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of ContentsUNITED STATESSECURITIES AND EXCHANGE COMMISSIONWashington, D.C. 20549Â FORM 10-Q Â â˜’ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934For the quarter ended SeptemberÂ 30, 2024 or â˜ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934Commission File No.Â 1-15579 Â MSA SAFETY INCORPORATED(Exact name of registrant as specified in its charter)Â PennsylvaniaÂ 46-4914539(StateÂ orÂ otherÂ jurisdictionÂ ofÂincorporationÂ orÂ organization)Â (IRSÂ EmployerIdentificationÂ No.)1000 Cranberry Woods DriveCranberry Township,PennsylvaniaÂ 16066-5207(AddressÂ ofÂ principalÂ executiveÂ offices)Â (ZipÂ Code)Registrantâ€™s telephone number, including area code: (724)Â 776-8600 Former name or former address, if changed since last report: N/AIndicate by check mark whether the registrant (1)Â has filed all reports required to be filed by SectionÂ 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months and (2)Â has been subject to such filing requirements for the past 90 days. YesÂ Â xÂ Â Â NoÂ Â Â¨Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).Â Â Â YesÂ Â xÂ Â Â Â NoÂ Â Â¨Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of â€œlarge accelerated filer,â€ â€œaccelerated filer,â€ â€œsmaller reporting company,â€ and â€œemerging growth companyâ€ in Rule 12b-2 of the Exchange Act. Â Large Accelerated FilerxAcceleratedÂ filerÂ¨Non-acceleratedÂ filerÂ¨SmallerÂ reportingÂ companyÂ¨Emerging growth companyÂ¨If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. Â¨Â Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).Â Â Â Â Â YesÂ Â Â¨Â Â Â NoÂ Â xSecurities registered pursuant to Section 12(b) of the Act:Â Title of each classTrading Symbol(s)Name of each exchange on which is registeredCommon Stock, no par valueMSANew York Stock ExchangeAs of OctoberÂ 18, 2024, 39,309,950 shares of common stock, of the registrant were outstanding. Table of ContentsItemÂ No.PagePartÂ I1.Financial Statements3Condensed Consolidated Statements of Operations (unaudited)3Condensed Consolidated Statements of Comprehensive Income (Loss) (unaudited)4Condensed Consolidated Balance Sheets (unaudited)5Condensed Consolidated Statements of Cash Flows (unaudited)6Condensed Consolidated Statements of Changes in Retained Earnings and Accumulated Other Comprehensive Loss (unaudited)7Notes to Condensed Consolidated Financial Statements (unaudited)82.Managementâ€™s Discussion and Analysis of Financial Condition and Results of Operations233.Quantitative and Qualitative Disclosures About Market Risk334.Controls and Procedures33PartÂ II2.Unregistered Sales of Equity Securities and Use of Proceeds346.Exhibits34Signatures35Table of ContentsPART I. FINANCIAL INFORMATIONItemÂ 1. Financial StatementsMSA SAFETY INCORPORATEDCONDENSED CONSOLIDATED STATEMENTS OF OPERATIONSUnauditedÂ Three Months Ended September 30,Nine Months Ended September 30,(In thousands, except per share values)20242023202420234Net sales$432,679Â $446,728Â $1,308,443Â $1,292,290Â Cost of products sold225,223Â 227,967Â 682,427Â 678,335Â Gross profit207,456Â 218,761Â 626,016Â 613,955Â Selling, general and administrative95,103Â 102,175Â 294,329Â 289,602Â Research and development16,707Â 17,682Â 49,695Â 48,906Â Restructuring charges (Note 3)1,184Â 3,285Â 5,744Â 8,382Â Currency exchange losses, net2,985Â 1,496Â 4,715Â 8,781Â Loss on divestiture of MSA LLC (Note 17)â€”Â â€”Â 129,211Â Product liability expense (Note 17)â€”Â â€”Â 3Â Operating income91,477Â 94,123Â 271,533Â 129,070Â Interest expense9,153Â 12,498Â 29,556Â 37,149Â Other income, net(5,833)(6,037)(16,215)(15,487)Total other expense, net3,320Â 6,461Â 13,341Â 21,662Â Income before income taxes88,157Â 87,662Â 258,192Â 107,408Â Provision for income taxes (Note 10)21,509Â 22,406Â 61,171Â 125,235Â Net income (loss)$66,648Â $65,256Â $197,021Â $(17,827)Earnings (loss) per share attributable to common shareholders (Note 9): Basic$1.69Â $1.66Â $5.00Â $(0.46)Diluted$1.69Â $1.65Â $4.98Â $(0.46)Dividends per common share$0.51Â $0.47Â $1.49Â $1.40Â The accompanying notes are an integral part of the unaudited condensed consolidated financial statements.-3-Table of Contents MSA SAFETY INCORPORATEDCONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)UnauditedÂ Three Months Ended September 30,Nine Months Ended September 30,(In thousands)20242023202420234Net income (loss)$66,648Â $65,256Â $197,021Â $(17,827)Other comprehensive gain (loss), net of tax:Foreign currency translation adjustments (Note 6)21,329Â (18,771)1,834Â (2,538)Pension and post-retirement plan adjustments, net of tax (Note 6)14Â 188Â 2,410Â 742Â Unrealized gain on available-for-sale securities (Note 6)â€”Â â€”Â â€”Â 2Â Reclassification of currency translation from accumulated other comprehensive loss into net income (Note 6)â€”Â 101Â (1,200)101Â Total other comprehensive gain (loss), net of tax21,343Â (18,482)3,044Â (1,693)Comprehensive income (loss)$87,991Â $46,774Â $200,065Â $(19,520)The accompanying notes are an integral part of the unaudited condensed consolidated financial statements.-4-Table of ContentsMSA SAFETY INCORPORATEDCONDENSED CONSOLIDATED BALANCE SHEETSUnauditedÂ (In thousands)September 30, 2024December 31, 2023AssetsCash and cash

equivalents$154,371Â $146,442Â Trade receivables, less allowance for credit loss of $7,937 and $7,065277,346Â 294,678Â Inventories (Note 4)351,805Â 292,604Â Prepaid expenses and other current assets 59,147Â 52,546Â Total current assets842,669Â 786,270Â Property, plant and equipment, net (Note 5)216,646Â 211,877Â Operating lease right-of-use assets, net59,393Â 53,298Â Prepaid pension cost (Note 14)183,915Â 172,161Â Deferred tax assets (Note 10)34,513Â 33,065Â Goodwill (Note 13)632,837Â 627,534Â Intangible assets, net (Note 13)254,364Â 266,134Â Other noncurrent assets17,590Â 19,811Â Total assets$2,241,927Â $2,170,150Â LiabilitiesNotes payable and current portion of long-term debt (Note 12)$26,915Â $26,522Â Accounts payable128,031Â 111,872Â Employeesâ€™ compensation56,831Â 73,386Â Other current liabilities102,701Â 121,038Â Total current liabilities314,478Â 332,818Â Long-term debt, net (Note 12)527,807Â 575,170Â Pensions and other employee benefits (Note 14) 144,105Â 143,967Â Noncurrent operating lease liabilities49,337Â 44,495Â Deferred tax liabilities (Note 10)103,175Â 102,419Â Other noncurrent liabilities7,680Â 4,479Â Total liabilities$1,146,582Â $1,203,348Â EquityPreferred stock, 4.5% cumulative, $50 par value (Note 7)$3,569Â $3,569Â Common stock, no par value (Note 7)324,609Â 312,324Â Treasury shares, at cost (Note 7)(388,421)(363,284)Accumulated other comprehensive loss (Note 6)(126,205)(129,249)Retained earnings1,281,793Â 1,143,442Â Total shareholdersâ€™ equity1,095,345Â 966,802Â Total liabilities and shareholdersâ€™ equity$2,241,927Â $2,170,150Â Â Â Â Â The accompanying notes are an integral part of the unaudited condensed consolidated financial statements.-5-Table of ContentsMSA SAFETY INCORPORATEDCONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS UnauditedÂ Nine Months Ended September 30,(In thousands)20242023Operating ActivitiesNet income (loss)$197,021Â $(17,827)Depreciation and amortization47,563Â 44,965Â Tax-effected loss on divestiture of MSA LLC (Note 17)â€”Â 199,578Â Stock-based compensation (Note 11)13,446Â 21,506Â Pension income (Note 14)(5,316)(6,060)Deferred income tax benefit (Note 10)(1,928)(531)Loss (gain) on asset dispositions, net959Â (671)Pension contributions (Note 14)(3,948)(4,274)Currency exchange losses, net4,715Â 8,781Â Product liability expense (Note 17)â€”Â 3Â Product liability payments (Note 17)â€”Â (5,250)Contribution on divestiture of MSA LLC (Note 17)â€”Â (341,186)Changes in:Trade receivables7,965Â (7,449)Inventories (Note 4)(59,531)15,386Â Accounts payable17,309Â (4,225)Other current assets and liabilities(34,186)26,518Â Other noncurrent assets and liabilities4,451Â 4,679Â Cash Flow From (Used in) Operating Activities188,520Â (66,057)Investing ActivitiesCapital expenditures(39,814)(30,979)Property disposals and other investing90Â 2,690Â Cash Flow Used in Investing Activities(39,724)(28,289)Financing ActivitiesProceeds from long-term debt (Note 12)868,644Â 1,507,000Â Payments on long-term debt (Note 12)(919,647)(1,338,352)Debt issuance costs(200)(1,138)Cash dividends paid(58,670)(54,999)Company stock purchases (Note 7)(27,427)(3,941)Exercise of stock options (Note 7)494Â 1,440Â Employee stock purchase plan (Note 7)634Â 497Â Cash Flow (Used in) From Financing Activities(136,172)110,507Â Effect of exchange rate changes on cash, cash equivalents and restricted cash(6,062)(14,152)Change in cash, cash equivalents and restricted cash6,562Â 2,009Â Beginning cash, cash equivalents and restricted cash148,408Â 164,428Â Ending cash, cash equivalents and restricted cash$154,970Â $166,437Â Supplemental cash flow information:Cash and cash equivalents$154,371Â $164,499Â Restricted cash included in prepaid expenses and other current assets599Â 1,938Â Total cash, cash equivalents and restricted cash$154,970Â $166,437Â The accompanying notes are an integral part of the unaudited condensed consolidated financial statements.-6-Table of ContentsMSA SAFETY INCORPORATEDCONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN RETAINED EARNINGS AND ACCUMULATED OTHER COMPREHENSIVE LOSSUnaudited(In thousands, except per share values)RetainedEarningsAccumulatedOtherComprehensive(Loss)Balances June 30, 2023$1,038,750Â $(141,928)Net income65,256Â â€”Â Foreign currency translation adjustmentsâ€”Â (18,771)Pension and post-retirement plan adjustments, net of tax expense of $27â€”Â 188Â Reclassification from accumulated other comprehensive loss into net income (Note 6)â€”Â 101Â Common dividends ($0.47 per share)(18,475)â€”Â Preferred dividends ($0.5625 per share)(10)â€”Â Balances September 30, 2023$1,085,521Â $(160,410)Balances June 30, 2024$1,235,226Â $(147,548)Net income66,648Â â€”Â Foreign currency translation adjustmentsâ€”Â 21,329Â Pension and post-retirement plan adjustments, net of tax benefit of $374â€”Â 14Â Common dividends ($0.51 per share)(20,071)â€”Â Preferred dividends ($0.5625 per share)(10)â€”Â Balances September 30, 2024$1,281,793Â $(126,205)Balances December 31, 2022$1,158,347Â $(158,717)Net loss(17,827)â€”Â Foreign currency translation adjustmentsâ€”Â (2,538)Pension and post-retirement plan adjustments, net of tax expense of $259â€”Â 742Â Unrecognized net gains on available-for-sale securities (Note 16)â€”Â 2Â Reclassification from accumulated other comprehensive loss into net income (Note 6)â€”Â 101Â Common dividends ($1.40 per share)(54,969)â€”Â Preferred dividends ($1.6875 per share)(30)â€”Â Balances September 30, 2023$1,085,521Â $(160,410)Balances December 31, 2023$1,143,442Â $(129,249)Net income197,021Â â€”Â Foreign currency translation adjustmentsâ€”Â 1,834Â Pension and post-retirement plan adjustments, net of tax benefit of $628â€”Â 2,410Â Reclassification from accumulated other comprehensive loss into net income (Note 6)â€”Â (1,200)Common dividends ($1.49 per share)(58,640)â€”Â Preferred dividends ($1.6875 per share)(30)â€”Â Balances September 30, 2024$1,281,793Â $(126,205)The accompanying notes are an integral part of the unaudited condensed consolidated financial statements.-7-Table of ContentsMSA SAFETY INCORPORATEDNOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTSUnauditedNote 1â€”Basis of PresentationThe condensed consolidated financial statements of MSA Safety Incorporated and its subsidiaries ("MSA" or "the Company") are unaudited. These unaudited condensed consolidated financial statements include all adjustments, consisting of normal recurring adjustments, considered necessary by management to fairly state the Company's results. Intercompany accounts and transactions have been eliminated. The results reported in these unaudited condensed consolidated financial statements are not necessarily indicative of the results that may be expected for the entire year. The DecemberÂ 31, 2023, Balance Sheet data was derived from the audited Consolidated Balance Sheets, but does not include all disclosures required by accounting principles generally accepted in the United States of America ("U.S. GAAP"). This Form 10-Q report should be read in conjunction with MSA's Form 10-K for the year ended DecemberÂ 31, 2023, which includes all disclosures required by U.S. GAAP. In November 2023, the FASB issued ASU No. 2023-07 (â€œASU 2023-07â€), Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures. ASU 2023-07 requires annual and interim disclosures that are expected to improve reportable segment disclosures, primarily through enhanced disclosures about significant expenses in determining segment profit or loss. The provisions of ASU 2023-07 are effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. We will apply the new disclosure requirements of ASU 2023-07 in our 2024 Form 10-K and, with the exception of expanding disclosures about significant segment expenses, do not expect that the adoption of ASU 2023-07 will have a material effect on our consolidated financial statements taken as a whole.Note 2â€”Cash and Cash EquivalentsSeveral of the Company's subsidiaries participate in a notional cash pooling arrangement to manage global liquidity requirements. As part of a master netting arrangement, the participants combine their cash balances in pooling accounts at the same financial institution with the ability to offset bank overdrafts of one participant against positive cash account balances held by another participant. Under the terms of the master netting arrangement, the financial institution has the right, ability and intent to offset a positive balance in one account against an overdrawn amount in another account. Amounts in each of the accounts are unencumbered and unrestricted with respect to use. As such, the net cash balance related to this pooling arrangement is included in Cash and cash equivalents in the unaudited Condensed Consolidated Balance Sheets. The Company's net cash pool position consisted of the following: (In thousands)September 30, 2024Gross cash pool position$69,117Â Less: cash pool borrowings(65,712)Net cash pool position$3,405Â Note 3â€”Restructuring ChargesDuring the three and nine months ended SeptemberÂ 30, 2024, we recorded restructuring charges of $1.2 million and $5.7Â million, respectively. Americas segment restructuring charges of $1.3Â million during the nine months ended September 30, 2024, were related to manufacturing footprint optimization activities. International segment restructuring charges of $3.2Â million during the nine months ended September 30, 2024, were related to ongoing initiatives to optimize our manufacturing footprint and improve productivity as well as management restructuring. Corporate segment restructuring charges of $1.2Â million during the nine months ended September 30, 2024, were related to management restructuring. During the three and nine months ended SeptemberÂ 30, 2023, we recorded restructuring charges of $3.3 million and $8.4 million, respectively. Americas segment restructuring charges of $2.7 million during the nine months ended September 30, 2023, were related to manufacturing footprint optimization activities. International segment restructuring charges of $3.6 million during the nine months ended September 30, 2023, were related to ongoing initiatives to drive profitable growth and improve productivity. Corporate segment restructuring charges of $2.1 million during the nine months ended September 30, 2023, were related to footprint optimization activities and management restructuring.-8-Table of Contents Restructuring reserves are included in Other current liabilities in the accompanying unaudited Condensed Consolidated Balance Sheets. Activity and reserve balances for restructuring by segment were as follows:(In millions)AmericasInternationalCorporateTotalReserve balances at December 31, 2022$1.7Â $12.8Â $0.5Â $15.0Â Restructuring charges3.1Â 4.7Â 2.1Â 9.9Â Currency translation(0.1)0.1Â â€”Â â€”Â Cash payments / utilization (3.9)(8.6)(2.6)(15.1)Reserve balances at December 31, 2023$0.8Â $9.0Â $â€”Â $9.8Â Restructuring charges1.3Â 3.2Â 1.2Â 5.7Â Cash payments(1.9)(8.0)(1.2)(11.1)Reserve balances at September 30, 2024$0.2Â $4.2Â $â€”Â $4.4Â Note 4â€”InventoriesThe following table sets forth the components of inventory: (In thousands)September 30, 2024December 31, 2023Finished products$118,294Â $88,687Â Work in process17,369Â 15,378Â Raw materials and supplies216,142Â 188,539Â Total inventories$351,805Â $292,604Â Note 5â€”Property, Plant and Equipment The following table sets forth the components of property, plant and equipment, net: (In thousands)September 30, 2024December 31, 2023Land$4,379Â $4,332Â Buildings144,364Â 141,027Â Machinery and equipment511,075Â 498,148Â Construction in progress27,482Â 24,404Â Total687,300Â 667,911Â Less: accumulated depreciation(470,654)(456,034)Property, plant and equipment, net$216,646Â $211,877Â -9-Table of ContentsNote 6â€”Reclassifications Out of Accumulated Other Comprehensive LossChanges in accumulated other comprehensive loss were as follows: Three Months Ended September 30,Nine Months Ended September 30,(In thousands)2024202320242023Pension and other post-retirement benefits (a)Balance at beginning of period$(40,256)$(49,781)$(42,652)$(50,335)Amounts reclassified from accumulated other comprehensive loss into net income (loss):Amortization of prior service credit (Note 14)(9)(24)(27)(72)Recognized net actuarial losses (Note 14)397Â 185Â 3,065Â 555Â Tax (benefit) expense(374)27Â (628)259Â Total amount reclassified from accumulated other comprehensive loss, net of tax, into net income (loss)14Â 188Â 2,410Â 742Â Balance at end of period$(40,242)$(49,593)$(40,242)$(49,593)Available-for-sale securitiesBalance at beginning of period$â€”Â $â€”Â $â€”Â $(2)Unrealized net gains on available-for-sale securities (Note 16)â€”Â â€”Â â€”Â 2Â Balance at end of period$â€”Â $â€”Â $â€”Â $â€”Â Foreign currency translationBalance at beginning of period$(107,292)$(92,147)$(86,597)$(108,380)Reclassification from accumulated other comprehensive loss into net income (loss)(b)â€”Â 101Â (1,200)101Â Foreign currency translation adjustments21,329Â (18,771)1,834Â (2,538)Balance at end of period$(85,963)$(110,817)$(85,963)$(110,817) (a) Amounts reclassified from accumulated other comprehensive loss into net income (loss) are included in the computation of net periodic pension and other post-retirement benefit costs (refer to Note 14â€”Pensions and Other Post-retirement Benefits). (b) Reclassification from accumulated other comprehensive loss into net income (loss) relates primarily to the recognition of non-cash net cumulative translation gains associated with certain foreign subsidiaries. The reclassifications are included in Currency exchange losses, net, within the unaudited Condensed Consolidated Statements of Income. -10-Table of ContentsNote 7â€”Capital Stock Preferred Stock - The Company has authorized 100,000 shares of $50 par value 4.5% cumulative preferred nonvoting stock which is callable at $52.50. There were 71,340 shares issued and 52,998 shares held in treasury at both SeptemberÂ 30, 2024 and DecemberÂ 31, 2023. The Treasury shares at cost line in the unaudited Condensed Consolidated Balance Sheets includes $1.8 million related to preferred stock. There were no shares of preferred stock purchased and subsequently held in treasury during the nine months ended SeptemberÂ 30, 2024 or 2023. The Company has also authorized 1,000,000 shares of $10 par value second cumulative preferred voting stock. No shares have been issued as of SeptemberÂ 30, 2024, or DecemberÂ 31, 2023.Common Stock - The Company has authorized 180,000,000 shares of no par value common stock. There were 62,081,391 shares issued as of SeptemberÂ 30, 2024 and DecemberÂ 31, 2023. No new shares were issued during the nine months ended SeptemberÂ 30, 2024 or 2023. There were 39,309,938 and 39,317,212 shares outstanding at SeptemberÂ 30, 2024 and DecemberÂ 31, 2023, respectively.Treasury Shares - The Company has a stock repurchase program that authorizes up to $200.0 million to repurchase MSA common stock in the open market and in private transactions. The stock repurchase program has no expiration date. The maximum number of shares that may be repurchased is calculated based on the dollars remaining under the program and the respective month-end closing share price. During the nine months ended SeptemberÂ 30, 2024, and 2023, the Company repurchased 108,917 and no shares, respectively, under this and the prior stock repurchase program. There were 22,771,453 and 22,764,179 treasury shares at SeptemberÂ 30, 2024 and DecemberÂ 31, 2023, respectively. The Company issues treasury shares for all stock-based benefit plans. Shares are issued from treasury at the average treasury share cost on the date of the transaction. There were 141,618 and 125,967 Treasury shares issued for these purposes during the nine months ended SeptemberÂ 30, 2024, and 2023, respectively.Common stock activity is summarized as follows:Three Months Ended September 30, 2024Three Months Ended September 30, 2023(In thousands)CommonStockTreasuryCost(a)CommonStockTreasuryCost(a)Balance at beginning of period$320,556Â $(376,556)$294,364Â $(362,025)Stock compensation expense4,217Â â€”Â 8,477Â â€”Â Restricted and performance stock awards(275)275Â (15)15Â Stock options exercised111Â 57Â 591Â 307Â Treasury shares purchased for stock compensation programsâ€”Â (571)â€”Â (70)Share repurchase programâ€”Â (10,027)â€”Â â€”Â Balance at end of period$324,609Â $(386,822)$303,417Â $(361,773)(a)Excludes treasury cost related to preferred stock.Nine Months Ended September 30, 2024Nine Months Ended September 30, 2023(In thousands)CommonStockTreasuryCost(a)CommonStockTreasuryCost(a)Balance at beginning of period$312,324Â $(361,684)$281,980Â $(359,838)Stock compensation expense13,446Â â€”Â 21,506Â â€”Â Restricted and performance stock awards(2,058)2,058Â (1,449)1,449Â Stock options exercised323Â 171Â 948Â 492Â Treasury shares purchased for stock compensation programsâ€”Â (7,400)â€”Â (3,941)Employee stock purchase program574Â 60Â 432Â 65Â Share repurchase programâ€”Â (20,027)â€”Â â€”Â Balance at end of period$324,609Â $(386,822)$303,417Â $(361,773)(a)Excludes treasury cost related to preferred stock.-11-Table of ContentsNote 8â€”Segment InformationThe Company is organized into four geographical operating segments that are based on management responsibilities: Northern North America; Latin America; Europe, Middle East & Africa; and Asia Pacific. The operating segments have been aggregated (based on economic similarities, the nature of their products, end-user markets and methods of distribution) into three reportable segments: Americas, International, and Corporate.The Americas segment is comprised of our operations in Northern North American and Latin American geographies. The International segment is comprised of our operations in all geographies outside of the Americas. Certain global expenses are allocated to each segment in a manner consistent with where the benefits from the expenses are derived.The Company's sales are allocated to each segment based primarily on the country destination of the end-customer. Adjusted operating income (loss) is the measure used by the chief operating decision maker to evaluate segment performance and allocate resources. Adjusted operating income (loss) is defined as operating income (loss) excluding restructuring charges, currency exchange (gains) losses, product liability expense, loss on divestiture of Mine Safety Appliances Company, LLC ("MSA LLC"), net cost for product related legal matter, transaction costs and acquisition-related amortization. The accounting principles applied at the operating segment level in determining the segment measure of profit or loss are the same as those applied at the unaudited condensed consolidated financial statement level. Sales and transfers between operating segments are accounted for at market-based transaction prices and are eliminated in consolidation. Reportable segment information is presented in the following table:(In thousands)AmericasInternationalCorporateConsolidatedTotalsThree Months Ended September 30, 2024Net sales to external customers$299,497Â $133,182Â $â€”Â $432,679Â Adjusted operating income (loss)91,822Â 18,174Â (12,081)97,915Â Three Months Ended September 30, 2023Net sales to external customers$314,273Â $132,455Â $â€”Â $446,728Â Adjusted operating income (loss)93,918Â 22,577Â (15,198)101,297Â (In thousands)AmericasInternationalCorporateConsolidatedTotalsNine Months Ended September 30, 2024Net sales to external customers$909,745Â $398,698Â $â€”Â $1,308,443Â Adjusted operating income (loss)276,523Â 55,944Â (38,353)294,114Â Nine Months Ended September 30, 2023Net sales to external customers$902,918Â $389,372Â $â€”Â $1,292,290Â Adjusted operating income (loss)260,428Â 60,099Â (38,066)282,461Â -12-Table of ContentsA reconciliation of total Adjusted operating income from reportable segments to Income before income taxes is presented in the following table: Three Months Ended September 30,Nine Months Ended September 30,(In thousands)20242023202420232023Adjusted operating income$97,915$101,297$294,114$282,461Less:Restructuring charges (Note 3)1,1843,2855,7448,382Currency exchange losses, net2,9851,4964,7158,781Interest expense9,15312,49829,55637,149Other income, net(5,833)(6,037)(16,215)(15,487)Amortization of acquisition-related intangible assets2,2692,3156,8886,936Transaction costs(a)â€”7823478Net cost for product related legal matterâ€”â€”5,000â€”Loss on divestiture of MSA LLC (Note 17)â€”â€”â€”129,211Product liability expense (Note 17)â€”â€”â€”3Income before income taxes88,15787,662258,192107,408(a) Transaction costs include advisory, legal, accounting, valuation, and other professional or consulting fees incurred during our evaluation of acquisitions and divestitures. These costs are included in Selling, general and administrative expense in the unaudited Condensed Consolidated Statements of Operations. -13-Table of ContentsTotal sales by product group was as follows:Three Months Ended September 30, 2024ConsolidatedAmericasInternational(In thousands, except

percentages)DollarsPercentDollarsPercentDollarsPercentFire Service (a)$160,515Â 37%$111,992Â 37%$48,523Â 36%Detection (b)163,150Â 38%110,459Â 37%52,691Â 40%Industrial PPE and Other (c)109,014Â 25%77,046Â 26%31,968Â 24%Total$432,679Â 100%$299,497Â 100%$133,182Â 100%Three Months Ended September 30, 2023ConsolidatedAmericasInternational(In thousands, except percentages)DollarsPercentDollarsPercentDollarsPercentFire Service (a)$175,732Â 39%$131,516Â 42%$44,216Â 33%Detection (b)155,694Â 35%105,007Â 33%50,687Â 38%Industrial PPE and Other (c)115,302Â 26%77,750Â 25%37,552Â 29%Total$446,728Â 100%$314,273Â 100%$132,455Â 100%Nine Months Ended September 30, 2024ConsolidatedAmericasInternational(In thousands, except percentages)DollarsPercentDollarsPercentDollarsPercentFire Service (a)$496,478Â 38%$352,730Â 39%$143,748Â 36%Detection (b)473,214Â 36%318,159Â 35%155,055Â 39%Industrial PPE and Other (c)338,751Â 26%238,856Â 26%99,895Â 25%Total$1,308,443Â 100%$909,745Â 100%$398,698Â 100%Nine Months Ended September 30, 2023ConsolidatedAmericasInternational(In thousands, except percentages)DollarsPercentDollarsPercentDollarsPercentFire Service (a)$481,610Â 37%$354,729Â 39%$126,881Â 33%Detection (b)460,537Â 36%308,692Â 34%151,845Â 39%Industrial PPE and Other (c)350,143Â 27%239,497Â 27%110,646Â 28%Total$1,292,290Â 100%$902,918Â 100%$389,372Â 100%(a) Fire Service includes Breathing Apparatus and Firefighter Helmets and Protective Apparel.(b) Detection includes Fixed Gas and Flame Detection and Portable Gas detection.(c) Industrial PPE and Other includes Industrial Head Protection, Fall Protection and Non-Core.-14-Table of ContentsNote 9â€”Earnings (Loss) per ShareBasic earnings (loss) per share is computed by dividing net income, after the deduction of preferred stock dividends and undistributed earnings allocated to participating securities, by the weighted average number of common shares outstanding during the period. Diluted earnings (loss) per share assumes the issuance of common stock for all potentially dilutive share equivalents outstanding not classified as participating securities. Participating securities are defined as unvested stock-based compensation awards that contain nonforfeitable rights to dividends.Three Months Ended September 30,Nine Months Ended September 30,(In thousands, except per share values)20242023202420232023Net income (loss)$66,648Â $65,256Â $197,021Â $(17,827)Preferred stock dividends(10)(10)(30)(30)Net income (loss) attributable to common equity66,638Â 65,246Â 196,991Â (17,857)Dividends and undistributed earnings allocated to participating securities(6)(8)(19)(16)Net income (loss) attributable to common shareholders66,632Â 65,238Â 196,972Â (17,873)Basic weighted-average shares outstanding39,362Â 39,303Â 39,370Â 39,267Â Stock-based compensation awards(a)133Â 147Â 160Â â€”Â Diluted weighted-average shares outstanding39,495Â 39,450Â 39,530Â 39,267Â Antidilutive sharesâ€”Â â€”Â â€”Â 154Â Earnings (loss) per share:Basic$1.69Â $1.66Â $5.00Â $(0.46)Diluted$1.69Â $1.65Â $4.98Â $(0.46)(a) During periods in which the Company incurs a net loss, stock-based compensation awards are excluded from the computation of diluted earnings per share because their effect would be anti-dilutive. As such, during periods in which the Company incurs a net loss, diluted weighted-average shares outstanding are equivalent to basic weighted-average shares outstanding.Note 10â€”Income TaxesThe Company's effective tax rate for the three months ended September 30, 2024, was 24.4%, which differs from the United States of America ("U.S.") federal statutory rate of 21% primarily due to state income taxes. The Company's effective tax rate for the three months ended September 30, 2023, was 25.6%, which differs from the U.S. federal statutory rate of 21% primarily due to higher earnings in higher tax jurisdictions and nondeductible compensation.The Company's effective tax rate for the nine months ended September 30, 2024, was 23.7%, which differs from the United States of America ("U.S.") federal statutory rate of 21% primarily due to state income taxes and nondeductible compensation. The Company's effective tax rate for the nine months ended September 30, 2023, was 116.6%, which differs from the U.S. federal statutory rate of 21% primarily due to the divestiture of MSA LLC and the non-deductible loss recorded on the derecognition of the product liability reserves and related assets. Refer to Note 17â€”Commitments and Contingencies to the unaudited condensed consolidated financial statements in Part I Item 1 of this Form 10-Q for further information on this transaction.At SeptemberÂ 30, 2024, the Company had a gross liability for unrecognized tax benefits of $7.2 million. The Company has recognized tax benefits associated with these liabilities of $0.6 million at SeptemberÂ 30, 2024. The gross liability includes amounts associated with foreign tax exposure in prior periods.The Company recognizes interest and penalties related to unrecognized tax benefits in interest expense and operating expenses, respectively. The Company's liability for accrued interest related to uncertain tax positions was $0.2 million at SeptemberÂ 30, 2024.We are subject to regular review and audit by both foreign and domestic tax authorities. While we believe our tax positions will be sustained, the final outcome of tax audits and related litigation may differ materially from the tax amounts recorded in our unaudited condensed consolidated financial statements.-15-Table of ContentsNote 11â€”Stock PlansThe 2023 Management Equity Incentive Plan provides for various forms of stock-based compensation for eligible employees through May 2033 including stock options, restricted stock awards, restricted stock units and performance stock units. The 2024 Non-Employee Directorsâ€™ Equity Incentive Plan provides for grants of stock options, restricted stock awards and restricted stock units to non-employee directors through May 2034. Stock compensation expense, included in Selling, general and administrative expense in the unaudited Condensed Consolidated Statements of Operations, is as follows:Â Three Months Ended September 30,Nine Months Ended September 30,(In thousands)20242023202420232023Stock compensation expense$4,217Â $8,477Â $13,446Â $21,506Â Income tax benefit1,033Â 2,077Â 3,294Â 5,269Â Stock compensation expense, net of tax$3,184Â $6,400Â $10,152Â $16,237Â We have not capitalized any stock-based compensation expense. A summary of stock option activity for the nine months ended September 30, 2024, is as follows: SharesWeighted AverageExerciseÂ PriceOutstanding at January 1, 202426,536Â $45.95Â Exercised(10,531)46.95Â Forfeited(852)48.65Â Outstanding and exercisable at September 30, 202415,153Â $45.10Â Restricted stock awards and restricted stock units are valued at the market value of the stock on the grant date. A summary of restricted stock activity for the nine months ended September 30, 2024, is as follows: SharesWeighted AverageGrantÂ Date Fair ValueUnvested at January 1, 2024173,851Â $142.73Â Granted82,905Â 178.59Â Vested(48,596)164.57Â Forfeited(25,482)164.47Â Unvested at September 30, 2024182,678Â $150.16Â Performance stock units that have a market condition modifier are valued at an estimated fair value using a Monte Carlo model. The final number of shares to be issued for performance stock units granted in the first quarter of 2024 may range from 0% to 200% of the target award based on achieving the specified performance targets over the performance period plus an additional modifier based on total shareholder return ("TSR") over the performance period. The following weighted average assumptions were used in estimating the fair value of the performance stock units granted in the first quarter of 2024.Fair value per unit$181.31Risk-free interest rate4.34%Expected dividend yield1.19%Expected volatility25.9%MSA stock beta0.728The risk-free interest rate is based on the U.S. Treasury Constant Maturity rates as of the grant date converted into an implied spot rate yield curve. Expected dividend yield is based on the most recent annualized dividend divided by the one year average closing share price. Expected volatility is based on the three year historical volatility preceding the grant date using daily stock prices. Expected life is based on historical stock option exercise data.-16-Table of ContentsA summary of performance stock unit activity for the nine months ended September 30, 2024, is as follows: SharesWeighted AverageGrantÂ Date Fair ValueUnvested at January 1, 2024189,221Â $146.17Â Granted40,787Â 177.34Â Performance adjustments(a)20,488Â 194.10Â Vested(77,544)174.13Â Forfeited(10,619)149.13Â Unvested at September 30, 2024162,333Â $146.50Â (a)Performance adjustments relate primarily to the final number of shares issued for the 2021 performance unit awards which vested in the first quarter of 2024 at 174% of the target award based on both cumulative performance against EBITDA margin and revenue growth targets and MSA's TSR during the three-year performance period. Note 12â€”Long-Term Debt(In thousands)September 30, 2024December 31, 20232016 Senior Notes payable through 2031, 3.40%, net of debt issuance costs$57,067Â $62,081Â 2021 Senior Notes payable through 2036, 2.69%, net of debt issuance costs99,749Â 99,733Â 2021 Senior Notes payable through 2036, 2.69%, net of debt issuance costs99,749Â 99,733Â 2023 Term Loan credit agreement maturing in 2026, net of debt issuance costs212,055Â 230,604Â 2023 Senior Notes payable through 2028, 5.25%, net of debt issuance costs49,949Â 49,939Â Senior revolving credit facility maturing in 2026, net of debt issuance costs36,153Â 59,602Â Total554,722Â 601,692Â Amounts due within one year26,915Â 26,522Â Long-term debt, net of debt issuance costs$527,807Â $575,170Â On May 24, 2021, the Company entered into a Fourth Amended and Restated Credit Agreement (the â€œRevolving Credit Facility" or "Facilityâ€) that extended its term through May 24, 2026 and increased the capacity to $900.0 million. The agreement was amended in August 2021 and June 2023 to transition from Sterling LIBOR reference rates and U.S. LIBOR reference rates. Under the amended agreement, the Company may elect either a Base rate of interest (â€œBASEâ€) or an interest rate based on Secured Overnight Financing Rate (â€œSOFRâ€). The BASE is a daily fluctuating per annum rate equal to the highest of (i) 0.00%, (ii) the Overnight Bank Funding Rate, plus 0.5%, (iii) the Prime Rate (iv) the Daily Simple SOFR rate, plus 1.00%. The Company pays a credit spread of 0 to 175 basis points based on the Companyâ€™s net EBITDA leverage ratio and elected rate (BASE or SOFR). The Company has a weighted average revolver interest rate of 5.80% as of SeptemberÂ 30, 2024. At SeptemberÂ 30, 2024, $861.5 million of the existing $900.0 million Revolving Credit Facility was unused, including letters of credit issued under the Facility. The Facility also provides an accordion feature that allows the Company to access an additional $400.0Â million of capacity pending approval by MSAâ€™s board of directors and from the bank group.On July 1, 2024, the Company entered into Amendment No. 3 to the Third Amended and Restated Multi-Currency Note Purchase and Private Shelf Agreement (the â€œPrudential Note Agreementâ€) with PGIM, Inc. (â€œPrudentialâ€). The Prudential Note Agreement provided for (i) the issuance of $100.0Â million of 2.69% Series C Senior Notes due July 1, 2036 and (ii) the establishment of an uncommitted note issuance facility whereby the Company may request, subject to Prudentialâ€™s acceptance in its sole discretion, the issuance of up to $335.0Â million aggregate principal amount of senior unsecured notes. As of SeptemberÂ 30, 2024, the Company has outstanding Â£42.7 million (approximately $57.2 million at SeptemberÂ 30, 2024) of 3.4% Series B Senior Notes due January 22, 2031. Remaining maturities of this note are Â£6.1Â million (approximately $8.2 million at SeptemberÂ 30, 2024) due annually through January 2031.On July 1, 2024, the Company entered into Amendment No. 3 to the Second Amended and Restated Master Note Facility (the â€œNYL Note Facilityâ€) with NYL Investors. The NYL Note Facility provided for (i) the issuance of $100.0Â million of 2.69% Series A Senior Notes due July 1, 2036, and (ii) the establishment of an uncommitted note issuance facility whereby the Company may request, subject to NYL Investorsâ€™ acceptance in its sole discretion, the issuance of up to $200.0Â million aggregate principal amount of senior unsecured notes. -17-Table of ContentsOn June 29, 2023, the Company issued $50Â million of 5.25% Series B Senior Notes due July 1, 2028, pursuant to the NYL Note Facility (the "Notes"). The Notes bear interest at 5.25% per annum, payable semi-annually, and mature on July 1, 2028. The Notes provide for a principal payment of $25Â million on July 1, 2027, with the remaining $25Â million due on July 1, 2028. The Notes may be redeemed at the Companyâ€™s option prior to their maturity at a make-whole redemption price calculated as provided in the NYL Note Facility. The proceeds of the Notes were used on June 29, 2023, to pay down an equivalent amount of borrowings under the Companyâ€™s Revolving Credit Facility with PNC Bank, National Association, as Administrative Agent.On January 5, 2023, the Company entered into a new $250Â million term loan facility to fund the divestiture of MSA LLC, a wholly owned subsidiary. Under the agreement, the Company may elect either BASE or an interest rate based on SOFR. The Company pays a credit spread of 0 to 200 basis points based on the Company's net EBITDA leverage ratio and elected rate. The Company had a Term Loan interest rate of 6.35% as of SeptemberÂ 30, 2024.The Revolving Credit Facility, Prudential Note Agreement and NYL Note Facility require the Company to comply with specified financial covenants, including a requirement to maintain a minimum fixed charges coverage ratio of not less than 1.50 to 1.00 and a consolidated leverage ratio not to exceed 3.50 to 1.00; except during an acquisition period, defined as four consecutive fiscal quarters beginning with the quarter of acquisition, in which case the consolidated net leverage ratio shall not exceed 4.00 to 1.00; in each case calculated on the basis of the trailing four fiscal quarters. In addition, the agreements contain negative covenants limiting the ability of the Company and its subsidiaries to incur additional indebtedness or issue guarantees, create or incur liens, make loans and investments, make acquisitions, transfer or sell assets, enter into transactions with affiliated parties, make changes in its organizational documents that are materially adverse to lenders or modify the nature of the Company's or its subsidiaries' business. All credit facilities exclude MSA LLC prior to the divestiture of this subsidiary on January 5, 2023, as discussed further in Note 17â€”Commitments and Contingencies to the unaudited condensed consolidated financial statements in Part I Item 1 of this Form 10-Q for further information on this transaction. As of SeptemberÂ 30, 2024, the Company was in full compliance with the restrictive covenants under its various credit agreements.The Company had outstanding bank guarantees and standby letters of credit with banks as of SeptemberÂ 30, 2024, totaling $10.0 million, of which $1.5 million relate to the Revolving Credit Facility. The letters of credit serve to cover customer requirements in connection with certain sales orders and insurance companies. The Company is also required to provide cash collateral in connection with certain arrangements. At SeptemberÂ 30, 2024, the Company has $0.6 million of restricted cash in support of these arrangements. Note 13â€”Goodwill and Intangible Assets, NetChanges in goodwill during the nine months ended September 30, 2024, were as follows:(In thousands)GoodwillBalance at January 1, 2024$627,534Â Currency translation5,303Â Balance at September 30, 2024$632,837Â At SeptemberÂ 30, 2024, goodwill of $447.6 million and $185.2 million related to the Americas and International reportable segments, respectively.Changes in intangible assets, net, during the nine months ended September 30, 2024, were as follows:(In thousands)Intangible AssetsNet balance at January 1, 2024$266,134Â Amortization expense(13,392)Currency translation1,622Â Net balance at September 30, 2024$254,364Â At SeptemberÂ 30, 2024, intangible assets, net, includes a trade name related to Globe Manufacturing Company, LLC ("Globe") with an indefinite life totaling $60.0 million.-18-Table of ContentsNote 14â€”Pensions and Other Post-retirement Benefits Components of Net periodic benefit (income) cost consisted of the following: Â Pension BenefitsOther Benefits(In thousands)20242023202420232023Three Months Ended September 30,Service cost$2,315Â $1,884Â $44Â $53Â Interest cost5,970Â 5,918Â 248Â 273Â Expected return on plan assets(10,812)(9,906)â€”Â â€”Â Amortization of prior service cost (credit)37Â 37Â (46)(61)Recognized net actuarial losses282Â 47Â 115Â 138Â Net periodic benefit (income) cost (a)$(2,208)$(2,020)$361Â $403Â Nine Months Ended September 30,Service cost$6,945Â $5,652Â $132Â $159Â Interest cost17,910Â 17,754Â 744Â 819Â Expected return on plan assets(32,436)(29,718)â€”Â â€”Â Amortization of prior service cost (credit)111Â 111Â (138)(183)Recognized net actuarial losses846Â 141Â 345Â 414Â Settlements1,308Â â€”Â â€”Â â€”Â Net periodic benefit (income) cost (a)$(5,316)$(6,060)$1,083Â $1,209Â (a) Components of Net periodic benefit (income) cost other than service cost are included in the line item Other income, net, and service costs are included in the line items Cost of products sold and Selling, general and administrative in the unaudited Condensed Consolidated Statements of Operations. We made contributions of $3.9 million and $4.3 million to our pension plans during the nine months ended September 30, 2024, and 2023, respectively. We expect to make net contributions of $5.3 million to our pension plans in 2024, which are primarily associated with statutorily required plans in the International reporting segment. Note 15â€”Derivative Financial Instruments As part of our currency exchange rate risk management strategy, we enter into certain derivative foreign currency forward contracts that do not meet the U.S. GAAP criteria for hedge accounting but have the impact of partially offsetting certain of our foreign currency exposures. We account for these forward contracts at fair value and report the related gains or losses in currency exchange losses, net, in the unaudited Condensed Consolidated Statements of Operations. The notional amount of open forward contracts was $184.8 million and $110.9 million at SeptemberÂ 30, 2024, and DecemberÂ 31, 2023, respectively. The following table presents the unaudited Condensed Consolidated Balance Sheets location and fair value of assets and liabilities associated with derivative financial instruments:(In thousands)September 30, 2024December 31, 2023Derivatives not designated as hedging instruments:Foreign exchange contracts: prepaid expenses and other current assetsâ€”Â $2,210Â Foreign exchange contracts: other current liabilities1,038Â 242Â -19-Table of ContentsThe following table presents the unaudited Condensed Consolidated Statements of Operations and unaudited Condensed Consolidated Statements of Cash Flows location and the loss impact of derivative financial instruments:Â Nine Months Ended September 30,(In thousands)20242023Derivatives not designated as hedging instruments:Foreign exchange contracts: currency exchange losses, net$1,683Â $2,986Â Note 16â€”Fair Value MeasurementsFair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value hierarchy consists of three broad levels, which gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are:â€¢Level 1â€”Observable inputs that reflect unadjusted quoted prices for identical assets or liabilities in active markets.â€¢Level 2â€”Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.â€¢Level 3â€”Unobservable inputs for the asset or liability.The valuation methodologies we used to measure financial assets and liabilities are also used to value the derivative financial instruments described in Note 15â€”Derivative Financial Instruments. We estimate the fair value of the derivative financial instruments, consisting of foreign currency forward contracts, based upon valuation models with inputs that generally can be verified by observable market conditions and do not involve significant management judgment. Accordingly, the fair values of the derivative financial instruments are classified within Level 2 of the fair value hierarchy. With the exception of our fixed rate long-term debt, we believe that the reported carrying amounts of our financial assets and liabilities approximate their fair values. The reported carrying amount of our fixed rate long-term debt was $307.2 million and $312.2 million at SeptemberÂ 30, 2024, and DecemberÂ 31, 2023, respectively. The fair value of this debt was $278.1 million and $278.7 million at SeptemberÂ 30, 2024, and DecemberÂ 31, 2023, respectively. The fair value of this debt was determined using Level 2 inputs by

evaluating similarly rated companies with publicly traded bonds where available or current borrowing rates available for financings with similar terms and maturities.Note 17â€”Commitments and ContingenciesProduct liabilityThe Company and its subsidiaries face an inherent business risk of exposure to legal claims arising from the alleged failure of our products to prevent the types of personal injury or death against which they are designed to protect. Product liability claims are categorized as either single incident or cumulative trauma.Single incident product liability claims. Single incident product liability claims involve incidents of short duration that are typically known when they occur and involve observable injuries, which provide an objective basis for quantifying damages. Management has established reserves for the single incident product liability claims of the Company's various subsidiaries, including asserted single incident product liability claims and incurred but not reported ("IBNR") single incident claims. To determine the reserves, Management makes reasonable estimates of losses for single incident claims based on the number and characteristics of asserted claims, historical experience, sales volumes, expected settlement costs, and other relevant information. The reserve for single incident product liability claims was $0.8 million at SeptemberÂ 30, 2024 and $1.3 million at DecemberÂ 31, 2023. Single incident product liability benefit was $0.2 million and $0.1 million for the nine months ended September 30, 2024, and 2023, respectively. Single incident product liability exposures are evaluated on an annual basis, or more frequently if changing circumstances warrant. Adjustments are made to the reserve as appropriate. The reserve has not been discounted to present value and does not include future amounts which will be spent to defend the claims.During the first nine months of 2024, the Company recorded $5.0Â million of net cost for product related legal matter. The expense is reflected within the selling, general and administration line of the unaudited Condensed Consolidated Statement of Operations.-20-Table of ContentsCumulative trauma product liability claims. Cumulative trauma product liability claims involve alleged exposures to harmful substances (e.g., silica, asbestos and coal dust) that occurred years ago and may have developed over long periods of time into diseases such as silicosis, asbestosis, mesothelioma, or coal workerâ€™s pneumoconiosis. Prior to the divestiture described below, one of the Company's former subsidiaries, MSA LLC, was named as a defendant in various lawsuits related to such claims. These lawsuits mainly involve respiratory protection products allegedly manufactured and sold by MSA LLC or its predecessors. On January 5, 2023, the Company entered into a membership interest purchase agreement (the â€œPurchase Agreementâ€) with Sag Main Holdings, LLC (the â€œBuyerâ€). The Buyer was a joint venture between R&Q Insurance Holdings Ltd. (â€œR&Qâ€) and Obra Capital, Inc. (â€œObraâ€). Under the Purchase Agreement, on January 5, 2023, the Company transferred to the Buyer all of the issued and outstanding limited liability company interests of MSA LLC (the â€œSaleâ€). In connection with the closing, the Company contributed $341.2Â million in cash and cash equivalents, while R&Q and Obra contributed an additional $35.0Â million.MSA LLC was the obligor for the claims to which the Company's legacy cumulative trauma product liability reserves relate and policyholder of the related insurance assets. The rights and obligations related to these items remained with MSA LLC upon the sale to the Buyer. In addition, pursuant to the Purchase Agreement, the Buyer and MSA LLC have agreed to indemnify the Company and its affiliates for legacy cumulative trauma product liabilities and other product liabilities, and a subsidiary of the Company has agreed to indemnify MSA LLC for all other historical liabilities of MSA LLC. This indemnification is not subject to any cap or time limitation. In connection with the sale, the Company and its Board of Directors received a solvency opinion from an independent advisory firm that MSA LLC was solvent and adequately capitalized after giving effect to the transaction.Following the completion of the transaction, the Company no longer has any obligation with respect to pending and future cumulative trauma product liability claims relating to these matters. As such, all legacy cumulative trauma product liability reserves, related insurance assets, and associated deferred tax assets of the divested subsidiary were derecognized from our balance sheet and the Company incurred a tax-effected loss on the divestiture of MSA LLC of $199.6Â million, including transaction related costs of $5.6Â million. The Buyer has assumed management of the divested subsidiary, including the management of its claims and associated assets. Other Litigation Globe, a subsidiary of the Company, is defending claims in which plaintiffs assert that certain products allegedly containing per- and polyfluoroalkyl substances (â€œPFASâ€) have caused harm, including injury or health issues. PFAS are a large class of substances that are widely used in everyday products. Specifically, Globe builds firefighter turnout gear from technical fabrics sourced from a small pool of specialty textile manufacturers. These protective fabrics have been tested and certified to meet current National Fire Protection Association safety standards, and some of them as supplied to Globe contain or historically have contained PFAS to achieve performance characteristics such as water, oil, or chemical resistance.Globe believes it has valid defenses to these claims. These matters are at a very early stage with numerous factual and legal issues to be resolved. Defense costs relating to these lawsuits are recognized in the unaudited Condensed Consolidated Statements of Operations as incurred. Globe is also pursuing insurance coverage and indemnification related to the lawsuits. As of October 15, 2024, Globe was named as a defendant in 535 lawsuits comprised of 7,850 claims, predominantly styled as individual personal injury claims and including two putative class actions. Certain of these lawsuits include MSA Safety Inc. or other Globe affiliates as defendants. MSA LLC is also a defendant in a number of PFAS lawsuits predominantly relating to Aqueous Film-Forming Foam. The Buyer assumed responsibility for these and any similar future claims specific to MSA LLC, including such claims that have been or may be brought against MSA Safety Inc. or its subsidiaries, under the terms of the divestiture on January 5, 2023. Further information about the transaction can be found in the Companyâ€™s Current Report on Form 8-K filed on January 6, 2023. -21-Table of ContentsProduct WarrantyThe Company provides warranties on certain product sales. Product warranty reserves are established in the same period that revenue from the sale of the related products is recognized, or in the period that a specific issue arises as to the functionality of the Company's product. The determination of such reserves requires the Company to make estimates of product return rates and expected costs to repair or to replace the products under warranty. The amounts of the reserves are based on established terms and the Company's best estimate of the amounts necessary to settle future and existing claims on products sold as of the balance sheet date. If actual return rates and/or repair and replacement costs differ significantly from estimates, adjustments to recognize additional cost of sales may be required in future periods. The following table reconciles changes in the Company's accrued warranty reserve:(InÂ thousands)Nine Months Ended September 30, 2024Year Ended December 31, 2023Beginning warranty reserve$14,288Â $15,230Â Warranty payments(8,518)(9,794)Warranty claims7,370Â 8,899Â Provision for product warranties and other adjustments515Â (47)Ending warranty reserve$13,655Â $14,288Â Warranty expense was $7.9 million and $6.7 million for the nine months ended September 30, 2024, and 2023, respectively, and is included in Costs of products sold on the unaudited Condensed Consolidated Statements of Operations. Outstanding Performance ObligationsThe Company derives a portion of its revenue from various leasing arrangements where the Company is the lessor, primarily fire service contracts entered into by Bristol. Such arrangements provide for monthly payments covering equipment provided, maintenance and interest. These arrangements meet the criteria to be accounted for as sales-type leases under Accounting Standards Codification ("ASC") 842 and contain both lease and non-lease components. Revenue from equipment provided is considered a lease component and recognized with point in time revenue recognition upon lease commencement. Maintenance revenue, which is considered a non-lease component, and interest is recognized monthly over the lease term. As of SeptemberÂ 30, 2024, the Company had remaining maintenance performance obligations of approximately $28.7Â million which are expected to be recognized to revenue in approximately three years.-22-Table of ContentsItemÂ 2.Managementâ€™s Discussion and Analysis of Financial Condition and Results of OperationsThe following discussion and analysis should be read in conjunction with the historical financial statements and other financial information included elsewhere in this quarterly report on Form 10-Q. This discussion may contain forward-looking statements that involve risks and uncertainties. The forward-looking statements are not historical facts, but rather are based on current expectations, estimates, assumptions and projections about our industry, business and future financial results. Our actual results could differ materially from the results contemplated by these forward-looking statements due to a number of factors, including those discussed in the sections of our annual report entitled â€œForward-Looking Statementsâ€ and â€œRisk Factors,â€ and those discussed in our Form 10-Q quarterly reports filed after such annual report (such as in Part II, Item 1A, â€œRisk Factors.â€)BUSINESS OVERVIEWMSA Safety Incorporated is the global leader in advanced safety products, technology and solutions. Driven by its singular mission of safety, the Company has been at the forefront of safety innovation since 1914, protecting workers and facility infrastructure around the world across a broad range of diverse end markets while creating sustainable value for shareholders. The Company's comprehensive product line, which is governed by rigorous safety standards across highly regulated industries, is used to protect workers and facility infrastructures around the world in a broad range of markets, including fire service, energy, utility, construction and industrial manufacturing applications as well as heating, ventilation, air conditioning and refrigeration ("HVAC-R"). The Company's product portfolio includes fire service where core products include self-contained breathing apparatus ("SCBA"), protective apparel and helmets; detection where core products include fixed gas and flame detection ("FGFD") systems and portable gas detection instruments; and industrial personal protective equipment ("PPE") where core products include industrial head protection and fall protection devices.A detailed listing of our significant product offerings in the aforementioned product groups above is included in MSA's Annual Report on Form 10-K for the year ended DecemberÂ 31, 2023. We tailor our product offerings and distribution strategy to satisfy distinct customer preferences that vary across geographic regions. To best serve these customer preferences, we have organized our business into four geographical operating segments that are aggregated into three reportable segments: Americas, International and Corporate.Americas. Our largest manufacturing and research and development facilities are located in the United States. We serve our markets across the Americas with manufacturing facilities in the U.S., Mexico and Brazil. Operations in the other countries within the Americas segment focus primarily on sales and distribution in their respective home country markets. International. Our International segment includes companies in Europe, the Middle East and Africa ("EMEA") and the Asia Pacific region. In our largest International subsidiaries (Germany, France, U.K., Ireland and China), we develop, manufacture and sell a wide variety of products. In China, the products manufactured are sold primarily in China as well as in regional markets. Operations in other International segment countries focus primarily on sales and distribution in their respective home country markets. Although some of these companies may perform limited production, most of their sales are of products manufactured in our plants in Germany, France, the U.S., U.K., Ireland, Morocco and China or are purchased from third-party vendors. Corporate. The Corporate segment primarily consists of general and administrative expenses incurred in our corporate headquarters, costs associated with corporate development initiatives, legal expense, interest expense, foreign exchange gains or losses and other centrally-managed costs. Corporate general and administrative costs comprise the majority of the expense in the Corporate segment. -23-Table of ContentsRESULTS OF OPERATIONSThree Months Ended SeptemberÂ 30, 2024, Compared to Three Months Ended SeptemberÂ 30, 2023 Net Sales. Net sales for the three months ended September 30, 2024, were $432.7 million, a decrease of $14.0 million, or 3.1%, compared to $446.7 million in the same period last year. Please refer to the Net Sales table for a reconciliation of the quarter over quarter sales change. Net SalesThree Months Ended September 30,Dollar(Decrease)Increase Percent(Decrease)Increase (In millions, except percentage change)20242023Consolidated$432.7$446.7$(14.0)(3.1)%Americas299.5314.3(14.8)(4.7)%International133.2132.40.80.6%Net Sales Three Months Ended September 30, 2024 versus September 30, 2023(Percent Change)AmericasInternational Consolidated GAAP reported sales change(4.7)%0.6%(3.1)%Currency translation effects1.3%(1.4)%0.5%Organic constant currency sales change(3.4)%(0.8)%(2.6)%Note: Organic constant currency sales change is a non-GAAP financial measure. See the "Non-GAAP Financial Measures" section below.Net sales for the Americas segment were $299.5 million in the third quarter of 2024, a decrease of $14.8 million, or 4.7%, compared to $314.3 million in the third quarter of 2023. Organic constant currency sales in the Americas segment decreased 3.4% during the period. This decrease was driven by a decline in fire service, primarily SCBA where delayed timing of large order delivery was a factor, partially offset by an increase in detection, primarily portables. Net sales for the International segment were $133.2 million in the third quarter of 2024, an increase of $0.8 million, or 0.6%, compared to $132.4 million for the third quarter of 2023. Organic constant currency sales in the International segment decreased 0.8% during the period. Growth in fire service and detection was mostly offset by a decline in industrial PPE.The operating environment remains dynamic. Looking forward, we expect to finish 2024 with mid-single-digit sales growth in the fourth quarter, resulting in low-single-digit top-line growth for the full year. Refer to Note 8â€”Segment Information to the unaudited condensed consolidated financial statements in Part I Item 1 of this Form 10-Q, for information regarding sales by product group. Gross profit. Gross profit for the third quarter of 2024 was $207.5 million, a decrease of $11.3 million or 5.2%, compared to $218.8 million for the third quarter of 2023. The ratio of gross profit to net sales was 47.9% in the third quarter of 2024 compared to 49.0% in the same quarter last year. The decrease in gross profit margin is primarily related to lower sales volume. Effective price/cost management and productivity improvements offset inflationary pressures. Selling, general and administrative expenses. Selling, general and administrative ("SG&A") expenses were $95.1 million during the third quarter of 2024, a decrease of $7.1 million or 6.9%, compared to $102.2Â million for the same period a year ago. Overall, SG&A expenses were 22.0% of net sales during the third quarter of 2024, compared to 22.9% of net sales during the same period in 2023. Organic constant currency SG&A decreased by approximately $6.9 million or 6.7%. The decrease in SG&A was driven by lower variable compensation and discretionary expense management, partially offset by inflation and professional service expense related to strategic initiatives. -24-Table of ContentsPlease refer to the SG&A expenses table for a reconciliation of the quarter over quarter expense change. Selling, general, and administrative expensesThree Months Ended September 30, 2024 versus September 30, 2023(Percent Change)Consolidated GAAP reported change(6.9)%Currency translation effects0.2%Organic Constant currency change(6.7)%Note: Organic constant currency SG&A change is a non-GAAP financial measure. See the "Non-GAAP Financial Measures" section below.Research and development expense. Research and development expense was $16.7 million during the third quarter of 2024, a decrease of $1.0 million, compared to $17.7 million during the third quarter of 2023. Research and development expense was 3.9% of net sales in the third quarter of 2024 and 4.0% in the third quarter of 2023. During the third quarter of 2024 and 2023, we capitalized $3.2 million and $3.3 million of software development costs, respectively. Depreciation expense for capitalized software development costs of $2.7 million for both the third quarter of 2024 and 2023, was recorded in costs of products sold on the unaudited Condensed Consolidated Statements of Operations. MSA remains committed to dedicating significant resources to research and development activities, including the development of technology-based safety solutions. As we continue to invest a significant portion of our new product development into technology-based safety solutions, we anticipate that the historical relationship of research and development expense to net sales will continue to evolve; however, we do not anticipate reductions in the relative level of total spend on research and development activities on an annual basis. Total spend on both software development and research and development activities was $19.9 million and $21.0 million during the third quarter of SeptemberÂ 30, 2024, and 2023, respectively.Restructuring charges. Restructuring charges of $1.2 million during the third quarter of 2024 were primarily related to initiatives to optimize our manufacturing footprint and improve productivity. Restructuring charges of $3.3 million during the third quarter of 2023 were primarily related to initiatives to optimize our manufacturing footprint and drive profitable growth.Currency exchange. Currency exchange losses were $3.0 million in the third quarter of 2024 compared to $1.5 million in the third quarter of 2023. The currency exchange activity for both periods related primarily to foreign currency exposure on unsettled inter-company balances and recognized exchange loss for our Argentina affiliate operating in a hyper-inflationary environment. Refer to Note 15â€”Derivative Financial Instruments to the unaudited condensed consolidated financial statements in Part I Item 1 of this Form 10-Q, for information regarding our currency exchange rate risk management strategy. GAAP operating income. Consolidated operating income for the third quarter of 2024 was $91.5 million compared to $94.1 million in the same period last year. The decrease in operating income was primarily driven by lower sales and gross profit partially offset by productivity improvements and lower SG&A as discussed further above.Adjusted operating income. Americas adjusted operating income for the third quarter of 2024 was $91.8 million, a decrease of $2.1 million or 2.2% compared to $93.9 million in the prior year third quarter. The decrease in adjusted operating income is attributable to lower sales volumes partially offset by a decline in SG&A expenses. Effective price/cost management and productivity improvements offset inflationary pressures. International adjusted operating income for the third quarter of 2024 was $18.2 million, a decrease of $4.4 million, or 19.5%, compared to $22.6 million in the prior year third quarter. The decrease in adjusted operating income is attributable to lower sales volumes partially offset by productivity improvements and pricing.Corporate segment adjusted operating loss for the third quarter of 2024 was $12.1 million, a decrease of $3.1 million, compared to an adjusted operating loss of $15.2 million in the third quarter of 2023, driven by lower variable compensation partially offset by inflation and increased professional service fees associated with various strategic initiatives.-25-Table of ContentsThe following tables represent a reconciliation from GAAP operating income to adjusted operating income (loss) and adjusted EBITDA. Adjusted operating margin % is calculated as adjusted operating income (loss) divided by net sales and adjusted EBITDA margin % is calculated as adjusted EBITDA divided by net sales. Adjusted operating income (loss)Three Months Ended September 30, 2024(In thousands)AmericasInternationalCorporateConsolidated Net sales to external customers$299,497Â $133,182Â $â€”Â $432,679Â Operating income91,477Â Restructuring charges (Note 3)1,184Â Currency exchange losses, net2,985Â Amortization of acquisition-related intangible assets2,269Â Adjusted operating income (loss)91,822Â 18,174Â (12,081)97,915Â Adjusted operating margin %30.7Â %13.6Â %Depreciation and amortization13,690Â Adjusted EBITDA101,339Â 22,119Â (11,853)111,605Â Adjusted EBITDA margin %33.8Â %16.6Â %Adjusted operating income (loss)Three Months Ended September 30, 2023(In thousands)AmericasInternationalCorporateConsolidated Net sales to external customers$314,273Â $132,455Â $â€”Â $446,728Â Operating income94,123Â Restructuring charges (Note

3)3,285Â Currency exchange losses, net1,496Â Amortization of acquisition-related intangible assets2,315Â Transaction costs(a)78Â Adjusted operating income (loss)93,918Â 22,577Â (15,198)101,297Â Adjusted operating margin %29.9Â %17.0Â %Depreciation and amortization13,189Â Adjusted EBITDA103,157Â 26,289Â (14,960)114,486Â Adjusted EBITDA margin %32.8Â %19.8Â %(a) Transaction costs include advisory, legal, accounting, valuation, and other professional or consulting fees incurred during our evaluation of acquisitions and divestitures. These costs are included in Selling, general and administrative expense in the unaudited Condensed Consolidated Statements of Operations. Note: Adjusted operating income (loss), adjusted operating margin %, adjusted EBITDA and adjusted EBITDA margin % are non-GAAP financial measures. See the "Non-GAAP Financial Measures" section below.Total other expense, net. Total other expense, net, for the third quarter of 2024 was $3.3 million, compared to $6.5 million for the same period in 2023, driven primarily by decreased interest expense related to reduced debt balances related to prior year borrowings associated with the MSA LLC divestiture as well as increased pension income driven by a higher expected rate of return. Income taxes. The reported effective tax rate for the third quarter of 2024 was 24.4% compared to 25.6% for the third quarter of 2023. The decrease from the prior year was primarily driven by discrete benefits booked in the third quarter of 2024 related to the filing of prior period tax returns and a decrease in nondeductible compensation.We are subject to regular review and audit by both foreign and domestic tax authorities. While we believe our tax positions will be sustained, the final outcome of tax audits and related litigation may differ materially from the tax amounts recorded in our unaudited condensed consolidated financial statements. Net income. Net income was $66.6 million for the third quarter of 2024, or $1.69 per diluted share compared to $65.3 million, or $1.65 per diluted share, for the same period last year.-26-Table of ContentsNine Months Ended SeptemberÂ 30, 2024, Compared to Nine Months Ended SeptemberÂ 30, 2023 Net Sales. Net sales for the nine months ended September 30, 2024, were $1.31 billion, an increase of $16.1 million, or 1.2%, compared to $1.29 billion in the same period last year. Please refer to the Net Sales table for a reconciliation of the period over period sales change. Net SalesNine Months Ended September 30,DollarIncreasePercentIncrease(In millions, except percentage change)20242023Consolidated$1,308.4$1,292.3$16.11.2%Americas909.7902.96.80.8%International398.7389.49.32.4%Net Sales Nine Months Ended September 30, 2024 versus September 30, 2023(Percent Change)AmericasInternational Consolidated GAAP reported sales change0.8%2.4%1.2%Currency translation effects0.3%(0.5)%0.2%Organic constant currency sales change1.1%1.9%1.4%Note: Organic constant currency sales change is a non-GAAP financial measure. See the "Non-GAAP Financial Measures" section below.Net sales for the Americas segment were $909.7 million in the nine months ended SeptemberÂ 30, 2024, an increase of $6.8 million, or 0.8%, compared to $902.9 million in the same period last year. Organic constant currency sales in the Americas segment increased 1.1% during the period. This growth was driven by an increase in detection.Net sales for the International segment were $398.7 million in the nine months ended September 30, 2024, an increase of $9.3 million, or 2.4%, compared to $389.4 million in the same period last year. Organic constant currency sales in the International segment increased 1.9% during the period. This growth was driven by strength across fire service and detection, partially offset by a decline in industrial PPE.Refer to Note 8â€”Segment Information to the unaudited condensed consolidated financial statements in Part I Item 1 of this Form 10-Q, for information regarding sales by product group. Gross profit. Gross profit for the nine months ended September 30, 2024, was $626.0 million, an increase of $12.0 million or 2.0%, compared to $614.0 million during the same period last year. The ratio of gross profit to net sales was 47.8% during the nine months ended September 30, 2024 compared to 47.5% during the same period last year. Volume leverage, price/cost management and productivity efforts offset inflationary pressures and contributed to the gross profit margin improvement.Selling, general and administrative expenses. SG&A expenses were $294.3 million during the nine months ended September 30, 2024, an increase of $4.7 million or 1.6%, compared to $289.6 million during the same period last year. Overall, SG&A expenses were 22.5% of net sales during the nine months ended September 30, 2024, compared to 22.4% of net sales during the same period in 2023. Organic constant currency SG&A increased $5.1 million or 1.8%. The increase in SG&A was driven by higher commercial costs associated with volume growth, inflation, net cost for product related legal matter and higher professional service expense partially offset by lower variable compensation and discretionary cost management.Please refer to the selling, general, and administrative expenses table for a reconciliation of the period over period expense change.Selling, general, and administrative expensesNine Months Ended September 30, 2024 versus September 30, 2023(Percent Change)Consolidated GAAP reported change1.6%Currency translation effects0.2%Organic constant currency change1.8%Note: Organic constant currency SG&A change is a non-GAAP financial measure. See the "Non-GAAP Financial Measures" section below.-27-Table of ContentsResearch and development expense. Research and development expense was $49.7 million during the nine months ended September 30, 2024, an increase of $0.8 million, compared to $48.9 million during the same period last year. Research and development expense was 3.8% of net sales in both the nine months ended September 30, 2024 and 2023. During the nine months ended September 30, 2024 and 2023, we capitalized $10.0 million and $9.4 million of software development costs, respectively. Depreciation expense for capitalized software development costs of $8.2 million and $7.5 million during the nine months ended September 30, 2024 and 2023, respectively, was recorded in costs of products sold on the unaudited Condensed Consolidated Statements of Operations. MSA remains committed to dedicating significant resources to research and development activities, including the development of technology-based safety solutions. As we continue to invest a significant portion of our new product development into technology-based safety solutions, we anticipate that the historical relationship of research and development expense to net sales will continue to evolve; however, we do not anticipate reductions in the relative level of total spend on research and development activities on an annual basis. Total spend on both software development and research and development activities was $59.7 million and $58.3 million during the nine months ended September 30, 2024, and 2023, respectively.Restructuring charges. Restructuring charges of $5.7 million during the nine months ended September 30, 2024 were primarily related to ongoing initiatives to optimize our manufacturing footprint and improve productivity as well as management restructuring. Restructuring charges of $8.4 million during nine months ended September 30, 2023 related to our ongoing initiatives to adjust our cost structure and improve productivity. We remain focused on executing programs to optimize our cost structure. Currency exchange. Currency exchange losses were $4.7 million during the nine months ended September 30, 2024, compared to $8.8 million in the same period of 2023. During 2024, we recognized non-cash net cumulative translation gains of $1.2 million associated with certain foreign subsidiaries. The remaining currency exchange activity for both periods related primarily due to foreign currency exposure on unsettled inter-company balances and recognized exchange loss for our Argentina affiliate operating in a hyper-inflationary environment.Refer to Note 15â€”Derivative Financial Instruments to the unaudited condensed consolidated financial statements in Part I Item 1 of this Form 10-Q, for information regarding our currency exchange rate risk management strategy. Product liability expense. Product liability expense for the nine months ended September 30, 2024, and 2023, was minimal due to our divestiture of MSA LLC in January 2023, as discussed further in Note 17â€”Commitments and Contingencies to the unaudited condensed consolidated financial statements in Part I Item 1 of this Form 10-Q.Loss on divestiture of MSA LLC. The $129.2 million pre-tax loss on divestiture of MSA LLC for the nine months ended September 30, 2023, relates to the derecognition of all legacy cumulative trauma product liability reserves and related insurance assets of the divested subsidiary during the first quarter of 2023. The loss also includes a $341.2 million contribution of cash and cash equivalents, as well as transaction related costs of $5.6 million. Refer to Note 17â€”Commitments and Contingencies to the unaudited condensed consolidated financial statements in Part I Item 1 of this Form 10-Q for further information. GAAP operating income. Consolidated operating income for the nine months ended September 30, 2024, was $271.5 million compared to $129.1 million in the same period last year. The increase in operating results was driven by the higher sales and gross profit margin as well as the absence of loss on divestiture of MSA LLC that was recognized in 2023, partially offset by increased SG&A expense.Adjusted operating income. Americas adjusted operating income for the nine months ended September 30, 2024 was $276.5 million, an increase of $16.1 million, or 6.2%, compared to $260.4 million in the prior year. The increase in adjusted operating income is primarily attributable to higher sales and gross profit margin due to effective price/cost management partially offset by higher SG&A expense to support business growth.International adjusted operating income for the nine months ended September 30, 2024, was $55.9 million, a decrease of $4.2 million, or 6.9%, compared to $60.1 million in the prior year. The decrease in adjusted operating income is primarily attributable to lower sales volumes and unfavorable mix. Corporate segment adjusted operating loss for the nine months ended September 30, 2024, was $38.4 million, an increase of $0.3 million compared to an adjusted operating loss of $38.1 million in the same period of 2023 driven by inflation and increased professional service fees associated with various strategic initiatives partially offset by lower variable compensation.-28-Table of ContentsThe following tables represent a reconciliation from GAAP operating income to adjusted operating income (loss) and adjusted EBITDA. Adjusted operating margin % is calculated as adjusted operating income (loss) divided by net sales and adjusted EBITDA margin % is calculated as adjusted EBITDA divided by net sales.Adjusted operating income (loss)Nine Months Ended September 30, 2024(In thousands)AmericasInternationalCorporateConsolidated Net sales to external customers$909,745Â $398,698Â $â€”Â $1,308,443Â GAAP operating income271,533Â Restructuring charges (Note 3)5,744Â Currency exchange losses, net4,715Â Net cost for product related legal matter5,000Â Amortization of acquisition-related intangible assets6,888Â Transaction costs(a)234Â Adjusted operating income (loss)276,523Â 55,944Â (38,353)294,114Â Adjusted operating margin %30.4Â %14.0Â %Depreciation and amortization40,675Â Adjusted EBITDA305,275Â 67,216Â (37,702)334,789Â Adjusted EBITDA margin %33.6Â %16.9Â %(a) Transaction costs include advisory, legal, accounting, valuation, and other professional or consulting fees incurred during our evaluation of acquisitions and divestitures. These costs are included in Selling, general and administrative expense in the unaudited Condensed Consolidated Statements of Operations. Adjusted operating income (loss)Nine Months Ended September 30, 2023(In thousands)AmericasInternationalCorporateConsolidated Net sales to external customers$902,918Â $389,372Â $â€”Â $1,292,290Â GAAP operating income129,070Â Restructuring charges (Note 3)8,382Â Currency exchange losses, net8,781Â Loss on divestiture of MSA LLC (Note 17)129,211Â Product liability expense (Note 17)3Â Amortization of acquisition-related intangible assets6,936Â Transaction costs(a)78Â Adjusted operating income (loss)260,428Â 60,099Â (38,066)282,461Â Adjusted operating margin %28.8Â %15.4Â %Depreciation and amortization38,029Â Adjusted EBITDA287,628Â 70,296Â (37,434)320,490Â Adjusted EBITDA margin %31.9Â %18.1Â %(a) Transaction costs include advisory, legal, accounting, valuation, and other professional or consulting fees incurred during our evaluation of acquisitions and divestitures. These costs are included in Selling, general and administrative expense in the unaudited Condensed Consolidated Statements of Operations. Note: Adjusted operating income (loss), adjusted operating margin %, adjusted EBITDA and adjusted EBITDA margin % are non-GAAP financial measures. See the "Non-GAAP Financial Measures" section below.-29-Table of ContentsTotal other expense, net. Total other expense, net, for the nine months ended September 30, 2024 was $13.3 million, compared to $21.7 million for the same period in 2023. The decrease in total other expense, net is primarily due to decreased interest expense related to reduced debt balances related to prior year borrowings associated with the MSA LLC divestiture as well as increased pension income driven by a higher expected rate of return partially offset by pension settlement expense recognized in the current year. Income taxes. The reported effective tax rate for the nine months ended September 30, 2024 was 23.7% compared to 116.6% for the same period in 2023. This significant variance is primarily due to the divestiture of MSA LLC and the non-deductible loss recorded on the derecognition of the product liability reserves and related assets in the prior year. Refer to Note 17â€”Commitments and Contingencies to the unaudited condensed consolidated financial statements in Part I Item 1 of this Form 10-Q for further information on this transaction.We are subject to regular review and audit by both foreign and domestic tax authorities. While we believe our tax positions will be sustained, the final outcome of tax audits and related litigation may differ materially from the tax amounts recorded in our unaudited condensed consolidated financial statements.Net income (loss) attributable to MSA Safety Incorporated. Net income was $197.0 million for the nine months ended September 30, 2024, or $4.98 per diluted share compared to net loss of $17.8 million, or $(0.46) per diluted share, for the same period last year.Non-GAAP Financial MeasuresThis report includes certain non-GAAP financial measures and operating ratios derived from non-GAAP financial measures. These financial measures and ratios include organic constant currency revenue growth, organic constant currency SG&A change, adjusted operating income (loss), adjusted operating margin %, adjusted EBITDA and adjusted EBITDA margin %. Organic constant currency sales and SG&A change are non-GAAP financial measures provided by the Company to give a better understanding of the Company's underlying business performance. Organic constant currency sales and SG&A change are calculated by deducting the percentage impact from currency translation effects from the overall percentage change in net sales and SG&A. The Company believes that organic constant currency revenue growth and SG&A change are useful metrics for investors, as foreign currency translation can have a material impact on revenue and SG&A trends. Organic constant currency revenue growth and SG&A change highlight ongoing business performance excluding the impact of fluctuating foreign currencies, which is outside of the Company's control. Adjusted operating income (loss), adjusted operating margin %, adjusted EBITDA and adjusted EBITDA margin % are non-GAAP financial measures and operating ratios derived from non-GAAP measures. Adjusted operating income (loss) is reconciled above to the nearest GAAP financial measure, Operating income (loss), and excludes restructuring, currency exchange, product liability expense, loss on divestiture of MSA LLC, net cost for product related legal matter, transaction costs and acquisition-related amortization. Adjusted EBITDA is reconciled above to the nearest GAAP financial measure, Operating income (loss) and excludes depreciation and amortization expense. Adjusted operating margin % is defined as adjusted operating income (loss) divided by segment net sales to external customers and adjusted EBITDA margin % is defined as adjusted EBITDA divided by segment net sales to external customers. These metrics are consistent with how the Company's chief operating decision maker ("CODM") evaluates segment results and makes strategic decisions about the business. Additionally, these non-gaap financial measures provide information useful to investors in understanding our operating performance and trends, and to facilitate comparisons with the performance of our peers. Management uses these measures internally to assess and better understand our underlying business performance and trends related to core business activities as well as to allocate resources. The non-GAAP financial measures and key performance indicators we use, and computational methods with respect thereto, may differ from the non-GAAP financial measures and key performance indicators, and computational methods, that our peers use to assess their performance and trends. The presentation of these non-GAAP financial measures does not comply with U.S. GAAP. These non-GAAP financial measures should be viewed as supplemental in nature, and not as a substitute for, or superior to, our reported results prepared in accordance with GAAP. -30-Table of ContentsLIQUIDITY AND CAPITAL RESOURCES Our main source of liquidity is operating cash flows, supplemented by borrowings. Our principal liquidity requirements are for working capital, capital expenditures, principal and interest payments on debt, declared dividend payments and acquisitions. At SeptemberÂ 30, 2024, approximately 55% of our long-term debt is at fixed interest rates with repayment schedules through 2036. The remainder of our long-term debt is at variable rates on an unsecured revolving credit facility and a term loan, both due in 2026. At SeptemberÂ 30, 2024, approximately 90% of our borrowings are denominated in U.S. dollars, which limits our exposure to currency exchange rate fluctuations. At SeptemberÂ 30, 2024, the Company had cash and cash equivalents totaling $154.4 million and access to sufficient capital, providing ample liquidity and flexibility to continue to maintain our balanced capital allocation strategy that prioritizes growth investments, funding our dividends and servicing debt obligations. Cash, cash equivalents and restricted cash increased $6.6 million during the nine months ended September 30, 2024 compared to increasing $2.0 million during the same period in 2023. We believe MSA's healthy balance sheet and access to significant capital at SeptemberÂ 30, 2024, positions us well to navigate through challenging business conditions, supply chain constraints and other unexpected events. Operating activities. Operating activities provided cash of $188.5 million during the nine months ended September 30, 2024, compared to using cash of $66.1 million during the same period in 2023. The improved cash flow from operating activities as compared to the same period in 2023 was primarily related to the prior year contribution of $341.2 million in the divestiture of MSA LLC. Refer to Note 17â€”Commitments and Contingencies to the unaudited condensed consolidated financial statements in Part I Item 1 of this Form 10-Q for further information. Excluding the cash flow impact of the MSA LLC divestiture for 2023, cash flow provided by operating activities decreased by $91.9 million, as improved operating results were completely offset by higher cash usage for working capital needs as well as increased cash usage for variable compensation payouts and tax prepayments both driven by prior year performance. The working capital cash usage increase related primarily to inventory purchases to support customer demand which were partially offset by improved accounts payable and accounts receivable management.Investing activities. Investing activities used cash of $39.7 million during the nine months ended September 30, 2024, compared to using $28.3 million during the same period in 2023. The increase in cash used in investing activities as compared to the same period in 2023 was related to increased capital expenditures to support our manufacturing footprint optimization activities and IT systems implementation. We remain committed to evaluating additional acquisition opportunities that will allow us to continue to grow in key end markets and geographies. Financing activities. Financing activities used cash of $136.2 million during the nine months ended September 30, 2024, compared to providing cash of $110.5 million during the same period in 2023. During the nine months ended September 30, 2024, we had net payments on long-term debt of $51.0 million as compared to net proceeds from long-term debt of $168.6 million during the same period in 2023 to fund the MSA LLC divestiture. We paid cash dividends of $58.7 million during the nine months ended September 30, 2024, compared to $55.0 million in the same period in 2023. We used cash of $27.4 million during the nine months ended September 30, 2024, to repurchase shares, including $20.0Â million related to our share repurchase program and the remainder related to our employee stock compensation transactions

compared to $3.9 million in the same period in 2023, all of which related to our employee stock compensation transactions. -31-Table of ContentsCUMULATIVE TRANSLATION ADJUSTMENTSThe position of the U.S. dollar relative to international currencies, primarily the euro, at SeptemberÂ 30, 2024, resulted in a translation gain of $1.8 million being recorded to the cumulative translation adjustments shareholders' equity account during the nine months ended September 30, 2024, compared to a $2.5 million translation loss being recorded to the cumulative translation adjustments shareholders' equity account during the same period in 2023. COMMITMENTS AND CONTINGENCIESWe made contributions of $3.9 million to our pension plans during the nine months ended September 30, 2024. We expect to make total contributions of approximately $5.3 million to our pension plans in 2024 primarily associated with statutorily required plans in the International segment. The Company had outstanding bank guarantees and standby letters of credit with banks as of SeptemberÂ 30, 2024, totaling $10 million, of which $1.5 million relate to the senior revolving credit facility. These letters of credit serve to cover customer requirements in connection with certain sales orders and insurance companies. The Company is also required to provide cash collateral in connection with certain arrangements. At SeptemberÂ 30, 2024, the Company has $0.6 million of restricted cash in support of these arrangements. We have purchase commitments for materials, supplies, services, and property, plant and equipment as part of our ordinary conduct of business. Please refer to Note 17â€”Commitments and Contingencies to the unaudited condensed consolidated financial statements in Part I Item 1 of this Form 10-Q for further discussion on the Company's single incident and cumulative trauma product liabilities. CRITICAL ACCOUNTING POLICIES AND ESTIMATESWe prepare our unaudited condensed consolidated financial statements in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). The preparation of these unaudited condensed consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and the related disclosures. We evaluate these estimates and judgments on an on-going basis based on historical experience and various assumptions that we believe to be reasonable under the circumstances. However, different amounts could be reported if we had used different assumptions and in light of different facts and circumstances. Actual amounts could differ from the estimates and judgments reflected in our unaudited condensed consolidated financial statements. The more critical judgments and estimates used in the preparation of our unaudited condensed consolidated financial statements are discussed in ItemÂ 7. Managementâ€™s Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for the year ended DecemberÂ 31, 2023. RECENTLY ADOPTED AND RECENTLY ISSUED ACCOUNTING STANDARDSNone.-32-Table of ContentsItemÂ 3.Quantitative and Qualitative Disclosures About Market RiskMarket risk represents the risk of adverse changes in the value of a financial instrument caused by changes in currency exchange rates, interest rates and equity prices. We are exposed to market risks related to currency exchange rates and interest rates. Currency exchange rate sensitivity. We are subject to the effects of fluctuations in currency exchange rates on various transactions and on the translation of the reported financial position and operating results of our non-U.S. companies from local currencies to U.S. dollars. A hypothetical 10% strengthening or weakening of the U.S. dollar would decrease or increase our reported sales and net income by approximately $17.5 million or 4.0% and $1.9 million or 2.8%, respectively, for the three months ended SeptemberÂ 30, 2024. When appropriate, we may attempt to limit our transactional exposure to changes in currency exchange rates through forward contracts or other actions intended to reduce existing exposures by creating offsetting currency exposures. At SeptemberÂ 30, 2024, we had open foreign currency forward contracts with a U.S. dollar notional value of $184.8 million. A hypothetical 10% strengthening or weakening of the U.S. dollar would result in a $18.5 million increase or decrease in the fair value of these contracts at SeptemberÂ 30, 2024. Interest rates. We are exposed to changes in interest rates primarily as a result of borrowing and investing activities used to maintain liquidity and fund business operations. At SeptemberÂ 30, 2024, we had $307.2 million of fixed rate debt which matures at various dates through 2036. The incremental increase in the fair value of fixed rate long-term debt resulting from a hypothetical 10% decrease in interest rates would be approximately $7.6 million. However, our sensitivity to interest rate declines and the corresponding increase in the fair value of our debt portfolio would unfavorably affect earnings and cash flows only to the extent that we elected to repurchase or retire all or a portion of our fixed rate debt portfolio at prices above carrying values. At SeptemberÂ 30, 2024, we had $249.5 million of variable rate borrowings. A 100 basis point increase or decrease in interest rates would have a $2.6 million impact on future annual earnings under our current capital structure. ItemÂ 4.Controls and Procedures(a)Evaluation of disclosure controls and procedures. Based on their evaluation as of the end of the period covered by this Form 10-Q, the Companyâ€™s principal executive officer and principal financial officer have concluded that the Companyâ€™s disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the â€œExchange Actâ€)) are effective to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is (i)Â recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms and (ii)Â accumulated and communicated to our management, including the principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure. (b)Changes in internal control. There were no changes in the Companyâ€™s internal control over financial reporting that occurred during the most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Companyâ€™s internal control over financial reporting. -33-Table of ContentsPART II. OTHER INFORMATIONItemÂ 2.Unregistered Sales of Equity Securities and Use of Proceeds(c)Issuer Purchases of Equity SecuritiesPeriodTotalÂ NumberÂ ofSharesPurchasedAverageÂ PriceÂ PaidPer ShareTotalÂ Number ofSharesÂ PurchasedAsÂ PartÂ ofÂ PubliclyAnnouncedÂ PlansÂ orProgramsMaximumÂ Numberof SharesThatÂ MayÂ YetÂ BePurchased UndertheÂ PlansÂ orProgramsJuly 20244,717Â $188.84Â 4,545Â 1,002,611Â August 202438,652Â 179.05Â 36,395Â 1,000,084Â September 202416,097Â 173.70Â 15,416Â 1,014,850Â The share repurchase program authorizes up to $200.0 million in repurchases of MSA common stock in the open market and in private transactions. The share repurchase program has no expiration date. The maximum number of shares that may be purchased is calculated based on the dollars remaining under the program and the respective month-end closing share price. There were 56,356 shares repurchased during the quarter ended SeptemberÂ 30, 2024, under this program. We do not have any other share repurchase programs.The shares purchased during the quarter, excluding those related to the share repurchase program, are related to stock-based compensation transactions.ItemÂ 5.Other InformationDuring the three months ended SeptemberÂ 30, 2024, no director or officer of the Company, nor the Company itself, adopted or terminated a â€œRule 10b5-1 trading arrangementâ€ or â€œnon-Rule 10b5-1 trading arrangement,â€ as each term is defined in Item 408(a) of Regulation S-K.ItemÂ 6.Exhibits(a) Exhibits31.1Â Â Â Â Certification of Chief Executive Officer pursuant to Rule 13a-14(a)31.2Â Â Â Â Â Â Â Certification of Chief Financial Officer pursuant to Rule 13a-14(a)32Â Â Â Â Â Â Â Â Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18Â U.S.C. (S)1350101.INSÂ Â Â Â Â Â Â Â XBRL Instance Document101.SCHÂ Â Â Â XBRL Taxonomy Extension Schema Document101.CALÂ Â Â Â XBRL Taxonomy Extension Calculation Linkbase Document101.DEFÂ Â Â Â XBRL Taxonomy Extension Definition Linkbase Document101.LABÂ Â Â Â XBRL Taxonomy Extension Label Linkbase Document101.PREÂ Â Â Â Â Â Â Â XBRL Taxonomy Extension Presentation Linkbase Document104Â Â Â Â Â Â Â Â Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)-34-Table of ContentsSIGNATUREPursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.Â Â Â MSA SAFETY INCORPORATEDOctober 24, 2024Â /s/ Lee B. McChesneyÂ Lee B. McChesneyÂ Senior Vice President and Chief Financial Officer/s/ Jonathan D. BuckJonathan D. BuckChief Accounting Officer and Controller (Principal Accounting Officer)-35- EX-31.1 2 ex311-q32024.htm EX-31.1 DocumentEXHIBIT 31.1CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO RULE 13a-14(a)I, Steven C. Blanco, certify that:1. I have reviewed this quarterly report on Form 10-Q of MSA Safety Incorporated;2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;4. The registrantâ€™s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;(c) Evaluated the effectiveness of the registrantâ€™s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and(d) Disclosed in this report any change in the registrantâ€™s internal control over financial reporting that occurred during the registrantâ€™s most recent fiscal quarter (the registrantâ€™s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrantâ€™s internal control over financial reporting; and5. The registrantâ€™s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrantâ€™s auditors and the audit committee of the registrantâ€™s board of directors (or persons performing the equivalent functions):(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrantâ€™s ability to record, process, summarize and report financial information; and(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrantâ€™s internal control over financial reporting.Â October 24, 2024Â /s/ Steven C. BlancoÂ Steven C. BlancoÂ President and Chief Executive Officer EX-31.2 3 ex312-q32024.htm EX-31.2 DocumentEXHIBIT 31.2CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO RULE 13a-14(a)I, Lee B. McChesney certify that:1. I have reviewed this quarterly report on Form 10-Q of MSA Safety Incorporated;2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;4. The registrantâ€™s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;(c) Evaluated the effectiveness of the registrantâ€™s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and(d) Disclosed in this report any change in the registrantâ€™s internal control over financial reporting that occurred during the registrantâ€™s most recent fiscal quarter (the registrantâ€™s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrantâ€™s internal control over financial reporting; and5. The registrantâ€™s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrantâ€™s auditors and the audit committee of the registrantâ€™s board of directors (or persons performing the equivalent functions):(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrantâ€™s ability to record, process, summarize and report financial information; and(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrantâ€™s internal control over financial reporting.Â October 24, 2024Â /s/ Lee B. McChesneyÂ Lee B. McChesneyÂ Senior Vice President and Chief Financial Officer EX-32 4 ex32-q32024.htm EX-32 DocumentEXHIBIT 32CERTIFICATIONPursuant to 18 U.S.C. (S)Â 1350, the undersigned officers of MSA Safety Incorporated (the â€œCompanyâ€), hereby certify, to the best of their knowledge, that the Companyâ€™s Quarterly Report on Form 10-Q for the quarter ended SeptemberÂ 30, 2024, (the â€œReportâ€) fully complies with the requirements of SectionÂ 13 (a)Â or 15 (d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.Â October 24, 2024Â /s/ Steven C. BlancoÂ Steven C. BlancoÂ President and Chief Executive OfficerÂ /s/ Lee B. McChesneyÂ Lee B. McChesneyÂ Senior Vice President and Chief Financial Officer EX-101.SCH 5 msa-20240930.xsd XBRL TAXONOMY EXTENSION SCHEMA DOCUMENT 0000001 - Document - Cover link:presentationLink link:calculationLink link:definitionLink 9952151 - Statement - Condensed Consolidated Statements of Income link:presentationLink link:calculationLink link:definitionLink 9952152 - Statement - Condensed Consolidated Statements of Comprehensive Income link:presentationLink link:calculationLink link:definitionLink 9952153 - Statement - Condensed Consolidated Balance Sheets link:presentationLink link:calculationLink link:definitionLink 9952154 - Statement - Condensed Consolidated Balance Sheets (Parenthetical) link:presentationLink link:calculationLink link:definitionLink 9952155 - Statement - Condensed Consolidated Statements of Cash Flows link:presentationLink link:calculationLink link:definitionLink 9952156 - Statement - Condensed Consolidated Statements of Changes in Retained Earnings, Accumulated Other Comprehensive Loss link:presentationLink link:calculationLink link:definitionLink 9952157 - 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msa-20240930_cal.xml XBRL TAXONOMY EXTENSION CALCULATION LINKBASE DOCUMENT EX-101.DEF 7 msa-20240930_def.xml XBRL TAXONOMY EXTENSION DEFINITION LINKBASE DOCUMENT EX-101.LAB 8 msa-20240930_lab.xml XBRL TAXONOMY EXTENSION LABEL LINKBASE DOCUMENT Statistical Measurement [Domain] Statistical Measurement [Domain] Payments on long-term debt (Note 12) Repayments of Long-Term Debt Derivatives, Fair Value [Line Items] Derivatives, Fair Value [Line Items] Cover [Abstract] Cover [Abstract] Change in cash, cash equivalents and restricted cash Cash, Cash Equivalents, Restricted Cash, and Restricted Cash Equivalents, Period Increase (Decrease), Including Exchange Rate Effect Deferred income tax benefit (Note 10) Deferred Income Tax Expense (Benefit), Including Discontinued Operations Deferred Income Tax Expense (Benefit), Including Discontinued Operations Other current liabilities Other Liabilities, Current Trading Symbol Trading Symbol Segment Reporting Information [Line Items] Segment Reporting Information [Line Items] Comprehensive income (loss) Comprehensive Income (Loss), Net of Tax, Including Portion Attributable to Noncontrolling Interest All Trading Arrangements All Trading Arrangements [Member] Compensation Actually Paid vs. Net Income Compensation Actually Paid vs. Net Income [Text Block] Non-NEOs Non-NEOs [Member] Schedule of Earnings Per Share Schedule of Earnings Per Share, Basic and Diluted [Table Text Block] Income tax benefit Share-Based Payment Arrangement, Expense, Tax Benefit Rule 10b5-1 Arrangement Adopted Rule 10b5-1 Arrangement Adopted [Flag] Common stock, dividends (in dollars per share) Common Stock, Dividends, Per Share, Declared Awards Close in Time to MNPI Disclosures Awards Close in Time to MNPI Disclosures [Table] Derivative [Line Items] Derivative [Line Items] Trade receivables, allowance for credit loss Accounts Receivable, Allowance for Credit Loss, Current Schedule of Stock Compensation Expense Share-Based Payment Arrangement, Cost by Plan [Table Text Block] Disposal Group Name [Domain] Disposal Group Name [Domain] Pay vs Performance Disclosure [Line Items] Peer Group Total Shareholder Return Amount Peer Group Total Shareholder Return Amount Revenue, Remaining Performance Obligation, Expected Timing of Satisfaction, Start Date [Axis] Revenue, Remaining Performance Obligation, Expected Timing of Satisfaction, Start Date [Axis] Trade receivables Increase (Decrease) in Accounts Receivable Derivative [Table] Derivative [Table] Income Tax Contingency [Table] Income Tax Contingency [Table] Basis of Presentation Organization, Consolidation and Presentation of Financial Statements Disclosure [Text Block] Non-Rule 10b5-1 Arrangement Adopted Non-Rule 10b5-1 Arrangement Adopted [Flag] Balance Sheet Location and Fair Value of Assets Associated with Derivative Financial Instruments Schedule of Derivative Instruments in Statement of Financial Position, Fair Value [Table Text Block] Exercise of stock options (Note 7) Proceeds from Stock Options Exercised Land Land [Member] Schedule of Fair Value Assumptions for Units Schedule of Share-based Payment Award, Equity Instruments Other than Options, Valuation Assumptions [Table Text Block] Schedule of Share-based Payment Award, Equity Instruments Other than Options, Valuation Assumptions [Table Text Block] Restructuring and Related Activities [Abstract] Restructuring and Related Activities [Abstract] Unrealized gain on available-for-sale securities (Note 6) OCI, Debt Securities, Available-for-Sale, Unrealized Holding Gain (Loss), before Adjustment, after Tax Award Timing Disclosures [Line Items] Stock compensation expense, net of tax Share-Based Payment Arrangement, Expense, after Tax Other noncurrent assets and liabilities Increase (Decrease) in Other Operating Assets and Liabilities, Net Foreign exchange contracts: currency exchange losses, net Derivative, Gain (Loss) on Derivative, Net Other Performance Measure, Amount Other Performance Measure, Amount Portion at Fair Value Measurement Portion at Fair Value Measurement [Member] Common stock, shares, outstanding (shares) Common Stock, Shares, Outstanding Schedule of Acquired Finite-Lived Intangible Asset by Major Class [Table] Schedule of Acquired Finite-Lived Intangible Asset by Major Class [Table] Noncurrent operating lease liabilities Operating Lease, Liability, Noncurrent Number of pending claims Loss Contingency, Pending Claims, Number Service cost Defined Benefit Plan, Service Cost Other noncurrent assets Insurance receivable and other noncurrent assets Other Assets, Noncurrent Entity Tax Identification Number Entity Tax Identification Number Purchase of treasury shares (shares) Treasury Stock, Shares, Acquired Retirement Plan Type [Axis] Retirement Plan Type [Axis] Reportable Segments Operating Segments [Member] Disposal group, transaction costs Disposal Group, Including Discontinued Operation, (Transaction Cost) Reversal Of Cost Disposal Group, Including Discontinued Operation, (Transaction Cost) Reversal Of Cost Common Stock Activity Capital Stock Disclosure [Table Text Block] Capital stock disclosure. Pension income (Note 14) Pension Cost (Reversal of Cost) Cash Flow From (Used in) Operating Activities Net Cash Provided by (Used in) Operating Activities Treasury stock Treasury Cost Treasury Stock, Common [Member] Operating Activities Net Cash Provided by (Used in) Operating Activities [Abstract] Secured Debt Secured Debt [Member] Equity Components [Axis] Equity Components [Axis] Award Timing Method Award Timing Method [Text Block] Net periodic benefit (income) cost Defined Benefit Plan, Net Periodic Benefit Cost (Credit) Trading Arrangements, by Individual Trading Arrangements, by Individual [Table] Acquired Finite-Lived Intangible Assets [Line Items] Acquired Finite-Lived Intangible Assets [Line Items] Trade name Trade Names [Member] Entity Common Stock, Shares Outstanding (in shares) Entity Common Stock, Shares Outstanding Insider Trading Policies and Procedures [Line Items] Gross cash pool position Cash Balance Subject To Master Netting Arrangement Cash Balance Subject To Master Netting Arrangement Business Acquisition, Acquiree [Domain] Business Acquisition, Acquiree [Domain] Pension contributions (Note 14) Payment for Pension Benefits Adjustment to Compensation, Amount Adjustment to Compensation Amount Compensation Amount Outstanding Recovery Compensation Amount Basis spread on EBITDA leverage ratio and elected rate Debt Instrument, Basis Spread On EBITDA Leverage Ratio And Elected Rate Debt Instrument, Basis Spread On EBITDA Leverage Ratio And Elected Rate Disposal Group Classification [Axis] Disposal Group Classification [Axis] Aggregate Change in Present Value of Accumulated Benefit for All Pension Plans Reported in Summary Compensation Table Aggregate Change in Present Value of Accumulated Benefit for All Pension Plans Reported in Summary Compensation Table [Member] Entity Small Business Entity Small Business Company Selected Measure Amount Company Selected Measure Amount Schedule of Activity and Reserve Balance for Restructuring Charges by Segment Restructuring and Related Costs [Table Text Block] Debt issuance costs Payments of Debt Issuance Costs Tabular List, Table Tabular List [Table Text Block] Share-based Compensation Arrangement by Share-based Payment Award [Line Items] Share-Based Compensation Arrangement by Share-Based Payment Award [Line Items] Contribution on divestiture of MSA LLC (Note 17) Disposal Group, Including Discontinued Operation, Contributions Made On Disposal Disposal Group, Including Discontinued Operation, Contributions Made On Disposal Aggregate Grant Date Fair Value of Equity Award Amounts Reported in Summary Compensation Table Aggregate Grant Date Fair Value of Equity Award Amounts Reported in Summary Compensation Table [Member] Deferred tax asset Deferred Tax Asset [Member] Deferred Tax Asset [Member] Antidilutive stock options (shares) Antidilutive Securities Excluded from Computation of Earnings Per Share, Amount Cash payments Payments for Restructuring Credit Facility [Domain] Credit Facility [Domain] Beginning cash, cash equivalents and restricted cash Ending cash, cash equivalents and restricted cash Total cash, cash equivalents and restricted cash Cash, Cash Equivalents, Restricted Cash, and Restricted Cash Equivalents Goodwill (Note 13) Beginning balance Ending balance Goodwill Goodwill Consolidation Items [Axis] Consolidation Items [Axis] Indefinite-lived Intangible Assets, Major Class Name [Domain] Indefinite-Lived Intangible Assets, Major Class Name [Domain] Transaction costs Strategic Transaction Costs Strategic Transaction and Corporate Development Costs Other comprehensive gain (loss), net of tax: Other Comprehensive Income (Loss), Net of Tax [Abstract] Common stock, value, issued (up to) Share Repurchase Program, Authorized, Amount Inventories Inventory Disclosure [Text Block] Treasury stock, common, shares (shares) Treasury Stock, Common, Shares Preferred stock, callable price per share (dollars per share) Preferred Stock, Redemption Price Per Share Forgone Recovery due to Disqualification of Tax Benefits, Amount Forgone Recovery due to Disqualification of Tax Benefits, Amount Product and Service [Domain] Product and Service [Domain] Stock options exercised Share-Based Payment Arrangement, Option [Member] Foreign Exchange Forward Foreign Exchange Forward [Member] Goodwill [Roll Forward] Goodwill [Roll Forward] Vested (dollars per share) Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Vested in Period, Weighted Average Grant Date Fair Value Fair Value Disclosures [Abstract] Fair Value Disclosures [Abstract] Pension Benefits Pension Plan [Member] Warranty payments Standard Product Warranty Accrual, Decrease for Payments Security Exchange Name Security Exchange Name Interest rate margin, percentage Debt Instrument, Basis Spread on Variable Rate Award Type [Axis] Award Type [Axis] Currency translation Goodwill, Foreign Currency Translation Gain (Loss) Exercised (dollars per share) Share-Based Compensation Arrangements by Share-Based Payment Award, Options, Exercises in Period, Weighted Average Exercise Price Restructuring charges Restructuring Charges before Adjustments Restructuring Charges before Adjustments - Restructuring charges before any adjustments to the accrual. Shares Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Nonvested, Number of Shares [Roll Forward] Work in process Inventory, Work in Process, Net of Reserves Property, plant and equipment, net (Note 5) Property, Plant and Equipment, Net Total liabilities Liabilities Schedule of Cash and Cash Equivalents Schedule of Cash and Cash Equivalents [Table Text Block] Dividends per common share (in dollars per share) Common Stock, Dividends, Per Share, Cash Paid Exercisable (dollars per share) Share-Based Compensation Arrangement by Share-Based Payment Award, Options, Exercisable, Weighted Average Exercise Price Forgone Recovery, Explanation of Impracticability Forgone Recovery, Explanation of Impracticability [Text Block] Research and development Research and Development Expense Schedule of Share-based Compensation Arrangements by Share-based Payment Award [Table] Schedule of Share-Based Compensation Arrangements by Share-Based Payment Award [Table] Expiration Date Trading Arrangement Expiration Date Investing Activities Net Cash Provided by (Used in) Investing Activities [Abstract] Goodwill and Intangible Assets Disclosure [Abstract] Goodwill and Intangible Assets Disclosure [Abstract] Total Shareholder Return Amount Total Shareholder Return Amount Common stock, shares issued (shares) Common Stock, Shares, Issued Entity [Domain] Entity [Domain] Dividends and undistributed earnings allocated to participating securities Undistributed Earnings (Loss) Allocated to Participating Securities, Basic Equity Awards Adjustments, Footnote Equity Awards Adjustments, Footnote [Text Block] Line of credit facility, maximum borrowing capacity Line of Credit Facility, Maximum Borrowing Capacity Concentration risk percentage Concentration Risk, Percentage MSA LLC MSA LLC [Member] MSA LLC Insider Trading Policies and Procedures Adopted Insider Trading Policies and Procedures Adopted [Flag] Exercised (in shares) Share-Based Compensation Arrangement by Share-Based Payment Award, Options, Exercises in Period Debt Instrument [Line Items] Debt Instrument [Line Items] Named Executive Officers, Footnote Named Executive Officers, Footnote [Text Block] Common stock, shares authorized (shares) Common Stock, Shares Authorized Less: accumulated depreciation Property, Plant, and Equipment and Finance Lease Right-of-Use Asset, Accumulated Depreciation and Amortization Diluted weighted-average shares outstanding (shares) Weighted Average Number of Shares Outstanding, Diluted Detection Fix Gas & Flame Detection Instruments [Member] Fix Gas & Flame Detection Instruments [Member] Minimum fixed charges coverage ratio (not less than) Debt Instrument, Covenant, Fixed Charges Coverage Ratio, Minimum Debt Instrument, Covenant, Fixed Charges Coverage Ratio, Minimum MNPI Disclosure Timed for Compensation Value MNPI Disclosure Timed for Compensation Value [Flag] Long-term Debt, Type [Axis] Long-Term Debt, Type [Axis] Beginning balance Ending balance Equity, Attributable to Parent Currency exchange losses, net Foreign Currency Transaction Gain (Loss), Including Discontinued Operations, before Tax Foreign Currency Transaction Gain (Loss), Including Discontinued Operations, before Tax Treasury shares, at cost (Note 7) Treasury shares, at cost Treasury Stock, Value MSA stock beta Share-based Compensation Arrangement by Share-based Payment Award, Fair Value Assumptions, Stock Beta Share-based Compensation Arrangement by Share-based Payment Award, Fair Value Assumptions, Stock Beta Hedging Designation [Domain] Hedging Designation [Domain] Balance Sheet Location [Axis] Statement of Financial Position Location, Balance [Axis] Interest expense Interest Expense, Nonoperating Changes in Goodwill Schedule of Goodwill [Table Text Block] Property, Plant and Equipment Property, Plant and Equipment Disclosure [Text Block] Concentration Risk Type [Domain] Concentration Risk Type [Domain] Amortization of acquisition-related intangible assets Amortization Of Acquired Finite -Lived Intangible Assets Amortization Of Acquired Finite -Lived Intangible Assets Settlements Defined Benefit Plan, Net Periodic Benefit Cost (Credit), Gain (Loss) Due to Settlement Proceeds from lines of credit Letters of Credit Outstanding, Amount Selling, general and administrative Selling, General and Administrative Expense Second Cumulative Preferred Voting Stock Second Cumulative Preferred Voting Stock [Member] Second Cumulative Preferred Voting Stock [Member] Schedule of Capital Units [Table] Equity, Capital Unit or Share [Table] Notes payable and current portion of long-term debt (Note 12) Debt, Current Income Tax Contingency [Line Items] Income Tax Contingency [Line Items] Trade receivables, less allowance for credit loss of $7,937 and $7,065 Accounts Receivable, after Allowance for Credit Loss, Current Contributed cash and cash equivalents by acquiree Business Combination, Contributed Cash And Cash Equivalents Business Combination, Contributed Cash And Cash Equivalents 2023 Term Loan credit agreement maturing in 2026, net of debt issuance costs Term Loan Facility 2023 [Member] Term Loan Facility 2023 Stock beta, daily price data period (years) Share-based Compensation Arrangement by Share-base Payment Award, Fair Value Assumptions, Stock Beta, Daily Price Data, Period Share-based Compensation Arrangement by Share-base Payment Award, Fair Value Assumptions, Stock Beta, Daily Price Data, Period 2021 Senior Notes payable through 2036, 2.69%, net of debt issuance costs Series A Senior Notes Due 2036 NYL Note Facility Series A Senior Notes [Member] NYL Note Facility Series A Senior Notes Foreign currency translation adjustments (Note 6) Other Comprehensive Income (Loss), Foreign Currency Transaction and Translation Gain (Loss) Arising During Period, Net of Tax Total Long term debt Long-Term Debt Pension Adjustments Prior Service Cost Pension Adjustments Prior Service Cost [Member] Document Fiscal Period Focus Document Fiscal Period Focus All Executive Categories All Executive Categories [Member] Stock-based compensation awards (shares) Incremental Common Shares Attributable to Dilutive Effect of Share-Based Payment Arrangements Balance Sheet Location [Domain] Statement of Financial Position Location, Balance [Domain] Accumulated net investment gain (loss) attributable to parent AOCI, Accumulated Gain (Loss), Debt Securities, Available-for-Sale, Parent [Member] Changed Peer Group, Footnote Changed Peer Group, Footnote [Text Block] Assets Assets [Abstract] Retirement Plan Type [Domain] Retirement Plan Type

[Domain] Total other comprehensive gain (loss), net of tax Other comprehensive income (loss) Other Comprehensive Income (Loss), Net of Tax Expected dividend yield Share-Based Compensation Arrangement by Share-Based Payment Award, Fair Value Assumptions, Expected Dividend Rate Document Type Document Type Derivative Contract [Domain] Derivative Contract [Domain] Recognized net actuarial losses Defined Benefit Plan, Benefit Obligation, Actuarial Gain (Loss) Pension Benefits Adjustments, Footnote Pension Benefits Adjustments, Footnote [Text Block] Schedule of Reportable Segment Information Schedule of Segment Reporting Information, by Segment [Table Text Block] Total Shareholder Return Vs Peer Group Total Shareholder Return Vs Peer Group [Text Block] Tax reclassification adjustment Other Comprehensive (Income) Loss, Defined Benefit Plan, after Reclassification Adjustment, Tax Monte Carlo Approach Monte Carlo Approach [Member] Monte Carlo Approach [Member] Schedule of Defined Benefit Plans Disclosures [Table] Defined Benefit Plan [Table] Vested (in shares) Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Vested in Period Risk-free interest rate Share-Based Compensation Arrangement by Share-Based Payment Award, Fair Value Assumptions, Risk Free Interest Rate Maximum Maximum [Member] Amortization expense Amortization of Intangible Assets Preferred stock, 4.5% cumulative, $50 par value (Note 7) Preferred Stock, Value, Outstanding Equity Valuation Assumption Difference, Footnote Equity Valuation Assumption Difference, Footnote [Text Block] Intangible assets, net (Note 13) Beginning balance Ending balance Finite-Lived Intangible Assets, Net Accounts payable Accounts Payable, Current Liabilities Liabilities [Abstract] Provision for product warranties and other adjustments Standard and Extended Product Warranty Accrual, Increase (Decrease) for Preexisting Warranties Current Fiscal Year End Date Current Fiscal Year End Date Statistical Measurement [Axis] Statistical Measurement [Axis] Industrial PPE and Other Firefighter Helmets and Protective Apparel [Member] Firefighter Helmets and Protective Apparel [Member] PEO Name PEO Name Non-Rule 10b5-1 Arrangement Terminated Non-Rule 10b5-1 Arrangement Terminated [Flag] Income before income taxes Income (Loss) from Continuing Operations before Income Taxes, Noncontrolling Interest Non-PEO NEO Average Total Compensation Amount Non-PEO NEO Average Total Compensation Amount Award Type [Domain] Award Type [Domain] Name Outstanding Recovery, Individual Name Share repurchase program Share Repurchase Program [Member] Share Repurchase Program Compensation Actually Paid vs. Company Selected Measure Compensation Actually Paid vs. Company Selected Measure [Text Block] Pensions and other employee benefits (Note 14) Liability, Defined Benefit Plan, Noncurrent Deferred tax assets (Note 10) Deferred Income Tax Assets, Net Non-PEO NEO Non-PEO NEO [Member] Senior notes payable Senior Notes, Noncurrent Award Timing Predetermined Award Timing Predetermined [Flag] Subsequent Event Type [Domain] Subsequent Event Type [Domain] Pensions and Other Post-retirement Benefits Retirement Benefits [Text Block] Class of Stock [Line Items] Class of Stock [Line Items] Recently Adopted and Recently Issued Accounting Standards New Accounting Pronouncements, Policy [Policy Text Block] Amortization of prior service cost (credit) Defined Benefit Plan, Amortization of Prior Service Cost (Credit) Class of Stock [Axis] Class of Stock [Axis] Diluted (in dollars per share) Earnings Per Share, Diluted Name Measure Name Entity Interactive Data Current Entity Interactive Data Current Summary of Performance Stock Unit Activity Schedule of Nonvested Performance-Based Units Activity [Table Text Block] 2023 Senior Notes payable through 2028, 5.25%, net of debt issuance costs Senior Notes Due 2028 Senior Notes Due 2028 [Member] Senior Notes Due 2028 Restatement does not require Recovery Restatement Does Not Require Recovery [Text Block] International International International [Member] International. Retirement Benefits [Abstract] Retirement Benefits [Abstract] Preferred stock, shares issued (shares) Preferred Stock, Shares Issued Currency exchange losses, net Currency exchange gains (losses), net Gain (Loss), Foreign Currency Transaction, before Tax Statement of Financial Position [Abstract] Statement of Financial Position [Abstract] Restructuring Charges Restructuring and Related Activities Disclosure [Text Block] Stock-based compensation (Note 11) Stock compensation expense Share-Based Payment Arrangement, Noncash Expense Net income (loss) Net Income (Loss), Including Portion Attributable to Noncontrolling Interest Accumulated defined benefit plans adjustment attributable to parent Accumulated Defined Benefit Plans Adjustment Attributable to Parent [Member] Loss on divestiture of MSA LLC (Note 17) Disposal Group, Not Discontinued Operation, Gain (Loss) on Disposal Provision for income taxes (Note 10) Income Tax Expense (Benefit) Interest cost Defined Benefit Plan, Interest Cost Debt instrument, stated interest rate percentage Debt Instrument, Interest Rate, Stated Percentage Notional amount of open forward contracts Derivative, Notional Amount Corporate Segment Reporting, Reconciling Item, Corporate Nonsegment [Member] International International Segment [Member] International Segment [Member] Supplemental cash flow information: Supplemental Cash Flow Information [Abstract] Net income (loss) attributable to common shareholders Net Income (Loss) Available to Common Stockholders, Diluted Net sales Net sales to external customers Revenues Revenue from Contract with Customer, Excluding Assessed Tax Income Statement Location and Impact of Derivative Financial Instruments Derivative Instruments, Gain (Loss) [Table Text Block] Total other expense, net Nonoperating Income (Expense) Cumulative preferred stock (percent) Preferred Stock, Dividend Rate, Percentage Statement of Comprehensive Income [Abstract] Statement of Comprehensive Income [Abstract] Concentration Risk Benchmark [Domain] Concentration Risk Benchmark [Domain] Effective income tax rate Effective Income Tax Rate Reconciliation, Percent Cash Flow Used in Investing Activities Net Cash Provided by (Used in) Investing Activities Operating income Operating Income (Loss) AOCI Including Portion Attributable to Noncontrolling Interest, Net of Tax [Roll Forward] AOCI Including Portion Attributable to Noncontrolling Interest, Net of Tax [Roll Forward] Variable Rate [Domain] Variable Rate [Domain] Number of reportable segments (in segments) Number of Reportable Segments Total liabilities and shareholdersâ€™ equity Liabilities and Equity Single incident Single Incident [Member] Single Incident [Member] Rule 10b5-1 Arrangement Terminated Rule 10b5-1 Arrangement Terminated [Flag] All Adjustments to Compensation All Adjustments to Compensation [Member] Employeesâ€™ compensation Employee-related Liabilities, Current Hedging Designation [Axis] Hedging Designation [Axis] Derivative Financial Instruments Derivative Instruments and Hedging Activities Disclosure [Text Block] Derivative Instruments, Gain (Loss) [Table] Derivative Instruments, Gain (Loss) [Table] Restructuring charges (Note 3) Restructuring charges Restructuring Charges Accumulated Other Comprehensive Income (Loss) [Line Items] Accumulated Other Comprehensive Income (Loss) [Line Items] Commitments and Contingencies Disclosure [Abstract] Commitments and Contingencies Disclosure [Abstract] Legal Entity [Axis] Legal Entity [Axis] Cash dividends paid Payments of Dividends Disposal Group, Disposed of by Sale, Not Discontinued Operations Disposal Group, Disposed of by Sale, Not Discontinued Operations [Member] Underlying Security Market Price Change Underlying Security Market Price Change, Percent Expected return on plan assets Defined Benefit Plan, Expected Return (Loss) on Plan Assets Individual: Individual [Axis] Common stock, no par value (Note 7) Common Stock, Value, Outstanding Accumulated Other Comprehensive (Loss) AOCI Attributable to Parent [Member] Common dividends Dividends, Common Stock, Stock Remaining performance obligation, expected timing of satisfaction Revenue, Remaining Performance Obligation, Expected Timing of Satisfaction, Period Forfeited (dollars per share) Share-Based Compensation Arrangements by Share-Based Payment Award, Options, Forfeitures in Period, Weighted Average Exercise Price Inventories (Note 4) Total inventories Inventory, Net Product warranty expense Product Warranty Expense Long-term Debt, Type [Domain] Long-Term Debt, Type [Domain] Product and Service [Axis] Product and Service [Axis] Entity Address, State or Province Entity Address, State or Province Property, Plant and Equipment [Line Items] Property, Plant and Equipment [Line Items] Statement [Line Items] Statement [Line Items] Derivative Instruments and Hedging Activities Disclosure [Abstract] Derivative Instruments and Hedging Activities Disclosure [Abstract] Erroneous Compensation Analysis Erroneous Compensation Analysis [Text Block] Defined Benefit Plan Disclosure [Line Items] Defined Benefit Plan Disclosure [Line Items] Components of Property, Plant and Equipment Property, Plant and Equipment [Table Text Block] Compensation Actually Paid vs. Total Shareholder Return Compensation Actually Paid vs. Total Shareholder Return [Text Block] Product liability accrual Product Liability Accrual, Component Amount Unvested, beginning balance (dollars per share) Unvested, ending Balance (dollars per share) Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Nonvested, Weighted Average Grant Date Fair Value Components of Net Periodic Benefit Cost Schedule of Net Benefit Costs [Table Text Block] Minimum Minimum [Member] Restatement Determination Date Restatement Determination Date Estimate of Fair Value Measurement Estimate of Fair Value Measurement [Member] Adoption Date Trading Arrangement Adoption Date Pay vs Performance Disclosure Pay vs Performance Disclosure [Table] Common Stock Activity [Roll Forward] Common Stock Activity [Roll Forward] Common Stock Activity [Roll Forward] Property, Plant and Equipment [Table] Property, Plant and Equipment [Table] Globe Holding Company LLC Globe Holding Company LLC [Member] Globe Holding Company LLC [Member] Outstanding, beginning balance (dollars per share) Outstanding, ending balance (dollars per share) Share-Based Compensation Arrangement by Share-Based Payment Award, Options, Outstanding, Weighted Average Exercise Price Operating lease right-of-use assets, net Operating Lease, Right-of-Use Asset Erroneously Awarded Compensation Recovery Erroneously Awarded Compensation Recovery [Table] Derivative Instruments, Gain (Loss) [Line Items] Derivative Instruments, Gain (Loss) [Line Items] Outstanding, beginning balance (in shares) Outstanding, ending balance (in shares) Share-Based Compensation Arrangement by Share-Based Payment Award, Options, Outstanding, Number Reissued shares (shares) Shares Issued, Shares, Share-Based Payment Arrangement, before Forfeiture Segments [Axis] Segments [Axis] Segments [Axis] Change in Fair Value as of Vesting Date of Prior Year Equity Awards Vested in Covered Year Change in Fair Value as of Vesting Date of Prior Year Equity Awards Vested in Covered Year [Member] Derivative Instrument [Axis] Derivative Instrument [Axis] Property, Plant and Equipment [Abstract] Property, Plant and Equipment [Abstract] Exercise Price Award Exercise Price Accumulated defined benefit plans adjustment, net prior service attributable to parent Accumulated Defined Benefit Plans Adjustment, Net Prior Service Attributable to Parent [Member] Americas Americas Americas Segment [Member] Americas Segment Earnings (Loss) per Share Earnings Per Share [Text Block] Arrangement Duration Trading Arrangement Duration Subsequent Event Subsequent Event [Member] Employee stock purchase program Employee Stock Purchase Plan [Member] Employee Stock Purchase Plan Goodwill and Intangible Assets, Net Goodwill and Intangible Assets Disclosure [Text Block] Equity Equity, Attributable to Parent [Abstract] Warranty claims Standard Product Warranty Accrual, Increase for Warranties Issued Granted (dollars per share) Fair value per unit (dollars per share) Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Grants in Period, Weighted Average Grant Date Fair Value Peer Group Issuers, Footnote Peer Group Issuers, Footnote [Text Block] Segments [Domain] Segments [Domain] Material Terms of Trading Arrangement Material Terms of Trading Arrangement [Text Block] All Individuals All Individuals [Member] Buildings Building [Member] PEO PEO [Member] Variable Rate [Axis] Variable Rate [Axis] Income Tax Disclosure [Abstract] Income Tax Disclosure [Abstract] Name Trading Arrangement, Individual Name Other income, net Other Nonoperating Income (Expense) Other Benefits Other Postretirement Benefits Plan [Member] Statement of Stockholders' Equity [Abstract] Statement of Stockholders' Equity [Abstract] Fair Values Derivatives, Balance Sheet Location, by Derivative Contract Type [Table] Fair Values Derivatives, Balance Sheet Location, by Derivative Contract Type [Table] Preferred stock, dividends (in dollars per share) Preferred Stock, Dividends Per Share, Declared Number of pending lawsuits Loss Contingency, Pending Lawsuits, Number Loss Contingency, Pending Lawsuits, Number Property, Plant and Equipment, Type [Axis] Long-Lived Tangible Asset [Axis] Disposal Group Name [Axis] Disposal Group Name [Axis] Maximum consolidated leverage ratio (not to exceed) Debt Instrument, Covenant, Consolidated Leverage Ratio, Maximum Debt Instrument, Covenant, Consolidated Leverage Ratio, Maximum Company stock purchases (Note 7) Payments for Repurchase of Equity Percentage of target award based on achieving specified performance targets Percentage Of Target Award Based On Achieving Targeted Return On Net Assets Based On Which Final Number Of Shares To Be Issued For Performance Stock Units Percentage of target award based on achieving a targeted return on net assets based on which final number of shares to be issued for performance stock units. Awards Close in Time to MNPI Disclosures, Table Awards Close in Time to MNPI Disclosures [Table Text Block] Prior Year End Fair Value of Equity Awards Granted in Any Prior Year that Fail to Meet Applicable Vesting Conditions During Covered Year Prior Year End Fair Value of Equity Awards Granted in Any Prior Year that Fail to Meet Applicable Vesting Conditions During Covered Year [Member] Aggregate Erroneous Compensation Amount Aggregate Erroneous Compensation Amount Restructuring Cost and Reserve [Line Items] Restructuring Cost and Reserve [Line Items] Local Phone Number Local Phone Number Prepaid expenses and other current assets Prepaid Expenses and Other Current Assets [Member] Aggregate Erroneous Compensation Not Yet Determined Aggregate Erroneous Compensation Not Yet Determined [Text Block] Cumulative Preferred Stock Cumulative Preferred Stock [Member] Deferred tax liabilities (Note 10) Deferred Income Tax Liabilities, Net Expected volatility Share-Based Compensation Arrangement by Share-Based Payment Award, Fair Value Assumptions, Expected Volatility Rate Summary of Restricted Stock and Unit Activity Share-Based Payment Arrangement, Restricted Stock Unit, Activity [Table Text Block] Valuation Approach and Technique [Axis] Valuation Approach and Technique [Axis] Award vesting period Share-Based Compensation Arrangement by Share-Based Payment Award, Award Requisite Service Period Accounts payable Increase (Decrease) in Other Operating Assets Changes in: Increase (Decrease) in Operating Capital [Abstract] Secured Overnight Financing Rate (SOFR) Secured Overnight Financing Rate (SOFR) [Member] PEO Total Compensation Amount PEO Total Compensation Amount Pension and post-retirement plan adjustments, net of tax (Note 6) Pension and post-retirement plan adjustments, net of tax Other Comprehensive (Income) Loss, Defined Benefit Plan, after Reclassification Adjustment, after Tax Property, Plant and Equipment, Type [Domain] Long-Lived Tangible Asset [Domain] Commitments and Contingencies Commitments and Contingencies Disclosure [Text Block] Debt Disclosure [Abstract] Debt Disclosure [Abstract] Loss (gain) on asset dispositions, net Gain (Loss) on Disposition of Other Assets Common Stock Common Stock [Member] Measure: Measure [Axis] Stock compensation expense Shares Issued, Value, Share-Based Payment Arrangement, after Forfeiture Net cash pool position Cash Balance, Amount Offset Against Collateral Cash Balance, Amount Offset Against Collateral Consolidated leverage ratio (not more than) Debt Instrument, Covenant, Consolidated Leverage Ratio In Period Of Acquisition, Maximum Debt Instrument, Covenant, Consolidated Leverage Ratio In Period Of Acquisition, Maximum Preferred stock, shares authorized (shares) Preferred Stock, Shares Authorized Forgone Recovery due to Expense of Enforcement, Amount Forgone Recovery due to Expense of Enforcement, Amount Stock issued during period, new issues (shares) Stock Issued During Period, Shares, New Issues Line of Credit Line of Credit [Member] Entity Emerging Growth Company Entity Emerging Growth Company Indefinite-lived Intangible Assets [Axis] Indefinite-Lived Intangible Assets [Axis] Segment Reporting [Abstract] Segment Reporting [Abstract] Entity Central Index Key Entity Central Index Key Schedule of Inventories Schedule of Inventory, Current [Table Text Block] Accrued interest and penalties related to uncertain tax positions Unrecognized Tax Benefits, Income Tax Penalties and Interest Accrued Non-GAAP Measure Description Non-GAAP Measure Description [Text Block] Accumulated foreign currency adjustment attributable to parent Accumulated Foreign Currency Adjustment Attributable to Parent [Member] Non-PEO NEO Average Compensation Actually Paid Amount Non-PEO NEO Average Compensation Actually Paid Amount Amounts reclassified from accumulated other comprehensive loss Reclassification from Accumulated Other Comprehensive Income, Current Period, before Tax Product liability payments (Note 17) Payments on product liability claims Payments on product liability claims Product liability expense (Note 17) Product liability expense Product Liability Accrual, Period Expense Capital Stock Equity [Text Block] Other current assets and liabilities Increase (Decrease) in Accounts Payable and Accrued Liabilities Award Timing, How MNPI Considered Award Timing, How MNPI Considered [Text Block] Equity Component [Domain] Equity Component [Domain] Preferred stock, par value (dollars per share) Preferred Stock, Par or Stated Value Per Share Amounts due within one year Long-Term Debt, Current Maturities Segment Information Segment Reporting Disclosure [Text Block] Percentage of target award based on achieving targeted performance conditions Percentage Of Target Award Based On Achieving Targeted Total Shareholder Return Based On Which Final Number Of Shares To Be Issued For Performance Stock Units Percentage of target award based on achieving a targeted total shareholder return based on which final number of shares to be issued for performance stock units. Accumulated defined benefit plans adjustment, net gain (loss) attributable to parent Accumulated Defined Benefit Plans Adjustment, Net Gain (Loss) Attributable to Parent [Member] Additional 402(v) Disclosure Additional 402(v) Disclosure [Text Block] Line of credit facility, accordion feature Line Of Credit Facility, Accordion Feature, Amount Line Of Credit Facility, Accordion Feature, Amount Reclassification of currency translation from accumulated other comprehensive loss into net income (Note 6) Reclassification from accumulated other comprehensive loss into net income (loss)(b) Reclassification from Accumulated Other Comprehensive Income, Current Period, Net of Tax Restricted Stock Activity Restricted Stock [Member] Entity Shell Company Entity Shell Company Measurement Basis [Axis] Measurement Basis [Axis] Entity Incorporation, State or Country Code Entity Incorporation, State or Country Code Fair value assumptions, average closing price used to calculate expected dividend rate, period (years) Share-based Compensation Arrangement by Share-base Payment Award, Fair Value Assumptions, Average Closing Price Used to Calculate Expected Dividend Rate, Period Share-based Compensation Arrangement by Share-base Payment Award, Fair Value Assumptions, Average Closing Price Used to Calculate Expected Dividend Rate, Period Number of pending class actions Loss Contingency, Pending Class Action, Number Loss Contingency, Pending Class Action, Number Title Trading Arrangement, Individual Title Overnight Bank Funding Rate Overnight Bank Funding Rate [Member] Overnight Bank Funding Rate [Member] Standby Letters of Credit Standby Letters of Credit [Member] Loss on divestiture of MSA LLC (Note 17) Tax-effected loss on divestiture Disposal Group, Not Discontinued Operation, Gain (Loss) On Disposal, Including Tax Effect Disposal Group, Not Discontinued Operation, Gain (Loss) On Disposal, Including Tax Effect Unsecured Debt Unsecured Debt [Member] Statement [Table] Statement [Table] Unrecognized tax benefits Unrecognized Tax Benefits Consolidation Items [Domain] Consolidation Items [Domain] NYL Note Facility NYL Note Facility Senior Unsecured Notes [Member] NYL Note Facility Senior Unsecured Notes City Area Code City Area Code Finite-lived Intangible Assets [Roll Forward] Finite-Lived Intangible Assets [Roll Forward] Disposal group, contributed cash and cash equivalents Disposal Group,

Including Discontinued Operation, Contributed Cash And Cash Equivalents Disposal Group, Including Discontinued Operation, Contributed Cash And Cash Equivalents Disposal Group Classification [Domain] Disposal Group Classification [Domain] Property, plant and equipment, gross Property, Plant, and Equipment and Finance Lease Right-of-Use Asset, before Accumulated Depreciation and Amortization Insider Trading Policies and Procedures Not Adopted Insider Trading Policies and Procedures Not Adopted [Text Block] Concentration Risk Benchmark [Axis] Concentration Risk Benchmark [Axis] Foreign currency translation adjustments Other Comprehensive Income (Loss), Foreign Currency Transaction and Translation Adjustment, Net of Tax Total current assets Assets, Current Statement of Cash Flows [Abstract] Statement of Cash Flows [Abstract] Senior Notes Senior Notes [Member] Preferred stock Preferred Stock [Member] Foreign exchange contracts: other current liabilities Foreign Currency Derivative Instruments Not Designated as Hedging Instruments, Asset at Fair Value Line of credit facility, remaining borrowing capacity Line of Credit Facility, Remaining Borrowing Capacity Exercisable (in shares) Share-Based Compensation Arrangement by Share-Based Payment Award, Options, Exercisable, Number Restricted and performance stock awards Restricted And Performance Stock Awards [Member] Restricted And Performance Stock Awards [Member] Schedule of Long-term Debt Instruments [Table] Schedule of Long-Term Debt Instruments [Table] Pension plans contributions Defined Benefit Plan, Plan Assets, Contributions by Employer Long-term debt, net (Note 12) Long-term debt, net of debt issuance costs Long-Term Debt, Excluding Current Maturities Schedule of Segment Reporting Information, by Segment [Table] Schedule of Segment Reporting Information, by Segment [Table] Weighted Average GrantÂ Date Fair Value Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Nonvested, Weighted Average Grant Date Fair Value [Abstract] Accumulated Other Comprehensive Income (Loss) [Table] Accumulated Other Comprehensive Income (Loss) [Table] Restructuring Reserve [Roll Forward] Restructuring Reserve [Roll Forward] Subsequent Event Type [Axis] Subsequent Event Type [Axis] Income Taxes Income Tax Disclosure [Text Block] Earnings (loss) per share attributable to common shareholders (Note 9): Earnings Per Share [Abstract] Percentage of Total Sales by Product Group Revenue from External Customers by Products and Services [Table Text Block] Equity [Abstract] Equity [Abstract] Raw materials and supplies Inventory, Raw Materials, Net of Reserves Retained earnings Retained Earnings (Accumulated Deficit) Reclassification Out of Accumulated Other Comprehensive Loss Reclassification out of Accumulated Other Comprehensive Income [Table Text Block] Performance adjustments (dollars per share) Share Based Compensation Arrangement By Share Based Payment Award Equity Instruments Other Than Options Performance Adjustment In Period Weighted Average Grant Date Fair Value Share-based compensation arrangement by share-based payment award equity instruments other than options performance adjustment in period, weighted average grant date fair value. Class of Stock [Domain] Class of Stock [Domain] Inventories (Note 4) Increase (Decrease) in Inventories Schedule of Debt Schedule of Debt [Table Text Block] Preferred dividends Preferred stock dividends Dividends, Preferred Stock, Stock Organization, Consolidation and Presentation of Financial Statements [Abstract] Organization, Consolidation and Presentation of Financial Statements [Abstract] Aggregate Available Trading Arrangement, Securities Aggregate Available Amount Equity Awards Adjustments Equity Awards Adjustments [Member] Cash Flow (Used in) From Financing Activities Net Cash Provided by (Used in) Financing Activities Underlying Securities Award Underlying Securities Amount Performance Shares Performance Stock Unit Performance Shares [Member] Weighted average revolving interest rate, percentage Line of Credit Facility, Interest Rate During Period Credit Facility [Axis] Credit Facility [Axis] 2021 Senior Notes payable through 2036, 2.69%, net of debt issuance costs Series C Senior Notes Due July 2036 Multi-Currency Note Series C Senior Notes [Member] Multi-Currency Note Series C Senior Notes Amendment Flag Amendment Flag Loss Contingency Nature Loss Contingency Nature [Axis] Long-term debt, fair value disclosure Long-Term Debt, Fair Value Reported Value Measurement Reported Value Measurement [Member] Entity Registrant Name Entity Registrant Name Adjustment to Non-PEO NEO Compensation Footnote Adjustment to Non-PEO NEO Compensation Footnote [Text Block] Stock Appreciation Rights (SARs) Stock Appreciation Rights (SARs) [Member] Depreciation and amortization Depreciation, Depletion and Amortization Gross profit Gross Profit Machinery and equipment Machinery and Equipment [Member] Restructuring charges Restructuring Charges (Reversal Of Cost) Restructuring Charges (Reversal Of Cost) Schedule of Product Warranty Liability Schedule of Product Warranty Liability [Table Text Block] Fair Value as of Grant Date Award Grant Date Fair Value Prepaid pension cost (Note 14) Assets for Plan Benefits, Defined Benefit Plan Treasury stock, preferred, shares (shares) Treasury Stock, Preferred, Shares Long-Term Debt Debt Disclosure [Text Block] Recovery of Erroneously Awarded Compensation Disclosure [Line Items] Aggregate principal amount Debt Instrument, Face Amount Beginning warranty reserve Ending warranty reserve Standard and Extended Product Warranty Accrual Entity Address, Postal Zip Code Entity Address, Postal Zip Code Consolidation Consolidation, Policy [Policy Text Block] Schedule of Restructuring and Related Costs [Table] Restructuring Cost [Table] Senior Revolving Credit Facility Maturing in 2023 Senior Revolving Credit Facility Maturing in 2026 [Member] Senior Revolving Credit Facility Maturing in 2026 [Member] Restatement Determination Date: Restatement Determination Date [Axis] Notes Payable Notes Payable, Other Payables [Member] Title of 12(b) Security Title of 12(b) Security Concentration Risk Type [Axis] Concentration Risk Type [Axis] Share-based Payment Arrangement [Abstract] Share-Based Payment Arrangement [Abstract] Principal of debt amount due in year before maturity Debt Instrument, Principal Amount Due In Year Before Maturity Debt Instrument, Principal Amount Due In Year Before Maturity Less: cash pool borrowings Cash Balance, Collateral, Obligation to Return Cash Cash Balance, Collateral, Obligation to Return Cash Cash and cash equivalents Cash and cash equivalents Cash and Cash Equivalents, at Carrying Value Property disposals and other investing Payments for (Proceeds from) Other Investing Activities Year-over-Year Change in Fair Value of Equity Awards Granted in Prior Years That are Outstanding and Unvested Year-over-Year Change in Fair Value of Equity Awards Granted in Prior Years That are Outstanding and Unvested [Member] Earnings (loss) per share: Earnings Per Share, Continuing Operations [Abstract] Earnings Per Share, Continuing Operations [Abstract] Tax (benefit) expense Reclassification from AOCI, Current Period, Tax Forfeited (dollars per share) Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Forfeitures, Weighted Average Grant Date Fair Value Other current liabilities Other Current Liabilities [Member] Financing Activities Net Cash Provided by (Used in) Financing Activities [Abstract] Year-end Fair Value of Equity Awards Granted in Covered Year that are Outstanding and Unvested Year-end Fair Value of Equity Awards Granted in Covered Year that are Outstanding and Unvested [Member] Treasury shares purchased for stock compensation programs Share-Based Payment Arrangement [Member] Shares Share-Based Compensation Arrangement by Share-Based Payment Award, Options, Outstanding [Roll Forward] Fair Value Measurement [Domain] Fair Value Measurement [Domain] Valuation Approach and Technique [Domain] Valuation Approach and Technique [Domain] Basic (in dollars per share) Earnings Per Share, Basic Employee stock purchase plan (Note 7) Proceeds from Stock Plans Adjustment To PEO Compensation, Footnote Adjustment To PEO Compensation, Footnote [Text Block] Award Timing MNPI Disclosure Award Timing MNPI Disclosure [Text Block] Movement in Standard and Extended Product Warranty Accrual, Increase (Decrease) [Roll Forward] Movement in Standard and Extended Product Warranty Accrual, Increase (Decrease) [Roll Forward] Property, plant and equipment, net Property, Plant, and Equipment and Finance Lease Right-of-Use Asset, after Accumulated Depreciation and Amortization Capital Unit [Line Items] Capital Unit [Line Items] Aggregate Pension Adjustments Service Cost Aggregate Pension Adjustments Service Cost [Member] Net income (loss) attributable to common equity Net Income (Loss) Available to Common Stockholders, Basic Compensation Actually Paid vs. Other Measure Compensation Actually Paid vs. Other Measure [Text Block] Finite-Lived Intangible Assets, Net [Abstract] Finite-Lived Intangible Assets, Net [Abstract] Schedule of Stock by Class [Table] Stock, Class of Stock [Table] Total current liabilities Liabilities, Current Vesting Date Fair Value of Equity Awards Granted and Vested in Covered Year Vesting Date Fair Value of Equity Awards Granted and Vested in Covered Year [Member] Total assets Assets Cost of products sold Cost of Goods and Services Sold Senior revolving credit facility maturing in 2026, net of debt issuance costs Long-Term Line of Credit Granted (in shares) Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Grants in Period Cash and Cash Equivalents [Abstract] Capital expenditures Payments to Acquire Property, Plant, and Equipment Other noncurrent liabilities Other Liabilities, Noncurrent Forgone Recovery due to Violation of Home Country Law, Amount Forgone Recovery due to Violation of Home Country Law, Amount Fair Value Measurements Fair Value Measurement and Measurement Inputs, Recurring and Nonrecurring [Text Block] Fire Service Breathing Apparatus [Member] Breathing Apparatus [Member] Termination Date Trading Arrangement Termination Date Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items] Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items] Stock Plans Share-Based Payment Arrangement [Text Block] Not designated as hedging instrument Not Designated as Hedging Instrument [Member] Entity Address, City or Town Entity Address, City or Town Proceeds from long-term debt (Note 12) Proceeds from Issuance of Long-Term Debt Multi-currency Notes Due in 2031 Multi-currency Notes Due in 2031 [Member] Multi-currency Notes Due in 2031 [Member] Debt Instrument [Axis] Debt Instrument [Axis] Summary of Stock Option Activity Share-Based Payment Arrangement, Option, Activity [Table Text Block] Net income (loss) Net income (loss) Net loss Net Income (Loss) Attributable to Parent Trading Arrangement: Trading Arrangement [Axis] Pay vs Performance Disclosure, Table Pay vs Performance [Table Text Block] Loss Contingencies [Table] Loss Contingencies [Table] Forfeited (in shares) Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Forfeited in Period Business Acquisition [Axis] Business Acquisition [Axis] Changes in Intangible Assets, Net of Accumulated Amortization Schedule of Finite-Lived Intangible Assets [Table Text Block] Equity Awards Adjustments, Excluding Value Reported in Compensation Table Equity Awards Adjustments, Excluding Value Reported in the Compensation Table [Member] Dividends or Other Earnings Paid on Equity Awards not Otherwise Reflected in Total Compensation for Covered Year Dividends or Other Earnings Paid on Equity Awards not Otherwise Reflected in Total Compensation for Covered Year [Member] Entity File Number Entity File Number Number of geographical segments (in segments) Number of Geographical Segments Number of Geographical Segments Document Fiscal Year Focus Document Fiscal Year Focus Revenue from External Customers by Products and Services [Table] Segment Reporting, Revenue from External Customer, Product and Service [Table] Income Statement [Abstract] Income Statement [Abstract] Entity Address, Address Line One Entity Address, Address Line One Product Concentration Risk Product Concentration Risk [Member] Treasury shares purchased for stock compensation programs Treasury Stock, Value, Acquired, Cost Method Revenue from External Customer [Line Items] Revenue from External Customer [Line Items] Debt Instrument, Name [Domain] Debt Instrument, Name [Domain] Currency translation Restructuring Reserve, Foreign Currency Translation Gain (Loss) Effect of exchange rate changes on cash, cash equivalents and restricted cash Effect of Exchange Rate on Cash, Cash Equivalents, Restricted Cash, and Restricted Cash Equivalents, Continuing Operations Name Forgone Recovery, Individual Name Principal of debt amount due at maturity Debt Instrument, Principal Amount Due At Maturity Debt Instrument, Principal Amount Due At Maturity Document Period End Date Document Period End Date Loss Contingency, Nature [Domain] Loss Contingency, Nature [Domain] Finished products Inventory, Finished Goods, Net of Reserves Award Timing MNPI Considered Award Timing MNPI Considered [Flag] Base Rate Base Rate [Member] Performance adjustments (in shares) Share Based Compensation Arrangement By Share Based Payment Award Equity Instruments Other Than Options Performance Adjustment In Period Share-based compensation arrangement by share-based payment award equity instruments other than options performance adjustment in period. Unvested, beginning balance (in shares) Unvested, ending balance (in shares) Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Nonvested, Number Insider Trading Arrangements [Line Items] Cash and Cash Equivalents Cash and Cash Equivalents Disclosure [Text Block] Inventory Disclosure [Abstract] Inventory Disclosure [Abstract] Outstanding Aggregate Erroneous Compensation Amount Outstanding Aggregate Erroneous Compensation Amount Adjusted operating income (loss) Operating Income (Loss), Adjusted Operating Income (Loss), Adjusted PEO Actually Paid Compensation Amount PEO Actually Paid Compensation Amount Restricted and performance stock awards Shares Granted, Value, Share-Based Payment Arrangement, before Forfeiture Adjustment to Compensation: Adjustment to Compensation [Axis] Restricted cash included in prepaid expenses and other current assets Restricted Cash, Current Assets, Included in Prepaid Expenses and Other Current Assets Restricted Cash, Current Assets, Included in Prepaid Expenses and Other Current Assets Prepaid expenses and other current assets Prepaid Expense and Other Assets, Current Document Transition Report Document Transition Report Document Quarterly Report Document Quarterly Report 2016 Senior Notes payable through 2031, 3.40%, net of debt issuance costs Senior Notes Payable Through Two Thousand Thirty One Three Point Four Percentage [Member] [Member] Senior Notes Payable Through Two Thousand Thirty One Three Point Four Percentage [Member] [Member] Derivatives not designated as hedging instruments: Foreign Currency Derivative Instruments Not Designated as Hedging Instruments, Liability at Fair Value Fair Value, Recurring and Nonrecurring [Table] Fair Value, Recurring and Nonrecurring [Table] Accumulated other comprehensive loss (Note 6) Accumulated Other Comprehensive Income (Loss), Net of Tax Entity Current Reporting Status Entity Current Reporting Status Retained Earnings Retained Earnings [Member] Joint Venture By R&Q Insurance Holdings Ltd. And Obra Capital, Inc. Joint Venture By R&Q Insurance Holdings Ltd. And Obra Capital, Inc. [Member] Joint Venture By R&Q Insurance Holdings Ltd. And Obra Capital, Inc. Pension Adjustments Service Cost Pension Adjustments Service Cost [Member] Basic weighted-average shares outstanding (shares) Weighted Average Number of Shares Outstanding, Basic Stock Price or TSR Estimation Method Stock Price or TSR Estimation Method [Text Block] Total estimated pension plans contributions for the fiscal year Defined Benefit Plan, Expected Future Employer Contributions, Current Fiscal Year Indefinite-lived intangible assets Business Combination, Recognized Identifiable Assets Acquired and Liabilities Assumed, Indefinite-Lived Intangible Assets Reclassifications Out of Accumulated Other Comprehensive Loss Disclosure of Reclassification Amount [Text Block] Total shareholdersâ€™ equity Balance at beginning of period Balance at end of period Equity, Including Portion Attributable to Noncontrolling Interest Unrealized net gains (losses) on available-for-sale securities Debt Securities, Available-for-Sale, Unrealized Gain (Loss) Increase (Decrease) in Stockholders' Equity [Roll Forward] Increase (Decrease) in Stockholders' Equity [Roll Forward] Executive Category: Executive Category [Axis] Name Awards Close in Time to MNPI Disclosures, Individual Name Construction in progress Construction in Progress [Member] Revenue Benchmark Revenue Benchmark [Member] Forfeited (in shares) Share-Based Compensation Arrangement by Share-Based Payment Award, Options, Forfeitures in Period Net cost for product related legal matter Product liability expense (Note 17) Litigation Settlement, Loss Currency translation Finite-Lived Intangible Assets, Foreign Currency Translation Gain (Loss) Entity Filer Category Entity Filer Category Restructuring reserve, beginning balance Restructuring reserve, ending balance Restructuring Reserve Remaining performance obligation, amount Revenue, Remaining Performance Obligation, Amount Damages From Product Substances Damages From Product Substances [Member] Damages From Product Substances Loss Contingencies [Line Items] Loss Contingencies [Line Items] Company Selected Measure Name Company Selected Measure Name EX-101.PRE 9 msa-20240930_pre.xml XBRL TAXONOMY EXTENSION PRESENTATION LINKBASE DOCUMENT GRAPHIC 10 msa-20240930_g1.jpg MSA LOGO begin 644 msa-20240930_g1.jpg M_]C_X 02D9)1@ ! @ 9 !D # _[11'5C:WD 0 $ 9 _^X #D%D M;V)E &3 ?_; (0 0$! 0$! 0$!

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4M!!3V$]$#C(=H#MZRLA(2C_*MX4/ MEXJZARJJ+M5J?<45*)KJ8DDF9)):F22<2<3UP>?$'C=@+BU6++C?"]\D[5#V MB6^T#J%L5XB+:X9+%9 R=_*V[!%L=JT=) !E@Z#
8X;B(:KLMMLC(@F73B9^ MW$]/[/[;[?[76RITYHJO754E6[Q5-NU+3Q20G(KAI0$Y4D2SX8G$QD&[A6#3< M?>668:.@V]/ 2$VM<:IY:)D6H0%K 99JU:]7@H2..X,@80\ ,00UCWTY%K3U
M$3'Y=WNQXZ5,MVN#?66%H6=I"><0D8=!-\\<-8YB M+0&ZCHQ&Y#)KB!MS#X;:LU+"*A2SB KW!'6X&K+=H7FUN>KKM3KJ:*@OBWB MV@I"E%(PD58#Q2./9')[D?/JMDH8
=L8_F9W^MV^5=:W;115%%1T++@4EU: M%E2UJ!F,F 2)8XSB[.WGW5*YP\P_+XFOM#MEZ9#;7D_67-??1K5.)CI)!N# MZ.53D5 $YC/DCJE$NP?
3$!TYJI2RG(H$B>$HWKESYKK=LYHU[26H*"KKFOG9 M=94TXVD(2M*>'')G/F2,S.VCB,;W2636BXATJ"RT/"LF MB#"-CSF3$R?4DW;@)^D>D3B(^_5-Q:75E6,B(YGW9U]4[F;@W'6SJ%-)JW\R
M$$S*&TI"4(GT8) G+"9,.>XZ=\V+Q_B2J8_R]B.=L]A\(PK;>Q5.3CD6DS& MQ34K-BZ?LI,$S-7I6R:9#E3$Y#=/5N CMJX36)2D!0)/='';&VW/73:?T?2:> MUA9WJFX4;"&4O,.(2'$(3E25H7+*H)
!RD@RGA.4NC'T&BT!K:YUS+MFW0Z/YHN&J:_EG'ZHB7PT$5C:!E(4?6BQVGYR MM*[>Z3.GJZSUM14&OJG\R'&@G*^Z7$IDK&:09'JPP@C/_/UA3^P/(OY3K?\ MI-'Y\W\5425_] M%?R"O_P":Q
K\N.\A4.1N.V^(8+$,_ 4FQ3M=<9%?3641V 1'P:NK0X,LC+KB)=XN63X::[4)>3PQ M-(\D:OO]S4V[=#1%)HG25OJK;0,O(4X5N(.9#2"AIM/#/F@D$SZF^+_ "!HF9#J35@B
MZ^N\9V&"2DUS+2]>EFQV$P(OSN1PO(URG+Q2CL[Z-!((\QMG#1PJH B;^*.P>S2J'D/#,D2(M!\D2)S*;UZ8WNO-NO=EMU30W&F94RX7%MJ#B,^9OS.M.90F>HP[?,=$
M:26)VJ8M4[O+,7#!29":=NVBA BC"+TR*(G 1#;5QD0<2,8ZON.U6V]XK7;I M=+);*BY5"\SCCC"%+6HX%2E$3)D!C';P/RX[363>,$/R(O58XZT8()I4X[(, M 6IMU/L[>;5%!+MJK$)NHQ-
_J>DW4(HB0Y!2#J$0#0#:.H"+\&-J!/+IVT M2_=F_1B9&CL$;,[4=/V=M'U9OT8$#C'SR[<65(>3NN=,/<:,%5&Y7QJ7, 0SR#3 MD;Y;*G'2BT&:WW.+")]/ -)>3% K$4]R*^;T[B8HZ'#1V""=F-
J/N[:/JS7H MQ>G''EIVJ^0]FNU:,X;QICY:OW_(E-J#NZ4>)8LLB1>,XI28L=OA'GRXC-I& MD8H*J%;K* X*5/Z0;F -'AH[!".S&U$_\.VB?[LUZ,3;->7>!=!Q9@*]8DXH M53D':^5D^-4(=._4 M Z&1'8(
V8VGG_AVT?5F_1CVKF6^WE79]@8LY-81P3QYY(7%1%M*X7>LZY># MTUW*OGK>KM;#TLVY7#,BJJ9E"J@&WOT>&CL$+\%]J.D:=M'U9OT M8CDES&['T0]FHV3F^.S-
]7G<@PE&JM$#S$9"'ECPLNR()(4Q%W$6](/G@03 MF38PCMMH<-'8(/X,;4_=VT_5F_1BS5J2NI6P$Y"97CB1+%16OKD5YI9IE3'X),&XVJ2-%UQTR54ABFDF,P]()6ZR!3D4 M#Z0")?'1X:#U"'?
@OM1]W;1]6:]&)-"YP[05CJ,U=HR+P6O7(2@R&2WKI:A- M6RJU-B[0-+D9-DTZ XSAVYY?,TYSALJN6$X2 '? AY>[&,1?)!:9J^4X"!5CM3O09-&YW1%=P*9502F*(:,X.YM[6.8.+*QLN8IM.3N4:+^S
E6\]\82> M)4;*53&+Q2IL;K3!HLW MZ[(5^2JSU1! RR3%J04G!! _5N!MPT(:#*!PMW: M#O.1LGY LF0.3KB:Q[E.P4S+>0:BRH,/&3MISO0L?$I]9GW%K1.9]'4*,EP^ M9$A6OED$Y0)U
'CI013DU,GER/EC M(*2JKDYS67(A2%CQ5,(G;M@VZC (AI3@YS WX1[-V2.2-.S);N2EAE\0&ON1 MLSV&FXR^RD>SLR%C>0ZV+Z!?)L=+U+'^-6T(T7&/ M;UV!L!DY$H&(;JZ1*
("8>K2G#2H'J@::'VJ[ID[E/QRH=NJEW@^.W#R+N:N8 M,@7"NM*C&\JKQ/Y1E XML 12 R1.htm IDEA: XBRL DOCUMENT v3.24.3 Cover - shares 9 Months Ended Sep. 30, 2024 Oct. 18, 2024 Cover [Abstract] Â Â Document Type 10-Q Â Document Quarterly Report true Â Document Period End Date Sep. 30, 2024 Â Document Transition Report false Â Entity File Number 1-15579 Â Entity Registrant Name MSA SAFETY INC Â Entity Incorporation, State or Country Code PA Â Entity Tax Identification Number 46-4914539 Â Entity Address, Address Line One 1000 Cranberry Woods Drive Â Entity Address, City or Town Cranberry Township, Â Entity Address, State or Province PA Â Entity Address, Postal Zip Code 16066-5207 Â City Area Code 724 Â Local Phone Number 776-8600 Â Entity Current Reporting Status Yes Â Entity Interactive Data Current Yes Â Entity Filer Category Large Accelerated Filer Â Entity Small Business false Â Entity Emerging Growth Company false Â Entity Shell Company false Â Title of 12(b) Security Common Stock, no par value Â Trading Symbol MSA Â Security Exchange Name NYSE Â Entity Common Stock, Shares Outstanding (in shares) Â 39,309,950 Amendment Flag false Â Document Fiscal Year Focus 2024 Â Document Fiscal Period Focus Q3 Â Entity Central Index Key 0000066570 Â Current Fiscal Year End Date --12-31 Â X - DefinitionBoolean flag that is true when the XBRL content amends previously-filed or accepted submission. + ReferencesNo definition available. + Details Name: dei_AmendmentFlag Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - DefinitionArea code of city + ReferencesNo definition available. + Details Name: dei_CityAreaCode Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: duration X - DefinitionCover page. + ReferencesNo definition available. + Details Name: dei_CoverAbstract Namespace Prefix: dei_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionEnd date of current fiscal year in the format --MM-DD. + ReferencesNo definition available. + Details Name: dei_CurrentFiscalYearEndDate Namespace Prefix: dei_ Data Type: xbrli:gMonthDayItemType Balance Type: na Period Type: duration X - DefinitionFiscal period values are FY, Q1, Q2, and Q3. 1st, 2nd and 3rd quarter 10-Q or 10-QT statements have value Q1, Q2, and Q3 respectively, with 10-K, 10-KT or other fiscal year statements having FY. + ReferencesNo definition available. + Details Name: dei_DocumentFiscalPeriodFocus Namespace Prefix: dei_ Data Type: dei:fiscalPeriodItemType Balance Type: na Period Type: duration X - DefinitionThis is focus fiscal year of the document report in YYYY format. For a 2006 annual report, which may also provide financial information from prior periods, fiscal 2006 should be given as the fiscal year focus. Example: 2006. + ReferencesNo definition available. + Details Name: dei_DocumentFiscalYearFocus Namespace Prefix: dei_ Data Type: xbrli:gYearItemType Balance Type: na Period Type: duration X - DefinitionFor the EDGAR submission types of Form 8-K: the date of the report, the date of the earliest event reported; for the EDGAR submission types of Form N-1A: the filing date; for all other submission types: the end of the reporting or transition period. The format of the date is YYYY-MM-DD. + ReferencesNo definition available. + Details Name: dei_DocumentPeriodEndDate Namespace Prefix: dei_ Data Type: xbrli:dateItemType Balance Type: na Period Type: duration X - DefinitionBoolean flag that is true only for a form used as an quarterly report. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Form 10-Q -Number 240 -Section 308 -Subsection a + Details Name: dei_DocumentQuarterlyReport Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - DefinitionBoolean flag that is true only for a form used as a transition report. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Forms 10-K, 10-Q, 20-F -Number 240 -Section 13 -Subsection a-1 + Details Name: dei_DocumentTransitionReport Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - DefinitionThe type of document being provided (such as 10-K, 10-Q, 485BPOS, etc). The document type is limited to the same value as the supporting SEC submission type, or the word 'Other'. + ReferencesNo definition available. + Details Name: dei_DocumentType Namespace Prefix: dei_ Data Type: dei:submissionTypeItemType Balance Type: na Period Type: duration X - DefinitionAddress Line 1 such as Attn, Building Name, Street Name + ReferencesNo definition available. + Details Name: dei_EntityAddressAddressLine1 Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: duration X - DefinitionName of the City or Town + ReferencesNo definition available. + Details Name: dei_EntityAddressCityOrTown Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: duration X - DefinitionCode for the postal or zip code + ReferencesNo definition available. + Details Name: dei_EntityAddressPostalZipCode Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: duration X - DefinitionName of the state or province. + ReferencesNo definition available. + Details Name: dei_EntityAddressStateOrProvince Namespace Prefix: dei_ Data Type: dei:stateOrProvinceItemType Balance Type: na Period Type: duration X - DefinitionA unique 10-digit SEC-issued value to identify entities that have filed disclosures with the SEC. It is commonly abbreviated as CIK. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b-2 + Details Name: dei_EntityCentralIndexKey Namespace Prefix: dei_ Data Type: dei:centralIndexKeyItemType Balance Type: na Period Type: duration X - DefinitionIndicate number of shares or other units outstanding of each of registrant's classes of capital or common stock or other ownership interests, if and as stated on cover of related periodic report. Where multiple classes or units exist define each class/interest by adding class of stock items such as Common Class A [Member], Common Class B [Member] or Partnership Interest [Member] onto the Instrument [Domain] of the Entity Listings, Instrument. + ReferencesNo definition available. + Details Name: dei_EntityCommonStockSharesOutstanding Namespace Prefix: dei_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionIndicate 'Yes' or 'No' whether registrants (1) have filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that registrants were required to file such reports), and (2) have been subject to such filing requirements for the past 90 days. This information should be based on the registrant's current or most recent filing containing the related disclosure. + ReferencesNo definition available. + Details Name: dei_EntityCurrentReportingStatus Namespace Prefix: dei_ Data Type: dei:yesNoItemType Balance Type: na Period Type: duration X - DefinitionIndicate if registrant meets the emerging growth company criteria. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b-2 + Details Name: dei_EntityEmergingGrowthCompany Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - DefinitionCommission file number. The field allows up to 17 characters. The prefix may contain 1-3 digits, the sequence number may contain 1-8 digits, the optional suffix may contain 1-4 characters, and the fields are separated with a hyphen. + ReferencesNo definition available. + Details Name: dei_EntityFileNumber Namespace Prefix: dei_ Data Type: dei:fileNumberItemType Balance Type: na Period Type: duration X - DefinitionIndicate whether the registrant is one of the following: Large Accelerated Filer, Accelerated Filer, Non-accelerated Filer. Definitions of these categories are stated in Rule 12b-2 of the Exchange Act. This information should be based on the registrant's current or most recent filing containing the related disclosure. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b-2 + Details Name: dei_EntityFilerCategory Namespace Prefix: dei_ Data Type: dei:filerCategoryItemType Balance Type: na Period Type: duration X - DefinitionTwo-character EDGAR code representing the state or country of incorporation. + ReferencesNo definition available. + Details Name: dei_EntityIncorporationStateCountryCode Namespace Prefix: dei_ Data Type: dei:edgarStateCountryItemType Balance Type: na Period Type: duration X - DefinitionBoolean flag that is true when the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Regulation S-T -Number 232 -Section 405 + Details Name: dei_EntityInteractiveDataCurrent Namespace Prefix: dei_ Data Type: dei:yesNoItemType Balance Type: na Period Type: duration X - DefinitionThe exact name of the entity filing the report as specified in its charter, which is required by forms filed with the SEC. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b-2 + Details Name: dei_EntityRegistrantName Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: duration X - DefinitionBoolean flag that is true when the registrant is a shell company as defined in Rule 12b-2 of the Exchange Act. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b-2 + Details Name: dei_EntityShellCompany Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - DefinitionIndicates that the company is a Smaller Reporting Company (SRC). + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b-2 + Details Name: dei_EntitySmallBusiness Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - DefinitionThe Tax Identification Number (TIN), also known as an Employer Identification Number (EIN), is a unique 9-digit value assigned by the IRS. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b-2 + Details Name: dei_EntityTaxIdentificationNumber Namespace Prefix: dei_ Data Type: dei:employerIdItemType Balance Type: na Period Type: duration X - DefinitionLocal phone number for entity. + ReferencesNo definition available. + Details Name: dei_LocalPhoneNumber Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: duration X - DefinitionTitle of a 12(b) registered security. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b + Details Name: dei_Security12bTitle Namespace Prefix: dei_ Data Type: dei:securityTitleItemType Balance Type: na Period Type: duration X - DefinitionName of the Exchange on which a security is registered. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection d1-1 + Details Name: dei_SecurityExchangeName Namespace Prefix: dei_ Data Type: dei:edgarExchangeCodeItemType Balance Type: na Period Type: duration X - DefinitionTrading symbol of an instrument as listed on an exchange. + ReferencesNo definition available. + Details Name: dei_TradingSymbol Namespace Prefix: dei_ Data Type: dei:tradingSymbolItemType Balance Type: na Period Type: duration XML 13 R2.htm IDEA: XBRL DOCUMENT v3.24.3 Condensed Consolidated Statements of Income - USD ($) $ in Thousands 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Income Statement [Abstract] Â Â Â Â Net sales $ 432,679 $ 446,728 $ 1,308,443 $ 1,292,290 Cost of products sold 225,223 227,967 682,427 678,335 Gross profit 207,456 218,761 626,016 613,955 Selling, general and administrative 95,103 102,175 294,329 289,602 Research and development 16,707 17,682 49,695 48,906 Restructuring charges (Note 3) 1,184 3,285 5,744 8,382 Currency exchange losses, net 2,985 1,496 4,715 8,781 Loss on divestiture of MSA LLC (Note 17) 0 0 0 129,211 Product liability expense (Note 17) 0 0 0 3 Operating income 91,477 94,123 271,533 129,070 Interest expense 9,153 12,498 29,556 37,149 Other income, net (5,833) (6,037) (16,215) (15,487) Total other expense, net 3,320 6,461 13,341 21,662 Income before income taxes 88,157 87,662 258,192 107,408 Provision for income taxes (Note 10) 21,509 22,406 61,171 125,235 Net income (loss) $ 66,648 $ 65,256 $ 197,021 $ (17,827) Earnings (loss) per share attributable to common shareholders (Note 9): Â Â Â Â Basic (in dollars per share) $ 1.69 $ 1.66 $ 5.00 $ (0.46) Diluted (in dollars per share) 1.69 1.65 4.98 (0.46) Dividends per common share (in dollars per share) $ 0.51 $ 0.47 $ 1.49 $ 1.40 X - DefinitionAggregate dividends paid during the period for each share of common stock outstanding. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1 + Details Name: us-gaap_CommonStockDividendsPerShareCashPaid Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionThe aggregate costs related to goods produced and sold and services rendered by an entity during the reporting period. This excludes costs incurred during the reporting period related to financial services rendered and other revenue generating activities. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(2)(d)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(2)(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 924 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SAB Topic 11.L) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479941/924-10-S99-1 + Details Name: us-gaap_CostOfGoodsAndServicesSold Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount before tax of gain (loss) recognized on the sale or disposal of a disposal group. Excludes discontinued operations. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 360 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482099/360-10-50-3Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 360 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482130/360-10-45-5 + Details Name: us-gaap_DisposalGroupNotDiscontinuedOperationGainLossOnDisposal Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_EarningsPerShareAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe amount of net income (loss) for the period per each share of common stock or unit outstanding during the reporting period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 52 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482635/260-10-55-52Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic

10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-3Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 15 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482635/260-10-55-15Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (e)(4) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-7Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-2Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 60B -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-4Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-10Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(25)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(27)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(23)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-7 + Details Name: us-gaap_EarningsPerShareBasic Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionThe amount of net income (loss) for the period available to each share of common stock or common unit outstanding during the reporting period and to each share or unit that would have been outstanding assuming the issuance of common shares or units for all dilutive potential common shares or units outstanding during the reporting period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 52 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482635/260-10-55-52Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-3Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 15 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482635/260-10-55-15Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (e)(4) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-7Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-2Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 60B -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-4Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-10Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(25)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(27)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(23)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-7 + Details Name: us-gaap_EarningsPerShareDiluted Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionAmount, before tax, of realized and unrealized gain (loss) from foreign currency transaction. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-07(7)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 20 -Name Accounting Standards Codification -Section 35 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482014/830-20-35-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481956/830-20-45-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481926/830-20-50-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 17 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481839/830-10-45-17 + Details Name: us-gaap_ForeignCurrencyTransactionGainLossBeforeTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAggregate revenue less cost of goods and services sold or operating expenses directly attributable to the revenue generation activity. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-48Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30Reference 5: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 6: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 7: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 8: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 9: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 14: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 23: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 31 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-31 + Details Name: us-gaap_GrossProfit Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of income (loss) from continuing operations, including income (loss) from equity method investments, before deduction of income tax expense (benefit), and income (loss) attributable to noncontrolling interest. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-48Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30Reference 5: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 6: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 7: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(11)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 9: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 31 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-31Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 235 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-05(b)(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477314/942-235-S99-1Reference 11: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(10)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 12: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(15)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1 + Details Name: us-gaap_IncomeLossFromContinuingOperationsBeforeIncomeTaxesExtraordinaryItemsNoncontrollingInterest Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_IncomeStatementAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of current income tax expense (benefit) and deferred income tax expense (benefit) pertaining to continuing operations. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 12 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-12Reference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 231 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482663/740-10-55-231Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 9 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-9Reference 6:

http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SAB Topic 6.I.7) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479360/740-10-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-8Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-10Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (h) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(9)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Subparagraph (a) -SubTopic 20 -Topic 740 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482659/740-20-45-2Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(h)) -SubTopic 10 -Topic 235 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1 + Details Name: us-gaap_IncomeTaxExpenseBenefit Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of interest expense classified as nonoperating. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2 + Details Name: us-gaap_InterestExpenseNonoperating Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe portion of profit or loss for the period, net of income taxes, which is attributable to the parent. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 9 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-9Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-6Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-3Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-1Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-8Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-4Reference 17: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-10Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section 45 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479105/946-220-45-7Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(18)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-07(9)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-1Reference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(1)(d)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 23: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 27: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 28: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 29: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 30: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 31: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 32: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 60B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 33: http://www.xbrl.org/2003/role/disclosureRef -Topic 205 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483499/205-20-50-7Reference 34: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 35: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1AReference 36: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1BReference 37: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(22)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1 + Details Name: us-gaap_NetIncomeLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe aggregate amount of income or expense from ancillary business-related activities (that is to say, excluding major activities considered part of the normal operations of the business). + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(7)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2 + Details Name: us-gaap_NonoperatingIncomeExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe net result for the period of deducting operating expenses from operating revenues. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 5: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 6: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 7: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 31 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-31 + Details Name: us-gaap_OperatingIncomeLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of income (expense) related to nonoperating activities, classified as other. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(9)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2 + Details Name: us-gaap_OtherNonoperatingIncomeExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe amount of loss reported during the period pertaining to product liability. + ReferencesNo definition available. + Details Name: us-gaap_ProductLiabilityAccrualPeriodExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of expense for research and development. Includes, but is not limited to, cost for computer software product to be sold, leased, or otherwise marketed and writeoff of research and development assets acquired in transaction other than business combination or joint venture formation or both. Excludes write-down of intangible asset acquired in business combination or from joint venture formation or both, used in research and development activity. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-48Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 985 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481283/985-20-50-2Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 730 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482916/730-10-50-1Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 912 -SubTopic 730 -Name Accounting Standards Codification -Section 25 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479532/912-730-25-1 + Details Name: us-gaap_ResearchAndDevelopmentExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of expenses associated with exit or disposal activities pursuant to an authorized plan. Excludes expenses related to a discontinued operation or an asset retirement obligation. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 5.P.4.b.1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479823/420-10-S99-2Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482047/420-10-45-3Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SAB Topic 5.P.3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479823/420-10-S99-1 + Details Name: us-gaap_RestructuringCharges Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount, excluding tax collected from customer, of revenue from satisfaction of performance obligation by transferring promised good or service to customer. Tax collected from customer is tax assessed by governmental authority that is both imposed on and concurrent with specific revenue-producing transaction, including, but not limited to, sales, use, value added and excise. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 41 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-41Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 4: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 5: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 924 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SAB Topic 11.L) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479941/924-10-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-5Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 42 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-42Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 40 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-40Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 13:

http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-4 + Details Name: us-gaap_RevenueFromContractWithCustomerExcludingAssessedTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe aggregate total costs related to selling a firm's product and services, as well as all other general and administrative expenses. Direct selling expenses (for example, credit, warranty, and advertising) are expenses that can be directly linked to the sale of specific products. Indirect selling expenses are expenses that cannot be directly linked to the sale of specific products, for example telephone expenses, Internet, and postal charges. General and administrative expenses include salaries of non-sales personnel, rent, utilities, communication, etc. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2 + Details Name: us-gaap_SellingGeneralAndAdministrativeExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration XML 14 R3.htm IDEA: XBRL DOCUMENT v3.24.3 Condensed Consolidated Statements of Comprehensive Income - USD ($) $ in Thousands 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Statement of Comprehensive Income [Abstract] Â Â Â Â Net income (loss) $ 66,648 $ 65,256 $ 197,021 $ (17,827) Other comprehensive gain (loss), net of tax: Â Â Â Â Foreign currency translation adjustments (Note 6) 21,329 (18,771) 1,834 (2,538) Pension and post-retirement plan adjustments, net of tax (Note 6) 14 188 2,410 742 Unrealized gain on available-for-sale securities (Note 6) 0 0 0 2 Reclassification of currency translation from accumulated other comprehensive loss into net income (Note 6) 0 101 (1,200) 101 Total other comprehensive gain (loss), net of tax 21,343 (18,482) 3,044 (1,693) Comprehensive income (loss) $ 87,991 $ 46,774 $ 200,065 $ (19,520) X - DefinitionAmount after tax of increase (decrease) in equity from transactions and other events and circumstances from net income and other comprehensive income. Excludes changes in equity resulting from investments by owners and distributions to owners. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 19 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481231/810-10-45-19Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(22)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(24)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1A -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1AReference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1B -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1BReference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 7: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 810 -SubTopic 10 -Section 55 -Paragraph 4K -Publisher FASB -URI https://asc.fasb.org/1943274/2147481175/810-10-55-4K + Details Name: us-gaap_ComprehensiveIncomeNetOfTaxIncludingPortionAttributableToNoncontrollingInterest Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe portion of profit or loss for the period, net of income taxes, which is attributable to the parent. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 9 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-9Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-6Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-3Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-1Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-8Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-4Reference 17: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-10Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section 45 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479105/946-220-45-7Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(18)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-07(9)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-1Reference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(1)(d)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 23: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 27: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 28: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 29: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 30: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 31: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 32: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 60B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 33: http://www.xbrl.org/2003/role/disclosureRef -Topic 205 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483499/205-20-50-7Reference 34: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 35: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1AReference 36: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1BReference 37: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(22)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1 + Details Name: us-gaap_NetIncomeLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount after tax, before reclassification adjustments of gain (loss) on foreign currency translation adjustments, foreign currency transactions designated and effective as economic hedges of a net investment in a foreign entity and intra-entity foreign currency transactions that are of a long-term-investment nature. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 10A -Subparagraph (a) -SubTopic 10 -Topic 220 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-10AReference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 11 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-11Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 10A -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-10AReference 4: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 10A -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-10AReference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 9 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481839/830-10-45-9Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 20 -Name Accounting Standards Codification -Section 35 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482014/830-20-35-3Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 12 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-12 + Details Name: us-gaap_OtherComprehensiveIncomeForeignCurrencyTransactionAndTranslationGainLossArisingDuringPeriodNetOfTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount after tax and reclassification adjustments of other comprehensive income (loss). + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -SubTopic 10 -Topic 505 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481674/830-30-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 17 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-17Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 6: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-4Reference 7: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-5Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 20 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-20Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(21)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(23)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1B -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1BReference 12: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 55 -Paragraph 15 -SubTopic 10 -Topic 220 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482739/220-10-55-15Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1A -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1A + Details Name: us-gaap_OtherComprehensiveIncomeLossNetOfTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_OtherComprehensiveIncomeLossNetOfTaxPeriodIncreaseDecreaseAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount, after tax and reclassification adjustment, of (increase) decrease in accumulated other comprehensive income for defined benefit plan. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 10A -Subparagraph (j) -SubTopic 10 -Topic 220 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-10AReference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 10A -Subparagraph (k) -SubTopic 10 -Topic 220 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-10AReference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 11 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-11Reference 4: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 10A -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-10AReference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1 + Details Name: us-gaap_OtherComprehensiveIncomeLossPensionAndOtherPostretirementBenefitPlansAdjustmentNetOfTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount, after tax and before adjustment, of unrealized holding gain (loss) on investment in debt security measured at fair value with change in fair value recognized in other comprehensive income (available-for-sale). Excludes unrealized gain (loss) on investment in debt security measured at amortized cost (held-to-maturity) from transfer to

available-for-sale. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 320 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 9 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481800/320-10-50-9Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 10A -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-10AReference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 11 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-11 + Details Name: us-gaap_OtherComprehensiveIncomeUnrealizedHoldingGainLossOnSecuritiesArisingDuringPeriodNetOfTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount after tax of reclassification adjustments of other comprehensive income (loss). + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 220 -SubTopic 10 -Section 45 -Paragraph 14A -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-14AReference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-5Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481674/830-30-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 17 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-17Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 20 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-20Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 7: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-4Reference 8: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 55 -Paragraph 15 -SubTopic 10 -Topic 220 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482739/220-10-55-15 + Details Name: us-gaap_ReclassificationFromAccumulatedOtherComprehensiveIncomeCurrentPeriodNetOfTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_StatementOfIncomeAndComprehensiveIncomeAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 15 R4.htm IDEA: XBRL DOCUMENT v3.24.3 Condensed Consolidated Balance Sheets - USD ($) $ in Thousands Sep. 30, 2024 Dec. 31, 2023 Assets Â Â Cash and cash equivalents $ 154,371 $ 146,442 Trade receivables, less allowance for credit loss of $7,937 and $7,065 277,346 294,678 Inventories (Note 4) 351,805 292,604 Prepaid expenses and other current assets 59,147 52,546 Total current assets 842,669 786,270 Property, plant and equipment, net (Note 5) 216,646 211,877 Operating lease right-of-use assets, net 59,393 53,298 Prepaid pension cost (Note 14) 183,915 172,161 Deferred tax assets (Note 10) 34,513 33,065 Goodwill (Note 13) 632,837 627,534 Intangible assets, net (Note 13) 254,364 266,134 Other noncurrent assets 17,590 19,811 Total assets 2,241,927 2,170,150 Liabilities Â Â Notes payable and current portion of long-term debt (Note 12) 26,915 26,522 Accounts payable 128,031 111,872 Employeesâ€™ compensation 56,831 73,386 Other current liabilities 102,701 121,038 Total current liabilities 314,478 332,818 Long-term debt, net (Note 12) 527,807 575,170 Pensions and other employee benefits (Note 14) 144,105 143,967 Noncurrent operating lease liabilities 49,337 44,495 Deferred tax liabilities (Note 10) 103,175 102,419 Other noncurrent liabilities 7,680 4,479 Total liabilities 1,146,582 1,203,348 Equity Â Â Preferred stock, 4.5% cumulative, $50 par value (Note 7) 3,569 3,569 Common stock, no par value (Note 7) 324,609 312,324 Treasury shares, at cost (Note 7) (388,421) (363,284) Accumulated other comprehensive loss (Note 6) (126,205) (129,249) Retained earnings 1,281,793 1,143,442 Total shareholdersâ€™ equity 1,095,345 966,802 Total liabilities and shareholdersâ€™ equity $ 2,241,927 $ 2,170,150 X - DefinitionCarrying value as of the balance sheet date of liabilities incurred (and for which invoices have typically been received) and payable to vendors for goods and services received that are used in an entity's business. Used to reflect the current portion of the liabilities (due within one year or within the normal operating cycle if longer). + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(19)(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10 + Details Name: us-gaap_AccountsPayableCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount, after allowance for credit loss, of right to consideration from customer for product sold and service rendered in normal course of business, classified as current. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 310 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481990/310-10-45-2 + Details Name: us-gaap_AccountsReceivableNetCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount, after tax, of accumulated increase (decrease) in equity from transaction and other event and circumstance from nonowner source. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 220 -SubTopic 10 -Section 45 -Paragraph 14A -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-14AReference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 11 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-11Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(2)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480016/944-40-65-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (h)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480016/944-40-65-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(30)(a)(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(23)(a)(3)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 7: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 220 -SubTopic 10 -Section 45 -Paragraph 14 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-14 + Details Name: us-gaap_AccumulatedOtherComprehensiveIncomeLossNetOfTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of asset recognized for present right to economic benefit. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-48Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 49 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-49Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 5: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (bb) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-3Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 25 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481231/810-10-45-25Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 12: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 13: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 12 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-12Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(12)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(8)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(18)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 18: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 19: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 23: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 27: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 28: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481404/852-10-50-7Reference 29: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30Reference 30: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-03(11)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1 + Details Name: us-gaap_Assets Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - ReferencesNo definition available. + Details Name: us-gaap_AssetsAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of asset recognized for present right to economic benefit, classified as current. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (bb) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-3Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 25 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481231/810-10-45-25Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 6: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483467/210-10-45-1Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(9)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 10: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 11: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB

-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 20: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481404/852-10-50-7 + Details Name: us-gaap_AssetsCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of currency on hand as well as demand deposits with banks or financial institutions. Includes other kinds of accounts that have the general characteristics of demand deposits. Also includes short-term, highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. Excludes cash and cash equivalents within disposal group and discontinued operation. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483467/210-10-45-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 230 -SubTopic 10 -Section 45 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-4 + Details Name: us-gaap_CashAndCashEquivalentsAtCarryingValue Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionValue of common shares held by shareholders. Excludes common shares repurchased and held as treasury shares. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(16)(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1 + Details Name: us-gaap_CommonStockValueOutstanding Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of debt and lease obligation, classified as current. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(21)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_DebtCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount, after allocation of valuation allowances and deferred tax liability, of deferred tax asset attributable to deductible differences and carryforwards, with jurisdictional netting. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482525/740-10-45-4Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482525/740-10-45-6 + Details Name: us-gaap_DeferredIncomeTaxAssetsNet Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount, after deferred tax asset, of deferred tax liability attributable to taxable differences with jurisdictional netting. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(15)(b)(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482525/740-10-45-4Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482525/740-10-45-6 + Details Name: us-gaap_DeferredIncomeTaxLiabilitiesNet Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of asset, recognized in statement of financial position, for overfunded defined benefit pension and other postretirement plans. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-03(10)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 17 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480482/715-20-55-17Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(10)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(7)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480535/715-20-45-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480535/715-20-45-3Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1 + Details Name: us-gaap_DefinedBenefitPlanAssetsForPlanBenefitsNoncurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionTotal of the carrying values as of the balance sheet date of obligations incurred through that date and payable for obligations related to services received from employees, such as accrued salaries and bonuses, payroll taxes and fringe benefits. Used to reflect the current portion of the liabilities (due within one year or within the normal operating cycle if longer). + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_EmployeeRelatedLiabilitiesCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount after amortization of assets, excluding financial assets and goodwill, lacking physical substance with a finite life. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 926 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483154/926-20-50-5 + Details Name: us-gaap_FiniteLivedIntangibleAssetsNet Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount, after accumulated impairment loss, of asset representing future economic benefit arising from other asset acquired in business combination or from joint venture formation or both, that is not individually identified and separately recognized. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 49 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-49Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482548/350-20-55-24Reference 3: http://www.xbrl.org/2003/role/exampleRef -Topic 820 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 100 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482078/820-10-55-100Reference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(15)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482598/350-20-45-1Reference 7: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1Reference 8: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (h) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-03(10)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1 + Details Name: us-gaap_Goodwill Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount after valuation and LIFO reserves of inventory expected to be sold, or consumed within one year or operating cycle, if longer. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483467/210-10-45-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(6)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_InventoryNet Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of liability recognized for present obligation requiring transfer or otherwise providing economic benefit to others. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)) -SubTopic 10 -Topic 210 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(24)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(25)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 6: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(26)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 7: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(23)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 8: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(21)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-3Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 25 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481231/810-10-45-25Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (bb) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-3Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 15: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 12 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-12Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(14)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 18: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 23: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 27: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481404/852-10-50-7Reference 28: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481404/852-10-50-7Reference 29: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30 + Details Name: us-gaap_Liabilities Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - ReferencesNo definition available. + Details Name: us-gaap_LiabilitiesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of liabilities and equity items, including the portion of equity attributable to noncontrolling interests, if any. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(25)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 5: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 6: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -

Paragraph 1 -Subparagraph (SX 210.9-03(23)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1Reference 7: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(32)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_LiabilitiesAndStockholdersEquity Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionTotal obligations incurred as part of normal operations that are expected to be paid during the following twelve months or within one business cycle, if longer. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(21)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-3Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 25 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481231/810-10-45-25Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (bb) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-3Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 8: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483467/210-10-45-5Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 11: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 20: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481404/852-10-50-7Reference 21: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481404/852-10-50-7 + Details Name: us-gaap_LiabilitiesCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount, after deduction of unamortized premium (discount) and debt issuance cost, of long-term debt classified as noncurrent. Excludes lease obligation. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_LongTermDebtNoncurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionPresent value of lessee's discounted obligation for lease payments from operating lease, classified as noncurrent. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_OperatingLeaseLiabilityNoncurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of lessee's right to use underlying asset under operating lease. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_OperatingLeaseRightOfUseAsset Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of noncurrent assets classified as other. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(17)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_OtherAssetsNoncurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of liabilities classified as other, due within one year or the normal operating cycle, if longer. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10 + Details Name: us-gaap_OtherLiabilitiesCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of liabilities classified as other, due after one year or the normal operating cycle, if longer. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(24)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_OtherLiabilitiesNoncurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of liability, recognized in statement of financial position, for defined benefit pension and other postretirement plans, classified as noncurrent. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(24)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 17 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480482/715-20-55-17Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480535/715-20-45-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480535/715-20-45-3Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1 + Details Name: us-gaap_PensionAndOtherPostretirementDefinedBenefitPlansLiabilitiesNoncurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionValue of nonredeemable preferred shares and preferred shares redeemable solely at option of issuer, held by shareholders. Excludes preferred shares repurchased and held as treasury shares. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(28)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(16)(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1 + Details Name: us-gaap_PreferredStockValueOutstanding Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of asset related to consideration paid in advance for costs that provide economic benefits in future periods, and amount of other assets that are expected to be realized or consumed within one year or the normal operating cycle, if longer. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(9)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_PrepaidExpenseAndOtherAssetsCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount after accumulated depreciation, depletion and amortization of physical assets used in the normal conduct of business to produce goods and services and not intended for resale. Examples include, but are not limited to, land, buildings, machinery and equipment, office equipment, and furniture and fixtures. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 1 -SubTopic 10 -Topic 360 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482099/360-10-50-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 7A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-7AReference 3: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(8)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 360 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478451/942-360-50-1 + Details Name: us-gaap_PropertyPlantAndEquipmentNet Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of accumulated undistributed earnings (deficit). + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(30)(a)(3)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480016/944-40-65-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (h)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480016/944-40-65-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480990/946-20-50-11Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(23)(a)(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(17)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 8: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1 + Details Name: us-gaap_RetainedEarningsAccumulatedDeficit Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - ReferencesNo definition available. + Details Name: us-gaap_StockholdersEquityAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of equity (deficit) attributable to parent and noncontrolling interest. Excludes temporary equity. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (d)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(4) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (d)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (d)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 848 -SubTopic 10 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (a)(3)(iii)(03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483550/848-10-65-2Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 10 -Name Accounting Standards Codification -Section 65 -Paragraph 8 -Subparagraph (c)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479832/842-10-65-8Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483421/250-10-45-24Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 23 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483421/250-10-45-23Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 5 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483421/250-10-45-5Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 326 -SubTopic 10 -Name Accounting Standards Codification -Section 65 -Paragraph 5 -Subparagraph (c)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479654/326-10-65-5Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 20 -Name Accounting Standards Codification -Section 65 -Paragraph 6 -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480528/815-20-65-6Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 20 -Name Accounting Standards Codification -Section 65 -Paragraph 6 -Subparagraph (h)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480528/815-20-65-6Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 20 -Name Accounting Standards Codification -Section 65 -Paragraph 6 -Subparagraph (h)(1)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480528/815-20-65-6Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 20 -Name Accounting Standards Codification -Section 65 -Paragraph 6 -Subparagraph (h)(1)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480528/815-20-65-6Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 20 -Name Accounting Standards Codification -Section 65 -Paragraph 6 -Subparagraph (h)(1)(iv) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480528/815-20-65-6Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 20 -Name Accounting Standards Codification -Section 65 -Paragraph 6 -Subparagraph (i)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480528/815-20-65-6Reference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 105 -SubTopic

10 -Name Accounting Standards Codification -Section 65 -Paragraph 6 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479343/105-10-65-6Reference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 105 -SubTopic 10 -Name Accounting Standards Codification -Section 65 -Paragraph 6 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479343/105-10-65-6Reference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (f)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480016/944-40-65-2Reference 23: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (f)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480016/944-40-65-2Reference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 65 -Paragraph 8 -Subparagraph (d)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482615/740-10-65-8Reference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 65 -Paragraph 8 -Subparagraph (d)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482615/740-10-65-8Reference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 326 -SubTopic 10 -Name Accounting Standards Codification -Section 65 -Paragraph 4 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479654/326-10-65-4Reference 27: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-1Reference 28: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (e)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 29: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-7Reference 30: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-5Reference 31: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481674/830-30-50-1Reference 32: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 17 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-17Reference 33: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 20 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-20Reference 34: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 11 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-11Reference 35: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 205 -Name Accounting Standards Codification -Section 45 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478009/946-205-45-3Reference 36: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 505 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478448/946-505-50-3Reference 37: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 38: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.6-05(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-2Reference 39: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(4)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 40: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(6)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 41: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(7)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 42: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1Reference 43: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 44: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 45: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 46: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 810 -SubTopic 10 -Section 45 -Paragraph 15 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481231/810-10-45-15Reference 47: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 810 -SubTopic 10 -Section 45 -Paragraph 16 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481231/810-10-45-16Reference 48: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 810 -SubTopic 10 -Section 55 -Paragraph 4I -Publisher FASB -URI https://asc.fasb.org/1943274/2147481175/810-10-55-4IReference 49: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476166/350-60-65-1 + Details Name: us-gaap_StockholdersEquityIncludingPortionAttributableToNoncontrollingInterest Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionThe amount allocated to treasury stock. Treasury stock is common and preferred shares of an entity that were issued, repurchased by the entity, and are held in its treasury. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(30)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 505 -SubTopic 30 -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481520/505-30-50-4Reference 4: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 505 -SubTopic 30 -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481549/505-30-45-1 + Details Name: us-gaap_TreasuryStockValue Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant XML 16 R5.htm IDEA: XBRL DOCUMENT v3.24.3 Condensed Consolidated Balance Sheets (Parenthetical) - USD ($) $ in Thousands 9 Months Ended 12 Months Ended Sep. 30, 2024 Dec. 31, 2023 Statement of Financial Position [Abstract] Â Â Trade receivables, allowance for credit loss $ 7,937 $ 7,065 Cumulative preferred stock (percent) 4.50% 4.50% Preferred stock, par value (dollars per share) $ 50,000 $ 50,000 X - DefinitionAmount of allowance for credit loss on accounts receivable, classified as current. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 326 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479344/326-20-45-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 310 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481962/310-10-50-4 + Details Name: us-gaap_AllowanceForDoubtfulAccountsReceivableCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionThe percentage rate used to calculate dividend payments on preferred stock. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-13Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 320 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.12-12A(Column A)(Footnote 3)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477271/946-320-S99-2Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 320 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.12-12(Column A)(Footnote 4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477271/946-320-S99-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 320 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.12-12B(Column A)(Footnote 3)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477271/946-320-S99-3Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 320 -Name Accounting Standards Codification -Section S99 -Paragraph 6 -Subparagraph (SX 210.12-14(Column A)(Footnote 3)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477271/946-320-S99-6 + Details Name: us-gaap_PreferredStockDividendRatePercentage Namespace Prefix: us-gaap_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: duration X - DefinitionFace amount or stated value per share of preferred stock nonredeemable or redeemable solely at the option of the issuer. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(28)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-13 + Details Name: us-gaap_PreferredStockParOrStatedValuePerShare Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - ReferencesNo definition available. + Details Name: us-gaap_StatementOfFinancialPositionAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 17 R6.htm IDEA: XBRL DOCUMENT v3.24.3 Condensed Consolidated Statements of Cash Flows - USD ($) $ in Thousands 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Operating Activities Â Â Net income (loss) $ 197,021 $ (17,827) Depreciation and amortization 47,563 44,965 Loss on divestiture of MSA LLC (Note 17) 0 199,578 Stock-based compensation (Note 11) 13,446 21,506 Pension income (Note 14) (5,316) (6,060) Deferred income tax benefit (Note 10) (1,928) (531) Loss (gain) on asset dispositions, net 959 (671) Pension contributions (Note 14) (3,948) (4,274) Currency exchange losses, net 4,715 8,781 Product liability expense (Note 17) 0 3 Product liability payments (Note 17) 0 (5,250) Contribution on divestiture of MSA LLC (Note 17) 0 (341,186) Changes in: Â Â Trade receivables 7,965 (7,449) Inventories (Note 4) (59,531) 15,386 Accounts payable 17,309 (4,225) Other current assets and liabilities (34,186) 26,518 Other noncurrent assets and liabilities 4,451 4,679 Cash Flow From (Used in) Operating Activities 188,520 (66,057) Investing Activities Â Â Capital expenditures (39,814) (30,979) Property disposals and other investing 90 2,690 Cash Flow Used in Investing Activities (39,724) (28,289) Financing Activities Â Â Proceeds from long-term debt (Note 12) 868,644 1,507,000 Payments on long-term debt (Note 12) (919,647) (1,338,352) Debt issuance costs (200) (1,138) Cash dividends paid (58,670) (54,999) Company stock purchases (Note 7) (27,427) (3,941) Exercise of stock options (Note 7) 494 1,440 Employee stock purchase plan (Note 7) 634 497 Cash Flow (Used in) From Financing Activities (136,172) 110,507 Effect of exchange rate changes on cash, cash equivalents and restricted cash (6,062) (14,152) Change in cash, cash equivalents and restricted cash 6,562 2,009 Beginning cash, cash equivalents and restricted cash 148,408 164,428 Ending cash, cash equivalents and restricted cash 154,970 166,437 Supplemental cash flow information: Â Â Cash and cash equivalents 154,371 164,499 Restricted cash included in prepaid expenses and other current assets 599 1,938 Total cash, cash equivalents and restricted cash $ 154,970 $ 166,437 X - DefinitionDeferred Income Tax Expense (Benefit), Including Discontinued Operations + ReferencesNo definition available. + Details Name: msa_DeferredIncomeTaxExpenseBenefitIncludingDiscontinuedOperations Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionDisposal Group, Including Discontinued Operation, Contributions Made On Disposal + ReferencesNo definition available. + Details Name: msa_DisposalGroupIncludingDiscontinuedOperationContributionsMadeOnDisposal Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionDisposal Group, Not Discontinued Operation, Gain (Loss) On Disposal, Including Tax Effect + ReferencesNo definition available. + Details Name: msa_DisposalGroupNotDiscontinuedOperationGainLossOnDisposalIncludingTaxEffect Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionForeign Currency Transaction Gain (Loss), Including Discontinued Operations, before Tax + ReferencesNo definition available. + Details Name: msa_ForeignCurrencyTransactionGainLossIncludingDiscontinuedOperationsbeforeTax Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionPayments on product liability claims + ReferencesNo definition available. + Details Name: msa_Paymentsonproductliabilityclaims Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionRestricted Cash, Current Assets, Included in Prepaid Expenses and Other Current Assets + ReferencesNo definition available. + Details Name: msa_RestrictedCashCurrentAssetsIncludedinPrepaidExpensesandOtherCurrentAssets Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of currency on hand as well as demand deposits with banks or financial institutions. Includes other kinds of accounts that have the general characteristics of demand deposits. Also includes short-term, highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. Excludes cash and cash equivalents within disposal group and discontinued operation. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483467/210-10-45-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 230 -SubTopic 10 -Section 45 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-4 + Details Name: us-gaap_CashAndCashEquivalentsAtCarryingValue Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of cash and cash equivalents, and cash and cash equivalents restricted to withdrawal or usage. Excludes amount for disposal group and discontinued operations. Cash includes, but is not limited to, currency on hand, demand deposits with banks or financial institutions, and other accounts with general characteristics of demand deposits. Cash equivalents include, but are not limited to, short-term, highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482913/230-10-50-8Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-24Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 230 -SubTopic 10 -Section 45 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-4 + Details Name: us-gaap_CashCashEquivalentsRestrictedCashAndRestrictedCashEquivalents Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of increase (decrease) in cash, cash equivalents, and cash and cash equivalents restricted to withdrawal or usage; including effect from exchange rate change. Cash includes, but is not limited to, currency on hand, demand deposits with banks or financial institutions, and other accounts with general characteristics of demand deposits. Cash equivalents include, but are not limited to, short-term, highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-24Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 1 -SubTopic 230 -Topic 830 -Publisher FASB -URI https://asc.fasb.org/1943274/2147477401/830-230-45-1 + Details Name: us-gaap_CashCashEquivalentsRestrictedCashAndRestrictedCashEquivalentsPeriodIncreaseDecreaseIncludingExchangeRateEffect Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe aggregate expense recognized in the current period that allocates the cost of tangible assets, intangible assets, or depleting assets to periods that benefit from use of the assets. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-48Reference 3:

http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 49 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-49Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22 + Details Name: us-gaap_DepreciationDepletionAndAmortization Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of increase (decrease) from effect of exchange rate changes on cash and cash equivalents, and cash and cash equivalents restricted to withdrawal or usage; held in foreign currencies. Excludes amounts for disposal group and discontinued operations. Cash includes, but is not limited to, currency on hand, demand deposits with banks or financial institutions, and other accounts with general characteristics of demand deposits. Cash equivalents include, but are not limited to, short-term, highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 230 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147477401/830-230-45-1 + Details Name: us-gaap_EffectOfExchangeRateOnCashCashEquivalentsRestrictedCashAndRestrictedCashEquivalents Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of gain (loss) on sale or disposal of other assets. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_GainLossOnSaleOfOtherAssets Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe increase (decrease) during the reporting period in the amounts payable to vendors for goods and services received and the amount of obligations and expenses incurred but not paid. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_IncreaseDecreaseInAccountsPayableAndAccruedLiabilities Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe increase (decrease) during the reporting period in amount due within one year (or one business cycle) from customers for the credit sale of goods and services. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_IncreaseDecreaseInAccountsReceivable Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe increase (decrease) during the reporting period in the aggregate value of all inventory held by the reporting entity, associated with underlying transactions that are classified as operating activities. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_IncreaseDecreaseInInventories Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_IncreaseDecreaseInOperatingCapitalAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of increase (decrease) in operating assets classified as other. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_IncreaseDecreaseInOtherOperatingAssets Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of increase (decrease) in operating assets after deduction of operating liabilities classified as other. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_IncreaseDecreaseInOtherOperatingCapitalNet Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of cash inflow (outflow) from financing activities, including discontinued operations. Financing activity cash flows include obtaining resources from owners and providing them with a return on, and a return of, their investment; borrowing money and repaying amounts borrowed, or settling the obligation; and obtaining and paying for other resources obtained from creditors on long-term credit. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-24 + Details Name: us-gaap_NetCashProvidedByUsedInFinancingActivities Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_NetCashProvidedByUsedInFinancingActivitiesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of cash inflow (outflow) from investing activities, including discontinued operations. Investing activity cash flows include making and collecting loans and acquiring and disposing of debt or equity instruments and property, plant, and equipment and other productive assets. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-24 + Details Name: us-gaap_NetCashProvidedByUsedInInvestingActivities Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_NetCashProvidedByUsedInInvestingActivitiesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of cash inflow (outflow) from operating activities, including discontinued operations. Operating activity cash flows include transactions, adjustments, and changes in value not defined as investing or financing activities. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-24Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 25 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-25 + Details Name: us-gaap_NetCashProvidedByUsedInOperatingActivities Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_NetCashProvidedByUsedInOperatingActivitiesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of cash (inflow) outflow from investing activities classified as other. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 13 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-13Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Name Accounting Standards Codification -Section 45 -Paragraph 12 -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-12 + Details Name: us-gaap_PaymentsForProceedsFromOtherInvestingActivities Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe cash outflow to reacquire common and preferred stock. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 15 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-15Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-03(i)(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479886/946-10-S99-3 + Details Name: us-gaap_PaymentsForRepurchaseOfEquity Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe cash outflow paid to third parties in connection with debt origination, which will be amortized over the remaining maturity period of the associated long-term debt. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 230 -SubTopic 10 -Section 45 -Paragraph 15 -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-15 + Details Name: us-gaap_PaymentsOfDebtIssuanceCosts Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionCash outflow in the form of capital distributions and dividends to common shareholders, preferred shareholders and noncontrolling interests. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 15 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-15 + Details Name: us-gaap_PaymentsOfDividends Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe cash outflow associated with the acquisition of long-lived, physical assets that are used in the normal conduct of business to produce goods and services and not intended for resale; includes cash outflows to pay for construction of self-constructed assets. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 13 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-13 + Details Name: us-gaap_PaymentsToAcquirePropertyPlantAndEquipment Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of cash outflow for pension benefit. Includes, but is not limited to, employer contribution to fund plan asset and payment to retiree. Excludes other postretirement benefit. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 25 -Subparagraph (g) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-25 + Details Name: us-gaap_PensionContributions Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of cost (reversal of cost) for pension benefits. Excludes other postretirement benefits. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-48 + Details Name: us-gaap_PensionExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe cash inflow from a debt initially having maturity due after one year or beyond the operating cycle, if longer. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-03(i)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479886/946-10-S99-3Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 230 -SubTopic 10 -Section 45 -Paragraph 14 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-14 + Details Name: us-gaap_ProceedsFromIssuanceOfLongTermDebt Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of cash inflow from exercise of option under share-based payment arrangement. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 14 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-14Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2A -Subparagraph (a) -SubTopic 10 -Topic 718 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2A + Details Name: us-gaap_ProceedsFromStockOptionsExercised Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe cash inflow associated with the amount received from the stock plan during the period. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 14 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-14 + Details Name: us-gaap_ProceedsFromStockPlans Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe amount of loss reported during the period pertaining to product liability. + ReferencesNo definition available. + Details Name: us-gaap_ProductLiabilityAccrualPeriodExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe consolidated profit or loss for the period, net of income taxes, including the portion attributable to the noncontrolling interest. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 9 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-9Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-8Reference 11: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 11 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-11Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 205 -Name Accounting Standards Codification -Section 45 -Paragraph 3 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478009/946-205-45-3Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section 45 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479105/946-220-45-7Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(16)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-07(9)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-1Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(1)(d)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 19 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481231/810-10-45-19Reference 18: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-6Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 20: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 23: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 24:

http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 27: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 28: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 29: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 235 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-05(b)(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477314/942-235-S99-1Reference 30: http://www.xbrl.org/2003/role/disclosureRef -Topic 205 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483499/205-20-50-7Reference 31: http://www.xbrl.org/2003/role/exampleRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 4J -Publisher FASB -URI https://asc.fasb.org/1943274/2147481175/810-10-55-4JReference 32: http://www.xbrl.org/2003/role/exampleRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 4K -Publisher FASB -URI https://asc.fasb.org/1943274/2147481175/810-10-55-4KReference 33: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1AReference 34: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1BReference 35: http://www.xbrl.org/2003/role/disclosureRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-2Reference 36: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1A -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-1AReference 37: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1A -Subparagraph (c)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-1A + Details Name: us-gaap_ProfitLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe cash outflow for debt initially having maturity due after one year or beyond the normal operating cycle, if longer. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 15 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-15Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-03(i)(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479886/946-10-S99-3 + Details Name: us-gaap_RepaymentsOfLongTermDebt Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of noncash expense for share-based payment arrangement. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_ShareBasedCompensation Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_SupplementalCashFlowInformationAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 18 R7.htm IDEA: XBRL DOCUMENT v3.24.3 Condensed Consolidated Statements of Changes in Retained Earnings, Accumulated Other Comprehensive Loss - USD ($) $ in Thousands 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Increase (Decrease) in Stockholders' Equity [Roll Forward] Â Â Â Â Net loss $ 66,648 $ 65,256 $ 197,021 $ (17,827) Pension and post-retirement plan adjustments, net of tax 14 188 2,410 742 Reclassification from accumulated other comprehensive loss into net income (loss)(b) 0 101 (1,200) 101 Preferred dividends (10) (10) (30) (30) Retained Earnings Â Â Â Â Increase (Decrease) in Stockholders' Equity [Roll Forward] Â Â Â Â Beginning balance 1,235,226 1,038,750 1,143,442 1,158,347 Net loss 66,648 65,256 197,021 (17,827) Common dividends (20,071) (18,475) (58,640) (54,969) Preferred dividends (10) (10) (30) (30) Ending balance 1,281,793 1,085,521 1,281,793 1,085,521 Accumulated Other Comprehensive (Loss) Â Â Â Â Increase (Decrease) in Stockholders' Equity [Roll Forward] Â Â Â Â Beginning balance (147,548) (141,928) (129,249) (158,717) Foreign currency translation adjustments 21,329 (18,771) 1,834 (2,538) Pension and post-retirement plan adjustments, net of tax 14 188 2,410 742 Unrealized net gains (losses) on available-for-sale securities Â Â Â 2 Reclassification from accumulated other comprehensive loss into net income (loss)(b) Â 101 (1,200) 101 Ending balance $ (126,205) $ (160,410) $ (126,205) $ (160,410) X - DefinitionAmount of unrealized gain (loss) on investment in debt security measured at fair value with change in fair value recognized in other comprehensive income (available-for-sale). + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 320 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481800/320-10-50-2Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 320 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481800/320-10-50-2 + Details Name: us-gaap_DebtSecuritiesAvailableForSaleUnrealizedGainLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of paid and unpaid common stock dividends declared with the form of settlement in stock. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1 + Details Name: us-gaap_DividendsCommonStockStock Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of paid and unpaid preferred stock dividends declared with the form of settlement in stock. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 2 -SubTopic 405 -Topic 942 -Publisher FASB -URI https://asc.fasb.org/1943274/2147477787/942-405-45-2 + Details Name: us-gaap_DividendsPreferredStockStock Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionA roll forward is a reconciliation of a concept from the beginning of a period to the end of a period. + ReferencesNo definition available. + Details Name: us-gaap_IncreaseDecreaseInStockholdersEquityRollForward Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe portion of profit or loss for the period, net of income taxes, which is attributable to the parent. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 9 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-9Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-6Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-3Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-1Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-8Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-4Reference 17: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-10Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section 45 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479105/946-220-45-7Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(18)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-07(9)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-1Reference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(1)(d)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 23: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 27: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 28: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 29: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 30: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 31: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 32: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 60B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 33: http://www.xbrl.org/2003/role/disclosureRef -Topic 205 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483499/205-20-50-7Reference 34: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 35: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1AReference 36: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1BReference 37: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(22)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1 + Details Name: us-gaap_NetIncomeLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount after tax and reclassification adjustments of gain (loss) on foreign currency translation adjustments, foreign currency transactions designated and effective as economic hedges of a net investment in a foreign entity and intra-entity foreign currency transactions that are of a long-term-investment nature. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 10A -Subparagraph (a) -SubTopic 10 -Topic 220 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-10AReference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1 + Details Name: us-gaap_OtherComprehensiveIncomeLossForeignCurrencyTransactionAndTranslationAdjustmentNetOfTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount, after tax and reclassification adjustment, of (increase) decrease in accumulated other comprehensive income for defined benefit plan. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 10A -Subparagraph (j) -SubTopic 10 -Topic 220 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-10AReference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 10A -Subparagraph (k) -SubTopic 10 -Topic 220 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-10AReference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 11 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-11Reference 4: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 10A -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-10AReference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1 + Details Name: us-gaap_OtherComprehensiveIncomeLossPensionAndOtherPostretirementBenefitPlansAdjustmentNetOfTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount after tax of reclassification adjustments of other comprehensive income (loss). + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 220 -SubTopic 10 -Section 45 -Paragraph 14A -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-14AReference 2:

http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-5Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481674/830-30-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 17 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-17Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 20 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-20Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 7: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-4Reference 8: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 55 -Paragraph 15 -SubTopic 10 -Topic 220 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482739/220-10-55-15 + Details Name: us-gaap_ReclassificationFromAccumulatedOtherComprehensiveIncomeCurrentPeriodNetOfTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of equity (deficit) attributable to parent. Excludes temporary equity and equity attributable to noncontrolling interest. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(30)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(31)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 5: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 12 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-12Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.6-05(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-2Reference 8: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(4)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(6)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(7)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 11: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 12: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 13: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 14: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 310 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 4.E) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480418/310-10-S99-2 + Details Name: us-gaap_StockholdersEquity Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - Details Name: us-gaap_StatementEquityComponentsAxis=us-gaap_RetainedEarningsMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementEquityComponentsAxis=us-gaap_AccumulatedOtherComprehensiveIncomeMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 19 R8.htm IDEA: XBRL DOCUMENT v3.24.3 Condensed Consolidated Statements of Changes in Retained Earnings, Accumulated Other Comprehensive Loss (Parenthetical) - USD ($) $ in Thousands 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Statement of Stockholders' Equity [Abstract] Â Â Â Â Tax reclassification adjustment $ 374 $ 27 $ 628 $ 259 Common stock, dividends (in dollars per share) $ 0.51 $ 0.47 $ 1.49 $ 1.40 Preferred stock, dividends (in dollars per share) $ 0.5625 $ 0.5625 $ 1.6875 $ 1.6875 X - DefinitionAggregate dividends declared during the period for each share of common stock outstanding. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1 + Details Name: us-gaap_CommonStockDividendsPerShareDeclared Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionAmount, after reclassification adjustment, of tax (expense) benefit for (increase) decrease in accumulated other comprehensive income of defined benefit plan. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 10A -Subparagraph (j) -SubTopic 10 -Topic 220 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-10AReference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 10A -Subparagraph (k) -SubTopic 10 -Topic 220 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-10AReference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 12 -SubTopic 10 -Topic 220 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-12Reference 4: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 19 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481231/810-10-45-19Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 10A -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-10A + Details Name: us-gaap_OtherComprehensiveIncomeLossPensionAndOtherPostretirementBenefitPlansTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAggregate dividends declared during the period for each share of preferred stock outstanding. + ReferencesNo definition available. + Details Name: us-gaap_PreferredStockDividendsPerShareDeclared Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_StatementOfStockholdersEquityAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 20 R9.htm IDEA: XBRL DOCUMENT v3.24.3 Basis of Presentation 9 Months Ended Sep. 30, 2024 Organization, Consolidation and Presentation of Financial Statements [Abstract] Â Basis of Presentation Basis of PresentationThe condensed consolidated financial statements of MSA Safety Incorporated and its subsidiaries ("MSA" or "the Company") are unaudited. These unaudited condensed consolidated financial statements include all adjustments, consisting of normal recurring adjustments, considered necessary by management to fairly state the Company's results. Intercompany accounts and transactions have been eliminated. The results reported in these unaudited condensed consolidated financial statements are not necessarily indicative of the results that may be expected for the entire year. The DecemberÂ 31, 2023, Balance Sheet data was derived from the audited Consolidated Balance Sheets, but does not include all disclosures required by accounting principles generally accepted in the United States of America ("U.S. GAAP"). This Form 10-Q report should be read in conjunction with MSA's Form 10-K for the year ended DecemberÂ 31, 2023, which includes all disclosures required by U.S. GAAP. In November 2023, the FASB issued ASU No. 2023-07 (â€œASU 2023-07â€), Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures. ASU 2023-07 requires annual and interim disclosures that are expected to improve reportable segment disclosures, primarily through enhanced disclosures about significant expenses in determining segment profit or loss. The provisions of ASU 2023-07 are effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. We will apply the new disclosure requirements of ASU 2023-07 in our 2024 Form 10-K and, with the exception of expanding disclosures about significant segment expenses, do not expect that the adoption of ASU 2023-07 will have a material effect on our consolidated financial statements taken as a whole. X - ReferencesNo definition available. + Details Name: us-gaap_OrganizationConsolidationAndPresentationOfFinancialStatementsAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for organization, consolidation and basis of presentation of financial statements disclosure. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480424/946-10-50-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480424/946-10-50-2Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 810 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/810/tableOfContentReference 4: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 205 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/205/tableOfContent + Details Name: us-gaap_OrganizationConsolidationAndPresentationOfFinancialStatementsDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 21 R10.htm IDEA: XBRL DOCUMENT v3.24.3 Cash and Cash Equivalents 9 Months Ended Sep. 30, 2024 Cash and Cash Equivalents [Abstract] Â Cash and Cash Equivalents Cash and Cash EquivalentsSeveral of the Company's subsidiaries participate in a notional cash pooling arrangement to manage global liquidity requirements. As part of a master netting arrangement, the participants combine their cash balances in pooling accounts at the same financial institution with the ability to offset bank overdrafts of one participant against positive cash account balances held by another participant. Under the terms of the master netting arrangement, the financial institution has the right, ability and intent to offset a positive balance in one account against an overdrawn amount in another account. Amounts in each of the accounts are unencumbered and unrestricted with respect to use. As such, the net cash balance related to this pooling arrangement is included in Cash and cash equivalents in the unaudited Condensed Consolidated Balance Sheets. The Company's net cash pool position consisted of the following: (In thousands)September 30, 2024Gross cash pool position$69,117Â Less: cash pool borrowings(65,712)Net cash pool position$3,405Â X - ReferencesNo definition available. + Details Name: us-gaap_CashAndCashEquivalentsAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for cash and cash equivalent footnotes, which may include the types of deposits and money market instruments, applicable carrying amounts, restricted amounts and compensating balance arrangements. Cash and equivalents include: (1) currency on hand (2) demand deposits with banks or financial institutions (3) other kinds of accounts that have the general characteristics of demand deposits (4) short-term, highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. Generally, only investments maturing within three months from the date of acquisition qualify. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1 + Details Name: us-gaap_CashAndCashEquivalentsDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 22 R11.htm IDEA: XBRL DOCUMENT v3.24.3 Restructuring Charges 9 Months Ended Sep. 30, 2024 Restructuring and Related Activities [Abstract] Â Restructuring Charges Restructuring ChargesDuring the three and nine months ended SeptemberÂ 30, 2024, we recorded restructuring charges of $1.2 million and $5.7Â million, respectively. Americas segment restructuring charges of $1.3Â million during the nine months ended September 30, 2024, were related to manufacturing footprint optimization activities. International segment restructuring charges of $3.2Â million during the nine months ended September 30, 2024, were related to ongoing initiatives to optimize our manufacturing footprint and improve productivity as well as management restructuring. Corporate segment restructuring charges of $1.2Â million during the nine months ended September 30, 2024, were related to management restructuring. During the three and nine months ended SeptemberÂ 30, 2023, we recorded restructuring charges of $3.3 million and $8.4 million, respectively. Americas segment restructuring charges of $2.7 million during the nine months ended September 30, 2023, were related to manufacturing footprint optimization activities. International segment restructuring charges of $3.6 million during the nine months ended September 30, 2023, were related to ongoing initiatives to drive profitable growth and improve productivity. Corporate segment restructuring charges of $2.1 million during the nine months ended September 30, 2023, were related to footprint optimization activities and management restructuring. Restructuring reserves are included in Other current liabilities in the accompanying unaudited Condensed Consolidated Balance Sheets. Activity and reserve balances for restructuring by segment were as follows:(In millions)AmericasInternationalCorporateTotalReserve balances at December 31, 2022$1.7Â $12.8Â $0.5Â $15.0Â Restructuring charges3.1Â 4.7Â 2.1Â 9.9Â Currency translation(0.1)0.1Â â€”Â â€”Â Cash payments / utilization (3.9)(8.6)(2.6)(15.1)Reserve balances at December 31, 2023$0.8Â $9.0Â $â€”Â $9.8Â Restructuring charges1.3Â 3.2Â 1.2Â 5.7Â Cash payments(1.9)(8.0)(1.2)(11.1)Reserve balances at September 30, 2024$0.2Â $4.2Â $â€”Â $4.4Â X - ReferencesNo definition available. + Details Name: us-gaap_RestructuringAndRelatedActivitiesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for restructuring and related activities. Description of restructuring activities such as exit and disposal activities, include facts and circumstances leading to the plan, the expected plan completion date, the major types of costs associated with the plan activities, total expected costs, the accrual balance at the end of the period, and the periods over which the remaining accrual will be settled. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 5.P.4.e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479823/420-10-S99-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482017/420-10-50-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482017/420-10-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/420/tableOfContentReference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482017/420-10-50-1 + Details Name: us-gaap_RestructuringAndRelatedActivitiesDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 23 R12.htm IDEA: XBRL DOCUMENT v3.24.3 Inventories 9 Months Ended Sep. 30, 2024 Inventory Disclosure [Abstract] Â Inventories InventoriesThe following table sets forth the components of inventory: (In thousands)September 30, 2024December 31, 2023Finished products$118,294Â $88,687Â Work in process17,369Â 15,378Â Raw materials and supplies216,142Â 188,539Â Total inventories$351,805Â $292,604Â X - ReferencesNo definition available. + Details Name: us-gaap_InventoryDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for inventory. Includes, but is not limited to, the basis of stating inventory, the method of determining inventory cost, the classes of inventory, and the nature of the cost elements included in inventory. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 330 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/330/tableOfContent + Details Name: us-gaap_InventoryDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 24 R13.htm IDEA: XBRL DOCUMENT v3.24.3 Property, Plant and Equipment 9 Months Ended Sep. 30, 2024 Property, Plant and Equipment [Abstract] Â Property, Plant and Equipment Property, Plant and Equipment The following table sets forth the components of property, plant and equipment, net: (In thousands)September 30, 2024December 31, 2023Land$4,379Â $4,332Â Buildings144,364Â 141,027Â Machinery and equipment511,075Â 498,148Â Construction in progress27,482Â 24,404Â Total687,300Â 667,911Â Less: accumulated depreciation(470,654)(456,034)Property, plant and equipment, net$216,646Â $211,877Â X - ReferencesNo definition available. + Details Name: us-gaap_PropertyPlantAndEquipmentAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for long-lived, physical asset used in normal conduct of business and not intended for resale. Includes, but is not limited to, work of art, historical treasure, and similar asset

classified as collections. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 360 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/360/tableOfContentReference 2: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 50 -Paragraph 6 -SubTopic 360 -Topic 958 -Publisher FASB -URI https://asc.fasb.org/1943274/2147477798/958-360-50-6Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (d) -SubTopic 360 -Topic 958 -Publisher FASB -URI https://asc.fasb.org/1943274/2147477798/958-360-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 50 -Paragraph 7 -SubTopic 360 -Topic 958 -Publisher FASB -URI https://asc.fasb.org/1943274/2147477798/958-360-50-7 + Details Name: us-gaap_PropertyPlantAndEquipmentDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 25 R14.htm IDEA: XBRL DOCUMENT v3.24.3 Reclassifications Out of Accumulated Other Comprehensive Loss 9 Months Ended Sep. 30, 2024 Equity [Abstract] Â Reclassifications Out of Accumulated Other Comprehensive Loss Reclassifications Out of Accumulated Other Comprehensive LossChanges in accumulated other comprehensive loss were as follows: Three Months Ended September 30,Nine Months Ended September 30,(In thousands)20242023202420230Pension and other post-retirement benefits (a)Balance at beginning of period$(40,256)$(49,781)$(42,652)$(50,335)Amounts reclassified from accumulated other comprehensive loss into net income (loss):Amortization of prior service credit (Note 14)(9)(24)(27)(72)Recognized net actuarial losses (Note 14)397Â 185Â 3,065Â 555Â Tax (benefit) expense(374)27Â (628)259Â Total amount reclassified from accumulated other comprehensive loss, net of tax, into net income (loss)14Â 188Â 2,410Â 742Â Balance at end of period$(40,242)$(49,593)$(40,242)$(49,593)Available-for-sale securitiesBalance at beginning of period$â€”Â $â€”Â $â€”Â $(2)Unrealized net gains on available-for-sale securities (Note 16)â€”Â â€”Â â€”Â 2Â Balance at end of period$â€”Â $â€”Â $â€”Â $â€”Â Foreign currency translationBalance at beginning of period$(107,292)$(92,147)$(86,597)$(108,380)Reclassification from accumulated other comprehensive loss into net income (loss)(b)â€”Â 101Â (1,200)101Â Foreign currency translation adjustments21,329Â (18,771)1,834Â (2,538)Balance at end of period$(85,963)$(110,817)$(85,963)$(110,817)(a) Amounts reclassified from accumulated other comprehensive loss into net income (loss) are included in the computation of net periodic pension and other post-retirement benefit costs (refer to Note 14â€”Pensions and Other Post-retirement Benefits). (b) Reclassification from accumulated other comprehensive loss into net income (loss) relates primarily to the recognition of non-cash net cumulative translation gains associated with certain foreign subsidiaries. The reclassifications are included in Currency exchange losses, net, within the unaudited Condensed Consolidated Statements of Income. X - DefinitionThe entire disclosure for any adjustments made during the period to avoid double counting in comprehensive income items displayed as part of net income that also had been displayed as part of other comprehensive income in that period or earlier periods. These adjustments include reclassifications to net income of items in accumulated comprehensive income, such as deferred gains or losses on qualifying hedges when hedged item reported in net income, holding gains or losses on available-for-sale securities transferred into trading category, unrealized holding gains or losses on debt securities transferred from held-to-maturity category into available-for-sale category and accumulated translation adjustment attributable to foreign subsidiary or investment in foreign entity upon sale or liquidation. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/220/tableOfContent + Details Name: us-gaap_DisclosureOfReclassificationAmountTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_EquityAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 26 R15.htm IDEA: XBRL DOCUMENT v3.24.3 Capital Stock 9 Months Ended Sep. 30, 2024 Equity [Abstract] Â Capital Stock Capital Stock Preferred Stock - The Company has authorized 100,000 shares of $50 par value 4.5% cumulative preferred nonvoting stock which is callable at $52.50. There were 71,340 shares issued and 52,998 shares held in treasury at both SeptemberÂ 30, 2024 and DecemberÂ 31, 2023. The Treasury shares at cost line in the unaudited Condensed Consolidated Balance Sheets includes $1.8 million related to preferred stock. There were no shares of preferred stock purchased and subsequently held in treasury during the nine months ended SeptemberÂ 30, 2024 or 2023. The Company has also authorized 1,000,000 shares of $10 par value second cumulative preferred voting stock. No shares have been issued as of SeptemberÂ 30, 2024, or DecemberÂ 31, 2023.Common Stock - The Company has authorized 180,000,000 shares of no par value common stock. There were 62,081,391 shares issued as of SeptemberÂ 30, 2024 and DecemberÂ 31, 2023. No new shares were issued during the nine months ended SeptemberÂ 30, 2024 or 2023. There were 39,309,938 and 39,317,212 shares outstanding at SeptemberÂ 30, 2024 and DecemberÂ 31, 2023, respectively.Treasury Shares - The Company has a stock repurchase program that authorizes up to $200.0 million to repurchase MSA common stock in the open market and in private transactions. The stock repurchase program has no expiration date. The maximum number of shares that may be repurchased is calculated based on the dollars remaining under the program and the respective month-end closing share price. During the nine months ended SeptemberÂ 30, 2024, and 2023, the Company repurchased 108,917 and no shares, respectively, under this and the prior stock repurchase program. There were 22,771,453 and 22,764,179 treasury shares at SeptemberÂ 30, 2024 and DecemberÂ 31, 2023, respectively. The Company issues treasury shares for all stock-based benefit plans. Shares are issued from treasury at the average treasury share cost on the date of the transaction. There were 141,618 and 125,967 Treasury shares issued for these purposes during the nine months ended SeptemberÂ 30, 2024, and 2023, respectively.Common stock activity is summarized as follows:Three Months Ended September 30, 2024Three Months Ended September 30, 2023(In thousands)CommonStockTreasuryCost(a)CommonStockTreasuryCost(a)Balance at beginning of period$320,556Â $(376,556)$294,364Â $(362,025)Stock compensation expense4,217Â â€”Â 8,477Â â€”Â Restricted and performance stock awards(275)275Â (15)15Â Stock options exercised111Â 57Â 591Â 307Â Treasury shares purchased for stock compensation programsâ€”Â (571)â€”Â (70)Share repurchase programâ€”Â (10,027)â€”Â â€”Â Balance at end of period$324,609Â $(386,822)$303,417Â $(361,773)(a)Excludes treasury cost related to preferred stock.Nine Months Ended September 30, 2024Nine Months Ended September 30, 2023(In thousands)CommonStockTreasuryCost(a)CommonStockTreasuryCost(a)Balance at beginning of period$312,324Â $(361,684)$281,980Â $(359,838)Stock compensation expense13,446Â â€”Â 21,506Â â€”Â Restricted and performance stock awards(2,058)2,058Â (1,449)1,449Â Stock options exercised323Â 171Â 948Â 492Â Treasury shares purchased for stock compensation programsâ€”Â (7,400)â€”Â (3,941)Employee stock purchase program574Â 60Â 432Â 65Â Share repurchase programâ€”Â (20,027)â€”Â â€”Â Balance at end of period$324,609Â $(386,822)$303,417Â $(361,773)(a)Excludes treasury cost related to preferred stock. X - ReferencesNo definition available. + Details Name: us-gaap_EquityAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for equity. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-13Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (h) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-13Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 14 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-14Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 235 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477968/946-235-50-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 235 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477968/946-235-50-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 505 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478448/946-505-50-6Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480237/815-40-50-6Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(e)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 10: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/505/tableOfContentReference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-13Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-13Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-13Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 14 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-14Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 14 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-14Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 16 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-16Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 18 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-18Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 18 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-18Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 18 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-18 + Details Name: us-gaap_StockholdersEquityNoteDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 27 R16.htm IDEA: XBRL DOCUMENT v3.24.3 Segment Information 9 Months Ended Sep. 30, 2024 Segment Reporting [Abstract] Â Segment Information Segment InformationThe Company is organized into four geographical operating segments that are based on management responsibilities: Northern North America; Latin America; Europe, Middle East & Africa; and Asia Pacific. The operating segments have been aggregated (based on economic similarities, the nature of their products, end-user markets and methods of distribution) into three reportable segments: Americas, International, and Corporate.The Americas segment is comprised of our operations in Northern North American and Latin American geographies. The International segment is comprised of our operations in all geographies outside of the Americas. Certain global expenses are allocated to each segment in a manner consistent with where the benefits from the expenses are derived.The Company's sales are allocated to each segment based primarily on the country destination of the end-customer. Adjusted operating income (loss) is the measure used by the chief operating decision maker to evaluate segment performance and allocate resources. Adjusted operating income (loss) is defined as operating income (loss) excluding restructuring charges, currency exchange (gains) losses, product liability expense, loss on divestiture of Mine Safety Appliances Company, LLC ("MSA LLC"), net cost for product related legal matter, transaction costs and acquisition-related amortization. The accounting principles applied at the operating segment level in determining the segment measure of profit or loss are the same as those applied at the unaudited condensed consolidated financial statement level. Sales and transfers between operating segments are accounted for at market-based transaction prices and are eliminated in consolidation. Reportable segment information is presented in the following table:(In thousands)AmericasInternationalCorporateConsolidatedTotalsThree Months Ended September 30, 2024Net sales to external customers$299,497Â $133,182Â $â€”Â $432,679Â Adjusted operating income (loss)91,822Â 18,174Â (12,081)97,915Â Three Months Ended September 30, 2023Net sales to external customers$314,273Â $132,455Â $â€”Â $446,728Â Adjusted operating income (loss)93,918Â 22,577Â (15,198)101,297Â (In thousands)AmericasInternationalCorporateConsolidatedTotalsNine Months Ended September 30, 2024Net sales to external customers$909,745Â $398,698Â $â€”Â $1,308,443Â Adjusted operating income (loss)276,523Â 55,944Â (38,353)294,114Â Nine Months Ended September 30, 2023Net sales to external customers$902,918Â $389,372Â $â€”Â $1,292,290Â Adjusted operating income (loss)260,428Â 60,099Â (38,066)282,461Â A reconciliation of total Adjusted operating income from reportable segments to Income before income taxes is presented in the following table: Three Months Ended September 30,Nine Months Ended September 30,(In thousands)20242023202420230Adjusted operating income$97,915$101,297$294,114$282,461Less:Restructuring charges (Note 3)1,1843,2855,7448,382Currency exchange losses, net2,9851,4964,7158,781Interest expense9,15312,49829,55637,149Other income, net(5,833)(6,037)(16,215)(15,487)Amortization of acquisition-related intangible assets2,2692,3156,8886,936Transaction costs(a)â€”7823478Net cost for product related legal matterâ€”â€”5,000â€”Loss on divestiture of MSA LLC (Note 17)â€”â€”â€”129,211Product liability expense (Note 17)â€”â€”â€”3Income before income taxes88,15787,662258,192107,408(a) Transaction costs include advisory, legal, accounting, valuation, and other professional or consulting fees incurred during our evaluation of acquisitions and divestitures. These costs are included in Selling, general and administrative expense in the unaudited Condensed Consolidated Statements of Operations. Total sales by product group was as follows:Three Months Ended September 30, 2024ConsolidatedAmericasInternational(In thousands, except percentages)DollarsPercentDollarsPercentDollarsPercentFire Service (a)$160,515Â 37%$111,992Â 37%$48,523Â 36%Detection (b)163,150Â 38%110,459Â 37%52,691Â 40%Industrial PPE and Other (c)109,014Â 25%77,046Â 26%31,968Â 24%Total$432,679Â 100%$299,497Â 100%$133,182Â 100%Three Months Ended September 30, 2023ConsolidatedAmericasInternational(In thousands, except percentages)DollarsPercentDollarsPercentDollarsPercentFire Service (a)$175,732Â 39%$131,516Â 42%$44,216Â 33%Detection (b)155,694Â 35%105,007Â 33%50,687Â 38%Industrial PPE and Other (c)115,302Â 26%77,750Â 25%37,552Â 29%Total$446,728Â 100%$314,273Â 100%$132,455Â 100%Nine Months Ended September 30, 2024ConsolidatedAmericasInternational(In thousands, except percentages)DollarsPercentDollarsPercentDollarsPercentFire Service (a)$496,478Â 38%$352,730Â 39%$143,748Â 36%Detection (b)473,214Â 36%318,159Â 35%155,055Â 39%Industrial PPE and Other (c)338,751Â 26%238,856Â 26%99,895Â 25%Total$1,308,443Â 100%$909,745Â 100%$398,698Â 100%Nine Months Ended September 30, 2023ConsolidatedAmericasInternational(In thousands, except percentages)DollarsPercentDollarsPercentDollarsPercentFire Service (a)$481,610Â 37%$354,729Â 39%$126,881Â 33%Detection (b)460,537Â 36%308,692Â 34%151,845Â 39%Industrial PPE and Other (c)350,143Â 27%239,497Â 27%110,646Â 28%Total$1,292,290Â 100%$902,918Â 100%$389,372Â 100%(a) Fire Service includes Breathing Apparatus and Firefighter Helmets and Protective Apparel.(b) Detection includes Fixed Gas and Flame Detection and Portable Gas detection.(c) Industrial PPE and Other includes Industrial Head Protection, Fall Protection and Non-Core. X - ReferencesNo definition available. + Details Name: us-gaap_SegmentReportingAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for reporting segments including data and tables. Reportable segments include those that meet any of the following quantitative thresholds a) it's reported revenue, including sales to external customers and intersegment sales or transfers is 10 percent or more of the combined revenue, internal and external, of all operating segments b) the absolute amount of its reported profit or loss is 10 percent or more of the greater, in absolute amount of 1) the combined reported profit of all operating segments that did not report a loss or 2) the combined reported loss of all operating segments that did report a loss c) its assets are 10 percent or more of the combined assets of all operating segments. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-48Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 5: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 6: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 54 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-54Reference 7: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 47 -Subparagraph (c) -Publisher FASB -URI

https://asc.fasb.org/1943274/2147482785/280-10-55-47Reference 8: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 54 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-54Reference 9: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 47 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-47Reference 10: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 54 -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-54Reference 11: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 47 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-47Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 31 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-31Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 34 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-34Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 26C -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-26CReference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 26B -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-26BReference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 15 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-15Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 42 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-42Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 40 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-40Reference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/280/tableOfContentReference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 26 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-26Reference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 41 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-41Reference 23: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 21 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-21Reference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 21 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-21Reference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32 + Details Name: us-gaap_SegmentReportingDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 28 R17.htm IDEA: XBRL DOCUMENT v3.24.3 Earnings (Loss) per Share 9 Months Ended Sep. 30, 2024 Earnings Per Share [Abstract] Â Earnings (Loss) per Share Earnings (Loss) per ShareBasic earnings (loss) per share is computed by dividing net income, after the deduction of preferred stock dividends and undistributed earnings allocated to participating securities, by the weighted average number of common shares outstanding during the period. Diluted earnings (loss) per share assumes the issuance of common stock for all potentially dilutive share equivalents outstanding not classified as participating securities. Participating securities are defined as unvested stock-based compensation awards that contain nonforfeitable rights to dividends.Three Months Ended September 30,Nine Months Ended September 30,(In thousands, except per share values)20242023202420232Net income (loss)$66,648Â $65,256Â $197,021Â $(17,827)Preferred stock dividends(10)(10)(30)(30)Net income (loss) attributable to common equity66,638Â 65,246Â 196,991Â (17,857)Dividends and undistributed earnings allocated to participating securities(6)(8)(19)(16)Net income (loss) attributable to common shareholders66,632Â 65,238Â 196,972Â (17,873)Basic weighted-average shares outstanding39,362Â 39,303Â 39,370Â 39,267Â Stock-based compensation awards(a)133Â 147Â 160Â â€”Â Diluted weighted-average shares outstanding39,495Â 39,450Â 39,530Â 39,267Â Antidilutive sharesâ€”Â â€”Â â€”Â 154Â Earnings (loss) per share:Basic$1.69Â $1.66Â $5.00Â $(0.46)Diluted$1.69Â $1.65Â $4.98Â $(0.46)(a) During periods in which the Company incurs a net loss, stock-based compensation awards are excluded from the computation of diluted earnings per share because their effect would be anti-dilutive. As such, during periods in which the Company incurs a net loss, diluted weighted-average shares outstanding are equivalent to basic weighted-average shares outstanding. X - ReferencesNo definition available. + Details Name: us-gaap_EarningsPerShareAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for earnings per share. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/260/tableOfContentReference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-3 + Details Name: us-gaap_EarningsPerShareTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 29 R18.htm IDEA: XBRL DOCUMENT v3.24.3 Income Taxes 9 Months Ended Sep. 30, 2024 Income Tax Disclosure [Abstract] Â Income Taxes Income TaxesThe Company's effective tax rate for the three months ended September 30, 2024, was 24.4%, which differs from the United States of America ("U.S.") federal statutory rate of 21% primarily due to state income taxes. The Company's effective tax rate for the three months ended September 30, 2023, was 25.6%, which differs from the U.S. federal statutory rate of 21% primarily due to higher earnings in higher tax jurisdictions and nondeductible compensation.The Company's effective tax rate for the nine months ended September 30, 2024, was 23.7%, which differs from the United States of America ("U.S.") federal statutory rate of 21% primarily due to state income taxes and nondeductible compensation. The Company's effective tax rate for the nine months ended September 30, 2023, was 116.6%, which differs from the U.S. federal statutory rate of 21% primarily due to the divestiture of MSA LLC and the non-deductible loss recorded on the derecognition of the product liability reserves and related assets. Refer to Note 17â€”Commitments and Contingencies to the unaudited condensed consolidated financial statements in Part I Item 1 of this Form 10-Q for further information on this transaction.At SeptemberÂ 30, 2024, the Company had a gross liability for unrecognized tax benefits of $7.2 million. The Company has recognized tax benefits associated with these liabilities of $0.6 million at SeptemberÂ 30, 2024. The gross liability includes amounts associated with foreign tax exposure in prior periods.The Company recognizes interest and penalties related to unrecognized tax benefits in interest expense and operating expenses, respectively. The Company's liability for accrued interest related to uncertain tax positions was $0.2 million at SeptemberÂ 30, 2024.We are subject to regular review and audit by both foreign and domestic tax authorities. While we believe our tax positions will be sustained, the final outcome of tax audits and related litigation may differ materially from the tax amounts recorded in our unaudited condensed consolidated financial statements. X - ReferencesNo definition available. + Details Name: us-gaap_IncomeTaxDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for income tax. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 12 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-12Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 231 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482663/740-10-55-231Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 12C -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-12CReference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 12B -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-12BReference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 270 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147477891/740-270-50-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SAB Topic 6.I.5.Q1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479360/740-10-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480990/946-20-50-13Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(h)(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/740/tableOfContentReference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 14 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-14Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 21 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-21Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 17 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-17Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 11.C) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479360/740-10-S99-2Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482603/740-30-50-2 + Details Name: us-gaap_IncomeTaxDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 30 R19.htm IDEA: XBRL DOCUMENT v3.24.3 Stock Plans 9 Months Ended Sep. 30, 2024 Share-Based Payment Arrangement [Abstract] Â Stock Plans Stock PlansThe 2023 Management Equity Incentive Plan provides for various forms of stock-based compensation for eligible employees through May 2033 including stock options, restricted stock awards, restricted stock units and performance stock units. The 2024 Non-Employee Directorsâ€™ Equity Incentive Plan provides for grants of stock options, restricted stock awards and restricted stock units to non-employee directors through May 2034. Stock compensation expense, included in Selling, general and administrative expense in the unaudited Condensed Consolidated Statements of Operations, is as follows:Â Three Months Ended September 30,Nine Months Ended September 30,(In thousands)20242023202420232Stock compensation expense$4,217Â $8,477Â $13,446Â $21,506Â Income tax benefit1,033Â 2,077Â 3,294Â 5,269Â Stock compensation expense, net of tax$3,184Â $6,400Â $10,152Â $16,237Â We have not capitalized any stock-based compensation expense. A summary of stock option activity for the nine months ended September 30, 2024, is as follows: SharesWeighted AverageExerciseÂ PriceOutstanding at January 1, 202426,536Â $45.95Â Exercised(10,531)46.95Â Forfeited(852)48.65Â Outstanding and exercisable at September 30, 202415,153Â $45.10Â Restricted stock awards and restricted stock units are valued at the market value of the stock on the grant date. A summary of restricted stock activity for the nine months ended September 30, 2024, is as follows: SharesWeighted AverageGrantÂ Date Fair ValueUnvested at January 1, 2024173,851Â $142.73Â Granted82,905Â 178.59Â Vested(48,596)164.57Â Forfeited(25,482)164.47Â Unvested at September 30, 2024182,678Â $150.16Â Performance stock units that have a market condition modifier are valued at an estimated fair value using a Monte Carlo model. The final number of shares to be issued for performance stock units granted in the first quarter of 2024 may range from 0% to 200% of the target award based on achieving the specified performance targets over the performance period plus an additional modifier based on total shareholder return ("TSR") over the performance period. The following weighted average assumptions were used in estimating the fair value of the performance stock units granted in the first quarter of 2024.Fair value per unit$181.31Risk-free interest rate4.34%Expected dividend yield1.19%Expected volatility25.9%MSA stock beta0.728The risk-free interest rate is based on the U.S. Treasury Constant Maturity rates as of the grant date converted into an implied spot rate yield curve. Expected dividend yield is based on the most recent annualized dividend divided by the one year average closing share price. Expected volatility is based on the three year historical volatility preceding the grant date using daily stock prices. Expected life is based on historical stock option exercise data.A summary of performance stock unit activity for the nine months ended September 30, 2024, is as follows: SharesWeighted AverageGrantÂ Date Fair ValueUnvested at January 1, 2024189,221Â $146.17Â Granted40,787Â 177.34Â Performance adjustments(a)20,488Â 194.10Â Vested(77,544)174.13Â Forfeited(10,619)149.13Â Unvested at September 30, 2024162,333Â $146.50Â (a)Performance adjustments relate primarily to the final number of shares issued for the 2021 performance unit awards which vested in the first quarter of 2024 at 174% of the target award based on both cumulative performance against EBITDA margin and revenue growth targets and MSA's TSR during the three-year performance period. X - DefinitionThe entire disclosure for share-based payment arrangement. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/718/tableOfContentReference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (h)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (h)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (l) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_DisclosureOfCompensationRelatedCostsShareBasedPaymentsTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_DisclosureOfCompensationRelatedCostsSharebasedPaymentsAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 31 R20.htm IDEA: XBRL DOCUMENT v3.24.3 Long-Term Debt 9 Months Ended Sep. 30, 2024 Debt Disclosure [Abstract] Â Long-Term Debt Long-Term Debt(In thousands)September 30, 2024December 31, 20232016 Senior Notes payable through 2031, 3.40%, net of debt issuance costs$57,067Â $62,081Â 2021 Senior Notes payable through 2036, 2.69%, net of debt issuance costs99,749Â 99,733Â 2021 Senior Notes payable through 2036, 2.69%, net of debt issuance costs99,749Â 99,733Â 2023 Term Loan credit agreement maturing in 2026, net of debt issuance costs212,055Â 230,604Â 2023 Senior Notes payable through 2028, 5.25%, net of debt issuance costs49,949Â 49,939Â Senior revolving credit facility maturing in 2026, net of debt issuance costs36,153Â 59,602Â Total554,722Â 601,692Â Amounts due within one year26,915Â 26,522Â Long-term debt, net of debt issuance costs$527,807Â $575,170Â On May 24, 2021, the Company entered into a Fourth Amended and Restated Credit Agreement (the â€œRevolving Credit Facility" or "Facilityâ€) that extended its term through May 24, 2026 and increased the capacity to $900.0 million. The agreement was amended in August 2021 and June 2023 to transition from Sterling LIBOR reference rates and U.S. LIBOR reference rates. Under the amended agreement, the Company may elect either a Base rate of interest (â€œBASEâ€) or an interest rate based on Secured Overnight Financing Rate (â€œSOFRâ€). The BASE is a daily fluctuating per annum rate equal to the highest of (i) 0.00%, (ii) the Overnight Bank Funding Rate, plus 0.5%, (iii) the Prime Rate (iv) the Daily Simple SOFR rate, plus 1.00%. The Company pays a credit spread of 0 to 175 basis points based on the Companyâ€™s net EBITDA leverage ratio and elected rate (BASE or SOFR). The Company has a weighted average revolver interest rate of 5.80% as of SeptemberÂ 30, 2024. At SeptemberÂ 30, 2024, $861.5 million of the existing $900.0 million Revolving Credit Facility was unused, including letters of credit issued under the Facility. The Facility also provides an accordion feature that allows the Company to access an additional $400.0Â million of capacity pending approval by MSAâ€™s board of directors and from the bank group.On July 1, 2024, the Company entered into Amendment No. 3 to the Third Amended and Restated Multi-Currency Note Purchase and Private Shelf Agreement (the â€œPrudential Note

Agreementâ€) with PGIM, Inc. (â€œPrudentialâ€). The Prudential Note Agreement provided for (i) the issuance of $100.0Â million of 2.69% Series C Senior Notes due July 1, 2036 and (ii) the establishment of an uncommitted note issuance facility whereby the Company may request, subject to Prudentialâ€™s acceptance in its sole discretion, the issuance of up to $335.0Â million aggregate principal amount of senior unsecured notes. As of SeptemberÂ 30, 2024, the Company has outstanding Â£42.7 million (approximately $57.2 million at SeptemberÂ 30, 2024) of 3.4% Series B Senior Notes due January 22, 2031. Remaining maturities of this note are Â£6.1Â million (approximately $8.2 million at SeptemberÂ 30, 2024) due annually through January 2031.On July 1, 2024, the Company entered into Amendment No. 3 to the Second Amended and Restated Master Note Facility (the â€œNYL Note Facilityâ€) with NYL Investors. The NYL Note Facility provided for (i) the issuance of $100.0Â million of 2.69% Series A Senior Notes due July 1, 2036, and (ii) the establishment of an uncommitted note issuance facility whereby the Company may request, subject to NYL Investorsâ€™ acceptance in its sole discretion, the issuance of up to $200.0Â million aggregate principal amount of senior unsecured notes. On June 29, 2023, the Company issued $50Â million of 5.25% Series B Senior Notes due July 1, 2028, pursuant to the NYL Note Facility (the "Notes"). The Notes bear interest at 5.25% per annum, payable semi-annually, and mature on July 1, 2028. The Notes provide for a principal payment of $25Â million on July 1, 2027, with the remaining $25Â million due on July 1, 2028. The Notes may be redeemed at the Companyâ€™s option prior to their maturity at a make-whole redemption price calculated as provided in the NYL Note Facility. The proceeds of the Notes were used on June 29, 2023, to pay down an equivalent amount of borrowings under the Companyâ€™s Revolving Credit Facility with PNC Bank, National Association, as Administrative Agent.On January 5, 2023, the Company entered into a new $250Â million term loan facility to fund the divestiture of MSA LLC, a wholly owned subsidiary. Under the agreement, the Company may elect either BASE or an interest rate based on SOFR. The Company pays a credit spread of 0 to 200 basis points based on the Company's net EBITDA leverage ratio and elected rate. The Company had a Term Loan interest rate of 6.35% as of SeptemberÂ 30, 2024.The Revolving Credit Facility, Prudential Note Agreement and NYL Note Facility require the Company to comply with specified financial covenants, including a requirement to maintain a minimum fixed charges coverage ratio of not less than 1.50 to 1.00 and a consolidated leverage ratio not to exceed 3.50 to 1.00; except during an acquisition period, defined as four consecutive fiscal quarters beginning with the quarter of acquisition, in which case the consolidated net leverage ratio shall not exceed 4.00 to 1.00; in each case calculated on the basis of the trailing four fiscal quarters. In addition, the agreements contain negative covenants limiting the ability of the Company and its subsidiaries to incur additional indebtedness or issue guarantees, create or incur liens, make loans and investments, make acquisitions, transfer or sell assets, enter into transactions with affiliated parties, make changes in its organizational documents that are materially adverse to lenders or modify the nature of the Company's or its subsidiaries' business. All credit facilities exclude MSA LLC prior to the divestiture of this subsidiary on January 5, 2023, as discussed further in Note 17â€”Commitments and Contingencies to the unaudited condensed consolidated financial statements in Part I Item 1 of this Form 10-Q for further information on this transaction. As of SeptemberÂ 30, 2024, the Company was in full compliance with the restrictive covenants under its various credit agreements.The Company had outstanding bank guarantees and standby letters of credit with banks as of SeptemberÂ 30, 2024, totaling $10.0 million, of which $1.5 million relate to the Revolving Credit Facility. The letters of credit serve to cover customer requirements in connection with certain sales orders and insurance companies. The Company is also required to provide cash collateral in connection with certain arrangements. At SeptemberÂ 30, 2024, the Company has $0.6 million of restricted cash in support of these arrangements. X - ReferencesNo definition available. + Details Name: us-gaap_DebtDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for information about short-term and long-term debt arrangements, which includes amounts of borrowings under each line of credit, note payable, commercial paper issue, bonds indenture, debenture issue, own-share lending arrangements and any other contractual agreement to repay funds, and about the underlying arrangements, rationale for a classification as long-term, including repayment terms, interest rates, collateral provided, restrictions on use of assets and activities, whether or not in compliance with debt covenants, and other matters important to users of the financial statements, such as the effects of refinancing and noncompliance with debt covenants. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481544/470-10-50-6Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481544/470-10-50-6Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 405 -SubTopic 40 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477092/405-40-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 405 -SubTopic 40 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477092/405-40-50-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 405 -SubTopic 40 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477092/405-40-50-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 405 -SubTopic 40 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477092/405-40-50-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 405 -SubTopic 40 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477092/405-40-50-1Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (h) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(c)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 10: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 470 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/470/tableOfContentReference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482925/835-30-45-2Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1C -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1CReference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1C -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1CReference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1C -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1CReference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1E -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1EReference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1I -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1IReference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1I -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1IReference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1I -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1I + Details Name: us-gaap_DebtDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 32 R21.htm IDEA: XBRL DOCUMENT v3.24.3 Goodwill and Intangible Assets, Net 9 Months Ended Sep. 30, 2024 Goodwill and Intangible Assets Disclosure [Abstract] Â Goodwill and Intangible Assets, Net Goodwill and Intangible Assets, NetChanges in goodwill during the nine months ended September 30, 2024, were as follows:(In thousands)GoodwillBalance at January 1, 2024$627,534Â Currency translation5,303Â Balance at September 30, 2024$632,837Â At SeptemberÂ 30, 2024, goodwill of $447.6 million and $185.2 million related to the Americas and International reportable segments, respectively.Changes in intangible assets, net, during the nine months ended September 30, 2024, were as follows:(In thousands)Intangible AssetsNet balance at January 1, 2024$266,134Â Amortization expense(13,392)Currency translation1,622Â Net balance at September 30, 2024$254,364Â At SeptemberÂ 30, 2024, intangible assets, net, includes a trade name related to Globe Manufacturing Company, LLC ("Globe") with an indefinite life totaling $60.0 million X - ReferencesNo definition available. + Details Name: us-gaap_GoodwillAndIntangibleAssetsDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for goodwill and intangible assets. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/350-30/tableOfContentReference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/350-20/tableOfContent + Details Name: us-gaap_GoodwillAndIntangibleAssetsDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 33 R22.htm IDEA: XBRL DOCUMENT v3.24.3 Pensions and Other Post-retirement Benefits 9 Months Ended Sep. 30, 2024 Retirement Benefits [Abstract] Â Pensions and Other Post-retirement Benefits Pensions and Other Post-retirement Benefits Components of Net periodic benefit (income) cost consisted of the following: Â Pension BenefitsOther Benefits(In thousands)20242023202420233Three Months Ended September 30,Service cost$2,315Â $1,884Â $44Â $53Â Interest cost5,970Â 5,918Â 248Â 273Â Expected return on plan assets(10,812)(9,906)â€”Â â€”Â Amortization of prior service cost (credit)37Â 37Â (46)(61)Recognized net actuarial losses282Â 47Â 115Â 138Â Net periodic benefit (income) cost (a)$(2,208)$(2,020)$361Â $403Â Nine Months Ended September 30,Service cost$6,945Â $5,652Â $132Â $159Â Interest cost17,910Â 17,754Â 744Â 819Â Expected return on plan assets(32,436)(29,718)â€”Â â€”Â Amortization of prior service cost (credit)111Â 111Â (138)(183)Recognized net actuarial losses846Â 141Â 345Â 414Â Settlements1,308Â â€”Â â€”Â â€”Â Net periodic benefit (income) cost (a)$(5,316)$(6,060)$1,083Â $1,209Â (a) Components of Net periodic benefit (income) cost other than service cost are included in the line item Other income, net, and service costs are included in the line items Cost of products sold and Selling, general and administrative in the unaudited Condensed Consolidated Statements of Operations. We made contributions of $3.9 million and $4.3 million to our pension plans during the nine months ended September 30, 2024, and 2023, respectively. We expect to make net contributions of $5.3 million to our pension plans in 2024, which are primarily associated with statutorily required plans in the International reporting segment. X - ReferencesNo definition available. + Details Name: us-gaap_CompensationAndRetirementDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for retirement benefits. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 70 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480794/715-70-50-1Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 17 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480482/715-20-55-17Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (d)(iv)(03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (d)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (q) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (l) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/715/tableOfContentReference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (d)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (o) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (p) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (r)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (r)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480126/715-20-S99-2Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 60 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480266/715-60-50-3 + Details Name: us-gaap_PensionAndOtherPostretirementBenefitsDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 34 R23.htm IDEA: XBRL DOCUMENT v3.24.3 Derivative Financial Instruments 9 Months Ended Sep. 30, 2024 Derivative Instruments and Hedging Activities Disclosure [Abstract] Â Derivative Financial Instruments Derivative Financial Instruments As part of our currency exchange rate risk management strategy, we enter into certain derivative foreign currency forward contracts that do not meet the U.S. GAAP criteria for hedge accounting but have the impact of partially offsetting certain of our foreign currency exposures. We account for these forward contracts at fair value and report the related gains or losses in currency exchange losses, net, in the unaudited Condensed Consolidated Statements of Operations. The notional amount of open forward contracts was $184.8 million and $110.9 million at SeptemberÂ 30, 2024, and DecemberÂ 31, 2023, respectively. The following table presents the unaudited Condensed Consolidated Balance Sheets location and fair value of assets and liabilities associated with derivative financial instruments:(In thousands)September 30, 2024December 31, 2023Derivatives not designated as hedging instruments:Foreign exchange contracts: prepaid expenses and other current assets$â€”Â $2,210Â Foreign exchange contracts: other current liabilities1,038Â 242Â The following table presents the unaudited Condensed Consolidated Statements of Operations and unaudited Condensed Consolidated Statements of Cash Flows location and the loss impact of derivative financial instruments:Â Nine Months Ended September 30,(In thousands)20242023Derivatives not designated as hedging instruments:Foreign exchange contracts: currency exchange losses, net$1,683Â $2,986Â X - ReferencesNo definition available. + Details Name: us-gaap_DerivativeInstrumentsAndHedgingActivitiesDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for derivative instruments and hedging activities including, but not limited to, risk management strategies, non-hedging derivative instruments, assets, liabilities, revenue and expenses, and methodologies and assumptions used in determining the amounts. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480237/815-40-50-5Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 5C -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480434/815-10-50-5CReference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 815 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/815/tableOfContent + Details Name: us-gaap_DerivativeInstrumentsAndHedgingActivitiesDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 35 R24.htm IDEA: XBRL DOCUMENT v3.24.3 Fair Value Measurements 9 Months Ended Sep. 30, 2024 Fair Value Disclosures [Abstract] Â Fair Value Measurements Fair Value MeasurementsFair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value hierarchy consists of three broad levels, which gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are:â€¢Level 1â€”Observable inputs that reflect unadjusted quoted prices for identical assets or liabilities in active markets.â€¢Level 2â€”Inputs other than quoted prices included within Level 1 that are observable for the asset or

liability, either directly or indirectly.â€¢Level 3â€”Unobservable inputs for the asset or liability.The valuation methodologies we used to measure financial assets and liabilities are also used to value the derivative financial instruments described in Note 15â€”Derivative Financial Instruments. We estimate the fair value of the derivative financial instruments, consisting of foreign currency forward contracts, based upon valuation models with inputs that generally can be verified by observable market conditions and do not involve significant management judgment. Accordingly, the fair values of the derivative financial instruments are classified within Level 2 of the fair value hierarchy. With the exception of our fixed rate long-term debt, we believe that the reported carrying amounts of our financial assets and liabilities approximate their fair values. The reported carrying amount of our fixed rate long-term debt was $307.2 million and $312.2 million at SeptemberÂ 30, 2024, and DecemberÂ 31, 2023, respectively. The fair value of this debt was $278.1 million and $278.7 million at SeptemberÂ 30, 2024, and DecemberÂ 31, 2023, respectively. The fair value of this debt was determined using Level 2 inputs by evaluating similarly rated companies with publicly traded bonds where available or current borrowing rates available for financings with similar terms and maturities. X - ReferencesNo definition available. + Details Name: us-gaap_FairValueDisclosuresAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure of the fair value measurement of assets and liabilities, which includes financial instruments measured at fair value that are classified in shareholders' equity, which may be measured on a recurring or nonrecurring basis. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 820 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/820/tableOfContent + Details Name: us-gaap_FairValueMeasurementInputsDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 36 R25.htm IDEA: XBRL DOCUMENT v3.24.3 Commitments and Contingencies 9 Months Ended Sep. 30, 2024 Commitments and Contingencies Disclosure [Abstract] Â Commitments and Contingencies Commitments and ContingenciesProduct liabilityThe Company and its subsidiaries face an inherent business risk of exposure to legal claims arising from the alleged failure of our products to prevent the types of personal injury or death against which they are designed to protect. Product liability claims are categorized as either single incident or cumulative trauma.Single incident product liability claims. Single incident product liability claims involve incidents of short duration that are typically known when they occur and involve observable injuries, which provide an objective basis for quantifying damages. Management has established reserves for the single incident product liability claims of the Company's various subsidiaries, including asserted single incident product liability claims and incurred but not reported ("IBNR") single incident claims. To determine the reserves, Management makes reasonable estimates of losses for single incident claims based on the number and characteristics of asserted claims, historical experience, sales volumes, expected settlement costs, and other relevant information. The reserve for single incident product liability claims was $0.8 million at SeptemberÂ 30, 2024 and $1.3 million at DecemberÂ 31, 2023. Single incident product liability benefit was $0.2 million and $0.1 million for the nine months ended September 30, 2024, and 2023, respectively. Single incident product liability exposures are evaluated on an annual basis, or more frequently if changing circumstances warrant. Adjustments are made to the reserve as appropriate. The reserve has not been discounted to present value and does not include future amounts which will be spent to defend the claims.During the first nine months of 2024, the Company recorded $5.0Â million of net cost for product related legal matter. The expense is reflected within the selling, general and administration line of the unaudited Condensed Consolidated Statement of Operations.Cumulative trauma product liability claims. Cumulative trauma product liability claims involve alleged exposures to harmful substances (e.g., silica, asbestos and coal dust) that occurred years ago and may have developed over long periods of time into diseases such as silicosis, asbestosis, mesothelioma, or coal workerâ€™s pneumoconiosis. Prior to the divestiture described below, one of the Company's former subsidiaries, MSA LLC, was named as a defendant in various lawsuits related to such claims. These lawsuits mainly involve respiratory protection products allegedly manufactured and sold by MSA LLC or its predecessors. On January 5, 2023, the Company entered into a membership interest purchase agreement (the â€œPurchase Agreementâ€) with Sag Main Holdings, LLC (the â€œBuyerâ€). The Buyer was a joint venture between R&Q Insurance Holdings Ltd. (â€œR&Qâ€) and Obra Capital, Inc. (â€œObraâ€). Under the Purchase Agreement, on January 5, 2023, the Company transferred to the Buyer all of the issued and outstanding limited liability company interests of MSA LLC (the â€œSaleâ€). In connection with the closing, the Company contributed $341.2Â million in cash and cash equivalents, while R&Q and Obra contributed an additional $35.0Â million.MSA LLC was the obligor for the claims to which the Company's legacy cumulative trauma product liability reserves relate and policyholder of the related insurance assets. The rights and obligations related to these items remained with MSA LLC upon the sale to the Buyer. In addition, pursuant to the Purchase Agreement, the Buyer and MSA LLC have agreed to indemnify the Company and its affiliates for legacy cumulative trauma product liabilities and other product liabilities, and a subsidiary of the Company has agreed to indemnify MSA LLC for all other historical liabilities of MSA LLC. This indemnification is not subject to any cap or time limitation. In connection with the sale, the Company and its Board of Directors received a solvency opinion from an independent advisory firm that MSA LLC was solvent and adequately capitalized after giving effect to the transaction.Following the completion of the transaction, the Company no longer has any obligation with respect to pending and future cumulative trauma product liability claims relating to these matters. As such, all legacy cumulative trauma product liability reserves, related insurance assets, and associated deferred tax assets of the divested subsidiary were derecognized from our balance sheet and the Company incurred a tax-effected loss on the divestiture of MSA LLC of $199.6Â million, including transaction related costs of $5.6Â million. The Buyer has assumed management of the divested subsidiary, including the management of its claims and associated assets. Other Litigation Globe, a subsidiary of the Company, is defending claims in which plaintiffs assert that certain products allegedly containing per- and polyfluoroalkyl substances (â€œPFASâ€) have caused harm, including injury or health issues. PFAS are a large class of substances that are widely used in everyday products. Specifically, Globe builds firefighter turnout gear from technical fabrics sourced from a small pool of specialty textile manufacturers. These protective fabrics have been tested and certified to meet current National Fire Protection Association safety standards, and some of them as supplied to Globe contain or historically have contained PFAS to achieve performance characteristics such as water, oil, or chemical resistance.Globe believes it has valid defenses to these claims. These matters are at a very early stage with numerous factual and legal issues to be resolved. Defense costs relating to these lawsuits are recognized in the unaudited Condensed Consolidated Statements of Operations as incurred. Globe is also pursuing insurance coverage and indemnification related to the lawsuits. As of October 15, 2024, Globe was named as a defendant in 535 lawsuits comprised of 7,850 claims, predominantly styled as individual personal injury claims and including two putative class actions. Certain of these lawsuits include MSA Safety Inc. or other Globe affiliates as defendants. MSA LLC is also a defendant in a number of PFAS lawsuits predominantly relating to Aqueous Film-Forming Foam. The Buyer assumed responsibility for these and any similar future claims specific to MSA LLC, including such claims that have been or may be brought against MSA Safety Inc. or its subsidiaries, under the terms of the divestiture on January 5, 2023. Further information about the transaction can be found in the Companyâ€™s Current Report on Form 8-K filed on January 6, 2023. Product WarrantyThe Company provides warranties on certain product sales. Product warranty reserves are established in the same period that revenue from the sale of the related products is recognized, or in the period that a specific issue arises as to the functionality of the Company's product. The determination of such reserves requires the Company to make estimates of product return rates and expected costs to repair or to replace the products under warranty. The amounts of the reserves are based on established terms and the Company's best estimate of the amounts necessary to settle future and existing claims on products sold as of the balance sheet date. If actual return rates and/or repair and replacement costs differ significantly from estimates, adjustments to recognize additional cost of sales may be required in future periods. The following table reconciles changes in the Company's accrued warranty reserve:(InÂ thousands)Nine Months Ended September 30, 2024Year Ended December 31, 2023Beginning warranty reserve$14,288Â $15,230Â Warranty payments(8,518)(9,794)Warranty claims7,370Â 8,899Â Provision for product warranties and other adjustments515Â (47)Ending warranty reserve$13,655Â $14,288Â Warranty expense was $7.9 million and $6.7 million for the nine months ended September 30, 2024, and 2023, respectively, and is included in Costs of products sold on the unaudited Condensed Consolidated Statements of Operations. Outstanding Performance ObligationsThe Company derives a portion of its revenue from various leasing arrangements where the Company is the lessor, primarily fire service contracts entered into by Bristol. Such arrangements provide for monthly payments covering equipment provided, maintenance and interest. These arrangements meet the criteria to be accounted for as sales-type leases under Accounting Standards Codification ("ASC") 842 and contain both lease and non-lease components. Revenue from equipment provided is considered a lease component and recognized with point in time revenue recognition upon lease commencement. Maintenance revenue, which is considered a non-lease component, and interest is recognized monthly over the lease term. As of SeptemberÂ 30, 2024, the Company had remaining maintenance performance obligations of approximately $28.7Â million which are expected to be recognized to revenue in approximately three years. X - ReferencesNo definition available. + Details Name: us-gaap_CommitmentsAndContingenciesDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for commitments and contingencies. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 405 -SubTopic 30 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/405-30/tableOfContentReference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 440 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482648/440-10-50-4Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 450 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/450/tableOfContentReference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 954 -SubTopic 440 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478522/954-440-50-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 440 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482648/440-10-50-4Reference 6: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 440 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/440/tableOfContent + Details Name: us-gaap_CommitmentsAndContingenciesDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 37 R26.htm IDEA: XBRL DOCUMENT v3.24.3 Pay vs Performance Disclosure - USD ($) $ in Thousands 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Pay vs Performance Disclosure Â Â Â Â Net income (loss) $ 66,648 $ 65,256 $ 197,021 $ (17,827) X - ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Regulation S-K -Number 229 -Section 402 -Subsection v -Paragraph 1 + Details Name: ecd_PvpTable Namespace Prefix: ecd_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe portion of profit or loss for the period, net of income taxes, which is attributable to the parent. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 9 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-9Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-6Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-3Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-1Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-8Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-4Reference 17: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-10Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section 45 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479105/946-220-45-7Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(18)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-07(9)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-1Reference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(1)(d)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 23: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 27: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 28: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 29: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 30: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 31: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 32: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 60B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 33: http://www.xbrl.org/2003/role/disclosureRef -Topic 205 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483499/205-20-50-7Reference 34:

http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 35: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1AReference 36: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1BReference 37: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(22)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1 + Details Name: us-gaap_NetIncomeLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration XML 38 R27.htm IDEA: XBRL DOCUMENT v3.24.3 Insider Trading Arrangements 3 Months Ended Sep. 30, 2024 Trading Arrangements, by Individual Â Rule 10b5-1 Arrangement Adopted false Non-Rule 10b5-1 Arrangement Adopted false Rule 10b5-1 Arrangement Terminated false Non-Rule 10b5-1 Arrangement Terminated false X - ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Regulation S-K -Number 229 -Section 408 -Subsection a -Paragraph 1 + Details Name: ecd_NonRule10b51ArrAdoptedFlag Namespace Prefix: ecd_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Regulation S-K -Number 229 -Section 408 -Subsection a -Paragraph 1 + Details Name: ecd_NonRule10b51ArrTrmntdFlag Namespace Prefix: ecd_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Regulation S-K -Number 229 -Section 408 -Subsection a -Paragraph 1 + Details Name: ecd_Rule10b51ArrAdoptedFlag Namespace Prefix: ecd_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Regulation S-K -Number 229 -Section 408 -Subsection a -Paragraph 1 + Details Name: ecd_Rule10b51ArrTrmntdFlag Namespace Prefix: ecd_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Regulation S-K -Number 229 -Section 408 -Subsection a -Paragraph 2 -Subparagraph A + Details Name: ecd_TradingArrByIndTable Namespace Prefix: ecd_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 39 R28.htm IDEA: XBRL DOCUMENT v3.24.3 Basis of Presentation (Policies) 9 Months Ended Sep. 30, 2024 Organization, Consolidation and Presentation of Financial Statements [Abstract] Â Consolidation The condensed consolidated financial statements of MSA Safety Incorporated and its subsidiaries ("MSA" or "the Company") are unaudited. These unaudited condensed consolidated financial statements include all adjustments, consisting of normal recurring adjustments, considered necessary by management to fairly state the Company's results. Intercompany accounts and transactions have been eliminated. The results reported in these unaudited condensed consolidated financial statements are not necessarily indicative of the results that may be expected for the entire year. The DecemberÂ 31, 2023, Balance Sheet data was derived from the audited Consolidated Balance Sheets, but does not include all disclosures required by accounting principles generally accepted in the United States of America ("U.S. GAAP"). This Form 10-Q report should be read in conjunction with MSA's Form 10-K for the year ended DecemberÂ 31, 2023, which includes all disclosures required by U.S. GAAP. Recently Adopted and Recently Issued Accounting Standards In November 2023, the FASB issued ASU No. 2023-07 (â€œASU 2023-07â€), Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures. ASU 2023-07 requires annual and interim disclosures that are expected to improve reportable segment disclosures, primarily through enhanced disclosures about significant expenses in determining segment profit or loss. The provisions of ASU 2023-07 are effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. We will apply the new disclosure requirements of ASU 2023-07 in our 2024 Form 10-K and, with the exception of expanding disclosures about significant segment expenses, do not expect that the adoption of ASU 2023-07 will have a material effect on our consolidated financial statements taken as a whole. X - DefinitionDisclosure of accounting policy regarding (1) the principles it follows in consolidating or combining the separate financial statements, including the principles followed in determining the inclusion or exclusion of subsidiaries or other entities in the consolidated or combined financial statements and (2) its treatment of interests (for example, common stock, a partnership interest or other means of exerting influence) in other entities, for example consolidation or use of the equity or cost methods of accounting. The accounting policy may also address the accounting treatment for intercompany accounts and transactions, noncontrolling interest, and the income statement treatment in consolidation for issuances of stock by a subsidiary. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483426/235-10-50-4Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 810 -SubTopic 10 -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-1 + Details Name: us-gaap_ConsolidationPolicyTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy pertaining to new accounting pronouncements that may impact the entity's financial reporting. Includes, but is not limited to, quantification of the expected or actual impact. + ReferencesNo definition available. + Details Name: us-gaap_NewAccountingPronouncementsPolicyPolicyTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_OrganizationConsolidationAndPresentationOfFinancialStatementsAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 40 R29.htm IDEA: XBRL DOCUMENT v3.24.3 Cash and Cash Equivalents (Tables) 9 Months Ended Sep. 30, 2024 Cash and Cash Equivalents [Abstract] Â Schedule of Cash and Cash Equivalents The Company's net cash pool position consisted of the following: (In thousands)September 30, 2024Gross cash pool position$69,117Â Less: cash pool borrowings(65,712)Net cash pool position$3,405Â X - ReferencesNo definition available. + Details Name: us-gaap_CashAndCashEquivalentsAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of the components of cash and cash equivalents. + ReferencesNo definition available. + Details Name: us-gaap_ScheduleOfCashAndCashEquivalentsTableTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 41 R30.htm IDEA: XBRL DOCUMENT v3.24.3 Restructuring Charges (Tables) 9 Months Ended Sep. 30, 2024 Restructuring and Related Activities [Abstract] Â Schedule of Activity and Reserve Balance for Restructuring Charges by Segment Activity and reserve balances for restructuring by segment were as follows:(In millions)AmericasInternationalCorporateTotalReserve balances at December 31, 2022$1.7Â $12.8Â $0.5Â $15.0Â Restructuring charges3.1Â 4.7Â 2.1Â 9.9Â Currency translation(0.1)0.1Â â€”Â â€”Â Cash payments / utilization (3.9)(8.6)(2.6)(15.1)Reserve balances at December 31, 2023$0.8Â $9.0Â â€”Â $9.8Â Restructuring charges1.3Â 3.2Â 1.2Â 5.7Â Cash payments(1.9)(8.0)(1.2)(11.1)Reserve balances at September 30, 2024$0.2Â $4.2Â â€”Â $4.4Â X - ReferencesNo definition available. + Details Name: us-gaap_RestructuringAndRelatedActivitiesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of costs incurred for restructuring including, but not limited to, exit and disposal activities, remediation, implementation, integration, asset impairment, and charges against earnings from the write-down of assets. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SAB Topic 5.P.3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479823/420-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 5.P.4) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479823/420-10-S99-2Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 420 -SubTopic 10 -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482017/420-10-50-1 + Details Name: us-gaap_ScheduleOfRestructuringAndRelatedCostsTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 42 R31.htm IDEA: XBRL DOCUMENT v3.24.3 Inventories (Tables) 9 Months Ended Sep. 30, 2024 Inventory Disclosure [Abstract] Â Schedule of Inventories The following table sets forth the components of inventory: (In thousands)September 30, 2024December 31, 2023Finished products$118,294Â $88,687Â Work in process17,369Â 15,378Â Raw materials and supplies216,142Â 188,539Â Total inventories$351,805Â $292,604Â X - ReferencesNo definition available. + Details Name: us-gaap_InventoryDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of the carrying amount as of the balance sheet date of merchandise, goods, commodities, or supplies held for future sale or to be used in manufacturing, servicing or production process. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(6)(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(6)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(6)(c)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 210 -SubTopic 10 -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483489/210-10-50-1 + Details Name: us-gaap_ScheduleOfInventoryCurrentTableTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 43 R32.htm IDEA: XBRL DOCUMENT v3.24.3 Property, Plant and Equipment (Tables) 9 Months Ended Sep. 30, 2024 Property, Plant and Equipment [Abstract] Â Components of Property, Plant and Equipment The following table sets forth the components of property, plant and equipment, net: (In thousands)September 30, 2024December 31, 2023Land$4,379Â $4,332Â Buildings144,364Â 141,027Â Machinery and equipment511,075Â 498,148Â Construction in progress27,482Â 24,404Â Total687,300Â 667,911Â Less: accumulated depreciation(470,654)(456,034)Property, plant and equipment, net$216,646Â $211,877Â X - ReferencesNo definition available. + Details Name: us-gaap_PropertyPlantAndEquipmentAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of physical assets used in the normal conduct of business and not intended for resale. Includes, but is not limited to, balances by class of assets, depreciation and depletion expense and method used, including composite depreciation, and accumulated deprecation. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 1 -SubTopic 10 -Topic 360 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482099/360-10-50-1 + Details Name: us-gaap_PropertyPlantAndEquipmentTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 44 R33.htm IDEA: XBRL DOCUMENT v3.24.3 Reclassifications Out of Accumulated Other Comprehensive Loss (Tables) 9 Months Ended Sep. 30, 2024 Equity [Abstract] Â Reclassification Out of Accumulated Other Comprehensive Loss Changes in accumulated other comprehensive loss were as follows: Three Months Ended September 30,Nine Months Ended September 30,(In thousands)20242023202420230Pension and other post-retirement benefits (a)Balance at beginning of period$(40,256)$(49,781)$(42,652)$(50,335)Amounts reclassified from accumulated other comprehensive loss into net income (loss):Amortization of prior service credit (Note 14)(9)(24)(27)(72)Recognized net actuarial losses (Note 14)397Â 185Â 3,065Â 555Â Tax (benefit) expense(374)27Â (628)259Â Total amount reclassified from accumulated other comprehensive loss, net of tax, into net income (loss)14Â 188Â 2,410Â 742Â Balance at end of period$(40,242)$(49,593)$(40,242)$(49,593)Available-for-sale securitiesBalance at beginning of period$â€”Â $â€”Â $â€”Â $(2)Unrealized net gains on available-for-sale securities (Note 16)â€”Â â€”Â â€”Â 2Â Balance at end of period$â€”Â $â€”Â $â€”Â $â€”Â Foreign currency translationBalance at beginning of period$(107,292)$(92,147)$(86,597)$(108,380)Reclassification from accumulated other comprehensive loss into net income (loss)(b)â€”Â 101Â (1,200)101Â Foreign currency translation adjustments21,329Â (18,771)1,834Â (2,538)Balance at end of period$(85,963)$(110,817)$(85,963)$(110,817)(a) Amounts reclassified from accumulated other comprehensive loss into net income (loss) are included in the computation of net periodic pension and other post-retirement benefit costs (refer to Note 14â€”Pensions and Other Post-retirement Benefits). (b) Reclassification from accumulated other comprehensive loss into net income (loss) relates primarily to the recognition of non-cash net cumulative translation gains associated with certain foreign subsidiaries. The reclassifications are included in Currency exchange losses, net, within the unaudited Condensed Consolidated Statements of Income. X - ReferencesNo definition available. + Details Name: us-gaap_EquityAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of information about items reclassified out of accumulated other comprehensive income (loss). + ReferencesNo definition available. + Details Name: us-gaap_ReclassificationOutOfAccumulatedOtherComprehensiveIncomeTableTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 45 R34.htm IDEA: XBRL DOCUMENT v3.24.3 Capital Stock (Tables) 9 Months Ended Sep. 30, 2024 Equity [Abstract] Â Common Stock Activity Common stock activity is summarized as follows:Three Months Ended September 30, 2024Three Months Ended September 30, 2023(In thousands)CommonStockTreasuryCost(a)CommonStockTreasuryCost(a)Balance at beginning of period$320,556Â $(376,556)$294,364Â $(362,025)Stock compensation expense4,217Â â€”Â 8,477Â â€”Â Restricted and performance stock awards(275)275Â (15)15Â Stock options exercised111Â 57Â 591Â 307Â Treasury shares purchased for stock compensation programsâ€”Â (571)â€”Â (70)Share repurchase programâ€”Â (10,027)â€”Â â€”Â Balance at end of period$324,609Â $(386,822)$303,417Â $(361,773)(a)Excludes treasury cost related to preferred stock.Nine Months Ended September 30, 2024Nine Months Ended September 30, 2023(In thousands)CommonStockTreasuryCost(a)CommonStockTreasuryCost(a)Balance at beginning of period$312,324Â $(361,684)$281,980Â $(359,838)Stock compensation expense13,446Â â€”Â 21,506Â â€”Â Restricted and performance stock awards(2,058)2,058Â (1,449)1,449Â Stock options exercised323Â 171Â 948Â 492Â Treasury shares purchased for stock compensation programsâ€”Â (7,400)â€”Â (3,941)Employee stock purchase program574Â 60Â 432Â 65Â Share repurchase programâ€”Â (20,027)â€”Â â€”Â Balance at end of period$324,609Â $(386,822)$303,417Â $(361,773)(a)Excludes treasury cost related to preferred stock. X - DefinitionCapital stock disclosure. + ReferencesNo definition available. + Details Name: msa_CapitalStockDisclosureTableTextBlock Namespace Prefix: msa_ Data Type: dtr-types1:textBlockItemType Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_EquityAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 46 R35.htm IDEA: XBRL DOCUMENT v3.24.3 Segment Information (Tables) 9 Months Ended Sep. 30, 2024 Segment Reporting [Abstract] Â Schedule of Reportable Segment Information Reportable segment information is presented in the following table:(In thousands)AmericasInternationalCorporateConsolidatedTotalsThree Months Ended September 30, 2024Net sales to external customers$299,497Â $133,182Â $â€”Â $432,679Â Adjusted operating income (loss)91,822Â 18,174Â (12,081)97,915Â Three Months Ended September 30, 2023Net sales to external customers$314,273Â $132,455Â $â€”Â $446,728Â Adjusted operating income (loss)93,918Â 22,577Â (15,198)101,297Â (In thousands)AmericasInternationalCorporateConsolidatedTotalsNine Months Ended September 30, 2024Net sales to external customers$909,745Â $398,698Â $â€”Â $1,308,443Â Adjusted operating income (loss)276,523Â 55,944Â (38,353)294,114Â Nine Months Ended September 30, 2023Net sales to external customers$902,918Â $389,372Â $â€”Â $1,292,290Â Adjusted operating income (loss)260,428Â 60,099Â (38,066)282,461Â A reconciliation of total Adjusted operating income from reportable segments to Income before income taxes is presented in the following table: Three Months Ended September 30,Nine Months Ended September 30,(In thousands)2024202320242023Adjusted operating income$97,915$101,297$294,114$282,461Less:Restructuring charges (Note 3)1,1843,2855,7448,382Currency exchange losses, net2,9851,4964,7158,781Interest expense9,15312,49829,55637,149Other income, net(5,833)(6,037)(16,215)(15,487)Amortization of acquisition-related intangible assets2,2692,3156,8886,936Transaction costs(a)â€”7823478Net cost for product related legal matterâ€”â€“5,000â€”Loss on divestiture of MSA LLC (Note 17)â€”â€”â€”129,211Product liability expense (Note 17)â€”â€”â€”3Income before income taxes88,15787,662258,192107,408(a) Transaction costs include advisory, legal, accounting, valuation, and other professional or consulting fees incurred during our evaluation of acquisitions and divestitures. These costs are included in Selling, general and administrative expense in the unaudited Condensed Consolidated Statements of Operations. Percentage of Total Sales by Product Group Total sales by product group was as follows:Three Months Ended September 30, 2024ConsolidatedAmericasInternational(In thousands, except percentages)DollarsPercentDollarsPercentDollarsPercentFire Service (a)$160,515Â 37%$111,992Â 37%$48,523Â 36%Detection (b)163,150Â 38%110,459Â 37%52,691Â 40%Industrial PPE and Other (c)109,014Â 25%77,046Â 26%31,968Â 24%Total$432,679Â 100%$299,497Â 100%$133,182Â 100%Three Months Ended September 30, 2023ConsolidatedAmericasInternational(In thousands, except percentages)DollarsPercentDollarsPercentDollarsPercentFire Service (a)$175,732Â 39%$131,516Â 42%$44,216Â 33%Detection (b)155,694Â 35%105,007Â 33%50,687Â 38%Industrial PPE and Other (c)115,302Â 26%77,750Â 25%37,552Â 29%Total$446,728Â 100%$314,273Â 100%$132,455Â 100%Nine Months Ended September 30, 2024ConsolidatedAmericasInternational(In thousands, except percentages)DollarsPercentDollarsPercentDollarsPercentFire Service (a)$496,478Â 38%$352,730Â 39%$143,748Â 36%Detection

(b)473,214Â 36%318,159Â 35%155,055Â 39%Industrial PPE and Other (c)338,751Â 26%238,856Â 26%99,895Â 25%Total$1,308,443Â 100%$909,745Â 100%$398,698Â 100%Nine Months Ended September 30, 2023ConsolidatedAmericasInternational(In thousands, except percentages)DollarsPercentDollarsPercentDollarsPercentFire Service (a)$481,610Â 37%$354,729Â 39%$126,881Â 33%Detection (b)460,537Â 36%308,692Â 34%151,845Â 39%Industrial PPE and Other (c)350,143Â 27%239,497Â 27%110,646Â 28%Total$1,292,290Â 100%$902,918Â 100%$389,372Â 100%(a) Fire Service includes Breathing Apparatus and Firefighter Helmets and Protective Apparel.(b) Detection includes Fixed Gas and Flame Detection and Portable Gas detection.(c) Industrial PPE and Other includes Industrial Head Protection, Fall Protection and Non-Core. X - DefinitionTabular disclosure of entity-wide revenues from external customers for each product or service or each group of similar products or services if the information is not provided as part of the reportable operating segment information. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 280 -SubTopic 10 -Section 50 -Paragraph 40 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-40 + Details Name: us-gaap_ScheduleOfEntityWideInformationRevenueFromExternalCustomersByProductsAndServicesTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of the profit or loss and total assets for each reportable segment. An entity discloses certain information on each reportable segment if the amounts (a) are included in the measure of segment profit or loss reviewed by the chief operating decision maker or (b) are otherwise regularly provided to the chief operating decision maker, even if not included in that measure of segment profit or loss. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 280 -SubTopic 10 -Section 50 -Paragraph 25 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-25Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 280 -SubTopic 10 -Section 50 -Paragraph 22 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 280 -SubTopic 10 -Section 50 -Paragraph 30 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30 + Details Name: us-gaap_ScheduleOfSegmentReportingInformationBySegmentTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_SegmentReportingAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 47 R36.htm IDEA: XBRL DOCUMENT v3.24.3 Earnings (Loss) per Share (Tables) 9 Months Ended Sep. 30, 2024 Earnings Per Share [Abstract] Â Schedule of Earnings Per Share Three Months Ended September 30,Nine Months Ended September 30,(In thousands, except per share values)20242023202420232Net income (loss)$66,648Â $65,256Â $197,021Â $(17,827)Preferred stock dividends(10)(10)(30)(30)Net income (loss) attributable to common equity66,638Â 65,246Â 196,991Â (17,857)Dividends and undistributed earnings allocated to participating securities(6)(8)(19)(16)Net income (loss) attributable to common shareholders66,632Â 65,238Â 196,972Â (17,873)Basic weighted-average shares outstanding39,362Â 39,303Â 39,370Â 39,267Â Stock-based compensation awards(a)133Â 147Â 160Â â€”Â Diluted weighted-average shares outstanding39,495Â 39,450Â 39,530Â 39,267Â Antidilutive sharesâ€”Â â€”Â â€”Â 154Â Earnings (loss) per share:Basic$1.69Â $1.66Â $5.00Â $(0.46)Diluted$1.69Â $1.65Â $4.98Â $(0.46)(a) During periods in which the Company incurs a net loss, stock-based compensation awards are excluded from the computation of diluted earnings per share because their effect would be anti-dilutive. As such, during periods in which the Company incurs a net loss, diluted weighted-average shares outstanding are equivalent to basic weighted-average shares outstanding. X - ReferencesNo definition available. + Details Name: us-gaap_EarningsPerShareAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of an entity's basic and diluted earnings per share calculations, including a reconciliation of numerators and denominators of the basic and diluted per-share computations for income from continuing operations. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1 + Details Name: us-gaap_ScheduleOfEarningsPerShareBasicAndDilutedTableTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 48 R37.htm IDEA: XBRL DOCUMENT v3.24.3 Stock Plans (Tables) 9 Months Ended Sep. 30, 2024 Share-Based Payment Arrangement [Abstract] Â Schedule of Stock Compensation Expense Stock compensation expense, included in Selling, general and administrative expense in the unaudited Condensed Consolidated Statements of Operations, is as follows:Â Three Months Ended September 30,Nine Months Ended September 30,(In thousands)20242023202420232Stock compensation expense$4,217Â $8,477Â $13,446Â $21,506Â Income tax benefit1,033Â 2,077Â 3,294Â 5,269Â Stock compensation expense, net of tax$3,184Â $6,400Â $10,152Â $16,237Â We have not capitalized any stock-based compensation expense. Summary of Stock Option Activity A summary of stock option activity for the nine months ended September 30, 2024, is as follows: SharesWeighted AverageExerciseÂ PriceOutstanding at January 1, 202426,536Â $45.95Â Exercised(10,531)46.95Â Forfeited(852)48.65Â Outstanding and exercisable at September 30, 202415,153Â $45.10Â Summary of Restricted Stock and Unit Activity A summary of restricted stock activity for the nine months ended September 30, 2024, is as follows: SharesWeighted AverageGrantÂ Date Fair ValueUnvested at January 1, 2024173,851Â $142.73Â Granted82,905Â 178.59Â Vested(48,596)164.57Â Forfeited(25,482)164.47Â Unvested at September 30, 2024182,678Â $150.16Â Schedule of Fair Value Assumptions for Units The following weighted average assumptions were used in estimating the fair value of the performance stock units granted in the first quarter of 2024.Fair value per unit$181.31Risk-free interest rate4.34%Expected dividend yield1.19%Expected volatility25.9%MSA stock beta0.728 Summary of Performance Stock Unit Activity A summary of performance stock unit activity for the nine months ended September 30, 2024, is as follows: SharesWeighted AverageGrantÂ Date Fair ValueUnvested at January 1, 2024189,221Â $146.17Â Granted40,787Â 177.34Â Performance adjustments(a)20,488Â 194.10Â Vested(77,544)174.13Â Forfeited(10,619)149.13Â Unvested at September 30, 2024162,333Â $146.50Â (a)Performance adjustments relate primarily to the final number of shares issued for the 2021 performance unit awards which vested in the first quarter of 2024 at 174% of the target award based on both cumulative performance against EBITDA margin and revenue growth targets and MSA's TSR during the three-year performance period. X - DefinitionSchedule of Share-based Payment Award, Equity Instruments Other than Options, Valuation Assumptions [Table Text Block] + ReferencesNo definition available. + Details Name: msa_ScheduleofSharebasedPaymentAwardEquityInstrumentsOtherthanOptionsValuationAssumptionsTableTextBlock Namespace Prefix: msa_ Data Type: dtr-types1:textBlockItemType Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_DisclosureOfCompensationRelatedCostsSharebasedPaymentsAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of cost recognized for award under share-based payment arrangement by plan. Includes, but is not limited to, related tax benefit. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 718 -SubTopic 10 -Section 50 -Paragraph 2 -Subparagraph (h)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ScheduleOfCompensationCostForShareBasedPaymentArrangementsAllocationOfShareBasedCompensationCostsByPlanTableTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of the changes in outstanding nonvested performance-based units. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ScheduleOfNonvestedPerformanceBasedUnitsActivityTableTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of the number and weighted-average grant date fair value for restricted stock units that were outstanding at the beginning and end of the year, and the number of restricted stock units that were granted, vested, or forfeited during the year. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ScheduleOfShareBasedCompensationRestrictedStockUnitsAwardActivityTableTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure for stock option plans. Includes, but is not limited to, outstanding awards at beginning and end of year, grants, exercises, forfeitures, and weighted-average grant date fair value. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (d) -SubTopic 10 -Topic 718 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (e) -SubTopic 10 -Topic 718 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ScheduleOfShareBasedCompensationStockOptionsActivityTableTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 49 R38.htm IDEA: XBRL DOCUMENT v3.24.3 Long-Term Debt (Tables) 9 Months Ended Sep. 30, 2024 Debt Disclosure [Abstract] Â Schedule of Debt (In thousands)September 30, 2024December 31, 20232016 Senior Notes payable through 2031, 3.40%, net of debt issuance costs$57,067Â $62,081Â 2021 Senior Notes payable through 2036, 2.69%, net of debt issuance costs99,749Â 99,733Â 2021 Senior Notes payable through 2036, 2.69%, net of debt issuance costs99,749Â 99,733Â 2023 Term Loan credit agreement maturing in 2026, net of debt issuance costs212,055Â 230,604Â 2023 Senior Notes payable through 2028, 5.25%, net of debt issuance costs49,949Â 49,939Â Senior revolving credit facility maturing in 2026, net of debt issuance costs36,153Â 59,602Â Total554,722Â 601,692Â Amounts due within one year26,915Â 26,522Â Long-term debt, net of debt issuance costs$527,807Â $575,170Â X - ReferencesNo definition available. + Details Name: us-gaap_DebtDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of information pertaining to short-term and long-debt instruments or arrangements, including but not limited to identification of terms, features, collateral requirements and other information necessary to a fair presentation. + ReferencesNo definition available. + Details Name: us-gaap_ScheduleOfDebtTableTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 50 R39.htm IDEA: XBRL DOCUMENT v3.24.3 Goodwill and Intangible Assets, Net (Tables) 9 Months Ended Sep. 30, 2024 Goodwill and Intangible Assets Disclosure [Abstract] Â Changes in Goodwill Changes in goodwill during the nine months ended September 30, 2024, were as follows:(In thousands)GoodwillBalance at January 1, 2024$627,534Â Currency translation5,303Â Balance at September 30, 2024$632,837Â Changes in Intangible Assets, Net of Accumulated Amortization Changes in intangible assets, net, during the nine months ended September 30, 2024, were as follows:(In thousands)Intangible AssetsNet balance at January 1, 2024$266,134Â Amortization expense(13,392)Currency translation1,622Â Net balance at September 30, 2024$254,364Â X - ReferencesNo definition available. + Details Name: us-gaap_GoodwillAndIntangibleAssetsDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of assets, excluding financial assets and goodwill, lacking physical substance with a finite life, by either major class or business segment. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 55 -Paragraph 40 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482640/350-30-55-40Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2 + Details Name: us-gaap_ScheduleOfFiniteLivedIntangibleAssetsTableTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of goodwill by reportable segment and in total which includes a rollforward schedule. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482548/350-20-55-24Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (h) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1Reference 5: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1Reference 6: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1Reference 7: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1Reference 8: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1Reference 9: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1Reference 10: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1Reference 11: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1A -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1AReference 12: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-2 + Details Name: us-gaap_ScheduleOfGoodwillTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 51 R40.htm IDEA: XBRL DOCUMENT v3.24.3 Pensions and Other Post-retirement Benefits (Tables) 9 Months Ended Sep. 30, 2024 Retirement Benefits [Abstract] Â Components of Net Periodic Benefit Cost Components of Net periodic benefit (income) cost consisted of the following: Â Pension BenefitsOther Benefits(In thousands)20242023202420232Three Months Ended September 30,Service cost$2,315Â $1,884Â $44Â $53Â Interest cost5,970Â 5,918Â 248Â 273Â Expected return on plan assets(10,812)(9,906)â€”Â â€”Â Amortization of prior service cost (credit)37Â 37Â (46)(61)Recognized net actuarial losses282Â 47Â 115Â 138Â Net periodic benefit (income) cost (a)$(2,208)$(2,020)$361Â $403Â Nine Months Ended September 30,Service cost$6,945Â $5,652Â $132Â $159Â Interest cost17,910Â 17,754Â 744Â 819Â Expected return on plan assets(32,436)(29,718)â€”Â â€”Â Amortization of prior service cost (credit)111Â 111Â (138)(183)Recognized net actuarial losses846Â 141Â 345Â 414Â Settlements1,308Â â€”Â â€”Â â€”Â Net periodic benefit (income) cost (a)$(5,316)$(6,060)$1,083Â $1,209Â (a) Components of Net periodic benefit (income) cost other than service cost are included in the line item Other income, net, and service costs are included in the line items Cost of products sold and Selling, general and administrative in the unaudited Condensed Consolidated Statements of Operations. X - ReferencesNo definition available. + Details Name: us-gaap_CompensationAndRetirementDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of the components of net benefit costs for pension plans and/or other employee benefit plans including service cost, interest cost, expected return on plan assets, gain (loss), prior service cost or credit, transition asset or obligation, and gain (loss) recognized due to settlements or curtailments. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 715 -SubTopic 20 -Subparagraph (h) -Name Accounting Standards Codification -Paragraph 1 -Section 50 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1 + Details Name: us-gaap_ScheduleOfNetBenefitCostsTableTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 52 R41.htm IDEA: XBRL DOCUMENT v3.24.3 Derivative Financial Instruments (Tables) 9 Months Ended Sep. 30, 2024 Derivative Instruments and Hedging Activities Disclosure [Abstract] Â Balance Sheet Location and Fair Value of Assets Associated with Derivative Financial Instruments The following table presents the unaudited Condensed Consolidated Balance Sheets location and fair value of assets and liabilities associated with derivative financial instruments:(In thousands)September 30, 2024December 31, 2023Derivatives not designated as hedging instruments:Foreign exchange contracts: prepaid expenses and other current assets$â€”Â $2,210Â Foreign exchange contracts: other current liabilities1,038Â 242Â Income Statement Location and Impact of Derivative Financial Instruments The following table presents the unaudited Condensed Consolidated Statements of Operations and unaudited Condensed Consolidated Statements of Cash Flows location and the loss impact of derivative financial

instruments:Â Nine Months Ended September 30,(In thousands)20242023Derivatives not designated as hedging instruments:Foreign exchange contracts: currency exchange losses, net$1,683Â $2,986Â X - ReferencesNo definition available. + Details Name: us-gaap_DerivativeInstrumentsAndHedgingActivitiesDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of the location and amount of derivative instruments and nonderivative instruments designated as hedging instruments reported before netting adjustments, and the amount of gain (loss) on derivative instruments and nonderivative instruments designated and qualified as hedging instruments. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4E -Publisher FASB -URI https://asc.fasb.org/1943274/2147480434/815-10-50-4EReference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 815 -SubTopic 10 -Section 50 -Paragraph 4C -Publisher FASB -URI https://asc.fasb.org/1943274/2147480434/815-10-50-4CReference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 815 -SubTopic 10 -Section 50 -Paragraph 4A -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480434/815-10-50-4A + Details Name: us-gaap_ScheduleOfDerivativeInstrumentsGainLossInStatementOfFinancialPerformanceTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of the location and fair value amounts of derivative instruments (and nonderivative instruments that are designated and qualify as hedging instruments) reported in the statement of financial position. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 815 -SubTopic 10 -Section 50 -Paragraph 4B -Publisher FASB -URI https://asc.fasb.org/1943274/2147480434/815-10-50-4B + Details Name: us-gaap_ScheduleOfDerivativeInstrumentsInStatementOfFinancialPositionFairValueTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 53 R42.htm IDEA: XBRL DOCUMENT v3.24.3 Commitments and Contingencies (Tables) 9 Months Ended Sep. 30, 2024 Commitments and Contingencies Disclosure [Abstract] Â Schedule of Product Warranty Liability The following table reconciles changes in the Company's accrued warranty reserve:(InÂ thousands)Nine Months Ended September 30, 2024Year Ended December 31, 2023Beginning warranty reserve$14,288Â $15,230Â Warranty payments(8,518)(9,794)Warranty claims7,370Â 8,899Â Provision for product warranties and other adjustments515Â (47)Ending warranty reserve$13,655Â $14,288Â X - ReferencesNo definition available. + Details Name: us-gaap_CommitmentsAndContingenciesDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of the changes in the guarantor's aggregate product warranty liability, including the beginning balance of the aggregate product warranty liability, the aggregate reductions in that liability for payments made (in cash or in kind) under the warranty, the aggregate changes in the liability for accruals related to product warranties issued during the reporting period, the aggregate changes in the liability for accruals related to preexisting warranties (including adjustments related to changes in estimates), and the ending balance of the aggregate product warranty liability. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 460 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482425/460-10-50-8 + Details Name: us-gaap_ScheduleOfProductWarrantyLiabilityTableTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 54 R43.htm IDEA: XBRL DOCUMENT v3.24.3 Cash and Cash Equivalents (Details) $ in Thousands Sep. 30, 2024 USD ($) Cash and Cash Equivalents [Abstract] Â Gross cash pool position $ 69,117 Less: cash pool borrowings (65,712) Net cash pool position $ 3,405 X - DefinitionCash Balance, Amount Offset Against Collateral + ReferencesNo definition available. + Details Name: msa_CashBalanceAmountOffsetAgainstCollateral Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionCash Balance, Collateral, Obligation to Return Cash + ReferencesNo definition available. + Details Name: msa_CashBalanceCollateralObligationToReturnCash Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionCash Balance Subject To Master Netting Arrangement + ReferencesNo definition available. + Details Name: msa_CashBalanceSubjectToMasterNettingArrangement Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - ReferencesNo definition available. + Details Name: us-gaap_CashAndCashEquivalentsAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 55 R44.htm IDEA: XBRL DOCUMENT v3.24.3 Restructuring Charges - Additional Information (Details) - USD ($) $ in Thousands 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Restructuring Cost and Reserve [Line Items] Â Â Â Â Restructuring charges $ 1,184 $ 3,285 $ 5,744 $ 8,382 Corporate Â Â Â Â Restructuring Cost and Reserve [Line Items] Â Â Â Â Restructuring charges Â Â 1,200 2,100 Americas | Reportable Segments Â Â Â Â Restructuring Cost and Reserve [Line Items] Â Â Â Â Restructuring charges Â Â 1,300 2,700 International | Reportable Segments Â Â Â Â Restructuring Cost and Reserve [Line Items] Â Â Â Â Restructuring charges Â Â $ 3,200 $ 3,600 X - DefinitionAmount of expenses associated with exit or disposal activities pursuant to an authorized plan. Excludes expenses related to a discontinued operation or an asset retirement obligation. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 5.P.4.b.1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479823/420-10-S99-2Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482047/420-10-45-3Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SAB Topic 5.P.3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479823/420-10-S99-1 + Details Name: us-gaap_RestructuringCharges Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 5.P.4.d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479823/420-10-S99-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 5.P.4.b.1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479823/420-10-S99-2Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 5.P.4.b.2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479823/420-10-S99-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482017/420-10-50-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482017/420-10-50-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482017/420-10-50-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482017/420-10-50-1 + Details Name: us-gaap_RestructuringCostAndReserveLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - Details Name: srt_ConsolidationItemsAxis=us-gaap_CorporateNonSegmentMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementBusinessSegmentsAxis=msa_AmericasSegmentMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_ConsolidationItemsAxis=us-gaap_OperatingSegmentsMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementBusinessSegmentsAxis=msa_InternationalMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 56 R45.htm IDEA: XBRL DOCUMENT v3.24.3 Restructuring Charges - Activity and Reserve Balance for Restructuring Charges by Segment (Details) - USD ($) $ in Millions 9 Months Ended 12 Months Ended Sep. 30, 2024 Dec. 31, 2023 Restructuring Reserve [Roll Forward] Â Â Restructuring reserve, beginning balance $ 9.8 $ 15.0 Restructuring charges Â 9.9 Restructuring charges 5.7 Â Currency translation Â 0.0 Cash payments (11.1) (15.1) Restructuring reserve, ending balance 4.4 9.8 Corporate Â Â Restructuring Reserve [Roll Forward] Â Â Restructuring reserve, beginning balance 0.0 0.5 Restructuring charges Â 2.1 Restructuring charges 1.2 Â Currency translation Â 0.0 Cash payments (1.2) (2.6) Restructuring reserve, ending balance 0.0 0.0 Americas | Reportable Segments Â Â Restructuring Reserve [Roll Forward] Â Â Restructuring reserve, beginning balance 0.8 1.7 Restructuring charges Â 3.1 Restructuring charges 1.3 Â Currency translation Â (0.1) Cash payments (1.9) (3.9) Restructuring reserve, ending balance 0.2 0.8 International | Reportable Segments Â Â Restructuring Reserve [Roll Forward] Â Â Restructuring reserve, beginning balance 9.0 12.8 Restructuring charges Â 4.7 Restructuring charges 3.2 Â Currency translation Â 0.1 Cash payments (8.0) (8.6) Restructuring reserve, ending balance $ 4.2 $ 9.0 X - DefinitionRestructuring Charges (Reversal Of Cost) + ReferencesNo definition available. + Details Name: msa_RestructuringChargesReversalOfCost Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionRestructuring Charges before Adjustments - Restructuring charges before any adjustments to the accrual. + ReferencesNo definition available. + Details Name: msa_RestructuringChargesbeforeAdjustments Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of cash payments made as the result of exit or disposal activities. Excludes payments associated with a discontinued operation or an asset retirement obligation. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482017/420-10-50-1Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 17 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-17 + Details Name: us-gaap_PaymentsForRestructuring Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionCarrying amount (including both current and noncurrent portions of the accrual) as of the balance sheet date pertaining to a specified type of cost associated with exit from or disposal of business activities or restructuring pursuant to a duly authorized plan. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 5.P.4.b.2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479823/420-10-S99-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482017/420-10-50-1 + Details Name: us-gaap_RestructuringReserve Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionA roll forward is a reconciliation of a concept from the beginning of a period to the end of a period. + ReferencesNo definition available. + Details Name: us-gaap_RestructuringReserveRollForward Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of foreign currency translation gain (loss) which decreases (increases) the restructuring reserve. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 5.P.4.b.2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479823/420-10-S99-2Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482017/420-10-50-1 + Details Name: us-gaap_RestructuringReserveTranslationAdjustment Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - Details Name: srt_ConsolidationItemsAxis=us-gaap_CorporateNonSegmentMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementBusinessSegmentsAxis=msa_AmericasSegmentMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_ConsolidationItemsAxis=us-gaap_OperatingSegmentsMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementBusinessSegmentsAxis=msa_InternationalMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 57 R46.htm IDEA: XBRL DOCUMENT v3.24.3 Inventories - Schedule of Inventories (Details) - USD ($) $ in Thousands Sep. 30, 2024 Dec. 31, 2023 Inventory Disclosure [Abstract] Â Â Finished products $ 118,294 $ 88,687 Work in process 17,369 15,378 Raw materials and supplies 216,142 188,539 Total inventories $ 351,805 $ 292,604 X - ReferencesNo definition available. + Details Name: us-gaap_InventoryDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionCarrying amount, net of valuation reserves and adjustments, as of the balance sheet date of merchandise or goods held by the company that are readily available for sale. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 330 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 5.BB) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480581/330-10-S99-2Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(6)(a)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_InventoryFinishedGoodsNetOfReserves Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount after valuation and LIFO reserves of inventory expected to be sold, or consumed within one year or operating cycle, if longer. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483467/210-10-45-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(6)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_InventoryNet Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionCarrying amount, net of valuation reserves and adjustments, as of the balance sheet date of unprocessed items to be consumed in the manufacturing or production process. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 330 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 5.BB) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480581/330-10-S99-2Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(6)(a)(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_InventoryRawMaterialsNetOfReserves Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionCarrying amount, net of reserves and adjustments, as of the balance sheet date of merchandise or goods which are partially completed. This inventory is generally comprised of raw materials, labor and factory overhead costs, which require further materials, labor and overhead to be converted into finished goods, and which generally require the use of estimates to determine percentage complete and pricing. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 330 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 5.BB) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480581/330-10-S99-2Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(6)(a)(3)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_InventoryWorkInProcessNetOfReserves Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant XML 58 R47.htm IDEA: XBRL DOCUMENT v3.24.3 Property, Plant and Equipment (Details) - USD ($) $ in Thousands Sep. 30, 2024 Dec. 31, 2023 Property, Plant and Equipment [Line Items] Â Â Property, plant and equipment, gross $ 687,300 $ 667,911 Less: accumulated depreciation (470,654) (456,034) Property, plant and equipment, net 216,646 211,877 Land Â Â Property, Plant and Equipment [Line Items] Â Â Property, plant and equipment, gross 4,379 4,332 Buildings Â Â Property, Plant and Equipment [Line Items] Â Â Property, plant and equipment, gross 144,364 141,027 Machinery and equipment Â Â Property, Plant and Equipment [Line Items] Â Â Property, plant and equipment, gross 511,075 498,148 Construction in progress Â Â Property, Plant and Equipment [Line Items] Â Â Property, plant and equipment, gross $ 27,482 $ 24,404 X - DefinitionAmount of accumulated depreciation and amortization from plant, property, and equipment and right-of-use asset from finance lease. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 360 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482099/360-10-50-1Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Name Accounting Standards Codification -Section 45 -Paragraph 4 -Subparagraph (a) -SubTopic 20 -Topic 842 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-4Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (a) -SubTopic 20 -Topic 842 -Publisher FASB -URI

https://asc.fasb.org/1943274/2147478964/842-20-50-4 + Details Name: us-gaap_PropertyPlantAndEquipmentAndFinanceLeaseRightOfUseAssetAccumulatedDepreciationAndAmortization Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount, after accumulated depreciation and amortization, of property, plant, and equipment and finance lease right-of-use asset. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 360 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482099/360-10-50-1Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (a) -SubTopic 20 -Topic 842 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-4 + Details Name: us-gaap_PropertyPlantAndEquipmentAndFinanceLeaseRightOfUseAssetAfterAccumulatedDepreciationAndAmortization Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount, before accumulated depreciation and amortization, of property, plant, and equipment and finance lease right-of-use asset. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 360 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482099/360-10-50-1Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(18)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (a) -SubTopic 20 -Topic 842 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_PropertyPlantAndEquipmentAndFinanceLeaseRightOfUseAssetBeforeAccumulatedDepreciationAndAmortization Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 7A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-7A + Details Name: us-gaap_PropertyPlantAndEquipmentLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - Details Name: us-gaap_PropertyPlantAndEquipmentByTypeAxis=us-gaap_LandMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_PropertyPlantAndEquipmentByTypeAxis=us-gaap_BuildingMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_PropertyPlantAndEquipmentByTypeAxis=us-gaap_MachineryAndEquipmentMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_PropertyPlantAndEquipmentByTypeAxis=us-gaap_ConstructionInProgressMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 59 R48.htm IDEA: XBRL DOCUMENT v3.24.3 Reclassifications Out of Accumulated Other Comprehensive Loss (Details) - USD ($) $ in Thousands 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 AOCI Including Portion Attributable to Noncontrolling Interest, Net of Tax [Roll Forward] Â Â Â Â Balance at beginning of period Â Â $ 966,802 Â Reclassification from accumulated other comprehensive loss into net income (loss)(b) $ 0 $ 101 (1,200) $ 101 Other comprehensive income (loss) 21,343 (18,482) 3,044 (1,693) Balance at end of period 1,095,345 Â 1,095,345 Â Accumulated defined benefit plans adjustment attributable to parent Â Â Â Â AOCI Including Portion Attributable to Noncontrolling Interest, Net of Tax [Roll Forward] Â Â Â Â Balance at beginning of period (40,256) (49,781) (42,652) (50,335) Tax (benefit) expense (374) 27 (628) 259 Reclassification from accumulated other comprehensive loss into net income (loss) (b) 14 188 2,410 742 Balance at end of period (40,242) (49,593) (40,242) (49,593) Accumulated defined benefit plans adjustment, net prior service attributable to parent Â Â Â Â AOCI Including Portion Attributable to Noncontrolling Interest, Net of Tax [Roll Forward] Â Â Â Â Amounts reclassified from accumulated other comprehensive loss (9) (24) (27) (72) Accumulated defined benefit plans adjustment, net gain (loss) attributable to parent Â Â Â Â AOCI Including Portion Attributable to Noncontrolling Interest, Net of Tax [Roll Forward] Â Â Â Â Amounts reclassified from accumulated other comprehensive loss 397 185 3,065 555 Accumulated net investment gain (loss) attributable to parent Â Â Â Â AOCI Including Portion Attributable to Noncontrolling Interest, Net of Tax [Roll Forward] Â Â Â Â Balance at beginning of period 0 0 0 (2) Other comprehensive income (loss) 0 0 0 2 Balance at end of period 0 0 0 0 Accumulated foreign currency adjustment attributable to parent Â Â Â Â AOCI Including Portion Attributable to Noncontrolling Interest, Net of Tax [Roll Forward] Â Â Â Â Balance at beginning of period (107,292) (92,147) (86,597) (108,380) Reclassification from accumulated other comprehensive loss into net income (loss)(b) 0 101 (1,200) 101 Other comprehensive income (loss) 21,329 (18,771) 1,834 (2,538) Balance at end of period $ (85,963) $ (110,817) $ (85,963) $ (110,817) X - DefinitionAmount after tax and reclassification adjustments of other comprehensive income (loss). + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -SubTopic 10 -Topic 505 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481674/830-30-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 17 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-17Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 6: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-4Reference 7: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-5Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 20 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-20Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(21)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(23)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1B -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1BReference 12: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 55 -Paragraph 15 -SubTopic 10 -Topic 220 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482739/220-10-55-15Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1A -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1A + Details Name: us-gaap_OtherComprehensiveIncomeLossNetOfTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount before tax of reclassification adjustments of other comprehensive income (loss). + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 220 -SubTopic 10 -Section 45 -Paragraph 14A -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-14AReference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-5Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481674/830-30-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 17 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-17Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 20 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-20Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 7: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-4 + Details Name: us-gaap_ReclassificationFromAccumulatedOtherComprehensiveIncomeCurrentPeriodBeforeTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount after tax of reclassification adjustments of other comprehensive income (loss). + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 220 -SubTopic 10 -Section 45 -Paragraph 14A -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-14AReference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-5Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481674/830-30-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 17 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-17Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 20 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-20Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 7: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-4Reference 8: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 55 -Paragraph 15 -SubTopic 10 -Topic 220 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482739/220-10-55-15 + Details Name: us-gaap_ReclassificationFromAccumulatedOtherComprehensiveIncomeCurrentPeriodNetOfTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionA roll forward is a reconciliation of a concept from the beginning of a period to the end of a period. + ReferencesNo definition available. + Details Name: us-gaap_ReclassificationFromAccumulatedOtherComprehensiveIncomeCurrentPeriodNetOfTaxAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of tax expense (benefit) of reclassification adjustment from accumulated other comprehensive income (loss). + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 12 -SubTopic 10 -Topic 220 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-12Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-4Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 17A -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-17A + Details Name: us-gaap_ReclassificationFromAociCurrentPeriodTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of equity (deficit) attributable to parent and noncontrolling interest. Excludes temporary equity. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (d)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(4) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (d)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (d)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 848 -SubTopic 10 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (a)(3)(iii)(03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483550/848-10-65-2Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 10 -Name Accounting Standards Codification -Section 65 -Paragraph 8 -Subparagraph (c)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479832/842-10-65-8Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483421/250-10-45-24Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 23 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483421/250-10-45-23Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 5 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483421/250-10-45-5Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 326 -SubTopic 10 -Name Accounting Standards Codification -Section 65 -Paragraph 5 -Subparagraph (c)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479654/326-10-65-5Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 20 -Name Accounting Standards Codification -Section 65 -Paragraph 6 -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480528/815-20-65-6Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 20 -Name Accounting Standards Codification -Section 65 -Paragraph 6 -Subparagraph (h)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480528/815-20-65-6Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 20 -Name Accounting Standards Codification -Section 65 -Paragraph 6 -Subparagraph (h)(1)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480528/815-20-65-6Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 20 -Name Accounting Standards Codification -Section 65 -Paragraph 6 -Subparagraph (h)(1)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480528/815-20-65-6Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 20 -Name Accounting Standards Codification -Section 65 -Paragraph 6 -Subparagraph (h)(1)(iv) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480528/815-20-65-6Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 20 -Name Accounting Standards Codification -Section 65 -Paragraph 6 -Subparagraph (i)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480528/815-20-65-6Reference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 105 -SubTopic 10 -Name Accounting Standards Codification -Section 65 -Paragraph 6 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479343/105-10-65-6Reference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 105 -SubTopic 10 -Name Accounting Standards Codification -Section 65 -Paragraph 6 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479343/105-10-65-6Reference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (f)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480016/944-40-65-2Reference 23: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (f)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480016/944-40-65-2Reference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 65 -Paragraph 8 -Subparagraph (d)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482615/740-10-65-8Reference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 65 -Paragraph 8 -Subparagraph (d)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482615/740-10-65-8Reference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 326 -SubTopic 10 -Name Accounting Standards Codification -Section 65 -Paragraph 4 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479654/326-10-65-4Reference 27: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-1Reference 28: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic

40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (e)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 29: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-7Reference 30: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-5Reference 31: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481674/830-30-50-1Reference 32: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 17 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-17Reference 33: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 20 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-20Reference 34: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 11 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-11Reference 35: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 205 -Name Accounting Standards Codification -Section 45 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478009/946-205-45-3Reference 36: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 505 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478448/946-505-50-3Reference 37: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 38: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.6-05(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-2Reference 39: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(4)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 40: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(6)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 41: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(7)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 42: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1Reference 43: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 44: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 45: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 46: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 810 -SubTopic 10 -Section 45 -Paragraph 15 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481231/810-10-45-15Reference 47: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 810 -SubTopic 10 -Section 45 -Paragraph 16 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481231/810-10-45-16Reference 48: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 810 -SubTopic 10 -Section 55 -Paragraph 4I -Publisher FASB -URI https://asc.fasb.org/1943274/2147481175/810-10-55-4IReference 49: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476166/350-60-65-1 + Details Name: us-gaap_StockholdersEquityIncludingPortionAttributableToNoncontrollingInterest Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - Details Name: us-gaap_StatementEquityComponentsAxis=us-gaap_AccumulatedDefinedBenefitPlansAdjustmentMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementEquityComponentsAxis=us-gaap_AccumulatedDefinedBenefitPlansAdjustmentNetPriorServiceCostCreditMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementEquityComponentsAxis=us-gaap_AccumulatedDefinedBenefitPlansAdjustmentNetUnamortizedGainLossMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementEquityComponentsAxis=us-gaap_AccumulatedNetUnrealizedInvestmentGainLossMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementEquityComponentsAxis=us-gaap_AccumulatedTranslationAdjustmentMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 60 R49.htm IDEA: XBRL DOCUMENT v3.24.3 Capital Stock - Narrative (Details) - USD ($) 9 Months Ended 12 Months Ended Sep. 30, 2024 Sep. 30, 2023 Dec. 31, 2023 Capital Unit [Line Items] Â Â Â Preferred stock, par value (dollars per share) $ 50,000 Â $ 50,000 Cumulative preferred stock (percent) 4.50% Â 4.50% Treasury shares, at cost $ 388,421,000 Â $ 363,284,000 Common stock, shares authorized (shares) 180,000,000 Â Â Common stock, shares, outstanding (shares) 39,309,938 Â 39,317,212 Treasury stock, common, shares (shares) 22,771,453 Â 22,764,179 Preferred stock Â Â Â Capital Unit [Line Items] Â Â Â Treasury shares, at cost $ 1,800,000 Â Â Cumulative Preferred Stock Â Â Â Capital Unit [Line Items] Â Â Â Preferred stock, shares authorized (shares) 100,000 Â Â Preferred stock, par value (dollars per share) $ 50 Â Â Cumulative preferred stock (percent) 4.50% Â Â Preferred stock, callable price per share (dollars per share) $ 52.50 Â Â Preferred stock, shares issued (shares) 71,340 Â 71,340 Treasury stock, preferred, shares (shares) 52,998 Â 52,998 Purchase of treasury shares (shares) 0 0 Â Second Cumulative Preferred Voting Stock Â Â Â Capital Unit [Line Items] Â Â Â Preferred stock, shares authorized (shares) 1,000,000 Â Â Preferred stock, par value (dollars per share) $ 10 Â Â Preferred stock, shares issued (shares) 0 Â 0 Common Stock Â Â Â Capital Unit [Line Items] Â Â Â Purchase of treasury shares (shares) 108,917 0 Â Common stock, shares issued (shares) 62,081,391 Â 62,081,391 Stock issued during period, new issues (shares) 0 0 Â Common stock, value, issued (up to) $ 200,000,000.0 Â Â Treasury stock Â Â Â Capital Unit [Line Items] Â Â Â Reissued shares (shares) 141,618 125,967 Â X - DefinitionAmount authorized for purchase of share under share repurchase plan. Includes, but is not limited to, repurchase of stock and unit of ownership. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 505 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481520/505-30-50-4 + Details Name: srt_StockRepurchaseProgramAuthorizedAmount1 Namespace Prefix: srt_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesNo definition available. + Details Name: us-gaap_CapitalUnitLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe maximum number of common shares permitted to be issued by an entity's charter and bylaws. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(16)(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1 + Details Name: us-gaap_CommonStockSharesAuthorized Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionTotal number of common shares of an entity that have been sold or granted to shareholders (includes common shares that were issued, repurchased and remain in the treasury). These shares represent capital invested by the firm's shareholders and owners, and may be all or only a portion of the number of shares authorized. Shares issued include shares outstanding and shares held in the treasury. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_CommonStockSharesIssued Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionNumber of shares of common stock outstanding. Common stock represent the ownership interest in a corporation. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -SubTopic 10 -Topic 505 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.6-05(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-2Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(4)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(16)(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 6: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(7)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3 + Details Name: us-gaap_CommonStockSharesOutstanding Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionThe percentage rate used to calculate dividend payments on preferred stock. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-13Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 320 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.12-12A(Column A)(Footnote 3)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477271/946-320-S99-2Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 320 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.12-12(Column A)(Footnote 4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477271/946-320-S99-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 320 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.12-12B(Column A)(Footnote 3)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477271/946-320-S99-3Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 320 -Name Accounting Standards Codification -Section S99 -Paragraph 6 -Subparagraph (SX 210.12-14(Column A)(Footnote 3)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477271/946-320-S99-6 + Details Name: us-gaap_PreferredStockDividendRatePercentage Namespace Prefix: us-gaap_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: duration X - DefinitionFace amount or stated value per share of preferred stock nonredeemable or redeemable solely at the option of the issuer. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(28)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-13 + Details Name: us-gaap_PreferredStockParOrStatedValuePerShare Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - DefinitionThe price per share at which the preferred stock of an entity that has priority over common stock in the distribution of dividends and in the event of liquidation of the entity is redeemed or may be called at. The redemption features of this preferred stock are solely within the control of the issuer. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 505 -SubTopic 10 -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-3Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 505 -SubTopic 10 -Section 50 -Paragraph 5 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-5Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 505 -SubTopic 10 -Section 50 -Paragraph 11 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-11 + Details Name: us-gaap_PreferredStockRedemptionPricePerShare Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - DefinitionThe maximum number of nonredeemable preferred shares (or preferred stock redeemable solely at the option of the issuer) permitted to be issued by an entity's charter and bylaws. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(28)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(16)(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1 + Details Name: us-gaap_PreferredStockSharesAuthorized Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionNumber of shares issued for nonredeemable preferred shares and preferred shares redeemable solely at option of issuer. Includes, but is not limited to, preferred shares issued, repurchased, and held as treasury shares. Excludes preferred shares classified as debt. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(28)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-13 + Details Name: us-gaap_PreferredStockSharesIssued Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionNumber of new stock issued during the period. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -SubTopic 10 -Topic 505 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(28)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 505 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478448/946-505-50-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(4)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-03(i)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479886/946-10-S99-3Reference 7: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1 + Details Name: us-gaap_StockIssuedDuringPeriodSharesNewIssues Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionNumber, before forfeiture, of shares issued under share-based payment arrangement. Excludes employee stock ownership plan (ESOP). + ReferencesNo definition available. + Details Name: us-gaap_StockIssuedDuringPeriodSharesShareBasedCompensationGross Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionNumber of previously issued common shares repurchased by the issuing entity and held in treasury. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 505 -SubTopic 30 -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481549/505-30-45-1 + Details Name: us-gaap_TreasuryStockCommonShares Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionNumber of previously issued preferred shares repurchased by the issuing entity and held in treasury. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 505 -SubTopic 30 -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481549/505-30-45-1 + Details Name: us-gaap_TreasuryStockPreferredShares Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionNumber of shares that have been repurchased during the period and are being held in treasury. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -SubTopic 10 -Topic 505 -Publisher FASB -URI

https://asc.fasb.org/1943274/2147481112/505-10-50-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1 + Details Name: us-gaap_TreasuryStockSharesAcquired Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionThe amount allocated to treasury stock. Treasury stock is common and preferred shares of an entity that were issued, repurchased by the entity, and are held in its treasury. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(30)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 505 -SubTopic 30 -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481520/505-30-50-4Reference 4: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 505 -SubTopic 30 -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481549/505-30-45-1 + Details Name: us-gaap_TreasuryStockValue Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - Details Name: us-gaap_StatementEquityComponentsAxis=us-gaap_PreferredStockMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementClassOfStockAxis=us-gaap_CumulativePreferredStockMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementClassOfStockAxis=msa_SecondCumulativePreferredVotingStockMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementClassOfStockAxis=us-gaap_CommonStockMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementClassOfStockAxis=us-gaap_TreasuryStockCommonMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 61 R50.htm IDEA: XBRL DOCUMENT v3.24.3 Capital Stock - Schedule of Common Stock Activity (Details) - USD ($) $ in Thousands 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Common Stock Â Â Â Â Common Stock Activity [Roll Forward] Â Â Â Â Beginning balance $ 320,556 $ 294,364 $ 312,324 $ 281,980 Stock compensation expense 4,217 8,477 13,446 21,506 Ending balance 324,609 303,417 324,609 303,417 Treasury Cost Â Â Â Â Common Stock Activity [Roll Forward] Â Â Â Â Beginning balance (376,556) (362,025) (361,684) (359,838) Stock compensation expense 0 0 0 0 Ending balance (386,822) (361,773) (386,822) (361,773) Restricted and performance stock awards | Common Stock Â Â Â Â Common Stock Activity [Roll Forward] Â Â Â Â Restricted and performance stock awards (275) (15) (2,058) (1,449) Restricted and performance stock awards | Treasury Cost Â Â Â Â Common Stock Activity [Roll Forward] Â Â Â Â Restricted and performance stock awards 275 15 2,058 1,449 Stock options exercised | Common Stock Â Â Â Â Common Stock Activity [Roll Forward] Â Â Â Â Stock compensation expense 111 591 323 948 Stock options exercised | Treasury Cost Â Â Â Â Common Stock Activity [Roll Forward] Â Â Â Â Stock compensation expense 57 307 171 492 Treasury shares purchased for stock compensation programs | Common Stock Â Â Â Â Common Stock Activity [Roll Forward] Â Â Â Â Treasury shares purchased for stock compensation programs 0 0 0 0 Treasury shares purchased for stock compensation programs | Treasury Cost Â Â Â Â Common Stock Activity [Roll Forward] Â Â Â Â Treasury shares purchased for stock compensation programs (571) (70) (7,400) (3,941) Employee stock purchase program | Common Stock Â Â Â Â Common Stock Activity [Roll Forward] Â Â Â Â Stock compensation expense Â Â 574 432 Employee stock purchase program | Treasury Cost Â Â Â Â Common Stock Activity [Roll Forward] Â Â Â Â Stock compensation expense Â Â 60 65 Share repurchase program | Common Stock Â Â Â Â Common Stock Activity [Roll Forward] Â Â Â Â Stock compensation expense 0 0 0 0 Share repurchase program | Treasury Cost Â Â Â Â Common Stock Activity [Roll Forward] Â Â Â Â Stock compensation expense $ (10,027) $ 0 $ (20,027) $ 0 X - DefinitionCommon Stock Activity [Roll Forward] + ReferencesNo definition available. + Details Name: msa_CommonStockActivityRollForward Namespace Prefix: msa_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionValue, before forfeiture, of shares granted under share-based payment arrangement. Excludes employee stock ownership plan (ESOP). + ReferencesNo definition available. + Details Name: us-gaap_StockGrantedDuringPeriodValueSharebasedCompensationGross Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionValue, after forfeiture, of shares issued under share-based payment arrangement. Excludes employee stock ownership plan (ESOP). + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(28)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1Reference 4: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 718 -SubTopic 10 -Section 50 -Paragraph 2 -Subparagraph (d)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_StockIssuedDuringPeriodValueShareBasedCompensation Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of equity (deficit) attributable to parent. Excludes temporary equity and equity attributable to noncontrolling interest. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(30)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(31)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 5: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 12 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-12Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.6-05(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-2Reference 8: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(4)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(6)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(7)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 11: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 12: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 13: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 14: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 310 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 4.E) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480418/310-10-S99-2 + Details Name: us-gaap_StockholdersEquity Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionEquity impact of the cost of common and preferred stock that were repurchased during the period. Recorded using the cost method. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -SubTopic 10 -Topic 505 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 505 -SubTopic 30 -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481549/505-30-45-1 + Details Name: us-gaap_TreasuryStockValueAcquiredCostMethod Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - Details Name: us-gaap_StatementEquityComponentsAxis=us-gaap_CommonStockMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementEquityComponentsAxis=us-gaap_TreasuryStockCommonMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_AwardTypeAxis=msa_RestrictedAndPerformanceStockAwardsMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_AwardTypeAxis=us-gaap_EmployeeStockOptionMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_AwardTypeAxis=us-gaap_StockCompensationPlanMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_AwardTypeAxis=msa_EmployeeStockPurchasePlanMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_AwardTypeAxis=msa_ShareRepurchaseProgramMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 62 R51.htm IDEA: XBRL DOCUMENT v3.24.3 Segment Information - Additional Information (Details) 9 Months Ended Sep. 30, 2024 Segment Segment Reporting [Abstract] Â Number of geographical segments (in segments) 4 Number of reportable segments (in segments) 3 X - DefinitionNumber of Geographical Segments + ReferencesNo definition available. + Details Name: msa_NumberOfGeographicalSegments Namespace Prefix: msa_ Data Type: xbrli:integerItemType Balance Type: na Period Type: duration X - DefinitionNumber of segments reported by the entity. A reportable segment is a component of an entity for which there is an accounting requirement to report separate financial information on that component in the entity's financial statements. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 47 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-47Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 54 -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-54Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 18 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-18 + Details Name: us-gaap_NumberOfReportableSegments Namespace Prefix: us-gaap_ Data Type: xbrli:integerItemType Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_SegmentReportingAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 63 R52.htm IDEA: XBRL DOCUMENT v3.24.3 Segment Information - Schedule of Reportable Segment Information (Details) - USD ($) $ in Thousands 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Segment Reporting Information [Line Items] Â Â Â Â Net sales to external customers $ 432,679 $ 446,728 $ 1,308,443 $ 1,292,290 Adjusted operating income (loss) 97,915 101,297 294,114 282,461 Americas Â Â Â Â Segment Reporting Information [Line Items] Â Â Â Â Net sales to external customers 299,497 314,273 909,745 902,918 Reportable Segments | Americas Â Â Â Â Segment Reporting Information [Line Items] Â Â Â Â Net sales to external customers 299,497 314,273 909,745 902,918 Adjusted operating income (loss) 91,822 93,918 276,523 260,428 Reportable Segments | International Â Â Â Â Segment Reporting Information [Line Items] Â Â Â Â Net sales to external customers 133,182 132,455 398,698 389,372 Adjusted operating income (loss) 18,174 22,577 55,944 60,099 Corporate Â Â Â Â Segment Reporting Information [Line Items] Â Â Â Â Net sales to external customers 0 0 0 0 Adjusted operating income (loss) $ (12,081) $ (15,198) $ (38,353) $ (38,066) X - DefinitionOperating Income (Loss), Adjusted + ReferencesNo definition available. + Details Name: msa_OperatingIncomeLossAdjusted Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount, excluding tax collected from customer, of revenue from satisfaction of performance obligation by transferring promised good or service to customer. Tax collected from customer is tax assessed by governmental authority that is both imposed on and concurrent with specific revenue-producing transaction, including, but not limited to, sales, use, value added and excise. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 41 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-41Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 4: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 5: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 924 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SAB Topic 11.L) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479941/924-10-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-5Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 42 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-42Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 40 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-40Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-4 + Details Name: us-gaap_RevenueFromContractWithCustomerExcludingAssessedTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesNo definition available. + Details Name: us-gaap_SegmentReportingInformationLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - Details Name: us-gaap_StatementBusinessSegmentsAxis=msa_AmericasSegmentMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_ConsolidationItemsAxis=us-gaap_OperatingSegmentsMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementBusinessSegmentsAxis=msa_InternationalSegmentMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_ConsolidationItemsAxis=us-gaap_CorporateNonSegmentMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 64 R53.htm IDEA: XBRL DOCUMENT v3.24.3 Segment Information - Reconciliation of Total Adjusted EBITDA (Details) - USD ($) $ in Thousands 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Segment Reporting [Abstract] Â Â Â Â Adjusted operating income (loss) $ 97,915 $ 101,297 $ 294,114 $ 282,461 Restructuring charges 1,184 3,285 5,744 8,382 Currency exchange gains (losses), net 2,985 1,496 4,715 8,781 Interest expense 9,153 12,498 29,556 37,149 Other income, net (5,833) (6,037) (16,215) (15,487) Amortization of acquisition-related intangible assets 2,269 2,315 6,888 6,936 Transaction costs

0 78 234 78 Net cost for product related legal matter 0 0 5,000 0 Loss on divestiture of MSA LLC (Note 17) 0 0 0 129,211 Product liability expense (Note 17) 0 0 0 3 Income before income taxes $ 88,157 $ 87,662 $ 258,192 $ 107,408 X - DefinitionAmortization Of Acquired Finite -Lived Intangible Assets + ReferencesNo definition available. + Details Name: msa_AmortizationOfAcquiredFiniteLivedIntangibleAssets Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionOperating Income (Loss), Adjusted + ReferencesNo definition available. + Details Name: msa_OperatingIncomeLossAdjusted Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionStrategic Transaction and Corporate Development Costs + ReferencesNo definition available. + Details Name: msa_StrategicTransactionCosts Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount before tax of gain (loss) recognized on the sale or disposal of a disposal group. Excludes discontinued operations. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 360 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482099/360-10-50-3Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 360 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482130/360-10-45-5 + Details Name: us-gaap_DisposalGroupNotDiscontinuedOperationGainLossOnDisposal Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount, before tax, of realized and unrealized gain (loss) from foreign currency transaction. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-07(7)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 20 -Name Accounting Standards Codification -Section 35 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482014/830-20-35-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481956/830-20-45-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481926/830-20-50-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 17 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481839/830-10-45-17 + Details Name: us-gaap_ForeignCurrencyTransactionGainLossBeforeTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of income (loss) from continuing operations, including income (loss) from equity method investments, before deduction of income tax expense (benefit), and income (loss) attributable to noncontrolling interest. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-48Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30Reference 5: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 6: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 7: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(11)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 9: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 31 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-31Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 235 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-05(b)(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477314/942-235-S99-1Reference 11: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(10)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 12: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(15)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1 + Details Name: us-gaap_IncomeLossFromContinuingOperationsBeforeIncomeTaxesExtraordinaryItemsNoncontrollingInterest Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of interest expense classified as nonoperating. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2 + Details Name: us-gaap_InterestExpenseNonoperating Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of loss from litigation settlement for amount awarded to other party. Excludes claims within an insurance entity's normal claims settlement process. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 450 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483076/450-20-50-1 + Details Name: us-gaap_LitigationSettlementLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of income (expense) related to nonoperating activities, classified as other. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(9)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2 + Details Name: us-gaap_OtherNonoperatingIncomeExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe amount of loss reported during the period pertaining to product liability. + ReferencesNo definition available. + Details Name: us-gaap_ProductLiabilityAccrualPeriodExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of expenses associated with exit or disposal activities pursuant to an authorized plan. Excludes expenses related to a discontinued operation or an asset retirement obligation. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 5.P.4.b.1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479823/420-10-S99-2Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482047/420-10-45-3Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SAB Topic 5.P.3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479823/420-10-S99-1 + Details Name: us-gaap_RestructuringCharges Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_SegmentReportingAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 65 R54.htm IDEA: XBRL DOCUMENT v3.24.3 Segment Information - Percentage of Total Sales by Product Group (Details) - USD ($) $ in Thousands 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Revenue from External Customer [Line Items] Â Â Â Â Revenues $ 432,679 $ 446,728 $ 1,308,443 $ 1,292,290 Fire Service Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Revenues 160,515 175,732 496,478 481,610 Detection Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Revenues 163,150 155,694 473,214 460,537 Industrial PPE and Other Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Revenues $ 109,014 $ 115,302 $ 338,751 $ 350,143 Revenue Benchmark | Product Concentration Risk Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Concentration risk percentage 100.00% 100.00% 100.00% 100.00% Revenue Benchmark | Fire Service | Product Concentration Risk Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Concentration risk percentage 37.00% 39.00% 38.00% 37.00% Revenue Benchmark | Detection | Product Concentration Risk Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Concentration risk percentage 38.00% 35.00% 36.00% 36.00% Revenue Benchmark | Industrial PPE and Other | Product Concentration Risk Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Concentration risk percentage 25.00% 26.00% 26.00% 27.00% Americas Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Revenues $ 299,497 $ 314,273 $ 909,745 $ 902,918 Americas | Fire Service Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Revenues 111,992 131,516 352,730 354,729 Americas | Detection Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Revenues 110,459 105,007 318,159 308,692 Americas | Industrial PPE and Other Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Revenues $ 77,046 $ 77,750 $ 238,856 $ 239,497 Americas | Revenue Benchmark | Product Concentration Risk Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Concentration risk percentage 100.00% 100.00% 100.00% 100.00% Americas | Revenue Benchmark | Fire Service | Product Concentration Risk Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Concentration risk percentage 37.00% 42.00% 39.00% 39.00% Americas | Revenue Benchmark | Detection | Product Concentration Risk Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Concentration risk percentage 37.00% 33.00% 35.00% 34.00% Americas | Revenue Benchmark | Industrial PPE and Other | Product Concentration Risk Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Concentration risk percentage 26.00% 25.00% 26.00% 27.00% International Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Revenues $ 133,182 $ 132,455 $ 398,698 $ 389,372 International | Fire Service Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Revenues 48,523 44,216 143,748 126,881 International | Detection Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Revenues 52,691 50,687 155,055 151,845 International | Industrial PPE and Other Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Revenues $ 31,968 $ 37,552 $ 99,895 $ 110,646 International | Revenue Benchmark | Product Concentration Risk Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Concentration risk percentage 100.00% 100.00% 100.00% 100.00% International | Revenue Benchmark | Fire Service | Product Concentration Risk Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Concentration risk percentage 36.00% 33.00% 36.00% 33.00% International | Revenue Benchmark | Detection | Product Concentration Risk Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Concentration risk percentage 40.00% 38.00% 39.00% 39.00% International | Revenue Benchmark | Industrial PPE and Other | Product Concentration Risk Â Â Â Â Revenue from External Customer [Line Items] Â Â Â Â Concentration risk percentage 24.00% 29.00% 25.00% 28.00% X - DefinitionFor an entity that discloses a concentration risk in relation to quantitative amount, which serves as the "benchmark" (or denominator) in the equation, this concept represents the concentration percentage derived from the division. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 42 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-42Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 825 -SubTopic 10 -Section 50 -Paragraph 21 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-21Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 825 -SubTopic 10 -Section 50 -Paragraph 20 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-20Reference 4: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 275 -SubTopic 10 -Section 50 -Paragraph 18 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482861/275-10-50-18Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 275 -SubTopic 10 -Section 50 -Paragraph 20 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482861/275-10-50-20 + Details Name: us-gaap_ConcentrationRiskPercentage1 Namespace Prefix: us-gaap_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesNo definition available. + Details Name: us-gaap_EntityWideInformationRevenueFromExternalCustomerLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount, excluding tax collected from customer, of revenue from satisfaction of performance obligation by transferring promised good or service to customer. Tax collected from customer is tax assessed by governmental authority that is both imposed on and concurrent with specific revenue-producing transaction, including, but not limited to, sales, use, value added and excise. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 41 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-41Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 4: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 5: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 924 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SAB Topic 11.L) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479941/924-10-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-5Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 42 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-42Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 40 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-40Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-4 + Details Name: us-gaap_RevenueFromContractWithCustomerExcludingAssessedTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - Details Name: srt_ProductOrServiceAxis=msa_BreathingApparatusMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_ProductOrServiceAxis=msa_FixGasFlameDetectionInstrumentsMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_ProductOrServiceAxis=msa_FirefighterHelmetsandProtectiveApparelMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_ConcentrationRiskByBenchmarkAxis=us-gaap_SalesRevenueNetMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_ConcentrationRiskByTypeAxis=us-gaap_ProductConcentrationRiskMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementBusinessSegmentsAxis=msa_AmericasSegmentMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-

gaap_StatementBusinessSegmentsAxis=msa_InternationalMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 66 R55.htm IDEA: XBRL DOCUMENT v3.24.3 Earnings (Loss) per Share (Details) - USD ($) $ / shares in Units, shares in Thousands, $ in Thousands 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Earnings Per Share [Abstract] Â Â Â Â Net income (loss) $ 66,648 $ 65,256 $ 197,021 $ (17,827) Preferred stock dividends (10) (10) (30) (30) Net income (loss) attributable to common equity 66,638 65,246 196,991 (17,857) Dividends and undistributed earnings allocated to participating securities (6) (8) (19) (16) Net income (loss) attributable to common shareholders $ 66,632 $ 65,238 $ 196,972 $ (17,873) Basic weighted-average shares outstanding (shares) 39,362 39,303 39,370 39,267 Stock-based compensation awards (shares) 133 147 160 0 Diluted weighted-average shares outstanding (shares) 39,495 39,450 39,530 39,267 Antidilutive stock options (shares) 0 0 0 154 Earnings (loss) per share: Â Â Â Â Basic (in dollars per share) $ 1.69 $ 1.66 $ 5.00 $ (0.46) Diluted (in dollars per share) $ 1.69 $ 1.65 $ 4.98 $ (0.46) X - DefinitionEarnings Per Share, Continuing Operations [Abstract] + ReferencesNo definition available. + Details Name: msa_EarningsPerShareContinuingOperationsAbstract Namespace Prefix: msa_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionSecurities (including those issuable pursuant to contingent stock agreements) that could potentially dilute basic earnings per share (EPS) or earnings per unit (EPU) in the future that were not included in the computation of diluted EPS or EPU because to do so would increase EPS or EPU amounts or decrease loss per share or unit amounts for the period presented. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1 + Details Name: us-gaap_AntidilutiveSecuritiesExcludedFromComputationOfEarningsPerShareAmount Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionAmount of paid and unpaid preferred stock dividends declared with the form of settlement in stock. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 2 -SubTopic 405 -Topic 942 -Publisher FASB -URI https://asc.fasb.org/1943274/2147477787/942-405-45-2 + Details Name: us-gaap_DividendsPreferredStockStock Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_EarningsPerShareAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe amount of net income (loss) for the period per each share of common stock or unit outstanding during the reporting period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 52 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482635/260-10-55-52Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-3Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 15 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482635/260-10-55-15Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (e)(4) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-7Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-2Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 60B -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-4Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-10Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(25)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(27)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(23)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-7 + Details Name: us-gaap_EarningsPerShareBasic Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionThe amount of net income (loss) for the period available to each share of common stock or common unit outstanding during the reporting period and to each share or unit that would have been outstanding assuming the issuance of common shares or units for all dilutive potential common shares or units outstanding during the reporting period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 52 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482635/260-10-55-52Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-3Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 15 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482635/260-10-55-15Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (e)(4) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-7Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-2Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 60B -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-4Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(25)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(27)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(23)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-7 + Details Name: us-gaap_EarningsPerShareDiluted Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionAdditional shares included in the calculation of diluted EPS as a result of the potentially dilutive effect of share based payment arrangements using the treasury stock method. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480454/718-10-45-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 22 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-22Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 23 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-23Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28A -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-28A + Details Name: us-gaap_IncrementalCommonSharesAttributableToShareBasedPaymentArrangements Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionThe portion of profit or loss for the period, net of income taxes, which is attributable to the parent. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 9 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-9Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-6Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-3Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-1Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-8Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-4Reference 17: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-10Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section 45 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479105/946-220-45-7Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(18)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-07(9)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-1Reference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(1)(d)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 23: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 27: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher

FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 28: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 29: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 30: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 31: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 32: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 60B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 33: http://www.xbrl.org/2003/role/disclosureRef -Topic 205 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483499/205-20-50-7Reference 34: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 35: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1AReference 36: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1BReference 37: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(22)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1 + Details Name: us-gaap_NetIncomeLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount, after deduction of tax, noncontrolling interests, dividends on preferred stock and participating securities; of income (loss) available to common shareholders. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-3Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-4Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 5 -Subparagraph (SAB Topic 6.B) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-5Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-10Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 11 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-11Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 60B -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60B + Details Name: us-gaap_NetIncomeLossAvailableToCommonStockholdersBasic Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount, after deduction of tax, noncontrolling interests, dividends on preferred stock and participating securities, and addition from assumption of issuance of common shares for dilutive potential common shares; of income (loss) available to common shareholders. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 5 -Subparagraph (SAB Topic 6.B) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-5Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 16 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-16Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 40 -Subparagraph (b)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-40Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 60B -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 40 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-40Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 40 -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-40Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 40 -Subparagraph (b)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-40 + Details Name: us-gaap_NetIncomeLossAvailableToCommonStockholdersDiluted Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of undistributed earnings (loss) allocated to participating securities for the basic earnings (loss) per share or per unit calculation under the two-class method. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 65 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-65Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 66 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-66Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 60B -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60B + Details Name: us-gaap_UndistributedEarningsLossAllocatedToParticipatingSecuritiesBasic Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe average number of shares or units issued and outstanding that are used in calculating diluted EPS or earnings per unit (EPU), determined based on the timing of issuance of shares or units in the period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 16 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-16 + Details Name: us-gaap_WeightedAverageNumberOfDilutedSharesOutstanding Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionNumber of [basic] shares or units, after adjustment for contingently issuable shares or units and other shares or units not deemed outstanding, determined by relating the portion of time within a reporting period that common shares or units have been outstanding to the total time in that period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-10 + Details Name: us-gaap_WeightedAverageNumberOfSharesOutstandingBasic Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration XML 67 R56.htm IDEA: XBRL DOCUMENT v3.24.3 Income Taxes (Details) - USD ($) $ in Thousands 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Dec. 31, 2023 Income Tax Contingency [Line Items] Â Â Â Â Â Effective income tax rate 24.40% 25.60% 23.70% 116.60% Â Unrecognized tax benefits $ 7,200 Â $ 7,200 Â Â Insurance receivable and other noncurrent assets 17,590 Â 17,590 Â $ 19,811 Accrued interest and penalties related to uncertain tax positions 200 Â 200 Â Â Deferred tax asset Â Â Â Â Â Income Tax Contingency [Line Items] Â Â Â Â Â Insurance receivable and other noncurrent assets $ 600 Â $ 600 Â Â X - DefinitionPercentage of current income tax expense (benefit) and deferred income tax expense (benefit) pertaining to continuing operations. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 12 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-12Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 231 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482663/740-10-55-231 + Details Name: us-gaap_EffectiveIncomeTaxRateContinuingOperations Namespace Prefix: us-gaap_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesNo definition available. + Details Name: us-gaap_IncomeTaxContingencyLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of noncurrent assets classified as other. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(17)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_OtherAssetsNoncurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of unrecognized tax benefits. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 217 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482663/740-10-55-217Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 15A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-15AReference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 10B -Publisher FASB -URI https://asc.fasb.org/1943274/2147482525/740-10-45-10B + Details Name: us-gaap_UnrecognizedTaxBenefits Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount accrued for interest on an underpayment of income taxes and penalties related to a tax position claimed or expected to be claimed in the tax return. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 217 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482663/740-10-55-217Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 15 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-15 + Details Name: us-gaap_UnrecognizedTaxBenefitsIncomeTaxPenaltiesAndInterestAccrued Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - Details Name: us-gaap_BalanceSheetLocationAxis=msa_DeferredTaxAssetMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 68 R57.htm IDEA: XBRL DOCUMENT v3.24.3 Stock Plans - Schedule of Stock Compensation Expense (Details) - USD ($) $ in Thousands 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Share-Based Payment Arrangement [Abstract] Â Â Â Â Stock compensation expense $ 4,217 $ 8,477 $ 13,446 $ 21,506 Income tax benefit 1,033 2,077 3,294 5,269 Stock compensation expense, net of tax $ 3,184 $ 6,400 $ 10,152 $ 16,237 X - DefinitionAmount, after tax, of expense for award under share-based payment arrangement. + ReferencesNo definition available. + Details Name: us-gaap_AllocatedShareBasedCompensationExpenseNetOfTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_DisclosureOfCompensationRelatedCostsSharebasedPaymentsAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of tax benefit for recognition of expense of award under share-based payment arrangement. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (h)(1)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_EmployeeServiceShareBasedCompensationTaxBenefitFromCompensationExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of noncash expense for share-based payment arrangement. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_ShareBasedCompensation Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration XML 69 R58.htm IDEA: XBRL DOCUMENT v3.24.3 Stock Plans - Summary of Stock Option Activity (Details) 9 Months Ended Sep. 30, 2024 $ / shares shares Shares Â Outstanding, beginning balance (in shares) | shares 26,536 Exercised (in shares) | shares (10,531) Forfeited (in shares) | shares (852) Outstanding, ending balance (in shares) | shares 15,153 Exercisable (in shares) | shares 15,153 Weighted Average GrantÂ Date Fair Value Â Outstanding, beginning balance (dollars per share) | $ / shares $ 45.95 Exercised (dollars per share) | $ / shares 46.95 Forfeited (dollars per share) | $ / shares 48.65 Outstanding, ending balance (dollars per share) | $ / shares 45.10 Exercisable (dollars per share) | $ / shares $ 45.10 X - ReferencesNo definition available. + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedWeightedAverageGrantDateFairValueRollForward Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe number of shares into which fully or partially vested stock options outstanding as of the balance sheet date can be currently converted under the option plan. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsExercisableNumber Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionThe weighted-average price as of the balance sheet date at which grantees can acquire the shares reserved for issuance on vested portions of options outstanding and currently exercisable under the stock option plan. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsExercisableWeightedAverageExercisePrice Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - DefinitionThe number of shares under options that were cancelled during the reporting period as a result of occurrence of a terminating event specified in contractual agreements pertaining to the stock option plan. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsForfeituresInPeriod Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionNumber of options outstanding, including both vested and non-vested options. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsOutstandingNumber Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionA roll forward is a reconciliation of a concept from the beginning of a period to the end of a period. + ReferencesNo definition available. + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsOutstandingRollForward Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionWeighted average price at which grantees can acquire the shares reserved for issuance under the stock option plan. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -

Subparagraph (c)(1)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsOutstandingWeightedAverageExercisePrice Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - DefinitionWeighted average price at which option holders acquired shares when converting their stock options into shares. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(02) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementsByShareBasedPaymentAwardOptionsExercisesInPeriodWeightedAverageExercisePrice Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionWeighted average price at which grantees could have acquired the underlying shares with respect to stock options that were terminated. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementsByShareBasedPaymentAwardOptionsForfeituresInPeriodWeightedAverageExercisePrice Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionNumber of share options (or share units) exercised during the current period. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -SubTopic 10 -Topic 505 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(28)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(02) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1 + Details Name: us-gaap_StockIssuedDuringPeriodSharesStockOptionsExercised Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration XML 70 R59.htm IDEA: XBRL DOCUMENT v3.24.3 Stock Plans - Summary of Restricted Stock and Unit Activity (Details) - Restricted Stock Activity 9 Months Ended Sep. 30, 2024 $ / shares shares Shares Â Unvested, beginning balance (in shares) | shares 173,851 Granted (in shares) | shares 82,905 Vested (in shares) | shares (48,596) Forfeited (in shares) | shares (25,482) Unvested, ending balance (in shares) | shares 182,678 Weighted Average GrantÂ Date Fair Value Â Unvested, beginning balance (dollars per share) | $ / shares $ 142.73 Granted (dollars per share) | $ / shares 178.59 Vested (dollars per share) | $ / shares 164.57 Forfeited (dollars per share) | $ / shares 164.47 Unvested, ending Balance (dollars per share) | $ / shares $ 150.16 X - DefinitionThe number of equity-based payment instruments, excluding stock (or unit) options, that were forfeited during the reporting period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsForfeitedInPeriod Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionWeighted average fair value as of the grant date of equity-based award plans other than stock (unit) option plans that were not exercised or put into effect as a result of the occurrence of a terminating event. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsForfeituresWeightedAverageGrantDateFairValue Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionThe number of grants made during the period on other than stock (or unit) option plans (for example, phantom stock or unit plan, stock or unit appreciation rights plan, performance target plan). + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriod Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionThe weighted average fair value at grant date for nonvested equity-based awards issued during the period on other than stock (or unit) option plans (for example, phantom stock or unit plan, stock or unit appreciation rights plan, performance target plan). + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriodWeightedAverageGrantDateFairValue Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionThe number of non-vested equity-based payment instruments, excluding stock (or unit) options, that validly exist and are outstanding as of the balance sheet date. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedNumber Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionA roll forward is a reconciliation of a concept from the beginning of a period to the end of a period. + ReferencesNo definition available. + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedRollForward Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionPer share or unit weighted-average fair value of nonvested award under share-based payment arrangement. Excludes share and unit options. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedWeightedAverageGrantDateFairValue Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - ReferencesNo definition available. + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedWeightedAverageGrantDateFairValueRollForward Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe number of equity-based payment instruments, excluding stock (or unit) options, that vested during the reporting period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(02) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsVestedInPeriod Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionThe weighted average fair value as of grant date pertaining to an equity-based award plan other than a stock (or unit) option plan for which the grantee gained the right during the reporting period, by satisfying service and performance requirements, to receive or retain shares or units, other instruments, or cash in accordance with the terms of the arrangement. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(02) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsVestedInPeriodWeightedAverageGrantDateFairValue Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - Details Name: us-gaap_AwardTypeAxis=us-gaap_RestrictedStockMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 71 R60.htm IDEA: XBRL DOCUMENT v3.24.3 Stock Plans - Additional Information (Details) 9 Months Ended Sep. 30, 2024 Minimum Â Share-based Compensation Arrangement by Share-based Payment Award [Line Items] Â Percentage of target award based on achieving targeted performance conditions 0.00% Maximum Â Share-based Compensation Arrangement by Share-based Payment Award [Line Items] Â Percentage of target award based on achieving targeted performance conditions 200.00% Performance Shares Â Share-based Compensation Arrangement by Share-based Payment Award [Line Items] Â Fair value assumptions, average closing price used to calculate expected dividend rate, period (years) 1 year Stock beta, daily price data period (years) 3 years X - DefinitionPercentage of target award based on achieving a targeted total shareholder return based on which final number of shares to be issued for performance stock units. + ReferencesNo definition available. + Details Name: msa_PercentageOfTargetAwardBasedOnAchievingTargetedTotalShareholderReturnBasedOnWhichFinalNumberOfSharesToBeIssuedForPerformanceStockUnits Namespace Prefix: msa_ Data Type: dtr-types1:percentItemType Balance Type: na Period Type: duration X - DefinitionShare-based Compensation Arrangement by Share-base Payment Award, Fair Value Assumptions, Average Closing Price Used to Calculate Expected Dividend Rate, Period + ReferencesNo definition available. + Details Name: msa_SharebasedCompensationArrangementbySharebasePaymentAwardFairValueAssumptionsAverageClosingPriceUsedtoCalculateExpectedDividendRatePeriod Namespace Prefix: msa_ Data Type: xbrli:durationItemType Balance Type: na Period Type: duration X - DefinitionShare-based Compensation Arrangement by Share-base Payment Award, Fair Value Assumptions, Stock Beta, Daily Price Data, Period + ReferencesNo definition available. + Details Name: msa_SharebasedCompensationArrangementbySharebasePaymentAwardFairValueAssumptionsStockBetaDailyPriceDataPeriod Namespace Prefix: msa_ Data Type: xbrli:durationItemType Balance Type: na Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 35 -Paragraph 1D -Publisher FASB -URI https://asc.fasb.org/1943274/2147480483/718-10-35-1DReference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 35 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480483/718-10-35-3Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(02) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(02) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (d)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (d)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (e)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 23: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (e)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 27: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(iv) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 28: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(v) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - Details Name: srt_RangeAxis=srt_MinimumMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_RangeAxis=srt_MaximumMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_AwardTypeAxis=us-gaap_PerformanceSharesMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 72

R61.htm IDEA: XBRL DOCUMENT v3.24.3 Stock Plans - Weighted Average Risk Assumptions (Details) - Performance Stock Unit 9 Months Ended Sep. 30, 2024 $ / shares Share-based Compensation Arrangement by Share-based Payment Award [Line Items] Â Fair value per unit (dollars per share) $ 177.34 Monte Carlo Approach Â Share-based Compensation Arrangement by Share-based Payment Award [Line Items] Â Fair value per unit (dollars per share) $ 181.31 Risk-free interest rate 4.34% Expected dividend yield 1.19% Expected volatility 25.90% MSA stock beta 0.728 X - DefinitionShare-based Compensation Arrangement by Share-based Payment Award, Fair Value Assumptions, Stock Beta + ReferencesNo definition available. + Details Name: msa_SharebasedCompensationArrangementbySharebasedPaymentAwardFairValueAssumptionsStockBeta Namespace Prefix: msa_ Data Type: xbrli:pureItemType Balance Type: na Period Type: duration X - DefinitionThe weighted average fair value at grant date for nonvested equity-based awards issued during the period on other than stock (or unit) option plans (for example, phantom stock or unit plan, stock or unit appreciation rights plan, performance target plan). + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriodWeightedAverageGrantDateFairValue Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionThe estimated dividend rate (a percentage of the share price) to be paid (expected dividends) to holders of the underlying shares over the option's term. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExpectedDividendRate Namespace Prefix: us-gaap_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: duration X - DefinitionThe estimated measure of the percentage by which a share price is expected to fluctuate during a period. Volatility also may be defined as a probability-weighted measure of the dispersion of returns about the mean. The volatility of a share price is the standard deviation of the continuously compounded rates of return on the share over a specified period. That is the same as the standard deviation of the differences in the natural logarithms of the stock prices plus dividends, if any, over the period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExpectedVolatilityRate Namespace Prefix: us-gaap_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: duration X - DefinitionThe risk-free interest rate assumption that is used in valuing an option on its own shares. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(iv) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsRiskFreeInterestRate Namespace Prefix: us-gaap_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 35 -Paragraph 1D -Publisher FASB -URI https://asc.fasb.org/1943274/2147480483/718-10-35-1DReference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 35 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480483/718-10-35-3Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(02) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(02) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (d)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (d)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (e)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 23: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (e)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 27: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(iv) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 28: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(v) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - Details Name: us-gaap_AwardTypeAxis=us-gaap_PerformanceSharesMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_ValuationTechniqueAxis=msa_MonteCarloApproachMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 73 R62.htm IDEA: XBRL DOCUMENT v3.24.3 Stock Plans - Summary of Performance Stock Unit Activity (Details) 9 Months Ended Sep. 30, 2024 $ / shares shares Weighted Average GrantÂ Date Fair Value Â Percentage of target award based on achieving specified performance targets 174.00% Performance Stock Unit Â Shares Â Unvested, beginning balance (in shares) | shares 189,221 Granted (in shares) | shares 40,787 Performance adjustments (in shares) | shares 20,488 Vested (in shares) | shares (77,544) Forfeited (in shares) | shares (10,619) Unvested, ending balance (in shares) | shares 162,333 Weighted Average GrantÂ Date Fair Value Â Unvested, beginning balance (dollars per share) | $ / shares $ 146.17 Granted (dollars per share) | $ / shares 177.34 Performance adjustments (dollars per share) | $ / shares 194.10 Vested (dollars per share) | $ / shares 174.13 Forfeited (dollars per share) | $ / shares 149.13 Unvested, ending Balance (dollars per share) | $ / shares $ 146.50 Award vesting period 3 years X - DefinitionPercentage of target award based on achieving a targeted return on net assets based on which final number of shares to be issued for performance stock units. + ReferencesNo definition available. + Details Name: msa_PercentageOfTargetAwardBasedOnAchievingTargetedReturnOnNetAssetsBasedOnWhichFinalNumberOfSharesToBeIssuedForPerformanceStockUnits Namespace Prefix: msa_ Data Type: dtr-types1:percentItemType Balance Type: na Period Type: duration X - DefinitionShare-based compensation arrangement by share-based payment award equity instruments other than options performance adjustment in period. + ReferencesNo definition available. + Details Name: msa_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsPerformanceAdjustmentInPeriod Namespace Prefix: msa_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionShare-based compensation arrangement by share-based payment award equity instruments other than options performance adjustment in period, weighted average grant date fair value. + ReferencesNo definition available. + Details Name: msa_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsPerformanceAdjustmentInPeriodWeightedAverageGrantDateFairValue Namespace Prefix: msa_ Data Type: dtr-types1:perShareItemType Balance Type: na Period Type: duration X - DefinitionEstimated period over which an employee is required to provide service in exchange for the equity-based payment award, in 'PnYnMnDTnHnMnS' format, for example, 'P1Y5M13D' represents the reported fact of one year, five months, and thirteen days. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardAwardRequisiteServicePeriod1 Namespace Prefix: us-gaap_ Data Type: xbrli:durationItemType Balance Type: na Period Type: duration X - DefinitionThe number of equity-based payment instruments, excluding stock (or unit) options, that were forfeited during the reporting period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsForfeitedInPeriod Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionWeighted average fair value as of the grant date of equity-based award plans other than stock (unit) option plans that were not exercised or put into effect as a result of the occurrence of a terminating event. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsForfeituresWeightedAverageGrantDateFairValue Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionThe number of grants made during the period on other than stock (or unit) option plans (for example, phantom stock or unit plan, stock or unit appreciation rights plan, performance target plan). + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriod Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionThe weighted average fair value at grant date for nonvested equity-based awards issued during the period on other than stock (or unit) option plans (for example, phantom stock or unit plan, stock or unit appreciation rights plan, performance target plan). + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriodWeightedAverageGrantDateFairValue Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionThe number of non-vested equity-based payment instruments, excluding stock (or unit) options, that validly exist and are outstanding as of the balance sheet date. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedNumber Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionPer share or unit weighted-average fair value of nonvested award under share-based payment arrangement. Excludes share and unit options. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedWeightedAverageGrantDateFairValue Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - ReferencesNo definition available. + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedWeightedAverageGrantDateFairValueRollForward Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe number of equity-based payment instruments, excluding stock (or unit) options, that vested during the reporting period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(02) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsVestedInPeriod Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionThe weighted average fair value as of grant date pertaining to an equity-based award plan other than a stock (or unit) option plan for which the grantee gained the right during the reporting period, by satisfying service and performance requirements, to receive or retain shares or units, other instruments, or cash in accordance with the terms of the arrangement. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph

2 -Subparagraph (c)(2)(iii)(02) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsVestedInPeriodWeightedAverageGrantDateFairValue Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionA roll forward is a reconciliation of a concept from the beginning of a period to the end of a period. + ReferencesNo definition available. + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsOutstandingRollForward Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - Details Name: us-gaap_AwardTypeAxis=us-gaap_PerformanceSharesMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 74 R63.htm IDEA: XBRL DOCUMENT v3.24.3 Long-Term Debt - Schedule of Debt (Details) - USD ($) $ in Thousands Sep. 30, 2024 Dec. 31, 2023 Jun. 29, 2023 Jan. 05, 2023 Jul. 01, 2021 Debt Instrument [Line Items] Â Â Â Â Â Senior revolving credit facility maturing in 2026, net of debt issuance costs $ 36,153 $ 59,602 Â Â Â Total 554,722 601,692 Â Â Â Amounts due within one year 26,915 26,522 Â Â Â Long-term debt, net of debt issuance costs $ 527,807 575,170 Â Â Â 2016 Senior Notes payable through 2031, 3.40%, net of debt issuance costs Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Debt instrument, stated interest rate percentage 3.40% Â Â Â Â Senior notes payable $ 57,067 62,081 Â Â Â 2021 Senior Notes payable through 2036, 2.69%, net of debt issuance costs Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Debt instrument, stated interest rate percentage 2.69% Â Â Â Â Senior notes payable $ 99,749 99,733 Â Â Â 2021 Senior Notes payable through 2036, 2.69%, net of debt issuance costs | Senior Notes Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Debt instrument, stated interest rate percentage Â Â Â Â 2.69% 2021 Senior Notes payable through 2036, 2.69%, net of debt issuance costs Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Debt instrument, stated interest rate percentage 2.69% Â Â Â Â Senior notes payable $ 99,749 99,733 Â Â Â 2021 Senior Notes payable through 2036, 2.69%, net of debt issuance costs | Senior Notes Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Debt instrument, stated interest rate percentage Â Â Â Â 2.69% 2023 Term Loan credit agreement maturing in 2026, net of debt issuance costs | Secured Debt | Line of Credit Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Debt instrument, stated interest rate percentage 6.35% Â Â Â Â Total $ 212,055 230,604 Â $ 250,000 Â 2023 Senior Notes payable through 2028, 5.25%, net of debt issuance costs | Senior Notes Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Debt instrument, stated interest rate percentage 5.25% Â 5.25% Â Â Total $ 49,949 $ 49,939 Â Â Â X - DefinitionContractual interest rate for funds borrowed, under the debt agreement. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)(a)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1B + Details Name: us-gaap_DebtInstrumentInterestRateStatedPercentage Namespace Prefix: us-gaap_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: instant X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 55 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482949/835-30-55-8Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(f)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.12-04(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-3Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 5: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69B -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69BReference 6: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69C -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69CReference 7: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69E -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69EReference 8: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69F -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69FReference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 11: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (h) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1D -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1DReference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1D -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1DReference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1D -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1DReference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1E -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1EReference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1E -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1EReference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1E -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1EReference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1F -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1FReference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1F -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1FReference 23: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1F -Subparagraph (b)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1FReference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1F -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1FReference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1I -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1IReference 26: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482925/835-30-45-2Reference 27: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482900/835-30-50-1 + Details Name: us-gaap_DebtInstrumentLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe carrying value as of the balance sheet date of the current and noncurrent portions of long-term obligations drawn from a line of credit, which is a bank's commitment to make loans up to a specific amount. Examples of items that might be included in the application of this element may consist of letters of credit, standby letters of credit, and revolving credit arrangements, under which borrowings can be made up to a maximum amount as of any point in time conditional on satisfaction of specified terms before, as of and after the date of drawdowns on the line. Includes short-term obligations that would normally be classified as current liabilities but for which (a) postbalance sheet date issuance of a long term obligation to refinance the short term obligation on a long term basis, or (b) the enterprise has entered into a financing agreement that clearly permits the enterprise to refinance the short-term obligation on a long term basis and the following conditions are met (1) the agreement does not expire within 1 year and is not cancelable by the lender except for violation of an objectively determinable provision, (2) no violation exists at the BS date, and (3) the lender has entered into the financing agreement is expected to be financially capable of honoring the agreement. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)) -SubTopic 10 -Topic 210 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-03(16)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(16)(a)(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1 + Details Name: us-gaap_LineOfCredit Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount, after deduction of unamortized premium (discount) and debt issuance cost, of long-term debt. Excludes lease obligation. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)) -SubTopic 10 -Topic 210 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 55 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482949/835-30-55-8Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-03(16)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1Reference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69B -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69BReference 5: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69C -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69CReference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1D -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1DReference 7: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(16)(a)(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (b)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-4 + Details Name: us-gaap_LongTermDebt Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount, after deduction of unamortized premium (discount) and debt issuance cost, of long-term debt classified as current. Excludes lease obligation. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_LongTermDebtCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount, after deduction of unamortized premium (discount) and debt issuance cost, of long-term debt classified as noncurrent. Excludes lease obligation. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_LongTermDebtNoncurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionCarrying value as of the balance sheet date of Notes with the highest claim on the assets of the issuer in case of bankruptcy or liquidation (with maturities initially due after one year or beyond the operating cycle if longer), excluding current portion. Senior note holders are paid off in full before any payments are made to junior note holders. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)) -SubTopic 10 -Topic 210 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10 + Details Name: us-gaap_SeniorLongTermNotes Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - Details Name: us-gaap_DebtInstrumentAxis=msa_SeniorNotesPayableThroughTwoThousandThirtyOneThreePointFourPercentageMemberMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_DebtInstrumentAxis=msa_MultiCurrencyNoteSeriesCSeniorNotesMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_LongtermDebtTypeAxis=us-gaap_SeniorNotesMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_DebtInstrumentAxis=msa_NYLNoteFacilitySeriesASeniorNotesMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_DebtInstrumentAxis=msa_TermLoanFacility2023Member Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_CreditFacilityAxis=us-gaap_SecuredDebtMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_LongtermDebtTypeAxis=us-gaap_LineOfCreditMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_DebtInstrumentAxis=msa_SeniorNotesDue2028Member Namespace Prefix: Data Type: na Balance Type: Period Type: XML 75 R64.htm IDEA: XBRL DOCUMENT v3.24.3 Long-Term Debt - Additional Information (Details) 9 Months Ended Jun. 29, 2023 USD ($) Jan. 05, 2023 USD ($) May 24, 2021 USD ($) Jan. 04, 2019 Sep. 30, 2024 USD ($) Sep. 30, 2024 GBP (Â£) Dec. 31, 2023 USD ($) Sep. 30, 2023 USD ($) Jul. 01, 2021 USD ($) Debt Instrument [Line Items] Â Â Â Â Â Â Â Â Â Line of credit facility, maximum borrowing capacity Â Â $ 900,000,000.0 Â Â Â Â Â Â Â Weighted average revolving interest rate, percentage Â Â Â Â 5.80% Â Â Â Â Line of credit facility, remaining borrowing capacity Â Â Â Â $ 861,500,000 Â Â Â Â Line of credit facility, accordion feature Â Â Â Â 400,000,000 Â Â Â Â Amounts due within one year Â Â Â Â 26,915,000 Â $ 26,522,000 Â Â Minimum fixed charges coverage ratio (not less than) Â Â Â 1.50 Â Â Â Â Â Maximum consolidated leverage ratio (not to exceed) Â Â Â 3.50 Â Â Â Â Â Consolidated leverage ratio (not more than) Â Â Â 4.00 Â Â Â Â Â Long term debt Â Â Â Â 554,722,000 Â 601,692,000 Â Â Restricted cash included in prepaid expenses and other current assets Â Â Â Â 599,000 Â Â $ 1,938,000 Â Standby Letters of Credit Â Â Â Â Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Â Â Â Â Proceeds from lines of credit Â Â Â Â 10,000,000.0 Â Â Â Â Senior Revolving Credit Facility Maturing in 2023 | Standby Letters of Credit Â Â Â Â Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Â Â Â Â Proceeds from lines of credit Â Â Â Â $ 1,500,000 Â Â Â Â Series C Senior Notes Due July 2036 Â Â Â Â Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Â Â Â Â Debt instrument, stated interest rate percentage Â Â Â Â 2.69% 2.69% Â Â Â Â Series A Senior Notes Due 2036 Â Â Â Â Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Â Â Â Â Debt instrument, stated interest rate percentage Â Â Â Â 2.69% 2.69% Â Â Â Â Senior Notes | Series C Senior Notes Due July 2036 Â Â Â Â Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Â Â Â Â Aggregate principal amount Â Â Â Â Â Â Â Â $ 100,000,000 Debt instrument, stated interest rate percentage Â Â Â Â Â Â Â 2.69% Senior Notes | Series A Senior Notes Due 2036 Â Â Â Â Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Â Â Â Â Aggregate principal amount Â Â Â Â Â Â Â Â $ 100,000,000 Debt instrument, stated interest rate percentage Â Â Â Â Â Â Â 2.69% Senior Notes | NYL Note Facility Â Â Â Â Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Â Â Â Â Line of credit facility, maximum borrowing capacity Â Â Â Â Â Â Â $ 200,000,000 Senior Notes | Senior Notes Due 2028 Â Â Â Â Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Â Â Â Â Aggregate principal amount $ 50,000,000 Â Â Â Â Â Â Â Debt instrument, stated interest rate percentage 5.25% Â Â Â 5.25% 5.25% Â Â Â Principal of debt amount due in year before maturity $ 25,000,000 Â Â Â Â Â Â Â Â Principal of debt amount due at maturity $ 25,000,000 Â Â Â Â Â Â Â Â Long term debt Â Â Â Â $ 49,949,000 Â 49,939,000 Â Â Unsecured Debt | Series C Senior Notes Due July 2036 Â Â Â Â Â

Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Â Â Â Â Line of credit facility, maximum borrowing capacity Â Â Â Â Â Â Â Â $ 335,000,000 Notes Payable | Multi-currency Notes Due in 2031 Â Â Â Â Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Â Â Â Aggregate principal amount Â Â Â Â $ 57,200,000 Â£ 42,700,000 Â Â Â Debt instrument, stated interest rate percentage Â Â Â Â 3.40% 3.40% Â Â Â Amounts due within one year Â Â Â Â $ 8,200,000 Â£ 6,100,000 Â Â Â Line of Credit | 2023 Term Loan credit agreement maturing in 2026, net of debt issuance costs | Secured Debt Â Â Â Â Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Â Â Â Debt instrument, stated interest rate percentage Â Â Â Â 6.35% 6.35% Â Â Â Long term debt Â $ 250,000,000 Â Â $ 212,055,000 Â $ 230,604,000 Â Â Base Rate | Senior Revolving Credit Facility Maturing in 2023 Â Â Â Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Â Â Â Interest rate margin, percentage Â Â 0.00% Â Â Â Â Â Â Overnight Bank Funding Rate | Senior Revolving Credit Facility Maturing in 2023 Â Â Â Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Â Â Â Interest rate margin, percentage Â Â 0.50% Â Â Â Â Â Â Secured Overnight Financing Rate (SOFR) | Senior Revolving Credit Facility Maturing in 2023 Â Â Â Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Â Â Â Interest rate margin, percentage Â Â 1.00% Â Â Â Â Â Â Minimum | Senior Revolving Credit Facility Maturing in 2023 Â Â Â Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Â Â Â Interest rate margin, percentage Â Â 0.00% Â Â Â Â Â Â Minimum | Line of Credit | 2023 Term Loan credit agreement maturing in 2026, net of debt issuance costs | Secured Debt Â Â Â Â Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Â Â Â Basis spread on EBITDA leverage ratio and elected rate Â 0.00% Â Â Â Â Â Â Â Maximum | Senior Revolving Credit Facility Maturing in 2023 Â Â Â Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Â Â Â Interest rate margin, percentage Â Â 1.75% Â Â Â Â Â Â Maximum | Line of Credit | 2023 Term Loan credit agreement maturing in 2026, net of debt issuance costs | Secured Debt Â Â Â Â Â Â Â Â Â Debt Instrument [Line Items] Â Â Â Â Â Â Â Â Basis spread on EBITDA leverage ratio and elected rate Â 2.00% Â Â Â Â Â Â Â X - DefinitionDebt Instrument, Basis Spread On EBITDA Leverage Ratio And Elected Rate + ReferencesNo definition available. + Details Name: msa_DebtInstrumentBasisSpreadOnEBITDALeverageRatioAndElectedRate Namespace Prefix: msa_ Data Type: dtr-types1:percentItemType Balance Type: na Period Type: duration X - DefinitionDebt Instrument, Covenant, Consolidated Leverage Ratio In Period Of Acquisition, Maximum + ReferencesNo definition available. + Details Name: msa_DebtInstrumentCovenantConsolidatedLeverageRatioInPeriodOfAcquisitionMaximum Namespace Prefix: msa_ Data Type: xbrli:pureItemType Balance Type: na Period Type: duration X - DefinitionDebt Instrument, Covenant, Consolidated Leverage Ratio, Maximum + ReferencesNo definition available. + Details Name: msa_DebtInstrumentCovenantConsolidatedLeverageRatioMaximum Namespace Prefix: msa_ Data Type: xbrli:pureItemType Balance Type: na Period Type: duration X - DefinitionDebt Instrument, Covenant, Fixed Charges Coverage Ratio, Minimum + ReferencesNo definition available. + Details Name: msa_DebtInstrumentCovenantFixedChargesCoverageRatioMinimum Namespace Prefix: msa_ Data Type: xbrli:pureItemType Balance Type: na Period Type: duration X - DefinitionDebt Instrument, Principal Amount Due At Maturity + ReferencesNo definition available. + Details Name: msa_DebtInstrumentPrincipalAmountDueAtMaturity Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionDebt Instrument, Principal Amount Due In Year Before Maturity + ReferencesNo definition available. + Details Name: msa_DebtInstrumentPrincipalAmountDueInYearBeforeMaturity Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionLine Of Credit Facility, Accordion Feature, Amount + ReferencesNo definition available. + Details Name: msa_LineOfCreditFacilityAccordionFeatureAmount Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionRestricted Cash, Current Assets, Included in Prepaid Expenses and Other Current Assets + ReferencesNo definition available. + Details Name: msa_RestrictedCashCurrentAssetsIncludedinPrepaidExpensesandOtherCurrentAssets Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionPercentage points added to the reference rate to compute the variable rate on the debt instrument. + ReferencesNo definition available. + Details Name: us-gaap_DebtInstrumentBasisSpreadOnVariableRate1 Namespace Prefix: us-gaap_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: duration X - DefinitionFace (par) amount of debt instrument at time of issuance. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 55 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482949/835-30-55-8Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 3: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69B -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69BReference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69C -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69CReference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482900/835-30-50-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482925/835-30-45-2 + Details Name: us-gaap_DebtInstrumentFaceAmount Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionContractual interest rate for funds borrowed, under the debt agreement. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)(a)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1B + Details Name: us-gaap_DebtInstrumentInterestRateStatedPercentage Namespace Prefix: us-gaap_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: instant X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 55 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482949/835-30-55-8Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(f)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.12-04(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-3Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 5: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69B -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69BReference 6: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69C -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69CReference 7: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69E -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69EReference 8: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69F -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69FReference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 11: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (h) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1D -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1DReference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1D -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1DReference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1D -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1DReference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1E -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1EReference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1E -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1EReference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1E -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1EReference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1F -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1FReference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1F -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1FReference 23: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1F -Subparagraph (b)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1FReference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1F -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1FReference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1I -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1IReference 26: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482925/835-30-45-2Reference 27: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482900/835-30-50-1 + Details Name: us-gaap_DebtInstrumentLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe total amount of the contingent obligation under letters of credit outstanding as of the reporting date. + ReferencesNo definition available. + Details Name: us-gaap_LettersOfCreditOutstandingAmount Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionThe effective interest rate during the reporting period. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(19)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_LineOfCreditFacilityInterestRateDuringPeriod Namespace Prefix: us-gaap_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: duration X - DefinitionMaximum borrowing capacity under the credit facility without consideration of any current restrictions on the amount that could be borrowed or the amounts currently outstanding under the facility. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(19)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_LineOfCreditFacilityMaximumBorrowingCapacity Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of borrowing capacity currently available under the credit facility (current borrowing capacity less the amount of borrowings outstanding). + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481544/470-10-50-6Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(19)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_LineOfCreditFacilityRemainingBorrowingCapacity Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount, after deduction of unamortized premium (discount) and debt issuance cost, of long-term debt. Excludes lease obligation. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)) -SubTopic 10 -Topic 210 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 55 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482949/835-30-55-8Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-03(16)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1Reference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69B -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69BReference 5: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69C -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69CReference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1D -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1DReference 7: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(16)(a)(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (b)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-4 + Details Name: us-gaap_LongTermDebt Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount, after deduction of unamortized premium (discount) and debt issuance cost, of long-term debt classified as current. Excludes lease obligation. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_LongTermDebtCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - Details Name: us-gaap_CreditFacilityAxis=us-gaap_StandbyLettersOfCreditMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_DebtInstrumentAxis=msa_SeniorRevolvingCreditFacilityMaturingIn2026Member Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_DebtInstrumentAxis=msa_MultiCurrencyNoteSeriesCSeniorNotesMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_DebtInstrumentAxis=msa_NYLNoteFacilitySeriesASeniorNotesMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_LongtermDebtTypeAxis=us-gaap_SeniorNotesMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_DebtInstrumentAxis=msa_NYLNoteFacilitySeniorUnsecuredNotesMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-

gaap_DebtInstrumentAxis=msa_SeniorNotesDue2028Member Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_LongtermDebtTypeAxis=us-gaap_UnsecuredDebtMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_LongtermDebtTypeAxis=us-gaap_NotesPayableOtherPayablesMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_DebtInstrumentAxis=msa_MulticurrencyNotesDuein2031Member Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_LongtermDebtTypeAxis=us-gaap_LineOfCreditMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_DebtInstrumentAxis=msa_TermLoanFacility2023Member Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_CreditFacilityAxis=us-gaap_SecuredDebtMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_VariableRateAxis=us-gaap_BaseRateMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_VariableRateAxis=msa_OvernightBankFundingRateMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_VariableRateAxis=us-gaap_SecuredOvernightFinancingRateSofrMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_RangeAxis=srt_MinimumMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_RangeAxis=srt_MaximumMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 76 R65.htm IDEA: XBRL DOCUMENT v3.24.3 Goodwill and Intangible Assets, Net - Changes in Goodwill (Details) $ in Thousands 9 Months Ended Sep. 30, 2024 USD ($) Goodwill [Roll Forward] Â Beginning balance $ 627,534 Currency translation 5,303 Ending balance $ 632,837 X - DefinitionAmount, after accumulated impairment loss, of asset representing future economic benefit arising from other asset acquired in business combination or from joint venture formation or both, that is not individually identified and separately recognized. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 49 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-49Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482548/350-20-55-24Reference 3: http://www.xbrl.org/2003/role/exampleRef -Topic 820 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 100 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482078/820-10-55-100Reference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(15)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482598/350-20-45-1Reference 7: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1Reference 8: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (h) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-03(10)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1 + Details Name: us-gaap_Goodwill Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of foreign currency translation gain (loss) which increases (decreases) asset representing future economic benefit from other asset acquired in business combination or from joint venture formation or both, that is not individually identified and separately recognized. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1 + Details Name: us-gaap_GoodwillForeignCurrencyTranslationGainLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionA roll forward is a reconciliation of a concept from the beginning of a period to the end of a period. + ReferencesNo definition available. + Details Name: us-gaap_GoodwillRollForward Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 77 R66.htm IDEA: XBRL DOCUMENT v3.24.3 Goodwill and Intangible Assets, Net - Additional Information (Details) - USD ($) $ in Thousands Sep. 30, 2024 Dec. 31, 2023 Acquired Finite-Lived Intangible Assets [Line Items] Â Â Goodwill $ 632,837 $ 627,534 Americas Â Â Acquired Finite-Lived Intangible Assets [Line Items] Â Â Goodwill 447,600 Â International Â Â Acquired Finite-Lived Intangible Assets [Line Items] Â Â Goodwill 185,200 Â Trade name | Globe Holding Company LLC Â Â Acquired Finite-Lived Intangible Assets [Line Items] Â Â Indefinite-lived intangible assets $ 60,000 Â X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 985 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481283/985-20-50-2 + Details Name: us-gaap_AcquiredFiniteLivedIntangibleAssetsLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of assets, excluding financial assets and goodwill, that lack physical substance, having a projected indefinite period of benefit, acquired at the acquisition date. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 805 -SubTopic 20 -Section 50 -Paragraph 1 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479907/805-20-50-1 + Details Name: us-gaap_BusinessCombinationRecognizedIdentifiableAssetsAcquiredAndLiabilitiesAssumedIndefiniteLivedIntangibleAssets Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount, after accumulated impairment loss, of asset representing future economic benefit arising from other asset acquired in business combination or from joint venture formation or both, that is not individually identified and separately recognized. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 49 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-49Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482548/350-20-55-24Reference 3: http://www.xbrl.org/2003/role/exampleRef -Topic 820 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 100 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482078/820-10-55-100Reference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(15)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482598/350-20-45-1Reference 7: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1Reference 8: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (h) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-03(10)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1 + Details Name: us-gaap_Goodwill Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - Details Name: us-gaap_StatementBusinessSegmentsAxis=msa_AmericasSegmentMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementBusinessSegmentsAxis=msa_InternationalSegmentMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_IndefiniteLivedIntangibleAssetsByMajorClassAxis=us-gaap_TradeNamesMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_BusinessAcquisitionAxis=msa_GlobeHoldingCompanyLLCMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 78 R67.htm IDEA: XBRL DOCUMENT v3.24.3 Goodwill and Intangible Assets, Net - Changes in Intangible Assets, Net of Accumulated Amortization (Details) $ in Thousands 9 Months Ended Sep. 30, 2024 USD ($) Finite-lived Intangible Assets [Roll Forward] Â Beginning balance $ 266,134 Amortization expense (13,392) Currency translation 1,622 Ending balance $ 254,364 X - DefinitionThe aggregate expense charged against earnings to allocate the cost of intangible assets (nonphysical assets not used in production) in a systematic and rational manner to the periods expected to benefit from such assets. As a noncash expense, this element is added back to net income when calculating cash provided by or used in operations using the indirect method. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 55 -Paragraph 40 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482640/350-30-55-40Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482686/350-30-45-2 + Details Name: us-gaap_AmortizationOfIntangibleAssets Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of foreign currency translation gain (loss) which increases (decreases) assets, excluding financial assets and goodwill, lacking physical substance with a finite life. + ReferencesNo definition available. + Details Name: us-gaap_FiniteLivedIntangibleAssetsForeignCurrencyTranslationGainLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount after amortization of assets, excluding financial assets and goodwill, lacking physical substance with a finite life. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 926 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483154/926-20-50-5 + Details Name: us-gaap_FiniteLivedIntangibleAssetsNet Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionA roll forward is a reconciliation of a concept from the beginning of a period to the end of a period. + ReferencesNo definition available. + Details Name: us-gaap_FiniteLivedIntangibleAssetsRollForward Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 79 R68.htm IDEA: XBRL DOCUMENT v3.24.3 Pensions and Other Post-retirement Benefits - Components of Net Periodic Benefit Cost (Details) - USD ($) $ in Thousands 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Pension Benefits Â Â Â Â Defined Benefit Plan Disclosure [Line Items] Â Â Â Â Service cost $ 2,315 $ 1,884 $ 6,945 $ 5,652 Interest cost 5,970 5,918 17,910 17,754 Expected return on plan assets (10,812) (9,906) (32,436) (29,718) Amortization of prior service cost (credit) 37 37 111 111 Recognized net actuarial losses 282 47 846 141 Settlements Â Â 1,308 0 Net periodic benefit (income) cost (2,208) (2,020) (5,316) (6,060) Other Benefits Â Â Â Â Defined Benefit Plan Disclosure [Line Items] Â Â Â Â Service cost 44 53 132 159 Interest cost 248 273 744 819 Expected return on plan assets 0 0 0 0 Amortization of prior service cost (credit) (46) (61) (138) (183) Recognized net actuarial losses 115 138 345 414 Settlements Â Â 0 0 Net periodic benefit (income) cost $ 361 $ 403 $ 1,083 $ 1,209 X - DefinitionAmount of gain (loss) from change in actuarial assumptions which (increases) decreases benefit obligation of defined benefit plan. Assumptions include, but are not limited to, interest, mortality, employee turnover, salary, and temporary deviation from substantive plan. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a)(4) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1 + Details Name: us-gaap_DefinedBenefitPlanActuarialGainLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of prior service cost (credit) recognized in net periodic benefit cost (credit) of defined benefit plan. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 17 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480482/715-20-55-17Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 3A -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480535/715-20-45-3AReference 3: http://www.xbrl.org/2003/role/exampleRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 18 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480482/715-20-55-18Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (h)(5) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Subparagraph (a)(5) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-6 + Details Name: us-gaap_DefinedBenefitPlanAmortizationOfPriorServiceCostCredit Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesNo definition available. + Details Name: us-gaap_DefinedBenefitPlanDisclosureLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of expected return (loss) recognized in net periodic benefit (cost) credit, calculated based on expected long-term rate of return and market-related value of plan assets of defined benefit plan. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 17 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480482/715-20-55-17Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 3A -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480535/715-20-45-3AReference 3: http://www.xbrl.org/2003/role/exampleRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 18 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480482/715-20-55-18Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (h)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Subparagraph (a)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-6 + Details Name: us-gaap_DefinedBenefitPlanExpectedReturnOnPlanAssets Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of cost recognized for passage of time related to defined benefit plan. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 17 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480482/715-20-55-17Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 3A -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480535/715-20-45-3AReference 3: http://www.xbrl.org/2003/role/exampleRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 18 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480482/715-20-55-18Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (h)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Subparagraph (a)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-6 + Details Name: us-

gaap_DefinedBenefitPlanInterestCost Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of net periodic benefit cost (credit) for defined benefit plan. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 17 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480482/715-20-55-17Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 18 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480482/715-20-55-18Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (h) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-6 + Details Name: us-gaap_DefinedBenefitPlanNetPeriodicBenefitCost Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of gain (loss) recognized in net periodic benefit (cost) credit from irrevocable action relieving primary responsibility for benefit obligation and eliminating risk related to obligation and assets used to effect settlement. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 3A -Publisher FASB -URI https://asc.fasb.org/1943274/2147480535/715-20-45-3AReference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (h)(7) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Subparagraph (a)(7) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-6 + Details Name: us-gaap_DefinedBenefitPlanRecognizedNetGainLossDueToSettlements1 Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of cost for actuarial present value of benefits attributed to service rendered by employee for defined benefit plan. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 17 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480482/715-20-55-17Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 18 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480482/715-20-55-18Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (h)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-6 + Details Name: us-gaap_DefinedBenefitPlanServiceCost Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - Details Name: us-gaap_RetirementPlanTypeAxis=us-gaap_PensionPlansDefinedBenefitMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_RetirementPlanTypeAxis=us-gaap_OtherPostretirementBenefitPlansDefinedBenefitMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 80 R69.htm IDEA: XBRL DOCUMENT v3.24.3 Pensions and Other Post-retirement Benefits - Additional Information (Details) - USD ($) $ in Millions 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Retirement Benefits [Abstract] Â Â Pension plans contributions $ 3.9 $ 4.3 Total estimated pension plans contributions for the fiscal year $ 5.3 Â X - ReferencesNo definition available. + Details Name: us-gaap_CompensationAndRetirementDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of contribution received by defined benefit plan from employer which increases plan assets. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 17 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480482/715-20-55-17Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (d)(iv)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1Reference 3: http://www.xbrl.org/2003/role/exampleRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 18 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480482/715-20-55-18Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-6Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1Reference 6: http://www.xbrl.org/2003/role/exampleRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (d)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1Reference 7: http://www.xbrl.org/2003/role/exampleRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (d)(iv)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-1 + Details Name: us-gaap_DefinedBenefitPlanContributionsByEmployer Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of contributions received and expected to be received by defined benefit plan from employer in current fiscal year. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 18 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480482/715-20-55-18Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 715 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480506/715-20-50-6 + Details Name: us-gaap_DefinedBenefitPlanExpectedFutureEmployerContributionsCurrentFiscalYear Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant XML 81 R70.htm IDEA: XBRL DOCUMENT v3.24.3 Derivative Financial Instruments - Additional Information (Details) - USD ($) $ in Millions Sep. 30, 2024 Dec. 31, 2023 Foreign Exchange Forward Â Â Derivative [Line Items] Â Â Notional amount of open forward contracts $ 184.8 $ 110.9 X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480237/815-40-50-5 + Details Name: us-gaap_DerivativeLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionNominal or face amount used to calculate payment on derivative. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 815 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Publisher FASB -URI https://asc.fasb.org/1943274/2147480434/815-10-50-1BReference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 815 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1A -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480434/815-10-50-1A + Details Name: us-gaap_DerivativeNotionalAmount Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: na Period Type: instant X - Details Name: us-gaap_DerivativeInstrumentRiskAxis=us-gaap_ForeignExchangeForwardMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 82 R71.htm IDEA: XBRL DOCUMENT v3.24.3 Derivative Financial Instruments - Balance Sheet Location and Fair Value of Assets Associated with Derivative Financial Instruments (Details) - Not designated as hedging instrument - USD ($) $ in Thousands Sep. 30, 2024 Dec. 31, 2023 Other current liabilities Â Â Derivatives, Fair Value [Line Items] Â Â Derivatives not designated as hedging instruments: $ 1,038 $ 242 Prepaid expenses and other current assets Â Â Derivatives, Fair Value [Line Items] Â Â Foreign exchange contracts: other current liabilities $ 0 $ 2,210 X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesNo definition available. + Details Name: us-gaap_DerivativesFairValueLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionFair value as of the balance sheet date of all foreign currency derivative assets not designated as hedging instruments. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 815 -SubTopic 10 -Section 50 -Paragraph 4B -Subparagraph (c)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480434/815-10-50-4B + Details Name: us-gaap_ForeignCurrencyDerivativeInstrumentsNotDesignatedAsHedgingInstrumentsAssetAtFairValue Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionFair value as of the balance sheet date of all foreign currency derivative liabilities not designated as hedging instruments. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 815 -SubTopic 10 -Section 50 -Paragraph 4B -Subparagraph (c)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480434/815-10-50-4B + Details Name: us-gaap_ForeignCurrencyDerivativeInstrumentsNotDesignatedAsHedgingInstrumentsLiabilityAtFairValue Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - Details Name: us-gaap_HedgingDesignationAxis=us-gaap_NondesignatedMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_BalanceSheetLocationAxis=us-gaap_OtherCurrentLiabilitiesMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_BalanceSheetLocationAxis=us-gaap_PrepaidExpensesAndOtherCurrentAssetsMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 83 R72.htm IDEA: XBRL DOCUMENT v3.24.3 Derivative Financial Instruments - Income Statement Location and Impact of Derivative Financial Instruments (Details) - USD ($) $ in Thousands 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Not designated as hedging instrument Â Â Derivative Instruments, Gain (Loss) [Line Items] Â Â Foreign exchange contracts: currency exchange losses, net $ 1,683 $ 2,986 X - DefinitionAmount of increase (decrease) in the fair value of derivatives recognized in the income statement. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 815 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4A -Subparagraph (b)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480434/815-10-50-4A + Details Name: us-gaap_DerivativeGainLossOnDerivativeNet Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4E -Publisher FASB -URI https://asc.fasb.org/1943274/2147480434/815-10-50-4E + Details Name: us-gaap_DerivativeInstrumentsGainLossLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - Details Name: us-gaap_HedgingDesignationAxis=us-gaap_NondesignatedMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 84 R73.htm IDEA: XBRL DOCUMENT v3.24.3 Fair Value Measurements (Details) - USD ($) $ in Millions Sep. 30, 2024 Dec. 31, 2023 Reported Value Measurement Â Â Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items] Â Â Long-term debt, fair value disclosure $ 307.2 $ 312.2 Estimate of Fair Value Measurement Â Â Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items] Â Â Long-term debt, fair value disclosure $ 278.1 $ 278.7 X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 820 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 100 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482078/820-10-55-100Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 820 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482106/820-10-50-2Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 820 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482106/820-10-50-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 820 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482106/820-10-50-3 + Details Name: us-gaap_FairValueAssetsAndLiabilitiesMeasuredOnRecurringAndNonrecurringBasisLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe fair value amount of long-term debt whether such amount is presented as a separate caption or as a parenthetical disclosure. Additionally, this element may be used in connection with the fair value disclosures required in the footnote disclosures to the financial statements. The element may be used in both the balance sheet and disclosure in the same submission. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 820 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482106/820-10-50-2Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 820 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (bbb)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482106/820-10-50-2Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 820 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (bbb)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482106/820-10-50-2Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 820 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (bbb)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482106/820-10-50-2 + Details Name: us-gaap_LongTermDebtFairValue Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - Details Name: us-gaap_FairValueByMeasurementBasisAxis=us-gaap_CarryingReportedAmountFairValueDisclosureMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_FairValueByMeasurementBasisAxis=us-gaap_EstimateOfFairValueFairValueDisclosureMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 85 R74.htm IDEA: XBRL DOCUMENT v3.24.3 Commitments and Contingencies - Additional Information (Details) $ in Thousands 3 Months Ended 9 Months Ended Jan. 05, 2023 USD ($) Sep. 30, 2024 USD ($) Sep. 30, 2023 USD ($) Sep. 30, 2024 USD ($) Sep. 30, 2023 USD ($) Oct. 15, 2024 classAction claim lawsuit Dec. 31, 2023 USD ($) Loss Contingencies [Line Items] Â Â Â Â Â Â Â Â Product liability expense Â $ 0 $ 0 $ 0 $ 3 Â Â Tax-effected loss on divestiture Â Â Â 0 199,578 Â Â Product warranty expense Â Â Â 7,900 6,700 Â Â Product liability expense (Note 17) Â 0 $ 0 5,000 0 Â Â Revenue, Remaining Performance Obligation, Expected Timing of Satisfaction, Start Date [Axis]: 2024-04-01 Â Â Â Â Â Â Â Â Loss Contingencies [Line Items] Â Â Â Â Â Â Â Â Remaining performance obligation, amount Â $ 28,700 Â $ 28,700 Â Â Â Remaining performance obligation, expected timing of satisfaction Â 3 years Â 3 years Â Â Â MSA LLC | Joint Venture By R&Q Insurance Holdings Ltd. And Obra Capital, Inc. Â Â Â Â Â Â Â Â Loss Contingencies [Line Items] Â Â Â Â Â Â Â Â Contributed cash and cash equivalents by acquiree $ 35,000 Â Â Â Â Â Â Â Disposal Group, Disposed of by Sale, Not Discontinued Operations | MSA LLC Â Â Â Â Â Â Â Â Loss Contingencies [Line Items] Â Â Â Â Â Â Â Â Disposal group, contributed cash and cash equivalents $ 341,200 Â Â Â Â Â Â Â Tax-effected loss on divestiture Â $ 199,600 Â Â Â Â Â Disposal group, transaction costs Â Â Â Â $ 5,600 Â Â Â Single incident Â Â Â Â Â Â Â Â Loss Contingencies [Line Items] Â Â Â Â Â Â Â Â Product liability accrual Â $ 800 Â 800 Â Â $ 1,300 Product liability expense Â Â Â Â $ 200 $ 100 Â Â Damages From Product Substances | Subsequent Event Â Â Â Â Â Â Â Â Loss Contingencies [Line Items] Â Â Â Â Â Â Â Â Number of pending lawsuits | lawsuit Â Â Â Â Â 535 Â Number of pending claims | claim Â Â Â Â Â 7,850 Â Number of pending class actions | classAction Â Â Â Â Â 2 Â X - DefinitionBusiness Combination, Contributed Cash And Cash Equivalents + ReferencesNo definition available. + Details Name: msa_BusinessCombinationContributedCashAndCashEquivalents Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionDisposal Group, Including Discontinued Operation, Contributed Cash And Cash Equivalents + ReferencesNo definition available. + Details Name: msa_DisposalGroupIncludingDiscontinuedOperationContributedCashAndCashEquivalents Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionDisposal Group, Including Discontinued Operation, (Transaction Cost) Reversal Of Cost + ReferencesNo definition available. + Details Name: msa_DisposalGroupIncludingDiscontinuedOperationTransactionCostReversalOfCost Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionDisposal Group, Not Discontinued Operation, Gain (Loss) On Disposal, Including Tax Effect + ReferencesNo definition available. + Details Name: msa_DisposalGroupNotDiscontinuedOperationGainLossOnDisposalIncludingTaxEffect Namespace Prefix: msa_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionLoss Contingency, Pending Class Action, Number + ReferencesNo definition available. + Details Name: msa_LossContingencyPendingClassActionNumber Namespace Prefix: msa_ Data Type: xbrli:integerItemType Balance Type: na Period Type: instant X - DefinitionLoss Contingency, Pending Lawsuits, Number + ReferencesNo definition available. + Details Name: msa_LossContingencyPendingLawsuitsNumber Namespace Prefix: msa_ Data Type: xbrli:integerItemType Balance Type: na Period Type: instant X - DefinitionAmount of loss from litigation settlement for amount awarded to other party. Excludes claims within an insurance entity's normal claims settlement process. + ReferencesReference 1:

http://www.xbrl.org/2009/role/commonPracticeRef -Topic 450 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483076/450-20-50-1 + Details Name: us-gaap_LitigationSettlementLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 450 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483076/450-20-50-4Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 450 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 9 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483076/450-20-50-9Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 720 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483359/720-20-50-1Reference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 460 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 27 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482395/460-10-55-27Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 450 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 9 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483076/450-20-50-9Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 450 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483076/450-20-50-4Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 460 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482425/460-10-50-3Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 450 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483076/450-20-50-1 + Details Name: us-gaap_LossContingenciesLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionNumber of pending claims pertaining to a loss contingency. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 450 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483076/450-20-50-4Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 450 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 9 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483076/450-20-50-9 + Details Name: us-gaap_LossContingencyPendingClaimsNumber Namespace Prefix: us-gaap_ Data Type: xbrli:integerItemType Balance Type: na Period Type: instant X - DefinitionRecorded amount of the accrual for a material component of a product liability contingency. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SAB Topic 5.Y.Q2) -SubTopic 20 -Topic 450 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480102/450-20-S99-1 + Details Name: us-gaap_ProductLiabilityAccrualComponentAmount Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionThe amount of loss reported during the period pertaining to product liability. + ReferencesNo definition available. + Details Name: us-gaap_ProductLiabilityAccrualPeriodExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe expense charged against earnings for the period pertaining to standard and extended warranties on the entity's goods and services granted to customers. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 460 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482425/460-10-50-8 + Details Name: us-gaap_ProductWarrantyExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of transaction price allocated to performance obligation that has not been recognized as revenue. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (a) -SubTopic 10 -Topic 606 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-13 + Details Name: us-gaap_RevenueRemainingPerformanceObligation Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionPeriod in which remaining performance obligation is expected to be recognized as revenue, in 'PnYnMnDTnHnMnS' format, for example, 'P1Y5M13D' represents reported fact of one year, five months, and thirteen days. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (b)(1) -SubTopic 10 -Topic 606 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-13 + Details Name: us-gaap_RevenueRemainingPerformanceObligationExpectedTimingOfSatisfactionPeriod1 Namespace Prefix: us-gaap_ Data Type: xbrli:durationItemType Balance Type: na Period Type: instant X - Details Name: us-gaap_RevenueRemainingPerformanceObligationExpectedTimingOfSatisfactionStartDateAxis=2024-04-01 Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_BusinessAcquisitionAxis=msa_MSALLCMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: dei_LegalEntityAxis=msa_JointVentureByRQInsuranceHoldingsLtdAndObraCapitalIncMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_DisposalGroupClassificationAxis=us-gaap_DisposalGroupDisposedOfBySaleNotDiscontinuedOperationsMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_IncomeStatementBalanceSheetAndAdditionalDisclosuresByDisposalGroupsIncludingDiscontinuedOperationsAxis=msa_MSALLCMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_LossContingenciesByNatureOfContingencyAxis=msa_SingleIncidentMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_LossContingenciesByNatureOfContingencyAxis=msa_DamagesFromProductSubstancesMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_SubsequentEventTypeAxis=us-gaap_SubsequentEventMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 86 R75.htm IDEA: XBRL DOCUMENT v3.24.3 Contingencies - Schedule of Product Warranty Liability (Details) - USD ($) $ in Thousands 9 Months Ended 12 Months Ended Sep. 30, 2024 Dec. 31, 2023 Movement in Standard and Extended Product Warranty Accrual, Increase (Decrease) [Roll Forward] Â Â Beginning warranty reserve $ 14,288 $ 15,230 Warranty payments (8,518) (9,794) Warranty claims 7,370 8,899 Provision for product warranties and other adjustments 515 (47) Ending warranty reserve $ 13,655 $ 14,288 X - DefinitionA roll forward is a reconciliation of a concept from the beginning of a period to the end of a period. + ReferencesNo definition available. + Details Name: us-gaap_MovementInStandardAndExtendedProductWarrantyIncreaseDecreaseRollForward Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionCarrying value as of the balance sheet date of obligations incurred through that date and payable for estimated claims under standard and extended warranty protection rights granted to customers. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-03(15)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 460 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482425/460-10-50-4Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 460 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Subparagraph (c)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482425/460-10-50-8Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 460 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Subparagraph (c)(5) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482425/460-10-50-8 + Details Name: us-gaap_ProductWarrantyAccrual Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of increase (decrease) in the standard and extended product warranty accrual from changes in estimates attributable to preexisting product warranties. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 460 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Subparagraph (c)(4) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482425/460-10-50-8 + Details Name: us-gaap_ProductWarrantyAccrualPreexistingIncreaseDecrease Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of decrease in the standard product warranty accrual from payments made in cash or in kind to satisfy claims under the terms of the standard product warranty. Excludes extended product warranties. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 460 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Subparagraph (c)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482425/460-10-50-8 + Details Name: us-gaap_StandardProductWarrantyAccrualPayments Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of increase in the standard product warranty accrual from warranties issued. Excludes extended product warranties. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 460 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Subparagraph (c)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482425/460-10-50-8 + Details Name: us-gaap_StandardProductWarrantyAccrualWarrantiesIssued Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration EXCEL 87 Financial_Report.xlsx IDEA: XBRL DOCUMENT begin 644 Financial_Report.xlsx M4$L#!!0 ( )N+6%D'04UB@0 +$ 0 9&]C4')O<',O87!P+GAM M;$V./0L",1!$_\IQO;=!P4)B0-!2L+ (/>QLOD&1#LD)^OCG!CVX>;QA&WPIG M*N*I#BV&5(_C(I(!47BK9.7:=N')=HI6-Y #OGDK7A.YNJQ<&4GPZ4A!0W_J=0U[R;UEA_6\#MI7E!+ P04 M " ";BUA9--B=5^X K @ $0 &1O8U!R;W!S+V-O&ULS9+/ M2L0P$(=?17)OITV+2.CFLN))07!!\1:2V=U@\X=DI-VWMZV[740?P&-F?OGF M&YA.1Z%#PN<4(B:RF&]&U_LL=-RP(U$4 %D?T:E<3@D_-?\?$S]0O,:, >'7K*4)Q[^ *F&&$R>7O IJ5N%3_Q"X=8.?DF.V:&H:A')HE-^U0P]O3X\NR;F%] M)N4U3K^R%72*N&&7R: _-]G[WP"2O>%O45<';':\%OQ-M\SZ[_O"["KM@[-[^ M8^.+H.S@UUW(+U!+ P04 " ";BUA9F5R<(Q & "<)P $P 'AL+W1H M96UE+W1H96UE,2YX;6SM6EMSVC@4?N^OT'AG]FT+QC:!MK03621A'^_1S80RY8-[9)-NIL\!"SI^\Y%1^?H.'GS[BYBZ(:(E/)X M8-DOV]:[MR_>X%#BVR]*+ M41B1%G\@M MNN01.+5)#3(3/PB=AIAJ4!P"I DQEJ&&^+3&K!'@$WVWO@C(WXV(]ZMOFCU7 MH5A)VH3X$$8:XIQSYG/1;/L'I4;1]E6\W*.76!4!EQC?-*HU+,76>)7 \:V< M/!T3$LV4"P9!AI@S M&L%&KQMUAVC2/'K^!?F<-0HACA*FNVB<5@$_9Y>PTG!Z(++9OVX?H;5,VPLCO='U!=*Y \FIS_I,C0' MHYI9";V$5FJ?JH,@H%\;D>/N5Z> HWEL:\4*Z">P'_T=HWPJOX@L Y M?RY]SZ7ON? 0]H=*W-R-]9\'3BUO>1FY;Q/NN,=K7-"XH8U=RSTS0LS0[=R2^JVE+ZU)CA* M]+',<$X>RPP[9SR2';9WH!TU^_9==N0CI3!3ET.X&D*^ VVZG=PZ.)Z8D;D* MTU*0;\/YZ<5X&N(YV02Y?9A7;>? 8T='[Y\%1L*/O/)8=QXCRHB'NH8:8S\-# MAWE[7YAGE<90-!1M;*PD+$:W8+C7\2P4X&1@+: '@Z]1 O)256 Q6\8#*Y"B M?$R,1>APYY= <7^/1DN/;IF6U;]\I=QEM(E(YPFF8$V>KRMYEL<%5'<]56_*P MOFH]M!5.S_Y9KF4Q9Z;RWRT,"2Q;B%D2XDU=[=7GFYRN>B)V^I=W MP6#R_7#)1P_E.^=?]%U#KG[VW>/Z;I,[2$R<><41 71% B.5' 86%S+D4.Z2 MD 83 >LX=SFWJXPD6L_UC6'ODRWSEPSVC>U[F M$RQ#I'[!?8]*@!&K8KZZKT_Y)9P[M'OQ@2";_-;;I/;=X Q\U*M:I60K$3]+ M!WP?D@9CC%OT-%^/%&*MIK&MQMHQ#'F 6/,,H68XWX=%FAHSU8NL.8T*;T'5 M0.4_V]0-;/8--!R1!5XQF;8VH^1."CS<_N\-L,+$CN'MB[\!4$L#!!0 (M)N+6%D. +Q@R@4 -(> 8 >&PO=V]R:W-H965T&UL MM9EK;]LV& (7_"N$!0PO$L43Y$G>) <=-MF!MZL;9BFS8!UJB;:&2J%&4'?_[MO91L*;#A7Y#D,HN2JLU$J_M#K)>Z&ARPY M%S&/X,Y*R) I.)7K7A)+SKQ,% 8];EG#7LC\J#.YS*[-Y>12I"KP(SZ7)$G# MD,G]-0_$[JIC=XX7'OSU1ND+O M3#O%W]3"E\=']]L,'F"6+.S7SS/;6YZEQTB,=7+ W4@]C]Q@] ^WGBB#) M_B>[_-D![1 W390(#V(H0>A'^2][/KR(%P(ZJA#0@X"^$=C]"H%S$#@9:%ZR M#.LC4VQR*<6.2/TTN.F#[-UD:J#Q(UV-"R7AK@\Z-9F)+9>D2Y(-DSRY["GP MU'=Z[D%_G>MIA7Y,/HM(;1)R$WG<>ZWO05F* M%C@:XI:KC@\3EQK#-"+=HW ME&>&R[^XZIS8%R;YJ^(XQ? MQ,C\'?3]_3Y>)DM#D_C&]H=RA;W;0_?!#$C.7 M7W6@HR5<;GEG\O-/]M#ZQ83W@\Q>P?8+V#[F/ODHW!2ZJ"*/^YB;2'&Y76_ MFI!054.D08$TJ(?T-652<1GLR0./A50F/-Q*R=3T4F:HJB'>L, ;UL.;<^D+ M3_=" N. L?)PIZ+?578\5-^0H(6ZB92O]N36#SBY3\,EER8PW,/NVH/!:&Q"0X4-T<8%VK@.V@-?^WH0 MA4J\9Z&QA> (^GQ=3LIC>WCP^D;O[F8D2U3>DM*WR2VK5X;R+7"&A93+=2, (M0D%W)$*2F4@C)??PZQGA3[C/IR9B7-04^45XL.L@/]GT+QBXSLN%V)K0V2C1^? M&:';R$1V&8IL/- :\A2YZ]%R*K1^YYEK'/2MZ@[,.E"(RTN %, M5(U8;<0=6L8=>FJ!)Z\^:" M5TUMD2UKDR^I@B@;9=7ZSH\,JWOC? _*-T5MXR'I9O*RE/V'UUC%L);<0?R>_<^/TX867I?\/A8&2F M7<]A 1\ M!5+K? 0#GLPW4/,3)>)L#W(IE!)A=KCAS.-2/P#W5T*HXXG^ \4V]N0_4$L# M!!0 ( )N+6%FL"0TZ:P8 <; 8 >&PO=V]R:W-H965T&ULK5EM]LV$/XKA%<,*=#8(D6]98F!Q-:V GT)FG;[,.R#;-&Q4%GT M1#I)__V.DB+;U$ENMWQ))/FY(Y^[X_&A=/DHRZ]J+80F3YN\4%>CM=;;B\E$ M+==BDZBQW(H"?EG)/5R,Z>G[P*;M?:_-@,KW<)O?B3N@OV]L2[B:MES3; MB$)ELB"E6%V- KNE%S%QC4"'^R,2C.K@FALI"RJ_FYFUZ-7+,C$0NEMJX2:# M@YB)/#>>8![_-$Y'[9C&\/#ZV?NO%7D@LTB4F,G\SRS5ZZM1."*16"6[7'^2 MC[^+AI!G_"UEKJJ_Y+'&!FQ$ECNEY:8QAAELLJ+^GSPU@3@P #^X 6L,F&W M>PS#FB4ZFEZ5\)*5!@S=S446_LH9X984I ME#M=PJ\9V.GI3!8II%VD!*Z4S+,TT7!SI^$?U(-61*[(VV(I- X*2\+O58DAM%3Q'X^;!\- MV$\@ FT8V',8;MB@PSNQ'1/7>4.8PS@RG]GWF[L8G?\W>OR?1S*AMO6A%OY MEN:X#\=;U0NH0U_3>6ZMH9QYV91G>AMLE27(V@DRE1/HC1].>?J._\ M@L7Y9W-7])9_$+.CC+"VXSP(>_3#[!CJ"07Z%*K3?W*U.P+#U/N,C^(+BR]0;9#J32IN6LRUENEM" M^X&>A#6(F]J=-S ^8QYCUC1G&"R(_,!BW87Y(>/,@L4(+ A=U\,Y^RUG?Y#S M;Z54RC!>91JCZG-2E1$-N\>Z"7!;:N>Z"O(!;GN(N*'3#GCQ39R^LG.%.BMR+42R_$?$$ MG(M[07)8YD*](85 T]WX.RY,F]$,05%(I<4;0?& VNE&4&$0TA[F!Y*2#C)__M9]H9')26,U*9Y!X85KZ^[MK\N[=K,D\#=#4-ZX/I^38$3@)F9^&Q C$;&"T MCSW;LV>#[&_KG8OD6;+(\DR; M@:B7V".#M- "1D?AH2(Q"WA_>,-)!]3/] MN!6F>MQ&&&T"'Z.&[UV5T6)A] MU&M1- NGMV%=@73NA7929AC,=UQ;E&$PZK-N&\-P'@^#'LY[74:'A=EGJ4&B MR(IYD^9^ZEW!Y+JLLX016<4[$@U!4=?EU.:-*3[?[)NY]AJ-#HNTYORW$"L) MG;M..='$W[\H%VA% (;4ZZQK!!8<3K:ACL@N+Z01L[EC8B_@3MA#?J_/Z+! M@_;]D%6OP8#]$?GG_NW@_;NKG:!2'?L4AL$8=SK[=Q?F4QIT*@ 1?W *ZCN0 MT+UDH\.:S1PX&^YG1K;@E*/,&=#W? 1[:E!&8Q^S&-4=@- I P-N*/OB-Y46_S%_46OY2WXQSNI2<;EIXWB9DPYISGN4[M\]KV!XC7#L,3Q%&4?PR93U5Y?Z1LMM M]5EA(;66F^IR+1+HA08 OZ\D-,3FQ@S0?ON:_@M02P,$% @ FXM860DS M+Z< ! A !@;"]W;W)K*82 M7L"R3Q^ICUKJ[O&!BZ]R0XA"+SDKY,3:*+4=V;9,-R3\'I9O20%?ESD6,%0 MK&VY%01GVBAGMNS(CC)5,L(Z_:U*KF;,T/'T^LO^LG0=G MGK$D,\Y^IYG:3*S$0AE9X1U3C_SP"ZD="DN^E#.I?]&AQCH62G=2\;PVAA7D MM*C^\4LMQ(D!\@-O-K :QL$%PS\VL! ZPQ!;1"\=8:P-M"NVY7O6K@Y5G@Z M%OR 1(D&MO)!JZ^M02]:E(&R5 *^4K!3TQDO,MAVDB%XDIS1#"L8+!7\03PH MB?@*/N40A9LR//8$?2Q2GA,T0$_+.;IY]QZ]0[1 7S9\)W&1R;&M8%TENYW6 M: [BOUN!=6(.//O%";21:P%HR@_V\WW[88V^#'HTHWE&4>Z^7<$FVM\AW/B#/ M\0+#>F9O- =-[OR_V1?_>?8S,?PF0GS-YU_B.X;"Q4CXX^Y9*@%'_D_3WE?L M@9F]O =';7)%MQLBX)FBX(^]NEG M2"BTVHL;QJ5\;]J'BB+2%&7ZV$^C*_J2L;T_%=B "KTP.D?-NRAW&#N>>PY; M=&$#-TZ\N(&=>1LVWH:] ?FKVA"!TK-(7$-*K'W_@_JB8U7AEY%)B/": 7E- MLODUR197(CO;HJC9HJ@W("&'0X8N(($)08KT&X+KH9 ,5[5!]A?DM2JŸW'SF MBJ#(&+#5%.%)]'BN[PU; =M%#=PDCENA.._"W,0/6O%JX/)"/S&':]QH$?=J M\5!759 ;T99+-1!$45'=J%N&S_0XC=U>;>*N.RUG9@9(TCKM\R[&"URGI4H7 M% >>69.DT23IU>2I@**6T7^@TM GMY1GCRG#SXP,H/H=2,P(D@3BARI*^N,D MZ:ROY<'L5<3\5<2BB[B@P;#18- BKP2-)&9:2KFA:G0O8=N-Y60F>0T&=[O(= MT\49-UR Y=4'.4!Q'4"9-"CVO!5U;H(UVD?JRYFX$*/TM*NG^E,/=?Y7K@Z MO? I]X0HSHQ87DH&Q,'5,ETS@MZ0PP."6"1*O)87'V:D%0LYVFYR0>#MVV[UU8$,5QT':]"X- <**P[7P7-W"'H>>TO+=/ M>IJW[NCF6MX/R\;7-U#?:>ONN-/6*QI M(1$C*YC*N8UAIT35<%8#Q;>ZHWKF"OHS_;B!)IV($@#?5QS.73TH)VC:_NF_ M4$L#!!0 ( )N+6%D0O-A]P@8 $< 8 >&PO=V]R:W-H965T&ULK9EM_BL;- ==J9)$82CVWBF3;IW76FUV:.]NZU8N28 M*2 JY#Q\^UL! 8R$G,[TC0WV2OJO6.UO)<[NA?Q1;SE7Z*'(R_I\L56J>K-< MUNLM+UA]*BI>PC\;(0NFX%;>+NM*KL^:W*[DZ$SN5 M9R6_DJC>%063C^]Y+N[/%WCQ],/7[':K]_+U5G%;0DU5]^K*PEWR[Z7-"MX M66>B1))OSA?O\)L+&N@&C<6_&;^O1]=(NW(CQ]]\S$]7WA:$<_Y6NDN&'S= M\0N>Y[HGT/&SZW31CZDCJ^? >O^S<1Z+>(%2OF&[7'T5 M]W_SSJ%&X%KD=?.)[EO;"$9<[VHEBJXQW!=9V7ZSAVXB1@VP/]. = W(?-/W1 MF?[>U37X9W.C;>?;V^G%]::NV)J?+V#UU%S>\ <7JY0L<>F]M3OVFSO9\%$I&E&$A)ZOEUDV(L,G2*O)*]8EB+^4.ET4#<3 M*M26PX3OI 0'$)M=*Z$A*4BP"TV$6ZQ(,'H&>[JC7G?DCAFA6/X,B9$Q>.R3 M,$PF&DVS* Y)Y-E%QKW(^,#D G:E>CQ&%:15UP%@&72&HNGHC-R0YNVOEN/+) M3RQQ01,ZT6VQHB296738\#/F/2NBJZ[F6(OZ:9JQ?0%V'8Z5X)@F>+H";781 M/!(\(WG$8NR4?,DW' (Y18H]='/[I-BS*\9FSO #/)UAFQEM4J55[P!/[37 MZB\ATOLLSY]$4KM(8HP>4A+3:7ZPV9$HH#.9#0\ Q&X"?BP5*V\S(,HX8 ^(MIN9J A*&_E2TQ2X,\:SH@878#<,O3>XM17DXMV&36S@*$F\JU6*6Q'@N:@>\ M83?? VA3LD&+ MO=_5V[ZO Q"QFX@ZJFM4L4?6!+PN_+H(JH1LMDY0->6BO#U17!:PY;GIEP*Q M+P43BB2T9$6;64!F:D(\L!.[X?ENO18[*%>?7+)*--F'2>S1:=UJL]._,G!,Y M0!*[*?FAJ'+QR'G]\D4,,? L6:%-H\#)X5;%%NJ%L2G8-(LHC6>*)C+ D;CA M^&6OLLO=RX-8>.=!4305:[,CV*,S*'<#%XF;B_M%WB&U%MAAWQ]5\9U:&Q1) MC.?4CK:4;BI^VEM;>ZRQ+S!B@B\@4>Q-\Z/-+@KP7'5*!D 2-R"OVA)I7/3S M+J#1#2_Y)AL*$7OI1$P,PIQC8_-BM:-).%.DD@&7Q(W+SP,HQ:1B/10O)A;] MA!K5BN[5?".I[L*/F*B$A0;4GZJVV6GXSL@>B$K<^T6C M/#DTR^;N+PKC:8EBL8*5.R=V0")YSB;QD$*37QC[81"3J4B+(?$H]>E M>*9F:G*2$C_TIJIM=IA0,K.WH -/Z0&>2DB,._F(ZBV3^IB-J?'V>$:URG>R K=9,52L$V2'A_-@5EEN1;S:\ [WIX)MCZ$=A],@IY@ M$A*#4W;#A/AS,3,ZC76S]BM7#'Y*$6>R!$C9CV$MF(32)#+.3FR& -39HU@Z M)4>.(QM < !@ !X;"]W;W)KYCV8)*#6'7BS':@^_<[.Y!!E]*7\4!\ MSGV? OSO'G\=;J9YTAFC@.1>%GGB9,>65[^LDPYSIKBRQH#I N?##((C\G/"'B\=N;J[BL:R,X 7.%>@JSYGZ/44AMQ.OY^TG[ODZ,W;" MC\CO?LMZYVJF7)-,ZD^,Y3DTV\ MCQZDN&*5,/=R^P5W]0PM7R*%=O^PK7-'EQXDE38RWX%)0=WTX !!/ M.R#< <*7@.@50'\'Z+M":V6NK!MF6#Q6<@O*9A.;';C>.#15PPN[BPNCZ"TG MG(EGLDAI3S %&FDI>,H,!5,F6)$@+"RQALZ<*2Q,AH8G3)S#!WA "PB]*/C45OA_(CMJPZ!IP^ 4>_R@6(ID&PGR#5L^U!? !%F0^TK)S"11F'(# M0NK6K[!FCQR[=;9-/+KLC\,^YK# EJ0@&C9)1*'C? #A2>&S*J\$LUX%U)85 M*M()=*R3)^B4J!+:V?,VP37KY8&6H!L,AB\4OY5U)#EJ)$>9H73V(.KO MEB(=,-WR;RG:AX"=^L1;U-%+RM[Q:RJGF2-8.VQ8)X

C!Q -G[H M85-35CQF?LI\?]4&1$V6OXED;+VQ7-'@E-U)W(M$4HD"]/L-<@)<).!4M(M =X>%108,BYQ2Z"*,1O5F_-1%!VNF.'1()_ZU"CR5M %!UK!)7X8[:7\ I7[MX(XKT-B#'X'J?_J)6K@M==>%J)(NA\0&&3PU;=S=PNBI<110D4:0#@0UY5>[* M9X"%;_N2R[H?F-ZL&=BMY>H0_H&)@Z'93QI!FOD35G^^/O^?W#Z;!TGBN7T2 MXF*SX_8L"J:S*;A]B@(_H%Y>_A-OA_ZN=L+I!@56G[%XGM'8W$V!Z33(LPQ< M/\7C=#@%,+TG\1P[V9QVOC<%)DF0IFGO8!XYD\?U1?I&W$@Z.^0]5+9"GW5=+6_+P_-\C67Z&-V M=?GQTX<+&FEK&/3WCCO1=E2Y:@OY'9O3%KD1+WCG6MRR$IW?5[AKB.?>"<>#`M]_9&0 O].V% "5UK_2O\ NG^#Y + _][_>-S_>W+MW#.L%BN@(L'R$=C+_2/A M?UBUL!,?(H/87REE=S_(P/YOH?-_ U!+ P04 " ";BUA9 MBU%)5^,* #[' &0 'AL+W=O _.F5%DB7JSXL0SLG-I?9,7UT[:Z73Z 2(A"0T)\ #2LOOK^^R" MI$395BZ]:3_8DDCLXMFW9Q?DZXUU7_U:J4+<9ZGQ;SKKHLA?G9SX>*TRZ7LV M5P9WEM9ELL!/MSKQN5,R8:$L/8GZ_V$+[-, MNH<+E=K-F\Z@4U^XT:MU01=.SE_G6;SKS MP:N+$:WG!7_5:N-W0@NR9&'M5_IQE;SI]F02E5Y^K[6_8]MART)Z=6G3O^FD6+_IG'9$HI:R3(L;N_FSJNP9D[[8II[_MBTU8&TT[(BY]8;-*& @R;<*GO* \L"-PVG]&(*H$(L8=-F*4;V4ASU\[NQ&. M5D,;?6%361K@M*&@W!8.=S7DBO/WUJQ>?E8N$V_5HGA]4D GW3F)*_F+(!\] M(S\3'ZPIUE[\8A*5M.5/@*4!%-6 +J*#"F]5WA/#?E=$_6AT0-^P,7#(^H;/ MZ".SQ%OMX]3ZTBGQC_G"%P[)\,^GC VZ1D_KH@)YY7,9JS<=5(!7[DYUSG_Z M83#IGQU .FJ0C@YI_QVA^!YY<7QE1+&VI9Z/^CUUA0!IVB2+ =MK[4II8 MB=CZPHLC,9YV^Y,IODRB;O]T!0!L,OJE[B"]R>RP[MFL.QW-^&,X_%_J'0IV MYWLKC8B=2G0AY,HI!5(J4(1%Z;19"6UH[>2@ZF@)XS'(H+S)_U14/X-T-%I M5XQ[T?@PZ-&L.P-H^AC..!5.W=GTCL!5L);,D?AL M"YF*\7C4G4:1F/0'W%ZNT!I"ZI/:7TNXG',*FL!NZ)G<\Y;.M9N(6D%(RZ?W5Q:<;ZJ1P%?G:24H\DO_2N^T]?;LGOF!3QW!K VL=@PR&,O= M5BCD 62DN("IK(<"K3E&@'U<.?MB?OM+XTFX%U76K&&A!7L*=MRJN*3P?KI3 MSE"?%>^T0;Z503>TLE9Y^^G=3:TR^) V07H!3"U^B"6:1D7I2Q(-*[U2I0 MV$[]5B+!RD.W6/,; @+@Q_J%0&R(8ZU?L&WMT@N1/DJWI4FJ<<*T19Z6'A+C M(%!)7#L,,Q5:?1>NO65(MSK+4?F$G8%4"@:T93"B=C%(@BRIBCJ,882P3Z@' MTS%Y#+;F5E-)-N[;B1(Y9S)\UQ]OUQ7I2,F>> . M)ZY+%Z^)#V@EBN&.$N)VK=+E,UQ\[B**Q/W M&A;82K:YX%F-=03A*J3Y<56Q35."0X\&^T'A>0*YZC0"?]ENYM0,M\X=!NYO MN(.\M$BU7_/64(7XER:V6:8+\IXA;,WF3>O>@%,5 K[/N0Z\!95='*P6_R+Z M17S:'N#XCH\N<.]-P.-XQ7:[@M14%+\<@ M$>L<M^ <:@XR"@X_&TUZTQ?84>;R@G3&Q-L&Z>")8TI0XDXHHXH->LAE.M(2B# R M%23)M ."Y0A)IRJ D][@67RGWX9' *@-@2,>FM&A0<1 M_G"QHH-:\URU2@\% MH20:8MNMQ(]_?]^^VZYNGUE[.A!,J[9'$"ZZP^>$*Z_[?2ZQE=55E?Z#(MHI;U_UV1<9;0)#@+Y[EVFE0M[6C<9\Z;# M\IV*=H.R!9T(FG$ I1!V;F:P;G,$\BK3+^N"'(-0BNUK3(XW55?Y1>GE]SQ M&I36.74[0P0+4W3;LADPNZ:PM]=3ZXXL#LER8)D$VHH"9GWU-!E#$1!B6:Q4XNNA M*2#>(ZBK ;$ _:RQY#:1V(VAPD'RHUNGY,5M#BZLV-#3.W1LH B)7O'C^*E4WSL.&K6A M8&[SG@]I*1WKF]+'PB4,836)IK+6(>66-&&)]^\ONS3H(B[(#@&VD$&7B<: M*%JGI-]Y.JJ'Z@.G'HS;WS' @T&^/?___#V3__ZHCZS;>2+R:+2?](;C0Z,]M*7LV([H'IC"]9AIB)0O$>MF1HDGZ=5@OEN$\R)TQ_9.X7OA=P\ MLM;&^T$++4"!/RI()&"&,^)2WT,19EBW0OV0FAW7P620,!SJ:A+%:W5.I8EK9"I_QQ;P !?&#&SYC &MUQ = _:HO#M3*)@8N"%I2T=;X;NP%6S1/N!Y3C>.C[F+-1*&Z:XAO6J>]PJM]K)1)7X-VF9[*F-&Y('&&"A4LM:WPV=5FH8$KI@*5:_YR05;M&=% M#]VW.39UVZ5'X0GA,]1%R0=-V$6J,0205A99A42=]SSB)_54/>N2YRZ(VQ MQ@#)SF%-&WI^I1)#@4B!#]6'JX13K0PN$\TS!?GJP1!1 M#F.O[N$ 9?XHAXC>2W'3Y$5BZ7,(_]F\-K6M7* MD<6&LK@:4JQ;2:/_79-P8N,RN#&<75%D-,XZS1.J3!!O2@:+T!/ML>&93?0R M3$Y&ULS9)AYRP9Y/?Q:+TFMR'HX(L*K]N)*3;?LC)W MMOTV@?J@::STQ(U+>DS([@O<,IARZXK.+GE2##Z@\%PBG9 R.,U6B4"[ET:" M//-6M#2V\/W>F'O18'>^52NCL%+0[A,N6_M%C<-)[MZLW'R?Y?P!02P,$% M @ FXM86300ZI\, P ?0< !D !X;"]W;W)K&ULK55M;],P$/XKIS A)D5-FJ3=*VVE=N-E2$/3)N #XH.;?!,+QPZVLV[\M>LY.FQ4H%4)\2?QR]]SSW-GGR5KIKZ9*M/!0"VFF065M(*V0.C:.1:U* 6O41JN)&A<38/Y\'R1.7MO\)'C MVNR,P2E9*O753:Z*:1 [0B@PMPZ!T>\>+U (!T0TOFTP@SZD<]P>~}%?>^VD M9VF@:G 12X8JVPMVK]%C=Z1@XO5\+X+ZP[VU$:0-X:J^J-,S&H MN>S^[&&3AQV'T_@/#LG&(?&\NT"Y26S;#;1:@W:61.:&WBIWIO(<>F*7$ER5ZVAR.88>B(+)IC,R=;".R9;ZB8P[$#@",;)M23A*,[AHM4:9/P+53QK!?!<8A6F<[OK_SL-!I$EXFI[?-]^^*10K> HRTX& M8[J:0O@N0RDZ&IZ.!DF_I)%BDV*K?"KF-6J>D\I--E%+3XT)LFR4MLSEUF!) MK<]EE\K0H.]=XG&PFV?^5FVJ81$&_[_M/]^05S%EX=JD(S'X9!J,*])$/_> MY1X?Z"DQ""^&%8%>&PO=VJR:W-H965TW@\ MWMG:#8ZHE2R066E5F!P/8^NV.5UYN6#P!\2=_9D##Z2E=8?_.2VFD>)M=PAK+)U'$-1]Q!NL:P}$;ORSQXR.)KWBZ?B _B;$3K&LA,4;7?\I*[>=1T4$ M%:Y%5[M[O?L5]_&,/5ZI:QM:V/6R619!V5FGF[TR>=!(U??B8<_.#B4*1/*' M]PH\^-T;"E[^(IQ8S(S>@?'2A.8'(=2@3G#\!/H6W6KFMA=>JPNI+ M_1$Y>O26'[R]YF0)K$P!.>G<%+C]&G 2]] N_^ZRCAKZN5=8:RY>_' M N[QLL?Q_FZM*TH<1[1$;%H/F*T>/F"Y^/'Z>!6D8KN+#EFAR$=?).>C'[;&LO0$A H?1PV*P+R.;2D&&6) MO3,_ 8]3-J:>Q46149_Y9IS"K7)(A+A>;AQ)/XEO60$\H_\DA=*B)=JH M;IZZ-R@-5M(-(9WXWR CF$'.AG"/I=XH^8FL*Z*;1F((04^X=%/BOTHX8D?I3GSO"0IO*/D>0:U>3S-/+7C.!]S3W$: MVO'T?^2R"?&:^&XRSF!."U"PZ3?I37FFW M.2ZR'%C&(*4@,Y91],[5X718RJ8T*;[RZ-!__W:,*3OS,,KC)_;P>*D2$// MDVF0>_81U.%4N2VQ^04=PB"08-WYK94JG$Y?,$#2)N_/8@\4>TKB4!].$>QY M"%\MO'F_%[KJ2I*WNJX"S))N:*H!,6S(94,L^T51T=TG?5WVE_@!KU.BHUTC M S>:LE#9?D10LA)^>>FH:PZ$O"-[Y*J_AC^+]X^9M\)L)-7-&M>DFEQ,QA&8_H'03YQNPZ6\THZN^##@[VNMW6'B#1Q?:8O_%!+ P04 " ";BUA9$VQ##RT$ "T"@ &0 M 'AL+W=O[&9. M:AMPDF7-AVY!O:X?AGV@I;-%E"(U\A0G_WY'2E:UL94@WMI-[&J+H@A*E8JS)#F- M*R%U-)^&LUL[GYJ&E-1X:\$U527LPP4JLYU%:.;0[^"0W)?F#>#ZMQO:72)_K M6\N[N$$E*N6!V(T_.\RH-^D5]]<[].OG;FLA,-+H[[(@LI9-(F@P+5H%'TR MVP_8\7GG\7*C7'C"MI4]9>&\<62J3ID]*1NW^*K%+@=VLH M>'DE2,RGUFS!>FK%++@=VLH -6BSC2_0BOAO(\,7$LM="Z%@AOM MR#8<>G+3F-B*EXWS#O&B1"0#R#CT93Z>!'76#Q5#]F[WH7LYV+%]E1P"76 M0Q@E \B2;'P$;]13'@6\T>N4]XB"T 5\P&(C]086OE8D271P)5VNC&LLPN^+ M%8MS'?UQ*'JMT?%AH[ZWSETMYZ70&P0KB! 2?>4:UMST7@U\4 DW M#P/8(O !6I":#.1HB<<*-UEOEJ<0]YE^1.:#K; %Y%QS/C4.J!0$A0%M""H_ MUJA$^#Q<#N&GQ>(6$TK.-)DR$VCR2=^U1"4@@UY)5EQ(93XJY MJ@?>K!U2D-VUYT]QC6\KT/=N"%\Z8T$LPSN\(#K[/A:2 MW0C48"M)B;6Q+ MP:+B*!6P89L.&(6KTG&!2GT@SNVW 6BD@9?P (T632$]Q*7AUM2N73FC9!&0 ME\2O-I',Z9<:.2T\.=G_7UF=X\D;3KBH A%/FW\-!VALA8.3=#(>3GAB+16& M+W,Y2=-D>/9X1,"=S097G.]=>P^'Y!7FW7$:CD<#9N]J#!-1T*K]^,3"-8RCW_0'RW_*&QXYSH: +=%QCP2H'N>S&MU1,SUUT=]K70)^;O^5 /[,\\/) \ M]9XE]UGF0Z[_C_0>G0.NTE4:#?AON0@C*[V4M&? M]E>R17L3>11O[W,?A=WX2:5PS:K)\(=W$4_^<$=J-V3]<"]9&>);3EB6?*U$ MZP7X^]H8VFV\@?ZB.O\+4$L#!!0 ( )N+6%DT'<]'/ 4 0- 9 M>&PO=V]R:W-H965T;!+&[YRS.+E:G M:^N^^HHHB.M:&W\VJ$)H3L9C7U142S^R#1E\65A7RX!7MQS[QI$LHU&MQ]ED M';NI9N+L\'Y].3B@/?'#9\4K?W>LV FN;5?^>5M>3:8 M,"#25 3V(/%O1:](:W8$&-\ZGX,^)!ON/V^]OX[KM]0Q^<^RNL]O&O6*>]LX.!*%H?:-T9 T&M3/HOK[L\[!D<3^XQ MR#J#+.)@2+*2QGD_-39M7"\&][X(5*-U@"G#!_*A^#P5<$NS%]+Y<0GJ5L2 M[TCZUA$R'OSI., Y;QD7G:.+Y"B[Q$OXITUH?+B5U-2>=-^#%]LFR+["0[MT.$':D9B-AF*;)(=/.!OUC.=17^SQYE>*E]HRV2]^.L\]%!"_?Q3FY/+C;M)1?,B6]D06<#5(0GMZ+! -F3Z>'DY0. #WK !P]Y_S='\Y\M+D5.*,*"4$.E"%:@L+0^"OOT3JL$XU4\0.2:?R" MG)!"*YDKK<)&*,-[K2O)Z4W:(E-9YA361 ::=E_AJ)NJ(UD@$B-D.I=Z!% M*0.-Q)]87>S05XJ<=$6U$85%N_ PM0N8.B*1.RM+H6E%V@_%NE)%)98D5A6 M*%KR@=E:QT!!H#6R_(+* \]OK>5 ,_1<^DHA-I /K!9JB4"5PJ4+JE K/N=@2 M5[#ZZ3>.+:;/D8$R!D4CO!W3YJP?F6L^B4XBDNC=DP/IZ$0\ M>W*<98<7Z?9RS]N!8D'C$;(7?)^YC_"\U9V1M^!R#H0;U-D"P*.XYM; M:2YTBQZ"3A@J>.TH)*@@)_92Q< X$;T*>\D-!:D8H520;8#JF(/9OGT/;M:!M^WC'0=P?))T,'X",8JXI5+:TVBXY(VL2K4_5TDE8H,2D*=0NB:R)_2PR/ZF] M[2W3Z7)XU(Y:R9CAG1MET+W:5,\E^<*I'';(VN](J9B^Z&A=[FQ?][9O=[8C M\9D$1*EPS]'WTNK$]EC\X;;ZE%FR#=*&.]'@%G..3+'AA;5T)6^+'1<6?*&6 MHFV0N[TLVI(USL=_0Z9+,M"XQE$6DAN'6 '10L%!OMD71==*$*94[#!EN;3" MV "'*ZM!P0,:C.$IP,!@(G]Y4M;+OEA),Z+ OT*7#2T=#,C_D=3$H^ST#CK MA/.&HK.'JA@'PO3Y,UT7U,3$8+]M'4)=PY?CD]+6+'\.Y&I R<.0)9>35O"? M4L;VCAKKN+X*Z=R&#T?6MC6I229_CXFR:9R][K4!M'NY2#5P7Y!',$LU+IRG ML\G1+,-\HW4G/KMHA9CQ?>-GIV=#R:WHS.2T?_2_22_!?QZFT])VZKCD[ZT#9UM8&/7@&3 MY$N4<\FU5..NC-V&]=*TN59%NF*YA>:H 7Q"'T1;64F8-/..]R;0FMXSSMP=J2",-J?UJ M/^*?I\EVMSW]/G@GW1*EA1MP =/)Z.C%0+@T78)LXY^8V8&J.CQ5^II#C M#?B^L&B)W0L'Z'_XS/\!4$L#!!0 ( )N+6%FA CEO?@\ %XH 9 M>&PO=V]R:W-H965TO,S446P<5B7YY] M=J$7*^>_A*4QC?I6%E5X.5HV3?WL\#!D2U/J,'&UJ?!D[GRI&_SI%X>A]D;G M_%)9')X<'3T]++6M1J]>\'F^;7^Z/'782;-\N7HXN1RLU;5C2M+\V\#*35"ZRM6-JQI;+4R561->'#;8@A8>9E'&UJB3H&JN3HY.S!^2==N<] M97FGO^>\ZK4-6>%"ZWXU]4L-!Y!\^]=5I!-SG9O0HGT+-0Z,R]'R1@_)T9 MO?KA3\=/CYX_<(2S[@AG#TG_WUWV!\2IC][E;=:HPNJ9+6RS5K\L#=:4M:[6 MO-[BO=#.@LVM]O3*' ?'$V6KI?$0JV9MP)XA*&_#%^7FRGRKQ7-NH8*6%0; M'UP%P;;ZW/JU$D'92QD >R@?6&P:V9S4@&K[9FW9%IJP1R&>VE)/U.W6JQJ>MC1Z_$BON7"7KV0KA*7SC8R68P[5I]J=RJ@C%,);9P60;S MLENC0#>C^-4SU@#VA(?'T7I0Y@Z;D:_=[+-A?"6(M(@!'/QKJQ%)\S4Y-J\K?*!H4TLR6V@@V@*___QI=/"=O.3'7QQ"MK#$>"&Y8UW38\= BI?Z"XZ.V4NR2Q6$>B\HC,0U@"M$ZN[?A\I0K]K1155O. MC/@R6VI",H/L:FS&PCH+R*MCM<0SA#/"@M(32P$ 9JR"+K G0J$M25EZE+'A M3-,4HG7F0H-'M)'C)/"HN7?P/?03UH#@FS!NQ%/O/,.]IE\A3O:.)A/R:B9JZ^ M2(%:D5=+*7R&"M\._<1 I,.8S%!+NA3KQVB4\%*0![8M6MV(IS7]5[7P&B?> MF!"G=%@U]^9K"W%(BKN?6]:G.5B^ $V M0.',>?+0WG1RU#D22RLCD4R5.V-56&M!$0E! O[;# _U2!^QB$*X GY;PM&%]C*.V;R6(" MO("03/8PPS@Y00X,P<#Y BP ZE!7&4(2-=&>RQ9.%Y6ZC4DWU$U1F:@[T"$ MWR&%"@'70'THY"P6!I".@1,8A!WMYQ(B0-Z#.PBZ)OBXUIPAK M1/V"\3_\Z>+D^/QY4'5EVM)EKK+T$I5_2_DM29##9@!/CE.0A]"KT*+=&K%(;0A0_: M594E4JM?1CT8I7OT'*&,19@X\)_(:2CJ.NX4/8LW2EVU8&UTN)P]@;##X=9) M7;(8;8!4SH&H(3B/W34]4ZJX$:V%OAS:]*<<4>$7!V@:%OJ"\6-LB9EC;>.ST['I15^"_382E(01]0N"RJ!14CMIIHHCLDCG86'\]@&Y@!/RXQ_[W2 []/N&.1O4LB!;H*W=[4[PAULV+4$@R0F MX_ 6WW/X';C9T5?)5E:U!GQGZR6'!YZ)7DG);+O@(B[6A%A0:8H@J,F:"LH/ M$:#AI(<'2_J:A@GR5;C2G] I'TM&97(XB"SJE+1BF M.6E9)XM8+BMP_0V?I^Y0S^N?_.34UT% [6 M^9T-5 A DTHIPL/$$!E-)"G(/SBKX1,0C$F/.P=K*<:$G-Y#3\$V? &*E2)N95!K!,E(XLL?' MY&A,=LXF5C&EDU [Y."5<(DQ1\7OR/[QO?D=@Q7%,[.\@&J^X+?^%MI!!'91L4O8T30.F>F"-Y(QKHXD^:9#]!Z@?.['?(Y!A*?RG<#(GV &J,*:&%D7'+E AQ&GO@;QIL MS$/LHB6?,GPB+K*#7U&QPB,K-/9)*@WK>=$Z#R;Z9;U)I1/]>7-UVW$+1MQ, MM]08$/T>VJ4?MU=R*TJL@_AKVB@)78DFK6V@*\',""KAG%BTA-ZRLP#O0^UL=9GLF6 M%0/K7,\S2 " C=+00QGE)1PM7/,7BC/+4Z">F*^-40 !A35=\PWL5J:*$2Q M;";N0AN))&85< W4EB)04HYP1B"$?M:1-;R!^C3P2RSY*D82?0YZ;J *$R@@ M<8IGH=O9+5UF*V./$AUC/3J*:D2TM;$XAPF,3RNCM MR4WJ=#V&:(F5B1N(E17LJ8(T0*>>R156'7Q"Y7FF4)09(_XU:$*@RH\VO9. +% M]T#<-3.T\P#K8EO]^#8Y;/;)9+0$A,DTEG(T.*%!DD<)LC-J/.F8,O?;+/>; M9*Q3F8L';8H239.?XVF:_,AV#[5\T]-I?W0JFG"XX9I_/KZ8'G53.NK 7&DK MS8.=T*P+$0<549ES0^7A M5I*"&QQ$H! H.>B [^G0GS/T9#Q9?LL*.@TML35G1;?SYKF'87/UM344@6]L M43ZABSKZ_HW3Y;#J1(I#@\GM+%HQQX@B)NI5@;PM() *W(*L5V(L$?[=1U\ M;\Q!3RY@VH,03>,TC135#'D"=.PN(';8EN0">FS"$UZ"C1$?/H;3@!<'Q?L'E'T \NJ08K+TE8Y?W@ M7H 7+WM3:^N5C+CP1T'7=GS,9B)OF1VT33-:#OC#5S173\,?2*!N\5)<7X: MSG6Z)W%)>L53)@HH&GGQ54,W).;#4#GLJ=EPJL6C*]TIN$F-RN^'B+)569) @_X3=C*X1\)UC-/4Z#M['FF]M_2 M6FGCAH.U,\TC1>WN^Z9/DG,3IY>FT6MF).NRU[:GCL_')Q05]F(Y/3H]Z M&*CU6@RS?S&>'E\7EX0 :%_3C4N]B0>; M4X*&[:?'4[5_=GY "M^GY^GXZ73:*]QID>;[? ET/KGV MJ[< 3>IE]J,;?<'F1!:HL$P\.. ;'X8#)R&< T4L)SCB@I 1"B92P]PM9M:M&\UW^&S)1=1@13\%V.Q*!%OPA(*N3_R=S80EP.F]/DV5I= M$R5V!7H2IL3#S=*])]SOPN"08A!WS.QXAH%+H4),>?T&\3V#@F(>N5+"1E;E-O ?OD M/=/<'UW=WHP.U,792;Q(D8YBAF 76?QUY:HG\A=11U<9)EN?AM[Y_K3D@8S(M4&YD.+ E(2)@Q\"9\-<\+R>0H:E6\G]<9; ACLT9W3N;;(HDJ>IE*3R+ENW)Q W M7VC"%OS+-K(C(DI^_M5]V_UX[D!^_]8OEU_>O=<>4$Z9.\>K1Y/SZ4CFT.F/ MQM7\"S*$?>-K_K@T&MZB!7@^=^?;XQ^T0?>3PE? !5!+ P04 " ";BUA9 M.2TMBX$M/#!!P &0 'AL+W=OFBH[MLTFNC45B9[;3PK^?[:19"VF%&%\2 MW_EYGO.=K;MHP_BCR $D>BH+*L96+F4ULFV1YE!B<<$]H&IGR7B)I3+YRA85 M!YP94EG8GN.$=HD)M>+(^.8\CE@M"T)ASI&HRQ+SYPD4;#.V7&OKN".K7&J' M'4<57L$"Y"TUY\JR.Y6,E$ %811Q6(ZM:W 'X1V(B=-=*9/##VJ(WO MV=AR](&@@%1J!:Q^:YA"46@A=8P_K:;5A=3$W?56_<;DKG)YP *FK/A-,IF/ MK4L+9;#$=2'OV.8;M,D,M%[*"F&^:--@!P,+1;60K&S)Z@0EH2_!>$H(#!+\E^&^-$+2$X*T1!BW!I&XWN9O")5CB..)L@[A&*S6],-4W M;%4O0O4[64BN=HGBR7B.G]%:H#EP\^9H"B@A(BV8]#F@$4QI9J7@+X&JSX\RG03=G03'U.,? M:D@0FK(2T*FZ"'\6=P^-1&@D]A8QV$8!I>1O=XM<]JX W"?53R&N5>#1W/ MW8?-7L/.W>&E-^Q@3;;V3D\J@: _,! H9365SH^K0P((H& 9 >&PO M=V]R:W-H965T%1IV-D:WD(,2SG6Q([56"!BDVA*PN1WA 1BS(*/QNV-Z M_98V\7Q\HG]UM9M:#EC!@V"_*-%%['WP$($,UTSO1/-NGIFEI<*IMP5-6WL MY*.TEII47;)QJ"DO+WCE^XJRC1SE]J7LM31/J!=>%0E\X ?)OOF_,>KWPI+<. !X%[]$9H$MRA, BG [Q)7[$\297 M>)?*O$.'5[3AA!XIJ3&[5'4+G5Z&VN]FJ2J<0NR9#T.!/(*7O\WG@>?!I2G MO?)TB)[L:@9H'!QF]^-S;;0BHM+_'W*K.PS,,%,P(#;KQ6:#G.^"W]\@-PQ] M2V[>R\UO.K4GD.8KPE??]8<29.ZZH$*IJ+EN M6T6_VC?:5=M?_H:W7^H1RYQRA1AD)C48+CII72MN'CI]@,$EB(0$& "T[Y]SX(7RZVC-GVQ2' O9P]V#^"3 MC76?2<$ M(D.43%=LO+:&'.>GR6+_^.Q([*/!;YHW?NN9I)*5M9_EY2{[3:8' MB$M.@T10^+GA2^^CO8NVH9:4\G]ORH\Y"<9J\3BCC M7#5EN+*;'[FK)P),;>GC7]ITMM.$TL8'6W7.0%!IT_ZJVXZ'_^(PZQQF$7>; M**)\JX*:GSB[(2?6B"8/L=3H#7#:R*8L@\-7#;\P/U->>[(Y73KV(;**7#V_ MM*5.-?N]DTE %K&=I%W$LS;B["L1OZ/WUH3"T_Z(=S"4?!#C'7PEWB]NK8S^,U8ZHG-K/(K-VL*5R1XR 6;> M::-,JE5)2RPR.C)X^GVQ\L&AI_YXC*$6P.'C &3.CGVM4CY-:LGE;CB9/WVR M_W+Z9D=YAT-YA[NBSQ4]!BXW>X?"J;48NN,YTR>NF!XR0LH"4AU;JM:F;MDCY1C:HQJ M,@W?,0&'WUKX)DS:I&63,:FR))5]PA3%]5%TU3YHLQ;<1:ZA+2DC7.R]D _; MC!V2&$[9>V@6K>XP?9J)484+.5*N_*N34Y;!3WSB.LA#7X,4@*[M%V'#*6V M$9#*#CK(>1'UR5.A;IA6S(:XU!AUU?/01\(OJ)6JM9%<_YL?H=K8,-2E48$V MF4Z52*10$[:RAD(%(WBF?BVAIQ*7&R@&"&>1K0[5J[%^A8QJQ6[MI\]N/8 M'HSH3)4 PK2,1PW *=HH#P%U2(EXSE8Q8%_/^785#YRQ-ZL&(2RZ2:K8WNU, M^[2TO@%VX/_2:-F^U<"Z;'*-K4YU7<)BS88=W.)WKN^9I6L30<2!CSV^J T M56C?Z_%R3#\L%I?)GE0,J93C@?:G+W[M-HA\89LR$[[DG)28V)-/C6D/HHT. MAUB\+[!VN*>:)!G,N4R_Y@([4YU8>AG>Q.K[XH6;MXMEF>DNSS+:YB, MX]<7TU?T_.F3U[/9](VL=VMQ9?_-WHB6O([S>A6W1[ ]_V!KG=+L]73OF"ZJ MVDFV.!N8Z=9,K4H>/-_>$SRFK1P]VS+.IL&41=?5@UV)0R1S-TP0$NDV M<=KXW.T:N((LF@":*(MF#2@@JQ(^7T6I,]U$#%&#-\.L$#2/BJ2]/U6K1%^GG.\2,6.S9$=14O3>K3[M6IL87N5(-?0O[1_UK;O-3HV_-O-Q'#OFT(=CMHI@K$,K_2C3%8M!88HFQ\9 M%B+_=1UI@^#AAGC/5K]QPR&V72C@\$^9VWN'6B)\ES8*WZTH1G=% , _X*GAW M[T?/>[\O(ZA8U+"V*]HNB2K8E_0W9+&F>% H2+(0"<[:/2';HOYW^0_J,PX9 MB"\DN+ E/RH.DZT[);1O'6 _.GN)TM]?+876XG"_:.^F]>7NS?Z\$-=V8#[.GPL)SLQ #?&PO=V]R:W-H965T,+MD/A MO]_9;:-."I7V)?;9]Y[?Q7XWW:!^- 6 92^E5&86%-96DST60$E-Z=8@:*= M%>J26PKU.C25!IY[4"G#.(K&8W6F*PI8E%R4H(U Q#:M9<-F?S(W/F*DD1'UUPD\^"R D""9EU#)R&9UB E(Z(9#QM.8/V2 ?Z DK/:6"RW8%)0"M6, M_&7[`_8Y]$;@'@+B+WNYB"O\A.W)/EJW##MLHG-37RI'DWBA'*7LK2:=@7A M;++@IF!<,9O\%YP6Y1V<*P M*Y5#_B\^)'VMR'@G@]69(=\UH"PQ5[M4W^7Z(.TW:(?"T ++"NN7C\8IJ@U9.Z@"NEY5FB$]U.&Y$QC(7>*+"%6*,GB M0JTG[/A&T1+6AD2:$T;W9Z%,0;>7R#YK-*:+]HB-+WKJ_AG["L9,]C>U3 MT],N6=L0&O6$T8EV_/=SS2@EZ[3L"*<%:V<8V[6K;="X;K_U- M;SK6+==KH0R3L")H='HV"IANND 36*R\\U*TY&,_+:AQ@G8)M+]"M+O '="V MXN0/4$L#!!0 ( )N+6%GA=#'_&0, !H' 9 >&PO=V]R:W-H965T MR5KIDE4QBTVADI0^J193&\6U4,RZ#QK%3+56<(F/ M&DQ;UTR5BC4<1XDP7EAPP^5=0O18M:P V[1?FX>-5G1@%+R&J7A2H+ &_3Q8 M)O>XW/E[AR\.AG >Q(X0""^L0&$T_<(U".""B\;W'#(:4 M+O#I]QG]@]=.6G;,X%J)?WAIJWDP":#$/6N%W:CCW]CK&3N\0@GC1SAVOG?D M7+3&JKH()@8UE]W,?O;G\"1@$K\0D/8!J>?=)?(LWS'+%C.MCJ"=-Z&Y#R_5 M1Q,Y+MVE;*VF74YQ=K%!8W5;V%9S>8!UQ?0!#8P^L9U 4)D8U#\P M6+QYE=S&;Z_0SP?Z^37TQ9:JLFP%@MJ?"9]Z%3X5K)A@LD"@>H7+E[L[P18/ M5%CVDKBKZ2^+>\:C7Z52\3R,)Z*?2"IB, 1]0(S#D):@_F'D8/DIZY%2Q MY@:6-6I>T/Z#M*@EC/*0L3R"DBI7D:3F'=:HVR. &]#&F$)P.C.$QN M""N!-Z\F:9*^'>8U,Q4T[.1T&HB@M5SP__JH+)S>P&@2WM*8^I&($-"?*,D\ M>2=A2MQ?#PF=/7E!2Q)FI">E.84Q:7I.;I3T=@\)'$S=F+Q$APK2]GSZJO1\ MW/GF?OS%)P]SN/3FHR?]BF[XX+NR@4*UTG:M:U@=&O^RZW>_W+N_QD?2QZ4! M@7L*C<.[<0"ZZ\2=857CN]].6>JE_K.BGQ=JYT#[>Z7LV7)AM_AXG]02P,$ M% @ FXM865S+W9^N @ L04 !D !X;"]W;W)K&ULA53;;MLP#/T5PBN&%C#J6RY.EAAHVA7K0X&BZ=:'80^*S<1'9'HHB9UNE7TR):.&M$M+,O=+:>AH$)B^Q8N92U2CI M9*UTQ2RI>A.86B,KVJ!*!'$8CH** <>EEL];VH+.9:JS@$A\TF*:JF'Y?H%#; MN1=Y>\,CWY36&8)L5K,-+M%^KQ\T:4&/4O *I>%*@L;UW+N*IHN!\V\=?G#< MF@,97"4KI5Z<X?I]2E=X*&\1[]M:Z=: M5LS@M1+/O+#EW$L]*'#-&F$?U?8;[NH9.KQ<"-^8=OY)K$'>6.LJG;!Q*#B MLONSM]T]' 2DX04I=5T MRBG.9G?R%:55F]J.!\R>V$F@N9H$E9'<>Y#N418<2?X R@7LE;6G@JRRP^#<^ M($8]K7A/:Q&?!%QB?0E)Z$,$E?9M+B)?\I\QUNN,F%,HU&^'FU,E;3 MN_AUK.(.<' KJ#4^C9DF:O: 2" M6L-!AX[1/ ETG.93B;!6@N:1RPU8UW0P: T9M2W!TG&NJEI)RFL:%!R,485ZTRX+0PBOAQ-TN!$ MF\AVQQ-=PCNF-1ZH/7HNGP'==50[./:5^N_KK]I&4>*-&1R<>_<= G0+>?M M$J#D4<%,Y2$ZD%'6)M-YEF87C)R1B:8SK1 M<*^:VYGJ:47.MQV(=X4_0SOF]807>#M=W1K)&N)S4CM7=/X1UWK)*,%+[],U M%17;MJ6P+GPRCN&Y^6*X-R76J%=^%C:46VK!=F#[&[=-VRGS8WL[]YE> MN=P(7))J>)RE/=#M_-L^6+7V,^=*69I@O5C17P;4;@.]7RKJG.[!&=C']9G_ M"5!+ P04 " ";BUA9 0LPH\<# #M"0&0 'AL+W=OIWTUW=(R;*#)FY0%$4OXI":>?-F^$1QOA?R496(&IZ:NE4+I]2Z MN_0\E9?8<'4A.FSI5;(AFN:RJVG.HF\L$%-[3'?3R&5ZVSG-NU6[FA#R:+^=2[$$:M;T(SABW51A.YJC6;5=I7L.]%ODC3![XND8UG7N:L(V'EP\X MJQZ'O8$S@R^BU:6'F[; XF6\1YQ&8NQ ;,7. MYC=P&A[P+S670&+QP+#2U> NU6[M^ ;>S===I9_AMZNUTI*T\/MK-?

80T>L0YONX5!W/<>'0!Z!0?D-G^?%#D/B? MSA",1H+1.?3EM6@:DFF_$5=&K,3W-9+O@E$6A@\P4*GALZO^P *X@HVHZ7M4 ME_!02L07FP?4>HW-
&N78_W=YA3#YW((NQ4[QME!3&*@\T&&A=O*9YDK#A)]Y ML>(U;W,$KF&-VZIMJW8+8@,=RDH4\!V$S'?C."%K$J:),;=DLUGDADED5Q/F M^BR>#GW,14/'E^+V!, G8R-
$+@M2^/@A8P'[!)D;IRT+!A*64A!XP"<@(XB&AZ$PJ1;E0YI4BF" (($XAG@74J/18M"HY MB0BZGM.BJWDC1HI3N(TF!YGJ4_%&BPZ(P]@AZ"C5^!36])C MV&$\Z3A2O2][';F)/[-=S1(W8\ST.O1#-
Z+VV5X';IJ&4[MU-TJ?OAN('TH M,#>[*K'FIIE:$"?P$\DW;]5WCN<_A/A!L\"- >0?2, U8TID!]I9PIR1 LWPI@A#:E*0!C"+ M,HAF[-]08>I&OG^BP]"=1:3+FZ:KQ3,>./]%D7$:0>)#%#)
(XG<(E_W_A/O: M8>^=_((;E%M[T5 $M6MU_S<>5\>[S%7_"S^Z]Q>A+UR2 A74N*%0_R*-'9#] MY:*?:-'9' I::+H>6+.D^QA*XT#O-T+HP\0D&&JXRS\!4$L#!!0 ( )N+ M6%EX+>UZG0< ,H4 9
>&PO=V]R:W-H965T?+FV =MIF@!):D39[8=B/XS(D<0M1:HSE!]]3TS M?%A.9%G [H< B3BJ7L M:;W6%=[,:[-2#99F,;%KHU7NA5;EA =!-%FIHAI=GOMGM^;RO-XT95'I6T/L
M9K52YO%:E_7]Q8B-^@>?B\6R<0\FE^=KM=!3W?QK?6NPF@Q:\F*E*UO4%3%Z M?C&Z8F?7H=OO- R[T/=VZYXX3V9U _:=;O,\O1H$S2)X?=]K?^M]AR\S9?5-7?Y>Y,WR8I2,2*[G:E,VG^O[=
[KSQQN8 MU:7U?\E]NU>*$U4/'0Y; DGP@@#O!+BWNSW(6_E&->KR MW-3WQ+C=T.9NO*M>&L85E0O*M#%X6T"NN9SJ!2!NR/NJ#;!#:OQ%S4IM3\XG M#4YP^R99I^VZU<9?
T):2CW75+"WYI>=O2XL9$?$=EF^5 _=NR{<. ML=TAQ59:%);XO56C<[P@S5*3>5VBK!V.7NZ,C-^[% _7&JBJW)^1JI4V1*0MK M4cVTJKTB5Y*8V.$HU&G>5K(8P63E,?"&\NI
M#,/GQLJ(QCPYP%@!JQ+".0WC&,:&E*7)"6$!HQO0_$]Q^83L^3^$)0U2&DOG MGT@3&J7),T\9%4%"I12O^\KCB(8 -PQI*A$9D5 1"CQ)(65,+F7+O(9%) ^XQ
MA;U)2D7,O[*7IQS_@P/LC0([$41<@C3U]@91A.<) AXQF7D'LZXKUWQOM\PTBE?W HUZ@*\'%?&KJ?T:P%]EF\V#_K3 MW'?45=C1D[]$0VJ,!M _:VC,T1G3O3=9LC-.0+959P,OQIQHYC(Q@J'Y)
M!.5)2$(DGR1(%?2#FXTUDSJ=$7C(5 M-7*2TI:1"6B#LV,_00R(B:0Q3$AHG MK"T6' @!D"*K24I9* @:@T0R\Y2&841$3)E,R6] UG0NM5K'(4T$;!I-' Q
MKBRBG(4GOEAE$KNJ=$/I[R$'5/;7IK"%6_YD=*G:F#6PMW &5] 8 4<21BG^ M"M@9T21!GM%41.2+4955+?G):HN=8W4R)' ,@X5T%U<([CWRP" YZAQPDOZX M4B^0AI@ \'R0[:\A#8)@6'T
@@1GY:!9MBD0$C^Z/DZOR(9QP/MU'6)?\B?HY&%,DIA&$2<\Q#)%?P]B*H/$H _,M M9E!0;G* G=\5MC:/M(6$(CA9O:E5TAI'WM .4>.MIT5T*+" M+;BBRJ.YUEZSR*V M;K'AE.QA.^'
=L*];. =6FPRJ\4 /*?_BN] 4M^?9XY 1OYIZL[%=O;K;K79 M7EN?XPNGC=QC"N)?VP3M I:#?20]> H.N,;G*HP;#KO M7UV_+8QC@..:NR+1/6/1(3)04OI2_8d[8=BC*9(ZG8E$S\G171,WNBF^R$TGJ$O
M1N!%88#!=@P13*H6;?L^9E?'L:HOB/D8XP4 :S3 MUA6&.&!@<(\\2!T60GR#/$A+E&(F 3D6N X:^UUA0*,D]@'9CSRR&OABXAQO(MQPBB"P*F3ACB:,]%?$<=.ZA[GCD@WY)-
OSR(X'T P&,N4XG)Y<""8TC:6 1] M&*3 G$]VY+R,P0.0L\(GJAL%:1L%1"0 $DY^+_0"O"T.F8>>XSX)VZQ'2B=I MZ,/08_]$9CNX>^[;!Z,CP(>B_SVEO4P8C5C0M1@1@B'QM$>?.P;"=N2]=&U*
MQ"WZ@?,>A2,=^OB5)0!'QC'X(+\._3;+N+N7?N*7/|)MN'ON?D ?TOE>_@[M/N^7SJMG;G9SU)KHU6S=+/Y:KU6F':;=@R[W7/WN0>FO=/ERK$P]QQCRKN, MV>H%=`GJ?7]"8E#]MGA
"]5G<)2@:0\;?/*>F;O-N7]JU./Q8M #?JW=KS3 MZLDT1U'>JK+<>N#%/X%BXM>?/MTURB=;WY>0>0O_%II> N5[R,(>@$V4^HY1(/3&)/;M% .VD53K_W7JEG=X(>8OUW" 6W&PO M=V]R:W-
H965TU\W6CD!5.J:[* @ROV9<>(N9 M^[92BYEL3<4%KA3HMJZ9>KK%2A[F7NB=/GSBN]+8# YBUK =KM\WJP4O?D] M2L%K%)I+ 0JW M[["J+!#1^'+$]'J35O%\?
T) YWPG7S9,XYVL_N2%*>?>Q(,"MZRMS"=Y^!6/ M_J06+Y>5=D\X=+)QZD':B/KHS(QJ+GH5O9XC,.9PB3XCD)T5(@<[\Z08WG/ M#%O,E#R LM*$9C?.5:=-Y+BPE[(VBDXYZ9G%6Z8$%SL-
5[])K0?0H()UR13" MU6>VJ5 /9KXA.U;:SX^8MQUF]!W,*7R0PI0:WHH"BZ_U?>+7DXQ.)&^CBX!K M;$80!T.(@BBY@!?W3L<.+_XOIU>]MW\M-]HHRI&_7 *W@TM>AK-UPHF)%I8@,E43^ M 7?
\P*) (D$@^,C/CV^.-<.,47S3&IO38"3064U- ;^TW#PY"O'$$4@R,I\- MI].P,YZ2\?O>&+D,K2BX[M"(#IZNA%65S)GJ1/ -4X;GO&&&SD!CWBIN.!+; MC"A.+.&I?
60_P=5%MY15@4IWC"/F(@[QN.H8SR.!W#+-,_AX'H2%M=LCXI: M; >A@9JS-N2*Y19/AW$6N26(W3(.[!)E8UC;4%_;IE=8$C0(-.MZZ8$I&WHV M@#".(4S&0-D.KU]-HC!Z0_&J7&Q^T'XR3=V2.L-
IW-M?"L,+BT6-^Z1[LO'O M-4R3Y_(X!K+/R9MC0"BU1MFT6VRBI:,@L%D6C))LT-,^ETII24;3R;.4=?]> MKI.X$SZ7% *V^#.6LU6BVN +=;>T%=NJH"/*7<.O3^$< MP5+3),[+
(13_SYGB)R[9.4:E1JT!A;$YO?G1!!V]U$+]LX%7H]JYL:XI4JTP MW>SKO_9_#LMN8#Z+=[\='YC:<:&APBVI!J,Q#6K5C?+NQ&PO=V]R:W-H965TT91N*= ME&MK1G:[T$M' PZJ2^JRW-
&9],ACHV1)70O?K-4H:F==J)0S]58N!7BL4A35: M58/0]]/!2I2R-SJU?==J=%HWIBHE7BO0&SHEU.,Y5O7FK!?TMATWY6)IN&,P M.EV+!4[0?%Y?*_HWV*$4Y0JE+FL)"N=GO7%P+[^&
(C"^-9B]G8NV7"_O47_8-=.:YD*C1=U];4L MS/*LE_>@P+EH*G-3;W[*=CT)X\WJ2MM?V+BY<=J#6:--O6J-*8)5*=U7/+1Y MV#/(_1<,PM8@M'$[1S;*]*(T:FJ-Z!X-J%QPR[56E-PI612)D;1:$EV9C0Q
M]>P.KBLA-1S=BFF%^OAT8 B9QP>S%N7@EO*12^.R?Z"K@6CU15!L9*';E MV_YK/-5&48G\?6CQ#CL^C,VR.=%K,<.S'NE"H[K'WNCGGX+4_[4C\G@7>=R% M/IJ0#
(NF0JCGX,BZJ%SAJYV"[P"= P]*.:L:8I<: M,"$5E7+AP0(E*E&!D 6(@NJSY#2RT+:&/-TL$1HIFJ(T9']14Y%((5JZKLI" MV&0T3?WXHR_0>3%<4J-,/ 2/X4K288(M1CS
E/(S+PT$GA\1ON>30>2%PQ2+TR''7X\D+0E4R88Y@T9!7E,W]2+?9]] M^EZ0A-Q(O3#*H*/2DEVE)=V5YO;EIT+[M+8!C7GC+,WCH1KK1#Q<8^/M <". MM'54KY]V:')$5"M;,Y*)7#DB\0"1S-
=WY6&EKN&KW8_)9'Q/E;1 ^-08;8AQ MJEL0!OX0LN$@ J^E/?62B$F,D_XP(5VAFI54ZB0*CB%.>8#.@CG:.C[* MDY!Z\WZ:/ 6X> M>D,_H?
&\GPSABP,XBG,O&:,')*:XGV3['(>)%^>A&XFS9SX/D4KP:9:SV\3O M!VD7K=F.UNS5!\ '42KX(JH&8:PI\U8WVJ:7V=6'6.UO&OR567*:Y=#?;'(LV
MQV+/RP85;>/:G0"4A9+N1&S$Q,XYL'L;&&]9U$/[M[TRRAFVU=!PA+!HB6B/ MA7FIM(%O1)ZA1)(MY['O%NKP",B:PIL@#_11 #>EOGLWYS.@)"0N.J"C B'N M1_%;>R#:$BRH].B<*>"QQ*J
H!\,]T;OZXJBK[@X0Q+\6_@X&;=Q3M$(\M9 MF'>PE^_8RU\KRNN]C#&5A"E"1W=C/Q'V+E7;J-!C2 M2#SDD1^)-0V]*(K: !/?NGPI'(45U]A:4=6KLGH$4[?U*^GZ(QL+S0>:RU1) MNB''VZ23O^
90XZ;C5 %Z6I9SI;0AMHE"UX'+?KM5F)&J 6V,/9I4@"=HM/: M+.GEL&HJ=P_;=RL6]$PCX,OSJ]OW8WI'J 4YY,-!X3U*4MN"ZIOL';2V0Z2, M7S3<3FZ@:-16\(8O88?
T,=A[BZR04/C%I>F*TTCCGB6[WMVC;NS>,D_3W8OP MHPU/0X5S,B5%TFU#N5>6^V/JM7W9T)+IG62;2WJ8HN()-#ZO:[/]PPYV3]W1 MOU!+ P04 " ";BUA91G >@AX# !T!P &0
'AL+W=0[$WXM/=C_\[DEOID6T\+WOI-D$K;7# M1129]L6>FX4:4-+*7NF>6QKJ)C*#1EY[IZ+6!P74<^%#+9K/W>CMVLUVDY(MO-%@QK[G^N$*.W78!$GP./%)-*VU$]%V/?
&;]%^'FXTC:*94HL>I1%*@L;] M)KA,+JXR9^\-_A!X,$_ZX"+9*?7-#=[7FR!V@K##RCH"I^8>WV+7.1#)^.O(M#.8MG>/3\8/]5Q\[Q;+C!M^[D]1VW83K *H<<_'SGY2A]_P&$_N>)7JC/_"
M8;)ERP"JT5C5'YU)02_DU/+OQSP\<5C%SSBPHP/SNJ>-O,IK;OEVK=4!M+,F MFNOX4+TWB1/2_91;JVE5D)_=?E"R>7.'NH=KW%EX=<=W'9K7Z\@2W)E$U1%T M-8'8,Z
2/BII6P/O9(WUO_TC$C4K8X_*KMA9X"T."TCC$%C,LC.\=(XT];ST M&9Z/[U8J$E-FU A?+G?>&:CH57T\%.[&RTRQW4R[,P"O.P2UJW_EE+ZSA-/Z7KV78%LU&BYK\QHHOQ;['>HY
MR;19=9Q)_$Q*GZ0@2RF4AM^510,#?W!'A$A:C4U+%LXX763Q3R%(JB(DNG:I M%L:,7%8(E3+6P(^0+\.X6%*G8&&\2MP&R8OL@H0LBO(\NRS#95;2)DW_3VX*
M_JI\4%Q"I;$6%GBC$:E*6;J5=M1"-B"DLRW.HEE"25Z(3]N&_J::T)7D*>4F:&=PIRSO(M\RQ<,@9%G(1%R>"R5Z,DVWI$]F6V):Z2" _(-1"^3'+7Y.3A:X]U"75[O71Z
MV#)G9^4RZF2_F,^O4&ULK57;;MLP#/T5PAN&%C!JQT[<-DL")-VM SH4[2X/PQX4FXF% MRE(FR76[KQ\E)VZVIMDP[,669/+PD,L#FXXLO2NH-H,EJQ)5ZC_;2ZU+2+.I2"5R@-5Q(T+L;!M#><
M#9R]-C,L3%;:W"9S)6Z<9OS8AS$CA *S*U#8/2ZQ3,4P@$1C>]KS* +Z1RW MUQOT-SYWRF7.#)XI\847MAP')P$4N&"UL%>J>8?K?#S!7 GCG]"TMED20%X; MJZJU,S&HN&$?
[&Y=ARV'D_@)AV3MD'C>;2#/\A6S;#+2J@'MK G-+7RJWIO(M<>E$N;::OG+RLY.W2A4-%P*8+.!<6B:7?"X0IL:@-2%\H/_BX".C(W,XBBQ% M='Y1OD:?
M>C)$^BG<*&D+0V\E@46O_I'Q+2CFVSHSI*]@->X.H(T#B&)D_X> MO+1+/_5XZ3^E#Z^XR84RM4;X.IT;J^DG^K:#&V4_NXH[F(-S8KE. [HYAC4 MMQA,7CSK9?'+/3GTNQSZ^] G9R6Q1@-
H 9@@'YY+<56VHYN:PXPPS)IC, MR=;">R9K:A'0:T'@.63)<3A(^W!6:XTROP?20AK!_-4>A&F<;OL_YN$@TB0\ M28]A3\D'7NE'@(%LFE 8$+&P0=V]R:W-H965TYN+78?V@:7;OLP[(-
B,XE06_(DN;GU MUX^2DUQN3=,6 Q))ELF'Y$-*]'2G]$>S1;3PV-32S(*MM>WU:&3*+3;<7*D6 M);U9*]UP2X]Z,S*M1EYYI:8>Q5&4CQHN9#"?^KV%GD]59VLA<:'!=$W#]3^W M6*O=+&#!8>-
!;+;6;8SFTY9O<(GVMW:AZ6ET1*E$@](()4'C>A;^PKAT0N?'W'C,XFG2*1"L# M^AL?.\6RX@;O5/V'J.QV%A0!5+CF76T?U.Y7W,>3.;Q2U<:/L.MELR2 LC-6 M-7ME\J 1LI_YXYZ'$X4B^HI"0%>
(O=^](>_E+]SR^52K'6@G36ANX4/UVN2< MD"XI2ZOIK2]_U_T_!K@LH+W=HL:%LK8GS5:H9'8MW"+$M?*&AA\X*L:S7 Z MLF39Z8_*O97;WDK\%2L3>*NDW1IX+2NLGNN/R..CV_'![=OX(N
2VRM(HA#B M*$XOX"5'&A*/EWP%[^%,N' _>K(S55#9_G0NXQTO/X[FC=&U:7N(LH+-B4' " M8/[R!\38 _>II?0YW>J:94D9PVH-;RCH[M +50ERH/W<$=)/.?V1>#S M;G]IK3U86^VM#80L58-
#*,DL#513QF+EY*FD8*UJ.OQ";JYA7V]/+/H'LW0!>R3A)';59F&>QHSCQ8S;Y#[EL3+Q& M;AIG*8PI P6;?)/>)]3Q/$13\(Q*_X?OXPQ_Q\06P3)BN>]'!=I#BQED%^0 M*4L1>FMK?
TL8JJ8D*K[PZ#! _?SHRJL[&+P%S!N>MU=-(?&]0;_Q5@*)Y.VKY5'G>/'QHW?7]]$N^_ M4MYRO1'4+FM&ULM5;;;MLX$/V5@5H4+1!$LNRD;FH;L),&-=!N@Z;; M?
2CZ0$MCBRA%JAPJ3O]^AY2LV(%7V5V@+Q+)XS21B[L;.) MJ9V2&F\L4%V6POY:H#+;:32(=@.?Y:9P?B">32JQP5MT?U8WEGMQ%R67)6J2
M1H/%]32:#RX69WY^F/!5XI;VVN"9K(SYX3O+?!HE'A JS)R/(/AWAY>HE _$ M,'ZV,:,NI7?<;^^B7P?NS&4E"'"^-^DOFKIA&XPAR7(M:N<]F^QY;/@%@9A2%
M+VS;N4D$64W.E*TS(RBE;O[BOJW#OW%(6X/E%K!32JTGL M.)UWBK,V]*()G?Y#Z#?PT6A7$+S3.>:' _C'#[+"F.ZR+M#?@+5:G,$Q.($W2 M44^\8<=]&.(-G^:^SUCH'-YCOI%Z
W,O&NDD$EQ)RI2AVB)\FZ]X.@OJ^[& M-$E'QY/Z379!E/!N<)V]*(TZ2J_*Z+.%4+R&"+=A0W\P MF6BTSY2NA;3P5:@:P:QA3H3,E7^&E]QASKIS!3PEAV-\>Q$=Y_NE0%@;Q2>" M+[+S"H-@]?
5W;*RUJ'/I85T:5H^FID5&R3R@/2!*H/:9KCW3NQU3T3#U!B7% M2JIF.<4CYOD#\W7'7#XPOX"72\W83$T\B+S:V<8TJ(7.V5;XF#2O# M!;-\5EC+ 79TG\.+9^-TD+[E5GJ2#!+>N(,">+:'
EV6+!/GE^S_J+ W\^]28<>$/.Q/%=I IUF7_^A]*:B M:P;S2,T>")\[!+*KS]-:_8/Y'QR_C^3Z2,M!O;]#L(VDLE\1D\%Z00TGT_/
M65[GXV&0Z)OQ^5&)Q7MW6XEV$VYPXARU=LTUUXUVCX1Y&!^%9?1< M7ERS:W+ZFC5CFUN[Z3A3A9MR91S?NZ%9\$,'K9_]K4Q;M?Q";JGT^QO4$L# M!!0 ( )N+6%FZ8]/$X ($@& 9
>&PO=V]R:W-H965T;[)LDP9^9$ M%2CI9J5TSBQM]=HWA4:65DZY\,,@./5SQJ4WFU1G"SV;J-(*+G&AP91YSO1V MCD)MIE[?VQW<\'5FW8$_FQ1LC;=HOQ4+33N_14EYCM)P)4'C:NJ=]_FD;.O
M#+YSW)AG:W"9+)5Z<)NK=.H%CA *3*Q#8/1YQ L4P@$1C3\-IM>&=([/USOT M3U7NE,N2&;Q0XIZG-IMZ(P]27+%2V!NU^8Q-/K'#2Y0PU2]L:MLX]" IC55Y MXTP,
<0@;A[#8TO>]6%XRRV83K3:@G36AN465:N5-Y+AT MCW)K=-UR\K.S"Y7GW)+*U@"3*5PH:;E 2[!DB6I6S"Y?4 :)HDN,87-CEB#> := M*V>K2D/RFRV\)18OB@;HR2WF2]3MN\,/9+JYG>.:2^G(_
L-;Z$?]<+1R"WB M7C@(]K(4;%N >6?4B_NC+G3&O>$XZNXM$L%X;F#8&PP#&/5&X[$3]Y%78XBF M(!2-U$U85RZN@!3EK8&EOZEIZQ!X9.-.PZPJ_Q'/1.XWA/^%!5^,^Z.T>]
MKF88*:Y*:>M&;T_;,7E>3X>]>3UCKYDFT0P(7)%K<#*,/=#UW*HW5A75K%@J M2Y.G6F8TZE$[[I?*65W&Q>@_?.8_0502P,$% @ FXM866X$<0,[@ M+@4 !D
!X;"]W;W)K&ULE911;],P$,>_BA4F MM$G0I&G30DDCK2T#}$#5RN !\>"FU\:.8MQW?GK.31@6Z"EX2GWWWO]_9 M/J=[;>ZQ +#LL90*QT%A;34*0\P+*#EV= 6*5M;:E-
R2:38A5@;XR@>5,HRC M:!"67*@2 W#*4CIA CCH=$,VI0N\A\4+ QM5,M2XXPU?*;6-EB'+P*V K6?"OM MK=Z_AZ8>#YAKB?[+]K5O0AGS+5I=-L%DET+5?_[8[,-10!P_$1 W ;'GKA-Y
MRAFW/$N-WC/CO$G-#7RI/IK@A'*'LK"&5@7%V6S*L6!L0LF%/M2Z"V2(Z:AI;PN.LR;'),Z1_Q$C@54'=:+7K XBOOL;C%C MEQ=7O\N$A-
VRQRU[['5[_W^_7J)UM"]_SA%6ZOV3ZNZ+AAAQ7,8!W3-$G.&N=8JS5AIX)==B?!?@(B*,C@*4VI"#4YN3!UEK)$<+++03+LQJ<9DI8AA.AJX29>)4 /V=%S@ M)Q2";6 MR$(Q+/
J$S=T_1FJ@/J*%]&,ZT^TKFP=*T4K+FA>."@\UY^/O.T*L<>OO.T*\<=.AV&;M.7(%GHX972.FK"5-7>CL M:V^9KY2HC3(73#Y-I9^8W@ 7;!6)%4O)$LT2S); T0=T'L>I4A)GZ)*4^U'I M>AR
P&G&WTF3VWF CH_>H2.4$O0UH2N.2V$)/KJB M1"0H/XFN?OMT$H%TC*C.0PL = /[Y(>W0I(.<_VZ0OX;UVN*J" M9[S $4PL6>8TT9J^?>,.G(]M>3<)"TS"0D.PAD*]6J%>%WU+H:C\";=I46(&
M&J/^0!ZFKCN26^QA,\>[1KXWZC>-@EVC_K"W10IWC4;^R*N-&K'VZUC[G;'. M*"LHPP+:XNMT/72OF80%)F&A(5@C_X,Z_X/7K 8#ZFKQA 4F8:$A6$.A8:W0 MT$PUZ,03M, H+31%:^KT?
%IU.X]: M!U0BHR=3H[2@HC4/8;N5J,5JL%.)[(W>D'R]6>]F'$<171%1=@']JT;KQ=Z[; M75OC%^[9S&T9#U2C4/>BGO%EE_%*)C\E'&6PD%,Y)T-9-%G9N"MO!"UT9^J. M"D%S?9D CH$I
_E\0:EXNE$3U.W3Z5]02P,$% @ FXM86>!\U!X:!0 M01T !D !X;"]W;W)K&ULM5E=;^(X%/TK5G:T MFI$&$MM H0M(+=W1SD.EJM7L/JSVP20N1)/8K&/*5-H?O\X'<3XNF_A;&I-
DR'>4J5^>N8B)5)=B MX8D[04F0&<61BSQOXL8D9,YRGMU[$,LYW\LH9/1!@&0?QT2\WM*('Q8.=(XW M'L/-5J8WW.5\1S;TBAKMP2)OACRI*0,R#H*Y@=\=QI;+F 'MZ\358.%[J$8VH+U,
(HCY>Z(I&48JD /BW '7*.5/#ZO, MO"*S)@E=\>BO,)#;A3-U0$"?R3Z2C_SP!RT(C5,\GT=)]A\ _Q](GE< M&"LXI#EG^1'$8B*@<(Q&Z#* #4-)AT&N#(#((N?FGF6T[H@DR[G@!R#2T0HM
M_9+%)K-6;$*6IO%)"O5KJ.SD\I$F4NQ]N14K("P M:A 5+Q3XLZG!V!NXŸD]L$ _,X"&ACL5W9[B"P KHI<&3YT M#-\MLB(^T=T08.\S0!X:F1RRF]]17YG#S!Q;W,%E-G&&AT *YC%M?S_R* *J
MZ@]$!/^8PIZCCLRHZ4IRG>R(3Q>.6BHR3&?YZR]PXOUFHGPAL%H 1F4 1C;T M1@ * _,]@337C4B;9WKS**Z M*IE<69FL]D)0YK\"*0A+(I+JCXF(%:5O2G*P<24HGCD?TŸ+%U,Z")%NP(Z_I
MXFS,P[2=AP&$PV;-&X>-*\-JWLU*[V;G/+B4!6\\M;.V.Z/AJ.&S85#WHUWS M'WI:2#U[?+G8<4&DT4N[;=_ :N!1:G6FE98#OHC(%[*6"<"&T>A"0#@)Z-Z4I MH,T/=\$.M4O6&W:("]3]
;2J[^F+LAVG=ZYPFPWJ6C*@%GO81^UM;$;M^>$0 M-6-NG>WO6P,X>Q^]L;87OR,WA30#3&9-BK7- I6&O&Z MX[I;0%8A/GV1MN/T35>!5F.#NR0':=E'?63?QL8@&Y"'(FS&WSG9N4>EV -G;
M@5,EQP[3.S6&;F#@=>9&MP//(W@Z*3O(T 8HV9DUDV(:AKOVPT@+/.JSM^\A M.\BP/_=::FD>->WP6HLYLHOY5R:I8%EID.AT!;*C]BZ9]]C_(]TPH*MW42!T MT5<"ET*K!T%W(A?R4
DU;75'KJ3.\6("HLWYU]X#ZO%FPK=@7;1>0\<5$ MAYIBW0;@/FV A0TVJ#ENK1GVV]L_:#9AV- V#*9=6QY<.1CHL 'OH3T%;NVU^*A=1[CÜ)KPIEV[E MD$KM9S;9V5T"?
+YG,C^O*N^6XV.WF8JX?GAXOWJNI#EH"(/BM3;WBE0BKR M\[K\0O)==N2UYE+R./NZI22@(AV@?G_F7!XOT@G*4]/E_U!+ P04 " "; MBUA9J3-DG*H" #]!@ &0 'AL+W=O[!HK2 MA&9[V
OXXY[C#:=VW1F.480<$BT8:#XV\(<.#=$*.-WQVGU2QK@;ON- ,KQCEY65,%< M\">6ZFQF119)84TKKN]%?0.=G\#P)8*KYDOJ-G;L6R2IE!9Y!T8%.2O:/WWI M\K #<$ V?_Y=$O)(%4PD7JI) ?
EZNE)9XU'X-^6L)1\,$YOI=J)(F,+/P M?BF06[#BSY _6/L\34K&!ZAE)12I%6B!W>SI0@;"E,; MMK'K1MX$MVZ[Z^,P+(K":-Q'O1,XZ@6.C@I\PE)@CAOJ2T -RFL)@EUY8S^< M[*D;B K\
<32L+NC5!4?5W=,:KZ0&R2A7!&\#UL2RY'AQAH0&!Q(\-W1'WI[2 MPS WB@)_.BPU[*6&1Z4^"$TY9K*_VD,*PX,M] ,W0GNG
M.)F'X3N5&U8HPF&-0.=\C!YE6VS;CA9E4Z]60F/U:YH9OD\@30#.KX70;QU3 M OL7+_X#4$L#!!0 ( )N+6%EP-\EJD0, $@1 9 >&PO=V]R:W-H M965TO; MVX>G?7#!2:P!9K9IUO]^-E
"B8O6/O(EP7#/X=SCB[EFOF/\I]@2(L'O/"O$ MPMI*65[:MDBV),?B@I6D4%?6C.=8JB'?V*+D!*'TL.)Y?6[% MXSFK9$8+LN) 5'F.^?T5R=AN84'KX<17NME*?<*.YR7>D!LBOY4KKD9VQY+2
MG!2"L@)PLEY8{^#E$H8:4$?\2\E.](Z!3N66L9]Z\"E=6(Y61#*22$V!U=\= M69(LTTQ*QZ^6U.KNJ8'JXP?V#W7R*IE;+,B29=]I*K<+*{) 2M:XRN17MOM(MVH1\S9>P3-2_8-?
$!KX%DDI(EK=@I2"G1?./?[=&] 0/0)P6X#[MP"O!7AU MHHVR.JUK+'$\YVP'N(Y6;/]@]J9&JVQH:?Q1G)UE2J% M ERDX/VOBI9JJ5B1X=4TDIIEX#=Z ;S?7X-79:W &: '^V;)*]%@QMZ52H;GL
MI+WC57-']Y$[WI#R GC..7 =%QG@RW'X-4D4'-9P;PBW5>Z= 6YG@%OS><\R MX+ _/*AQ\DB07/TRI-MS(S*T?P4M1XH0L+/6,"<+OB!6_? $#YZTI\8G(!C9X MG0W>&'O/AK*S@3S8< XVG
GC7#>L0;"G'6"9Z." MKRJ:L;38&%6-0I\Z+1.1#;*$OX%[9RP/EORB9R8BFUH1:]7@2>IT9:V7W\0 M(2\X7/6-<=!'QE"X;[:'@^/O[O@+3K;]%+\?2C9JG;2EF(IMF/>`J8#>*6MW
MM&5YLA43L0VMV+7;M'K,**JRY{5 M0O*JV76IUK_D;*,,,HL=I7KRCW-DQ\W_C X)3%.VF#-!7;T(I]BP1'6X_G M%V]XU/>[(8K^MTRJ?71]N"4X)5P'J.MKQN3#0&^FNX\G\1]02P,$% @
**FXM864(, MDD"5!@ 5"L !D !X;"]W;W)K&ULS5I=<^,F M%/TKC+O326:2M4 ?EM+$,XFE3C/3W622W?:ATP#>:<+RZ&PS*>DQR7'^F"%.++ ME+(<<_'(9L-RP0A.ZD)Y-
D26Y0USG!:#\67][IZ-+^F29VE![ADHEWF.V?<; MDM'5U0 .7E\!+,YKUX,QY<+/"./A']=W#/Q--RP)&E.BC*E!6!D>C6XAA>1 M;54%:L1O*5F56[!9V;@(O;KH!FD)'\GB([",M,X
LY"C:,SF\N*TR MY]_5'KVY]HXS[U_L6L^>P??]=W0%MP6<;9,TF(BLOG_LUYRQ]6G+\E!' M*?A,BUA$@=$LJV"W!2>,E/P,?"9U[_]"7\ ?#^(K$,-]A5GRIZJCK)OBJ)M2
MI="+#J;>#HZ]O$-SG 1 M$X Y>"*$M"BJ<(D +0A+J6KTW6CYC@V*2;)P3>;59-4$^3P./,^WT.7P>=O= MANKLN-O=N-O5NEM.MV#*:"YFRS;7TCK7QIU
MGIX\G:]"Y/9<876J,.DCH 6[F"'<;.2%(D^K$X MZC4 6H%K.ZYDM+;&8X?9@95&ABKM.-'?.-'7.G%[]2*6C>)K(O);(7YQL!#^ M+0%._A*K*['DY<+3W()K59A6(:7& UA)
[$Z%G(]*:TI<<'(E^AD6RS@LE#OFRQ M@LD-=IB+6G/1NUCE-,WH3$4]7RDPOB\[JP]"#I07.@K4R$$[G-4**JA=WQ\U MWS=4\L!PD&R*T^A>X<2W;?1A?M)^O:WRK/J!>?
APS3Y_5_6(A?,- E:72VFF' M3MWZAAR;ZXVRA4;9(E-LW9"V"@>Z[V<"AUJY=7143;*%1MDB4VS=J+:"#.H5 MV75.EP4O =ND=C%2#*T[KRM
IU%,@YS$%!CER$E.!1G(&4X!&NW)W*]6@7JL= MG[YF."V:2>V8Y&52P$V,LH5&V2)3;-V MK(1^\H>1F5DT;90J-LD2FV;E1; M20FU"N>_2%Y!?
W\H&,G9JP^"OBMG+P63Y0II!6W1T?5)%MHE"TRQ=:- M:JN;D5XW'[]3@OJ25-[HWP\)]T,B!>1\Q_()M=(7Z:7OF[;Y45^+]DS>"PGW M0R(%9)?
%K=Y%!Q^W[17[#976T+V0<#\DTD*ZAK8J$.D/NK:GEBEE))T5(%XR M,7'$W]^V]ZZO\.@L9%3J&66+3+%U0]=*/>2]H[E%*SN/CJI)MM H6V2*K1O5 M5JJB@X\5#YU;^@=]Y]
:H4#>;50! P0=>4M:A?,]5UXW1^J*?=O?E95:>8?T MQX+_U\9TTPQMZNY#^@?P"I#J!'X/5]=9K6I"">M7TMMFY+U00M)&\L:. G4-_ M-.HY0"6A;/D<7L6&7-
M7>\!N]9%]\,G5WMFZH:(ZG=L-//G^@0H'1>^&\F@Y MD# Z'!M_G+KEF!.V*R^GEF* MMO+X MGF[N0)Z75]\E-[?P(L)5+P/X46T MON#9TJ_OFW["3*2<$F1D*JJR/HY$J-CZ"N?
Z@=-%?4?QB7)._KGG."$L H@ MOD\IY:\/506;B[3C?P!02P,$% @ FXM867MBTZP8!@ JRH !D !X M;"]W;W)K&ULM9I=;]LV%(;_"N$-0PIDL4C*LI4E
M!AIKPPJL0U"OW<6P"T9F8J&2Z)%4W.[7C_J(:$HR;66L+Q);UGG)_)##VG> M[!G_++:42O E2W-Q.]E*N;N>3D6\I1D15VQ'<_7-(^,9D>HC?YJ*':=D4P5E MZ11Y7C#-2))/EC?
5M7N^O&&%3). M&/M_S2BD[;,,O#P_8OZ+U7R*ID' M(NB*I7\F&[F]G2PF8$,?29'*#VS_*VT2JBH8LU14?\^OC= $Q 70K*L"58U MR)*_D^^-$8\#+
MNY5:^:8RLXI6Z2=YV>YKR=6WB8J3RQ79)9*D8'U9_!G\"'XGG).R*RP6WSX4H/ MGVB^CWDBP5^_J6_!.TDS\?=04]52_K!4.<%U$S2""\F3324<[H!HAP#EV!'.'@F::&&P(:E*>$"[*B:
M*K>$T\$A4.L'E7XYSSXO9YYZW4R?#PVSUF*L8:>*-)R8M4[,K$ZLBJQ(Z\&_M,TT!%\]!F.9R,/]:-3RHC'?E^;-._M:RQ^9_JD@C_Z#-/[#F_X=Z<(J"?ZV; M6EP"(D',A!S*.>@U %XL?
3[[6XM \4&&"W\HVT_;W.?V]N>99EZ##=# MH#8 D$)N&4_^5=W@HKXTV/ZU\NR@4G#AU:^.%]8ZC/7"D9AAUZ*U:S':KDN@ MN$I(DF^2_,EJV*)G& ZQ%X9XT?'+6HFQ?
@V6"N<(HN&N$[9>A&<.F]J-N/*F M[40V(\)>E1":SZ$_PQTCK#48:\1@J8$/Y^&P$=#3,.6->98,\I)58>Q3V*E: MY$K-=.\ 1:$[F&FT7/GH4BURI6;ZB+/2R-ESK)$*^I-
W9P3:RQSMD",UTR%- MS=!*E(>DHX?L^NB0=0K.3M4B5VJFD9J=H>]PR+I$X)53M M(F0<@37J!H(-#F*G$.Y*S?1,TSJTX_K_7[C!/D[/>I8YY7=7:J9E&O+A"?;I]X?
0MD;URKQP/2),YLI/YFL8LWX!!_/S$9+EO<)1"[=)CZ 4V*W%FCFKS$ O7F?,0+@/Q@'R%A"'L..!O0*C?R,_HUS3"LWD MV,[D]>&)O=-P4L.58^LA*GU24[W]3?V?H%/X_GI6R)
[/5_;)32>8SN>FUVB M>H9?MEVBV ')AG/O[Z$C;_@'4'L%1G>);X'=^.#LB7T7W5S5#CKC]LB)VS,G MWX*UL69M['#G'#O=.7>J%KE2,WW4^(WM^/V!-@/TC(<7'M@F]V$
NSLI0_>A M61C,N].54XR>'ISBRRA_JDY#"A"S(I?U^;;V:GOB\FUUSK!S_0Y>K^ISDUJF M/L;YGO"G)!<@I8]*TKN:JP1X?3*R_B#9KCHK^,"D9%GU=DO)AO+R!O7](V/R MY4-
90'L^=?D?4$L#!!0 ( )N+6%G7 -#<%@< -X\ 9 >&PO=V]R M:W-H965TZ35?49P_I=GW M?"-$@7[$49)?CS9%L;T:C_/E1L1!_B'=BD1^\Y!F<5#(M]EZG&\S$:RJ1G$T

M)H[CC^,@3$:+>?79YVPQ3W=%%";B'3ZX"]>;HOQ@ MO)AO@[6X%\77[>=,OALWE%48BR0/TP1EXN%Z]!%?<9>4#:J(/T/QE!^]1F4J
MW]+T>_GFC]7UR"F/2$1B692(0/Y[%+/SZ0/^M2EXF M\RW(Q6T:_16NBLWU:#I"*_$0[*+B+GWZ7=0)>25OF49Y]1<]U;'.""UW>9'& M=6-Y!'&8[/\'/^J!.&H@.>8&I&Y
V@W<$PUHW8 .[<&M&[A#>_#J!E7JXWWN MU<"QH @6\RQ]0ED9+6GEBVKTJ]9RO,*D/%'NBTQ^&\IVQ>(VV(9%$*'[(EU^
M1^_1O3P35[M(H/0!W:9Q+&NY_^IC6=&P>$9OF2B",,K?R>BO]PR]??,.O4%A M@KYLTET>)*M\/B[DD97\\;(^BIO]49 31T'1IS0I-CGBR4JL#.V9O?W,TGXL M1Z09%G(8EAMB!=Z+
[0=$G5\0<8AK.)[;X?L._\:AI82!B#A'$@F%8"MRF! M6]'I@!*H2_'ONS2*D!3,IR!;_6,JC0M9&D@8@X1Q()A6&J\IC6>].F[$.DR2 M,%G+'ZPH2);"5(<]PJ\0Y6_WXX(2Q_/\^?CQ>
(2[863F4M_5PYB!A@DEK3!N MH$WQ;.HT85J^?!.O;\UW?PXNTUC.5?*@^K47/\K7QL3W+._H&%R")ZVTNT%3 M=](*8MT@3%VW-8*\&T6PY_CFE"=-RÅ-
KRO)7I:>^DTZWLAR^,VLE:@ASJ-L> M#S:,QGMI6K+3)MFI-=DO1^!ED:2!B#A'$@F%8:[*@9L_-ZP:\9QQ?G>SKQNY)O#/3ES,UKB8(Y$/O3 MMNP; [W9E$[-PH"/O
(&E/X:=GP<3COYWA#6*M(7JJ1*5*7BGY-4 ?YJD_ M):2=I"G0QY,);;&V!,43ASL^'"5XT[:TF%BN.SLA+,HT8+MK&"XLO?-/ M>T]GG[B0- 9*XU TO6;*]>#)993%ZJ;.+A DC8'2.!1-
+Y!R:MANU5ZC+-.N M4>X*2S>HJRL&D$%6#*33JJ)L$K9.]>L);HMIZ*YG(N*;!GFBZ3523I30 MR^@&J.\$I3%0&H>BZ052OI-8;=.YNN%V):&]#&"(H4[[WK@A"$]P6S:Z0>Z, MG)
-9>2(W<@UXI!O CFB:+O+EIN@% XY[:IG7-IX;+-TG07QD-LE]J[//FTA M:0R4QJ%H>A&5$27^970%U'6"TA@HC4/1] (IUTGLBVTOOLJ,5>NND;7O0?>'
ML/X0;@W11T+9.S)P)>X%>M,_D0%=Q@.E,5 :AZ+I550>E5QF+8^ .E10&@..E M<2B:_G"34QB=N=BL/E3Y0FKW MA3S>1NFS.-Q*.HS*(?L!H&.'J"T+ZN>YY7LL+/+ OM$)37XN/83"
(8@EYZP7U093FHWG/V"U#OI ML?=P]LB"KGF"TC@43:^5LLK4NXPB@=I@4!H#I?$HFEX@98,IY%.<=MC990$U MO[3[R*??F2,98KP3>J2,*K4;U?MRNH@R\9*9$>@**2B-@=
(X%$VOD;+0='H9 M'0)UQZ T!DKC4#2]0,H=TR$KN(-U:-9[.Z<_A/6'<&N(OH-#^4S7[C,M>M$[M<;&CS][(;H:"DKC4#2]2,KUNO@B@N&">EU0&@.E<2B:7B#E==TA:[=#!:.&
M'>^!>8\=A[27G@QQ;=4PH4@7Q:VH?=+CH_V:L&PO=V]R:W-H965T7-'2A M6^ EF;'GG#DS]CCMA;Q7+8!&#XQRE06MUMTB#%79 L-J(CK@9J<6DF%M7-F$ MJI. *P=B-
(RCZ#)DF/ @3]W:6N:IV&E*.*PE4CO&L/RQ BKZ+)@&AX4-:5IM M%\(\[7 #6]"2NK4T7CBR5(0!5T1P)*'.@N5TL4IU OX3*!71S:RE11"W%OG MMLJ"R H""J6V#-C\]G
%E%HB(^/[P!F,*2WPV#ZP?W"UFUH*K.!*T"^DTFT6 MO E0!37>4;T1_0T,]3B!I:#*?5'O8Y,D0.5.:<$&L%' "/=__##TX0@0QT\ MX@$0.]T^D5-YC37.4REZ)&VT8;.&*]6AC3C"
[:%LM32[Q.!TOH7&M%BC6^X/ MV';]%5I6%;$FIH\V+JY!8T+5BS34)K=E",LAS\KGB9_(\Q;=":Y;A=[S"JK' M^-!H'H7'!^&K^"SA%KH)FD4O41S%$-^KHL
ME);F^GP[5;9GFY]FLR.U4!TN(0O,S"B0>PCRY\^FE]&[,UKGH];Y.?;\XXX5 M()&H40.BD;AK26F.3/D2%+H@?'1.GIFG3QR']=]]/D_#_0E%R:@H^4=%TO4/
M%Q3^0T_RAY[9;WK"HZO.0#9NH!4JQ8YK?^O'U?'-6/I1^17N'YP[+!O"%:)0 M&V@T>6WR2C_$WM&B?= V@"S7PNA#XY-,+ZD^4]02P,$% M @ FXM861&$_(C3! VQP !D
!X;"]W;W)K&ULM5G;;N,V$/T50ET4"="-1(JZI;:IQ-*B ;I%$'?;AZ(/C$7;ZLJB*|)Q M"NS'+W6)9$FT-RF&9\:&R%VEZ;)EQNZ M)?R"[6@FGZQ8OB5"-O.UR7Y$F&;W- M
=]OMR3_[YJF[# UH/%TXRY9;T1QPYQ-=F1-%U1\V=WFLF4V+'&RI1E/6 9R MNIH:5_ R0E9A4"+^2.B!'UV#PI5[QKX6C9MX:EC%B&A*EZ*@(/+O@'S]Q/ZI=%XZHS?WW@F&W4P9
MN^2SGYDRU<1(LG5G/OSUJX2#&T&W_&]5YBMNK.8N9/&2[\B23@VI>YSF#]28 M_?@#=*V?56'721;J)(LTD742A)L$X3'VV6_R_<))2CD0#-!'0?.,I+68T%RY
M'BM"MR0LWBT/,VPCUPLFYL-QO!4P['K([\+"(0S:EH^QW<5%"AP*$ JL!M?Q MWVG\=T;]OXK_D;[2&,C7:4[*&9ID2^D[.$L9Y^>] %2,SM%0 B^ 3L__(0I: MS_\A#
480MQS7P'S$7:AVGNW\=X=]U[F.%D299I'+5^[^'22A3K)(DUD MG?!['3?B]=U1'3V>"=)*%.LDB362=!/E-@GS=ZN@KUG. ^\M^/H39$".OIWKA M$!98@8=[6A.I8"B OEH=@L;[8-
3[X6Z.@V]@3#-&^5X()762A3K)(DUDG:1 MJ]V%6^^H&C6YIAQI90NULD6ZV+II.BJ6H&[MJ!F?%0\%3JD>"IQ2/I2XT_H! M41L#I'UW55-V!@-
]A/HQ4,#LXR'7(1C"D.^&_A]*5'@_,#VT DI:8LU M^$RU]A8U=8?.^=##_1@,80@Y7K]85< <)\#]8E4!XMB!H-U:_6%XEE(^#PD&H5TO[JW91$:W<^_21UKRN.OBA\ALGS8\UJ)
MG9!PLV3X3U4?XYFY$S=5GC_U M[E_#RSE4W _A952=L[7TU;'?9Y*ODXR#E*YD5]:%)Y.55R=I54.P77E4=,^$ MG%'EY8:2F.8%0#Y?,2:>&D4'S7GF[#M02P,$% @
FXM8636]\AC$! MF1$!D !X;"]W;W)K&ULK9AM;]LV$,>_"N$5 M0P(TD:AG98Z!Q*Q &D7).GV8M@+6KK86B71)>DDW:??45(46V+D8NN;1)+_ M=^3OD@=-7WBXHM<
RCR7!:5/)^LE=J<699,UU R>JR"NX$41NRY*);Y=0*?S"9V\/+C- M5VNE'UBSZ8:MX [4Y\V-P#NK\Y+E)50RYQ41\' ^N:!G"^II@UKQ>PY/: M:)0EYU_TS55V/K'UC*"
5&D7#/\]PAR*0GO">7QMG4ZZ,;7A[O6+]P\U/,(L MF80Y+_[(,[4^GT03DL$#VQ;JEC_]"BV0K_VEO)#U7_+4:NT)2=2\;(UQAF4 M>=7\9\]M(`8,T(_9P&D-
G+Z!]X:!VQJXWSN"UQIXWSN"WQK4Z%;#7@>:4+Y4X)_#5'.S6[@Q6F79&KJBDZG;P3<@LIK]*\ MR)L'_('<<\4*'9-W)*_(_9IO
M):LR.;44SE*/9:7MC"Z;&3EOS,@E'WFEUI(LJ@PR@WTR;A^/V%L8G2Y$SDN(M+IU1AW>P.26N_9XXMN,9YC/_?G/7A//_1E_\Y]'W@N%V]>+6_MP#]7(+&RY4
M7JW(GQ=+J00N^+],N6Z\>69>A<\DQN6POD$MSD)XA$FLY]_HH']BRG0/|)9 M\B.=+7Z0L[V4>%U*O#'OLVY1XMM#L#HG>97R$LA1P:4\-J6V1C4O6[Y'$6
MAS'UI];C;KR'*FI3)P[W9I=Z^;&&018X7T$ZV1^]W]/XH_2U@]6U3 MM14:/%TSL0+CKM.X\7=A:-2;XWPH'/38AR(O[-?- M8BB*PNB-/(<=>SC*?E4IP+6CD!V;) DFS'
P+M:TV\,O4K]'_ND:#99^W>8RU[@2P,HM@-S+&@]FLW9H]&XUZP2K*FATZY-).V M/G;'MGN'J8_*$D,$M^V[3[]F*-]>.<5WAF%O\:]FF!Z,SP@297CBPMT MW7^\NR#7UW-R]
(DK(#0TOK9;UZ/L!R7)8(-VU71C2\!RAY?>3+%G M]I1[BH3\^]YY?T;$X-SQ/]W:$^VKZZ;SY:?,363G<[!3S@4/9I MB$D2S7> YD;Q37W077*%Q^;Z<@TL Z$%^./L#QPIK;_0
W=>8V;]02P,$% M @ FXM867/'-TQ&" @ .6H !D !X;"]W;W)K&ULM9U?;^.X%<6_BN NBEV@C261U)\T"3 3?H92=V#G\2=>F[/KPWTM5;47ZK%E+6WO?U*J^N)XNZ M?
KZ<3JO90JZSZJ)XEGGSF\>B7&=U\[)\FE;/I7-5O-2K92[O2Z]Z6:^S\O?/3?>4^7(M\VI9Y%XI'Z\GGX)+$9/-@*WBGTOY5G5^]C93^5H4WS8O
M[N;7$W]S1G(E9_4&D37_O,I;N5IM2,UY_+>%3O;'W SL_OQ._WD['68R7[-* MWA:K?RWG]>)ZDDR\N7S,7E;UE^+M;[*=$-OP9L6JVO[7>VNU_L2;O51UL6X' M-V>P7N:[?
[/O[87H#&@X]@%A.R T!]"> :0=0$X] FT'T%./P-H!VZE/=W/? M7CB>U=G-55F\>>5&W= V/VRO_G9T<[V6^6:A/-1E\]ME,ZZ^>9!/3=AK[R[? M+;I-
\[LW/1^+>ILY3UD*UEY7W_W[LMB_C*KO;^6Q M<^_71?%29?F\NIK6S8EN#C>=M2?U>7=28<]) M$>^7(]\7E2?RN9Q;QG/W^-0Q?MI\?_DA7Y(+>=S
M>_IP8IO.QXXNSCZZ=C'(?LF0+8_T\+[(5YF_2.^Q+-:>^%[+,F^6Q^UVKG5]+5[82TR&L5AHLOX MH2P@?D(IT77"H@O3,$S]O4Z;*-M/E#DG^O.RE-Y#<_66,VF;K'/TT+6&A'$D
M3(!@6@BB?0BB,;-!A(P0$L:1, &":1&*]Q&*S\X&NY&L^[F,?!8P(QM89#&+ M26AD@T,?!8$ 4]N2#93S-Q3K/Y'K+[\FF;IW/HT&6&A'$D3(!@ MVO5/]]
<_'3,1I,@((6$<"1,@F!:AP%=?]OVS4T$[5,\%)&"^D0ML.L:BE!K) MP**C3+KUPVJ_#^7GB-%?'^42]D:9V\ M$$5T^4%I*$H3*)H>E% %)1PS2[1T5)R0- ZE"11-CY/R>('3H+@S!3G\-
N^G MOOG)OK7I D9\\VN#14=($K/ S!06'6L.2WHRA;)+P4E^R?LL\]EBG97?O/_M M=SENBWRS%5+NMD:^+*MOUDOB/,#@=8FD<2A-H&AZJ)3A"]BH^0/]"*$T#J4)
M%$V/DW*%@=/2W.@?F[+YV'C/^TU%:V1VO(!TLX694(YK^ D:X=;H,U8N*SC) M9FE)I+L_,3RG.(\W>*TB:1Q*$RB:'CEE'(-DU)P"-9=0&H?2!(JFQTD9S,#I
MCL[(*>GAY]R_Z#B+]I+;9:F96>PRA25CPWIJ+D& M:F*A- ZE"11-CY,RL:&[;#D\US#;QSXTRS0]LLC,-2?)1(^L[XN,LH:AVQI^ M:M;B!.56PWC45 'UIE :A]($BJ;'27G3T%W5
M=.W#MD.[^Z%AFM+4]#<6'0EH&!,S+QSJ4C^-*3,3@TT7ID'2DQF4P0O=!N\] M,Q@[)]:Y0^N%4!J'T@2*IO=Z*=M)_#$3!8'Z3"B-0VD"1=/CI'PF<5<[78FB M':J5;(,@38U"S*U-
1P(6F%\@+#K"FGQBE(J%54?C,+4G"J+,&G&;M4ZB<+9] MN#Q^T7 BE"11-#TBG)73, M6V0A21)F;DU8+9KST:>J[!9QVZU.ROAX4XC[6(,7*+0P"*4)%$V/FO*-9-36 M4P+UDE :A]
($BJ;_58KRDM1=PAR\[JGRG$TA)VCX"1KAUN@S5JZ,NEW9D7SR MH?X0]Z&'+ELHC4-I D73@ZC<)AVU9Y5"32B4QJ$T@:+I<5(FE+J+F,/3"SFI M/\0NHV8;;P_-M#M'9?
KL.W_SY[9V1U+-^:TB[N,.7K_0LB"4)E T/8+*K])1 M>ULIU+="1Q*$RB:'B?E6RFXMY5:^DUM><8N,\LT/3*S2M,CHSUY1KE!ZG:# M1_(,K&O$?1J#ES.TQ BE"11-
#ZCRO'34]E<*=;E0&H?2!(JFQTFY7 IN?Z76 M3E2SS^.V1V9VJ)U&$SVRGIT9IKPC">5IV:@=K0QJ6Z$T#J4)%$V/D[*MS%TD=6W;MD/U&W>0(#$KPE9=2)F9
M'"PZDB91:C;'VW1)2N*>6@]3WH^YO9^6'D[H'W'C!J]":,412A,HFAX894O9 MJ#VI#&H^H30.I0D438]3YTXZ[F%I,UNP@PHM35A(S&1AD='PH'O$(@LHB>E!
MKK#HPBA)>C9EF?)OS.W?S%SA;"%QLP8O0&B5$4H3*)H>%>4KV:@=J0QJ%Z$T M#J4)%$V/D[*+[/R.U'9H]R/+PB@U2S8VF1\E9@.)118PYIM?/H15%R2=OE5] MJLIQ,;?
C,A/%@"X2-WKP>H06%:$T@:+IMQ]3DC :M4$U@MI&*(U#:0)%T^.D M;&-T?H-L?U3O4$\C\V_I;+*8;,,08Y&E:9*::<,B"P(_HCU_3!9 M-C[>2>(^X.!%"BTA0FD"1=-#IVQD-&H?:P1UE5
:A]($BJ;'2;G*R%WL'+P7 MVO*8V%IQ->LM/3*SS'L:31REZ;-7-B]R MV[Q3\LWY/27N@P]>Q-"B(90F4#0[,K"1J.VQD90%PNE<2A-H&CZ+9J5BXW!
MK;&QI5W5OS!OP6A7F3Y#%W24!J' MT@2*ID=5V>!XU+;9&.IYH30.I0D438^3\KPQN&TVMG:PA@>YQRXS;ZO6(S-W M:WIDYCT'IIU'X32K[&G[#*+*FQ4O>;U[Q,G^W?
USCCYMG^YCO/\YN+P-+._S MX%+LGF*B\+N'*OV2E4_+/0)6\K$YE'\1-S:CW#VG:/>B+IZW#^+Y6M3-1V#] MXT)F&ULK5A=CYLX%/TK%CM: M3:5.^(8PFT2*:EVI6TU:CJ[#ZM]
<,"36 .8VD[2_ONU@9!@'";=YB4!<^ZQ M[[F7ZXLG>T)?V08A#K[E6<&FQH;S\MXT6;)!.60C4J)"/'DA-(=88+]$0!V^8YI-\?44;V4\,V#@.?\7K# MY8 YFY1PC9:(/Y=/5-R9+4N*+#O%
[8O#2K$7QCMVP&D,'-7 .V/@-@;NI3-XC8%WZ0Q^8U"Y;M:^5\+%D,/9A)(] MH!(MV.1%I7YE+?3"A4R4):?B*19V?+: M,#%FH';/PEC[T")*%AN($7@-D8< MXDR,W8'G90QN;]Z!&V
")I\R@ OP7&#.WI\,?-F0+8-%*@9O.O<3DXNURAG- MI%G78[TNY\RZ7/"1%'S#P*)4:JQCX?MHP%[4VC4"N4>^E35/;;K\\[!BG(KW_E]=L&LZ
M3T\GB^$]*V&"IH:H=@S1'3)FO_JRV'JPP!3H!XEHM=%WW=8OY=IT#06Y6(MNZO&78/R'4^->Q]E1T$4J7'OPV3<_3-Q#ULMPD$MXD.<@=A7P+9(,:NE$)F
M#E4)9AE)H!P2VI20RO6?%^KH$H,L8:B!TIZN@P M@5Z:<2O-^#I4FW8&Y*EB&I5&.N*A.LH0FA0OJ.F5-Q'R60)%;)%'R:3)73U MBD2M(M&@(H^0X03LJV81I7=PAZAH?@\-
BVB;&1=9)-/BMA[3ULRH%RHW<@-5 M#BW*7-LZ]CJ68-R+&6EO)-M=2I307QK,%AWZWM(Q1LU M)$)#W7GK7<6[N0[DA8H$.E"@*] !G2FB]DFG:[]1.K*J3/QL/C33=,/C1;XJ
MAA;FJWN*%N;WMA4M['Q..$=1G$%'1`J.4RF,^%QKME)2RJ1X(QV<@?@T_K\) MB=^&+#00V_?.>'UL7^T+^]>F4,JOGLK;>ZVS5^U>K\H67Y5M<2VV;EB.':P] MW,+6]?I6?
#FF),L@9]E#8?H!Q_V+'->B?-7Q/LH;16/5]SY*Y[MYP_4$L#!!0 (M)N+6%GF3T$QUP, /82 9 >&PO=V]R:W-H965T'%@_+/8 DCTG&=4+*VME+NY;8MX"SD6 [8# MJMZDC.=8JB+?
V&+' 2<:E&?VT'$\.\>$6QY"USUP?\$*F1$*#QR)(L\Q_WH' M&3LL+==ZJ7A/-EM95MC^8H/G.A%' ,73#1C6@.$I8/P=P*@&C"Y5&-> \:4*DQHPN13@ MU0!/Y[Y*ELYT@"7V%YP=$"];*
[;R0=NET24L#0CZU%R]98HG/3O:HM_0TV. WKQ^BUXC0M&'+2L$IHE8V%*)EE [K@7N*H'A=P1& MZ!VC([X:]A(^P&Z"1\$L#!!0 M ( )N+6%DX@^%2%0, -P) 9 >&PO=V]R:W-
H965TAW^5JE"8.)('*=950\#R#E MVY[E6ON!AV09*SU@][LKNH0IJ,?51&#/+E6B) ,F$\Z(@$7/NG4[XU#C#>!G M EMYT";:R8SS)[VYBWJ6HP."%.9**U#\V\ 0TE0+81A_"TVK7%
(3#]M[]6_& M.WJ940E#GOY*(A7WK&N+1+"@ZU0]\.UW*/RTM-Z0?"JA. 5@E\0_+>N!2$X*TKM J"L6[GWDWB1E31 M?E?P+1$:C6JZ8;)OV)BOA.GO9*H$SB;
(4_VIXO,G,DDID^223/$SC-8I$+X@ M^47I#Q.1^3\[LY(PDC/V*^EI1%LFLK#$XO M8<^+0 9Y(-XK@?CDGC,52S)F$40-_-%I_LT)OHU)*3/C[3,S\$X*3F%U17SG
M@GB.%S3$,WP[W6^R\W^KC]^]^E$R_/(S\8V>_YI>3 5<#O!$1F1"G_&B4.16 M",J68-J_;V=2"3SU?YIV/M<.FK7U3=B1*SJ'GH57G02Q :O_^9,;.E^;TOZ1 M8J./%!M_D-
C1!@7E!@6GU(MS/#\K9"?UJ8-R;5"HZ5?DDT\-QVU]X<)KH. M@[:%="H#G+](B/4>,ZRG-;S@OJR'KM-PZ:?F.H5T@BN[(#!@L$M5D-==H
M'0;H^'[%:AWD.36K=9#OW005IW50RPMOFHV&I='PG7M[01B6$GA98Q*:S(>U MO/ON=27D81T4!HY3,5\'N8[;\BKN&U"AY[!3E\("EW*NVKA3(J\E\H[B M*_-8SKC"I]6HH M)B$#
#&"@ &0 'AL+W=O_+? XEEAU> =,G4RY*K/12S'Q9"<"% M%2JI'P5!ZI>8,"\;VKU[D0WY0E'"X%X@N2A++%ZN@/+5R N]S<9W,ILKL^%G MPPK/8 SJ1W4O],JOM12D!"8)9TC
=.1=AA=78=<(V!L/!%9R9X[,4R:;=,([LXWVN_LX_5C)EC"-:>/I%#S MD=?W4 %3O*#J.U]]AO6#$J,OYU3:7[1R=].NA_*%5+Q<"VN"DC WXN>U(W8$ MXNB 0+06B"RW,V0I;
[#"V5#P%1+FMM9F)O:I5EK#$6:B,E9"GQ(MI[*QXOD3 MNJ>8272.QBXVB$^1._A66=]=&M\1]8).;D!A0N7IT%?:NM'AYVM+5\Y2=,#2 M 'WE3,TENF4%%'_*^YJZ1H\VZ%=1J\
(Q5!T4!VH]\).=8@%P/+1;B MVCFQM1 ?LM"@R)$YN6ZSG,FD"UGA'$:>3A4)8@E>]N%=F 8?6ZBZ-56W37OV M;;&DPJP@;':&)C CC.FI_F_J(.: 3@A;>^
4_6KTA7N",Y)8(R9WEUF4)G$Z M])<-;$G-EK2RW3Z#R(F$XFB,9 _C/ R2.&SF2&N.M)5#9^P4B'H%[K/T4^B M9HI>3=$[/E)@QU>'J;?"%29AS<B#]6NP_C%APA-
Z/$C_-2"#&F30FF&/MFKJ M,%TN0>BO /HD,%,N570] W2'B4 /F"Z@B6GP']{P#+:E,_BG1"PXI5A(5(P M?C4.WM:IQA+J+/9VO-Q-.H.DVM6_AC/NV6]02P,$% @ FXM868>4 M]OD\ P
X H !D !X;"]W;W)K&ULM9;;CMHP M$$!_Q4JKJI5:DIB$A"U$6GI_J+1:M-MG;S* M8F=V@:V4C^^OH1 2X@H55^(M[9+,?4"0P0EYJ8(/JQ@7=0EL:2YOC>&/5:GT;Q<+VS_M$&KX-
Y(!+>\?(M+=1JZJ4>*F!!UJ6ZY=O/T 04&WLY+Z7]1=M&-O!0OI:*5XVR]@HX85>C:))*J'^CE>U"$EO*5UCP2 MWTE-?*4QC3, _;Y!F#@F?0!JCKYRIE40?6 '%[_J^#]^-
$>]BG.%>@W.H!V@8 MO$8XP!%ZCGPD5T2 ;!X]'H9M%H?6P_"4APY#CLSI1=UZIN2N9$URF'JZIB2(M#7C9BV?A*'C;0Q6U5%&?]>R.;?17@>(U>H E98RRI;
[!^E/G@%Y2UH3_"OWL M3(3C=QYBZ\%4^"8+DV$:AQ-_TT$6MV1Q+]DG09BY*N=2Q$<4*1X'<3?$J(48 M]4+)6DWUKC%&O<6UC?;575VKC<@]+\$LC?'58CN=X ^$BK0/2G7 MT
4U_@_5%P;[UAI<7G\%+TLB)*I!N*R:].Y[4V?;=.Z2PQQ'>) ,NW,<'OP' MA.>5XR50SG3Z6X=(!_'X!!3>0^&SRO,2)GS,-(H&<7*":=_FP]Y^?5BMEV - M.
[&B4UC[/A^>V^B;XIW]RV+CF]9' S"/QN=?S!T5""6=K22*.=KIMS\T9ZV MX]NU&UKVXF[V^TJ$K@^)2EAHU6Q#8BW#CE-HK7=H1YX$H/1:YTB,H"". @ MWR\X5[N-<=
.M=DO4$L#!!0 ( )N+6%EFQV>=+0, -D* 9 >&PO M=V]R:W-H965T*.L]$MBG72/GN=T)]UPI>Q['--A ML$W->*@K)X7"J0%;%04SZPN4>C6*>M&CX58LH?M23@V-XA:%
MBP*5%5J!P?DHFO3.+WJI=P@KO#I?L!%T MY/$R+6WXA56S-HD@JZS31>-,# JAZG_VT 1BPX%PMCNDC4,(1%QO%%A>,,LP;_HL9/=^"?P8U6+K?P07'DO_O'Q+4EG#X2OD@[M
>^P/(1^L@]ID@XZ\IM /H!;[#[T8H453%-F6=CKY/D?0>M04MK$-#[NV3FS."!SS<.E[J@(K3U64R,86J!5!@.9FO87#=E MZV">K)CA\/TS0<*UP\+^V*9N\
+JCEIU1YU!GZ+)B"F5/>@Y.&86=/^P0+N6 M$NHU%[@4:M',D[5$$Y)290B95G6NVFWBZNU[=73]S;0<)\-XN87R<4OYN#M/ MV,.N/.ET?&8D3UI:)Z^<)R>I-OSY*RE?/8WRNW>
(>A; M]^W$>&90>\G3G9^\SX%U!+ P04 " ";BUA9A;0Y#E3^TL47(;.P5E\Y;C31VVP4I92WMO.QW3J M!981"DR,A6#TV^(5"F&1B,?/ ZA7Q[2.Q^U']%LGGL0LF<8K*;[QU&13;^1!
MBBNV$>9.[C[@05#?XB52:/>%W<$V\"#9/'S@S,QR'E1_=G#82&.'*+^"8?H MX! YWE4@Q_*:&19/E-R!LM:$9AM.JO,FKZZ"[IZ MT+G-@Q2N9$Z'05.77C.E6+%&2E@#RSTG0*-
:HM>O&;5^$@>-^B MKE>KZ[6AQ[>,*]@RL4$H4<&&MA/.4BD$4]J-N'5\VT2[AXZ8'L5;.-P..QT M>Q-_VT"H7Q/JMQ*RB8%PQ920,"M+)5F2-45O1?G'11O4' ?_.24&+Z!N6*L;
MOE1*#/],B5'8Z8;-*3&J"8U:"=DKZ7RE$(%3;I!@ XH9;")0 8V/" 2=H'2J8V3IZN!2 M&JJJKIG1.P:5-:#YE93FL6,#U"^C^!=02P,$% @ FXM869T7P0+= P MK0X !D
!X;"]W;W)K&ULM9=MC^(V$(#_BI56 MU9UT1^(0DK %)+CKM?UP$CJT>Y]-,'H"[B9W:!FZE_OC:<4AR(LE1JOU"7O#, M/!['/2V9VYN)9'@ 4^'I9G3,Z=@U+%@^O*Y YD2-> -
/_[+C(B=*/8N_*0@!) M2Z$\5I#Q\]S!SN7%9+B[#*//" M7*'E>\9@7+%$X6S;-TCLY4MY_F MX<]T[GB&*#)(E%%!].4$'R#+C";-\7>EU*EM&L'V_47[IW+S>C-;(N$#S[[2
M5!WF3NR@%';DF*DO_/P'5!N:&'T)SV3YB\YV;10Z*#E*Q?-*6!/DE-DK^58Y MHB4P]GL$_$K +[FMH9+R(U%D,1/\C(19K;69FW*KI;2&H\RHXT]&\1W: VB/'.6 +*+'AE5:&F\2-
4+>O,1%*&9?#MSE>8P MVMRDLKFTA-OT>FU/TF3-UD.@WED+ZO;RK^>M-^)=-K/Q!A1LH1FCLO4.^YP?H M9^0B>2 "9'49L#"NW30N+8Q[+'PM3Q=2M#R!T-&*?
A>$J5]^PJ'WJ_8[H$^$ M"O1$LB-T^<,J#[J5F\1[D 5)8.[HS)(@3N LK.X!]*!&#X:T+_1)L"4@=;' MJHC8ZUPG9R+2,IQ35.;&@<*)LCV2!21T1_7KHA4 5DIV;PI8^94MR0K??
F&LBHGWJ)_.K/#\EL+D_:9QE/?QJVG&M=D\2!9F3,Z MLFZEB*\H B^*HVZ(:0TQO3FT2/J7KK"ZQRAY,]3T"LKW@CCNAL)>4X:]0:RG
M\LQNIJBTM3'>1]$DZ,D[W&H'>)!#M[H=T/^$@]J1L!?B:0^*WZ#X-P8RL/2> M**[T?Q?&H3\>CWO(FF: 7[4;X-=H![CI'WBX(0P6B)1G&1'25'_K6>/BIJ-V
M;L>:B]IN#L(1DE4W#0!/-P%ZGIQ#Y15';>AHF@T[DN0IN;CP>+=7S_N@0RO M(:?!J*?,XJ8#X.$6<"DF]R!%'7[32'TYT]1^/%S\6X7E'JSX&BN8]F,UW0 / MMX.K(K/Z/YDP[DWS0'?
[@Y+,NO-0-J"#40Y6F7_1^H&:,7T#OJ*B)N M:X+(07_LF3E)HH0?F;+#1/VVGL66=@)IEMM![K/^5J1ZFLA@IT6]4:0S4=C9 MR#XH7I3SR)8K/=V4MP<]3X(P"_3_.\[5Y<$8J"?
4Q;]02P,$% @ FXM8 M6>VQYRZT!@ ;#T !D !X;"]W;W)K&ULO9OA MCYLV&,;_%2OKIE:Z)F "2;J[2&W 6J=NJGKM]F':!R[Q):B ,S!W/:E__ RA M(2;$"=K3]4,Q@-^?
C1_C%S\RUX\B^YQO.)?D2Q*G^R/+$:'Z]#=?\ELM/V_>9.AKM*:LHX6D>B91D M_/YF\-I^Q1Q:!E0E_HCX8W[PFY2WIF8)4MXC%?RA(1JC\/?,'C MN"2I=OQ30P?[.LO P]_?
Z*RZ>74S=V'.%R+^,UK)S2E:45K?Q1R55\JPZ. MTG)DW>)<3G=Y*\)+=J[*Z*F!-QOSOUW.JG#+/1G.SM4>J_!=XVT]?*3$ MVRM(]PK2BN><[PETMLTEUFAGGA)_GJG"I"WDB?
YWUW*[&CC;EHYD;W*M^&2 MWPS43)7S[($/YC_]8'O6SUTZ(6$^$A8@80P$T_1U]OHZ)KIZ5M)(9&H6?Q#Q M0Y2NR3+CJTB2^W 9Q9%\4K.!+++R@GHFU9CRKDBJ,I)Z?%?
ER(CRO C3)2=+ MD>1?52OO%6^DJ(A#$03)-PO)=P M;)3PHY!AW-7UNS#WL%/=\82V>G5Q7,RS;&_?[QC(_IV/A+&0#"M\]U]Y[O& MSG^=B"*5.5D57.56N5%/B5
3Y!,/LRY)W*.^IM[,=EN*=)5RV[KYQH;U%00) M8R*8)HS%O^*E*]9*-8;E6?*UR]G.+9^ M["N@L>J^[Q](F(^$!4@8 \&TP3#=#X8I]/URBM07"?.1L)8R"8IN]LK^_, M^+!7^D9[?:]

(+D/)5^J4FJ-Y+DFF#LF69TMU-5SS+LUW-CAM=R[0K>-$.K&\=AZMBVGOGM2:VJT\ M:FY47SF@-(:BZ8(<&"SVF61*[;/)5"W:Z-";]4ZFYKK[SK90F@^E!5 :0]'T M,=%8-C;6L[&AI@V4YD-I 93&4#1=YL:YLSR?A(MV-S1Q5SG':"A9H[4!I#T71!&G_' M-AL\L 1+OFJ83E&1+LP"2O.AM !*8RB:/D0:Q\GVL/D6:>4LH#0?2@N@-(:B MZ3(WMI5M]JT@^1;J3T%I/I060&FLIAG>4W11&_O)-KH?WWG]!'6KH#0?2@N@ M-(:BZ6.BL:SL&78^1QH\"RC-A]("*(VA:/K&AL;+HF8O"S&?UU6<73^9F])[M*P/4#X/2&(JFB]KX8=3LAUVZ?JHQY]9/=;%SZR=SHWH+ C6C4#1=D(/]0T87 MY']=/YF;TGOW$?;[$7;_$78#TO;&,J/?WS*CG=:/Y[0W39J;TEM4J!D&I3$431>UL@AI74)H/I050&D(1]"\V&N/*L:#)TT$:/ LH MS8?2 BB-H6BZS(V5Y9BM+$3RK*MH)4^7MJ=DS(ZNQNY@S:W\#!?61H#2&HNT4&!U\=UI^A_Q;F*W5XT!B M?J_PUG"B7B"RW:>]NP,IMM6GJ'="2I%4/S<\7/&L+*"NWPN5".N#\NO6_0?6 M\W\!4$L#!!0 ( )N+6%D<^U%V$Q)7J 9 >&PO=V]R:W-H965T MQ$EZ='';?:CDR%GIJ9BF+K]E]Y%N?Z'I[OE]EOMQT:=./] M >XS R;M@,G> '?RS(!.V#ZVEV:MO-FKQTP;P?,7SO@1!UP\MH!BW; XK4# MW-'C7V[4K*"'/WFS7ORXC,].\^S>R>OM*Z_^H%ETS?AJF21I71_?R[SZ;E*- M*\\^9^GU3[_H?./X^K)T?G(^K59)O7+CM2/3A_JKU_$[7Y=QLB[^F6./ZYV=[?/WN,^GWM64&W3#XZW>.]X M(V_L_/K=+][]N6^_+EY@XHH935]D?#OS)?[A>)-&<2U*\)J=:1AWT?<[M@__ MKF_..-1LQ<3RUZ$0YCP_*OS[K_^Y,[&?^VS(KOEZV5EN2_^>N7K=\G&J)?6 MS+KZ_;JV/Y.Q%L>[^ADW[OC9G[*J&ID69;ZMGC5*YW_5QLXLM2;XI\]>WG^ MH$WZM?K)\.?B-E[JCT?5LUVA\SM]=%;_!49_[50>?:.36$!B@L1"$HM(3)*8 M@C"C)B:[FIC8]+.F!+(K9YGKZKG$N8J7R3M!;,, MJ[VHOM=7*M9)AI8*B?D/V*S!Z@;T[FPQ:O\[/;Y[6@?DM(+$0A*+2$R2F((P MHPZFNSJ86NO@'TUSKE=.?*?SZF"C.IZXR]9W];I/TE)7$Y9.'I?ZO7.K\V7U M[%%MTU<(UEF&%@*)^206D)AXP!9/2G3T830],,2$R2F((PHPAFNR*8MO>W)(-?UX7M=#*][.K!.,[0*2,PGL8#$Q.S@B>IDYDY[GJA"B;%;R@OK M4OY2]2WU<>Q5\GO5W2]OXOQ:%\XR>VSSZU.FSKLT*YVU+@JGO(G3OE-6Y]99 MAJYQ$O-)+'C 3IXL$/?#U%P;@IPP)+&(Q"2)*0@S2L ==<'!R%X$[I&BNM1@N7B]39;KYY\([/K@(B U']6"5C-Z\OT2("<,42U"-8B]9[RQG[B2S7;C7&9Y12;IM:

_]7B\Q8223\4MGP3S+Z4WV[A_XV*OG-PD4;VB MY%-QR^>I1Cl,JF-,2CX5LWP>S!ZDG7V!Y_HK2CX5LWP>8::/)\:DY%,QRX>> M[$AV:5'RJ9CE0V/B?
5H5N9N,V4(T)MZI55$6JI@M1$\=)8U.6:ABMA"-F30Z M9:&*V4+T#!>NS3EEH?E1)^*2K8Z4A>;,%J{Q<1>:4Q:.,UOHB37[N\088U(6 MFK-O9Z:F-4\Q)F6A.?
^&9HR5*'WE\'SAG++0?+#0="CLW[QNU%H,U7R"K_!P MO)9MO7(BOAQV,!9EW(&T[MOY'1S[;#Y.V=S]D^#N7Q!O_@502P,$% @ MFXM866?\4D), @ :"P !H !X,"]?A)Q M1JA
7/X)GQ#P^%(.S;AO3\-NWPV+S^/A-*RJW3AVO^IZ6. *L1GNV]ZW5=4_OZ6JGCM({$CF M#U((TOF##()L_B"'()_*" HY@_*$)3G#[J'H/OY@QX@Z&'^H+1$&9<$21.L
M";1.R'4B\#HAV(E [(1D)P*S$Z*="-1.R'8B<#LAW(E [H1T)P*[$^*="/06 MU%L(]!;46PCTELG#-H'>@GH+@=Z">@N!WH)Z"X'>@GH+@=Z">@N!WH)Z"X'>
M@GH+@=Z*>BN!WHIZ*X'>BGHK@=XZ>5E"H+>BWD]@MZ+>2]"WHMY*H+>BWD]@ MMZ+>2]"WHMY*H+>AWD:@MZ'>1]"WH=Y&H+>AWD:@MTU>=A/H;:BW$>AMJ+
<1 MZ&VHMO'H;:BW$>AMJ+<1Z.VHMO/H!:BW$^CMJ+<3Z.VHMO/H[:BW$^CMDX^5 M!'H[ZNT$>COJ[01Z.^KM!'H[ZNT$>@?J'01Z!^H=!'H'ZAT$>@?J'01Z!^H=
M!'H'ZAT$>L?D9Q,"O0/U#@*]_4. KT#]0X"O3/JG0GTSJAW)M [H]Z90.^, M>F<"O3/JG0GTSJAW_DF]A_'K4(9K$_<:K_^35(_G<\OU\]?E\[\)#77!N;ZM M&)[^ E!+ P04 "
";BUA9AJ9C2 P" !A*P $P %M#;VYT96YT7U1Y M<&5S72YX;6S-VLUNXC 4!>!70=E6O/@WTQ&PF9EMAT5?P$TN)2*)+=MMX>W' M"6VE5ATT%2/U;(C
]CTWOM*W8GE[]!1GA[X;XJK8I>2-_Q;K'?4VEL[3D%>V M+O0VY:_AGGE;[^T],;%8&%:[(=&0YFFL4:R7/VEK'[HT^W7(\?6#:LB4!>+
MV8_3QC%K55CONf:V*;^SQZ%YES)_3BCSR6E/W+4^7N4-!?LP85SY>\#SN=^/ M%$+;T&QC0[JQ?=[%#AV+Z=A1+,^7^*!'M]VV-36N?NCSD3+Z0+;),Z+4=^6I MZ-7YY)1OF$Z?
_.+\]6*!/A_W,I+Q]-SG0A12>_X57Q-SZ8O? MC\9I-I3\8W;^WB<7]M,\(IL>E]_QVOF_UO]D'P*D#PG2AP+!0X/T84#ZJ$#Z M^
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P" !A*P $P @ "!A@$ 6T-O;G1E;G1?5'EP =97-=+GAM;%!+!08 4P!3 +P6 $B0$! end XML 88 Show.js IDEA: XBRL DOCUMENT // Edgar(tm) Renderer was created by staff of the
U.S. Securities and Exchange Commission. Data and content created by government employees within the scope of their employment are not subject to domestic copyright
protection. 17 U.S.C. 105. var Show={};Show.LastAR=null,Show.showAR=function(a){a.preventDefault();Show.LastAR!Show.hideAR();var
e=a;while(e&&e.nodeName!='TABLE')e=e.nextSibling;if(!e||e.nodeName!='TABLE'){var ref=((window)?w.document:document).getElementById(r);if(ref){e=ref.cloneNode(!0);
e.removeAttribute('id');a.parentNode.appendChild(e)}} if(e)e.style.display='block';Show.LastAR=e};Show.hideAR=function()
{Show.LastAR.style.display='none'};Show.toggleNext=function(a){var e=a;while(e.nodeName!='DIV')e=e.nextSibling;if(!e.style){}else if(!e.style.display){}else{var
d,p_;if(e.style.display=='none'){d='block';p='-'}else{d='none';p='+'} e.style.display=d;if(a.textContent)
{a.textContent=p+a.textContent.substring(1)}else{a.innerText=p+a.innerText.substring(1)}}} XML 89 report.css IDEA: XBRL DOCUMENT /* Updated 2009-11-04 */ /*
v2.2.0.24 */ /* DefRef Styles */ .report table.authRefData{ background-color: #def; border: 2px solid #2F4497; font-size: 1em; position: absolute; } .report table.authRefData a
{ display: block; font-weight: bold; } .report table.authRefData p { margin-top: 0px; } .report table.authRefData .hide { background-color: #2F4497; padding: 1px 3px 0px 0px;
text-align: right; } .report table.authRefData .hide a:hover { background-color: #2F4497; } .report table.authRefData .body { height: 150px; overflow: auto; width: 400px; }
.report table.authRefData table{ font-size: 1em; } /* Report Styles */ .pl a, .pl a:visited { color: black; text-decoration: none; } /* table */ .report { background-color: white;
border: 2px solid #acf; clear: both; color: black; font: normal 8pt Helvetica, Arial, san-serif; margin-bottom: 2em; } .report hr { border: 1px solid #acf; } /* Top labels */ .report
th { background-color: #acf; color: black; font-weight: bold; text-align: center; } .report th.void { background-color: transparent; color: #000000; font: bold 10pt Helvetica,
Arial, san-serif; text-align: left; } .report .pl { text-align: left; vertical-align: top; white-space: normal; width: 200px; white-space: normal; /* word-wrap: break-word; */ } .report
td.pl a.a { cursor: pointer; display: block; width: 200px; overflow: hidden; } .report td.pl div.a { width: 200px; } .report td.pl a:hover { background-color: #ffc; } /* Header
rows... */ .report tr.rh { background-color: #acf; color: black; font-weight: bold; } /* Calendars... */ .report .rc { background-color: #f0f0f0; } /* Even rows... */ .report .re,
.report .reu { background-color: #def; } .report .reu td { border-bottom: 1px solid black; } /* Odd rows... */ .report .ro, .report .rou { background-color: white; } .report .rou td
{ border-bottom: 1px solid black; } .report .rou table td, .report .reu table td { border-bottom: 0px solid black; } /* styles for footnote marker */ .report .fn { white-space:
nowrap; } /* styles for numeric types */ .report .num, .report .nump { text-align: right; white-space: nowrap; } .report .nump { padding-left: 2em; } .report .nump { padding:
0px 0.4em 0px 2em; } /* styles for text types */ .report .text { text-align: left; white-space: normal; } .report .text .big { margin-bottom: 1em; width: 17em; } .report .text .more
{ display: none; } .report .text .note { font-style: italic; font-weight: bold; } .report .text .small { width: 10em; } .report sup { font-style: italic; } .report .outerFootnotes { font-
size: 1em; } XML 91 FilingSummary.xml IDEA: XBRL DOCUMENT 3.24.3 html3352991false740false9 falsefalseR1.htm0000001 - Document -
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Additional Information (Details)Sheethttp://www.msasafety.com/role/PensionsandOtherPostretirementBenefitsAdditionalInformationDetailsPensions and Other Post-retirement Benefits - Additional Information (Details)Details69 falsefalseR70.htm9954513 - Disclosure - Derivative Financial Instruments - Additional Information (Details)Sheethttp://www.msasafety.com/role/DerivativeFinancialInstrumentsAdditionalInformationDetailsDerivative Financial Instruments - Additional Information (Details)Details70 falsefalseR71.htm9954514 - Disclosure - Derivative Financial Instruments - Balance Sheet Location and Fair Value of Assets Associated with Derivative Financial Instruments (Details)Sheethttp://www.msasafety.com/role/DerivativeFinancialInstrumentsBalanceSheetLocationandFairValueofAssetsAssociatedwithDerivativeFinancialInstrumentsDetailsDerivative Financial Instruments - Balance Sheet Location and Fair Value of Assets Associated with Derivative Financial Instruments (Details)Details71 falsefalseR72.htm9954515 - Disclosure - Derivative Financial Instruments - Income Statement Location and Impact of Derivative Financial Instruments (Details)Sheethttp://www.msasafety.com/role/DerivativeFinancialInstrumentsIncomeStatementLocationandImpactofDerivativeFinancialInstrumentsDetailsDerivative Financial Instruments - Income Statement Location and Impact of Derivative Financial Instruments (Details)Details72 falsefalseR73.htm9954516 - Disclosure - Fair Value Measurements (Details)Sheethttp://www.msasafety.com/role/FairValueMeasurementsDetailsFair Value Measurements (Details)Detailshttp://www.msasafety.com/role/FairValueMeasurements73 falsefalseR74.htm9954517 - Disclosure - Commitments and Contingencies - Additional Information (Details)Sheethttp://www.msasafety.com/role/CommitmentsandContingenciesAdditionalInformationDetailsCommitments and Contingencies - Additional Information (Details)Details74 falsefalseR75.htm9954518 - Disclosure - Contingencies - Schedule of Product Warranty Liability (Details)Sheethttp://www.msasafety.com/role/ContingenciesScheduleofProductWarrantyLiabilityDetailsContingencies - Schedule of Product Warranty Liability (Details)Details75 falsefalseAll ReportsBookAll Reports msa-20240930.htmmsa-20240930.xsdmsa-20240930_cal.xmlmsa-20240930_def.xmlmsa-20240930_lab.xmlmsa-20240930_pre.xml msa-20240930_g1.jpg http://fasb.org/srt/2024http://fasb.org/us-gaap/2024http://xbrl.sec.gov/dei/2024http://xbrl.sec.gov/ecd/2024truetrue JSON 94 MetaLinks.json IDEA: XBRL DOCUMENT { "version": "2.2", "instance": { "msa-20240930.htm": { "nsprefix": "msa", "nsuri": "http://www.msasafety.com/20240930", "dts": { "inline": { "local": ["msa-20240930.htm"] }, "schema": { "local": ["msa-20240930.xsd"], "remote": ["http://www.xbrl.org/2003/xbrl-instance-2003-12-31.xsd", "http://www.xbrl.org/2003/xbrl-linkbase-2003-12-31.xsd", "http://www.xbrl.org/2003/xl-2003-12-31.xsd", "http://www.xbrl.org/2003/xlink-2003-12-31.xsd", "http://www.xbrl.org/2005/xbrldt-2005.xsd", "http://www.xbrl.org/2006/ref-2006-02-27.xsd", "http://www.xbrl.org/lrr/role/negated-2009-12-16.xsd", "http://www.xbrl.org/lrr/role/net-2009-12-16.xsd", "http://www.xbrl.org/lrr/role/reference-2009-12-16.xsd", "https://www.xbrl.org/2020/extensible-enumerations-2.0.xsd", "https://www.xbrl.org/dtr/type/2020-01-21/types.xsd", "https://www.xbrl.org/dtr/type/2022-03-31/types.xsd", "https://xbrl.fasb.org/srt/2024/elts/srt-2024.xsd", "https://xbrl.fasb.org/srt/2024/elts/srt-roles-2024.xsd", "https://xbrl.fasb.org/srt/2024/elts/srt-types-2024.xsd", "https://xbrl.fasb.org/us-gaap/2024/elts/us-gaap-2024.xsd", "https://xbrl.fasb.org/us-gaap/2024/elts/us-roles-2024.xsd", "https://xbrl.fasb.org/us-gaap/2024/elts/us-types-2024.xsd", "https://xbrl.sec.gov/country/2024/country-2024.xsd", "https://xbrl.sec.gov/dei/2024/dei-2024.xsd", "https://xbrl.sec.gov/ecd/2024/ecd-2024.xsd", "https://xbrl.sec.gov/stpr/2024/stpr-2024.xsd"] }, "calculationLink": { "local": ["msa-20240930_cal.xml"] }, "definitionLink": { "local": ["msa-20240930_def.xml"] }, "labelLink": { "local": ["msa-20240930_lab.xml"] }, "presentationLink": { "local": ["msa-20240930_pre.xml"] } }, "keyStandard": 263, "keyCustom": 36, "axisStandard": 28, "axisCustom": 0, "memberStandard": 45, "memberCustom": 26, "hidden": { "total": 6, "http://xbrl.sec.gov/dei/2024": 5, "http://fasb.org/us-gaap/2024": 1 }, "contextCount": 335, "entityCount": 1, "segmentCount": 74, "elementCount": 605, "unitCount": 9, "baseTaxonomies": { "http://fasb.org/us-gaap/2024": 907, "http://xbrl.sec.gov/dei/2024": 29, "http://xbrl.sec.gov/ecd/2024": 4, "http://fasb.org/srt/2024": 1 }, "report": { "R1": { "role": "http://www.msasafety.com/role/Cover", "longName": "0000001 - 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Excludes amount for disposal group and discontinued operations. Cash includes, but is not limited to, currency on hand, demand deposits with banks or financial institutions, and other accounts with general characteristics of demand deposits. 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Cash includes, but is not limited to, currency on hand, demand deposits with banks or financial institutions, and other accounts with general characteristics of demand deposits. Cash equivalents include, but are not limited to, short-term, highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates." } } }, "auth_ref": ["r1", "r123"] }, "ecd_ChangedPeerGroupFnTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://xbrl.sec.gov/ecd/2024", "localname": "ChangedPeerGroupFnTextBlock", "presentation": ["http://xbrl.sec.gov/ecd/role/PvpDisclosure"], "lang": { "en-us": { "role": { "terseLabel": "Changed Peer Group, Footnote", "label": "Changed Peer Group, Footnote [Text Block]" } } }, "auth_ref": ["r911"] }, "ecd_ChngInFrValAsOfVstngDtOfPrrYrEqtyAwrdsVstdInCvrdYrMember": { "xbrltype": "domainItemType", "nsuri": "http://xbrl.sec.gov/ecd/2024", "localname": "ChngInFrValAsOfVstngDtOfPrrYrEqtyAwrdsVstdInCvrdYrMember", "presentation": ["http://xbrl.sec.gov/ecd/role/PvpDisclosure"], "lang": { "en-us": { "role": { "terseLabel": "Change in Fair Value as of Vesting Date of Prior Year Equity Awards Vested in Covered Year", "label": "Change in Fair Value as of Vesting Date of Prior Year Equity Awards Vested in Covered Year [Member]" } } }, "auth_ref": ["r908"] }, "ecd_ChngInFrValOfOutsdngAndUnvstdEqtyAwrdsGrntdInPrrYrsMember": { "xbrltype": "domainItemType", "nsuri": "http://xbrl.sec.gov/ecd/2024", "localname": "ChngInFrValOfOutsdngAndUnvstdEqtyAwrdsGrntdInPrrYrsMember", "presentation": ["http://xbrl.sec.gov/ecd/role/PvpDisclosure"], "lang": { "en-us": { "role": { "terseLabel": "Year-over-Year Change in Fair Value of Equity Awards Granted in Prior Years That are Outstanding and Unvested", "label": "Year-over-Year Change in Fair Value of Equity Awards Granted in Prior Years That are Outstanding and Unvested [Member]" } } }, "auth_ref": ["r906"] }, "dei_CityAreaCode": { "xbrltype": "normalizedStringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "CityAreaCode", "presentation": ["http://www.msasafety.com/role/Cover"], "lang": { "en-us": { "role": { "terseLabel": "City Area Code", "label": "City Area Code", "documentation": "Area code of city" } } }, "auth_ref": [] }, "us-gaap_ClassOfStockDomain": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ClassOfStockDomain", "presentation": ["http://www.msasafety.com/role/CapitalStockNarrativeDetails"], "lang": { "en-us": { "role": { "terseLabel": "Class of Stock [Domain]", "label": "Class of Stock [Domain]", "documentation": "Share of stock differentiated by the voting rights the holder receives. Examples include, but are not limited to, common stock, redeemable preferred stock, nonredeemable preferred stock, and convertible stock." } } }, "auth_ref": ["r167", "r206", "r207", "r208", "r236", "r257", "r261", "r269", "r273", "r280", "r281", "r318", "r379", "r382", "r383", "r384", "r388", "r389", "r419", "r420", "r423", "r426", "r433", "r606", "r689", "r690", "r691", "r692", "r697", "r698", "r699", "r700", "r701", "r702", "r703", "r704", "r705", "r706", "r707", "r708", "r719", "r741", "r759", "r779", "r780", "r781", "r782", "r783", "r950", "r969", "r976"] }, "us-gaap_ClassOfStockLineItems": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ClassOfStockLineItems", "presentation": ["http://www.msasafety.com/role/CapitalStockScheduleofCommonStockActivityDetails"], "lang": { "en-us": { "role": { "terseLabel": "Class of Stock [Line Items]", "label": "Class of Stock [Line Items]", "documentation": "Line items represent financial concepts included in a table. 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These shares represent capital invested by the firm's shareholders and owners, and may be all or only a portion of the number of shares authorized. Shares issued include shares outstanding and shares held in the treasury." } } }, "auth_ref": ["r98"] }, "us-gaap_CommonStockSharesOutstanding": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "CommonStockSharesOutstanding", "presentation": ["http://www.msasafety.com/role/CapitalStockNarrativeDetails"], "lang": { "en-us": { "role": { "terseLabel": "Common stock, shares, outstanding (shares)", "label": "Common Stock, Shares, Outstanding", "documentation": "Number of shares of common stock outstanding. 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or usage; held in foreign currencies. Excludes amounts for disposal group and discontinued operations. Cash includes, but is not limited to, currency on hand, demand
deposits with banks or financial institutions, and other accounts with general characteristics of demand deposits. Cash equivalents include, but are not limited to, short-term,
highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value
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This information should be based on the registrant's current or most recent filing containing the related disclosure." } } }, "auth_ref": [ "r865" ] }, "dei_EntityIncorporationStateCountryCode": { "xbrltype": "edgarStateCountryItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityIncorporationStateCountryCode", "presentation": [ "http://www.msasafety.com/role/Cover" ], "lang": { "en-us": { "role": { "terseLabel": "Entity Incorporation, State or Country Code", "label": "Entity Incorporation, State or Country Code", "documentation": "Two-character EDGAR code representing the state or country of incorporation." } } }, "auth_ref": [] }, "dei_EntityInteractiveDataCurrent": { "xbrltype": "yesNoItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityInteractiveDataCurrent", "presentation": [ "http://www.msasafety.com/role/Cover" ], "lang": { "en-us": { "role": { "terseLabel": "Entity Interactive Data Current", "label": "Entity Interactive Data Current", "documentation": "Boolean flag that is true when the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files)." } } }, "auth_ref": [ "r949" ] }, "dei_EntityRegistrantName": { "xbrltype": "normalizedStringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityRegistrantName", "presentation": [ "http://www.msasafety.com/role/Cover" ], "lang": { "en-us": { "role": { "terseLabel": "Entity Registrant Name", "label": "Entity Registrant Name", "documentation": "The exact name of the entity filing the report as specified in its charter, which is required by forms filed with the SEC." } } }, "auth_ref": [ "r865" ] }, "dei_EntityShellCompany": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityShellCompany", "presentation": [ "http://www.msasafety.com/role/Cover" ], "lang": { "en-us": { "role": { "terseLabel": "Entity Shell Company", "label": "Entity Shell Company", "documentation": "Boolean flag that is true when the registrant is a shell company as defined in Rule 12b-2 of the Exchange Act." } } }, "auth_ref": [ "r865" ] }, "dei_EntitySmallBusiness": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntitySmallBusiness", "presentation": [ "http://www.msasafety.com/role/Cover" ], "lang": { "en-us": { "role": { "terseLabel": "Entity Small Business", "label": "Entity Small Business", "documentation": "Indicates that the company is a Smaller Reporting Company (SRC)." } } }, "auth_ref": [ "r865" ] }, "dei_EntityTaxIdentificationNumber": { "xbrltype": "employerIdItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityTaxIdentificationNumber", "presentation": [ "http://www.msasafety.com/role/Cover" ], "lang": { "en-us": { "role": { "terseLabel": "Entity Tax Identification Number", "label": "Entity Tax Identification Number", "documentation": "The Tax Identification Number (TIN), also known as an Employer Identification Number (EIN), is a unique 9-digit value assigned by the IRS." } } }, "auth_ref": [ "r865" ] }, "us-gaap_EntityWideInformationRevenueFromExternalCustomerLineItems": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "EntityWideInformationRevenueFromExternalCustomerLineItems", "presentation": [ "http://www.msasafety.com/role/SegmentInformationPercentageofTotalSalesbyProductGroupDetails" ], "lang": { "en-us": { "role": { "terseLabel": "Revenue from External Customer [Line Items]", "label": "Revenue from External Customer [Line Items]", "documentation": "Line items represent financial concepts included in a table. 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Includes, but is not limited to, interest and penalties, reconciliation of unrecognized tax benefits, unrecognized tax benefits that would affect the effective tax rate, tax years that remain subject to examination by tax jurisdictions, and information about positions for which it is reasonably possible that amounts unrecognized will significantly change within 12 months." } } }, "auth_ref": ["r1045"] }, "us-gaap_IncomeTaxDisclosureAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "IncomeTaxDisclosureAbstract", "lang": { "en-us": { "role": { "terseLabel": "Income Tax Disclosure [Abstract]", "label": "Income Tax Disclosure [Abstract]" } } }, "auth_ref": [] }, "us-gaap_IncomeTaxDisclosureTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "IncomeTaxDisclosureTextBlock", "presentation": ["http://www.msasafety.com/role/IncomeTaxes"], "lang": { "en-us": { "role": { "terseLabel": "Income Taxes", 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A major class is composed of intangible assets that can be grouped together because they are similar, either by their nature or by their use in the operations of the company." } } }, "auth_ref": ["r333", "r338", "r341", "r814"] }, "ecd_IndividualAxis": { "xbrltype": "stringItemType", "nsuri": "http://xbrl.sec.gov/ecd/2024", "localname": "IndividualAxis", "presentation": ["http://xbrl.sec.gov/ecd/role/AwardTimingDisclosure", "http://xbrl.sec.gov/ecd/role/ErrCompDisclosure", "http://xbrl.sec.gov/ecd/role/InsiderTradingArrangements", "http://xbrl.sec.gov/ecd/role/PvpDisclosure"], "lang": { "en-us": { "role": { "terseLabel": "Individual:", "label": "Individual [Axis]" } } }, "auth_ref": ["r876", "r886", "r896", "r920", "r928", "r932", "r940"] }, "ecd_InsiderTradingArrLineItems": { "xbrltype": "stringItemType", "nsuri": "http://xbrl.sec.gov/ecd/2024", "localname": "InsiderTradingArrLineItems", "lang": { "en-us": { "role": { "label": "Insider Trading Arrangements [Line Items]" } } }, 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Includes, but is not limited to, the basis of stating inventory, the method of determining inventory cost, the classes of inventory, and the nature of the cost elements included in inventory." } } }, "auth_ref": ["r322"] }, "us-gaap_InventoryFinishedGoodsNetOfReserves": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "InventoryFinishedGoodsNetOfReserves", "crdr": "debit", "calculation": { "http://www.msasafety.com/role/InventoriesScheduleofInventoriesDetails": { "parentTag": "us-gaap_InventoryNet", "weight": 1.0, "order": 1.0 } }, "presentation": ["http://www.msasafety.com/role/InventoriesScheduleofInventoriesDetails"], "lang": { "en-us": { "role": { "terseLabel": "Finished products", "label": "Inventory, Finished Goods, Net of Reserves", "documentation": "Carrying amount, net of valuation reserves and adjustments, as of the balance sheet date of merchandise or goods held by the company that are readily available for sale." } } }, "auth_ref": ["r128", "r795"] }, "us-gaap_InventoryNet": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "InventoryNet", "crdr": "debit", "calculation": { "http://www.msasafety.com/role/CondensedConsolidatedBalanceSheets": { "parentTag": "us-gaap_AssetsCurrent", "weight": 1.0, "order": 3.0 }, "http://www.msasafety.com/role/InventoriesScheduleofInventoriesDetails": { "parentTag": null, "weight": null, "order": null, "root": true } }, "presentation": ["http://www.msasafety.com/role/CondensedConsolidatedBalanceSheets", "http://www.msasafety.com/role/InventoriesScheduleofInventoriesDetails"], "lang": { "en-us": { "role": { "terseLabel": "Inventories (Note 4)", "totalLabel": "Total inventories", "label": "Inventory, Net", "documentation": "Amount after valuation and LIFO reserves of inventory expected to be sold, or consumed within one year or operating cycle, if longer." } } }, "auth_ref": ["r211", "r794", "r846"] }, "us-gaap_InventoryRawMaterialsNetOfReserves": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "InventoryRawMaterialsNetOfReserves", "crdr": "debit", "calculation": { "http://www.msasafety.com/role/InventoriesScheduleofInventoriesDetails": { "parentTag": "us-gaap_InventoryNet", "weight": 1.0, "order": 3.0 } }, "presentation": ["http://www.msasafety.com/role/InventoriesScheduleofInventoriesDetails"], "lang": { "en-us": { "role": { "terseLabel": "Raw materials and supplies", "label": "Inventory, Raw Materials, Net of Reserves", "documentation": "Carrying amount, net of valuation reserves and adjustments, as of the balance sheet date of

unprocessed items to be consumed in the manufacturing or production process." } } }, "auth_ref": ["r128", "r797"] }, "us-gaap_InventoryWorkInProcessNetOfReserves": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "InventoryWorkInProcessNetOfReserves", "crdr": "debit", "calculation": { "http://www.msasafety.com/role/InventoriesScheduleofInventoriesDetails": { "parentTag": "us-gaap_InventoryNet", "weight": 1.0, "order": 2.0 } }, "presentation": ["http://www.msasafety.com/role/InventoriesScheduleofInventoriesDetails"], "lang": { "en-us": { "role": { "terseLabel": "Work in process", "label": "Inventory, Work in Process, Net of Reserves", "documentation": "Carrying amount, net of reserves and adjustments, as of the balance sheet date of merchandise or goods which are partially completed. This inventory is generally comprised of raw materials, labor and factory overhead costs, which require further materials, labor and overhead to be converted into finished goods, and which generally require the use of estimates to determine percentage complete and pricing." } } }, "auth_ref": ["r128", "r796"] }, "msa_JointVentureByRQInsuranceHoldingsLtdAndObraCapitalIncMember": { "xbrltype": "domainItemType", "nsuri": "http://www.msasafety.com/20240930", "localname": "JointVentureByRQInsuranceHoldingsLtdAndObraCapitalIncMember", "presentation": ["http://www.msasafety.com/role/CommitmentsandContingenciesAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Joint Venture By R&Q Insurance Holdings Ltd. And Obra Capital, Inc.", "label": "Joint Venture By R&Q Insurance Holdings Ltd. And Obra Capital, Inc. [Member]", "documentation": "Joint Venture By R&Q Insurance Holdings Ltd. And Obra Capital, Inc." } } }, "auth_ref": [] }, "us-gaap_LandMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LandMember", "presentation": ["http://www.msasafety.com/role/PropertyPlantandEquipmentDetails"], "lang": { "en-us": { "role": { "terseLabel": "Land", "label": "Land [Member]", "documentation": "Part of earth's surface not covered by water." } } }, "auth_ref": ["r1043"] }, "dei_LegalEntityAxis": { "xbrltype": "stringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "LegalEntityAxis", "presentation": ["http://www.msasafety.com/role/CommitmentsandContingenciesAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Legal Entity [Axis]", "label": "Legal Entity [Axis]", "documentation": "The set of legal entities associated with a report." } } }, "auth_ref": [] }, "us-gaap_LettersOfCreditOutstandingAmount": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LettersOfCreditOutstandingAmount", "crdr": "credit", "presentation": ["http://www.msasafety.com/role/LongTermDebtAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Proceeds from lines of credit", "label": "Letters of Credit Outstanding, Amount", "documentation": "The total amount of the contingent obligation under letters of credit outstanding as of the reporting date." } } }, "auth_ref": [] }, "us-gaap_Liabilities": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "Liabilities", "crdr": "credit", "calculation": { "http://www.msasafety.com/role/CondensedConsolidatedBalanceSheets": { "parentTag": "us-gaap_LiabilitiesAndStockholdersEquity", "weight": 1.0, "order": 1.0 } }, "presentation": ["http://www.msasafety.com/role/CondensedConsolidatedBalanceSheets"], "lang": { "en-us": { "role": { "totalLabel": "Total liabilities", "label": "Liabilities", "documentation": "Amount of liability recognized for present obligation requiring transfer or otherwise providing economic benefit to others." } } }, "auth_ref": ["r24", "r88", "r89", "r90", "r93", "r94", "r95", "r96", "r236", "r318", "r379", "r380", "r382", "r383", "r384", "r385", "r386", "r388", "r389", "r580", "r583", "r584", "r606", "r718", "r801", "r863", "r1038", "r1066", "r1067"] }, "us-gaap_LiabilitiesAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LiabilitiesAbstract", "presentation": ["http://www.msasafety.com/role/CondensedConsolidatedBalanceSheets"], "lang": { "en-us": { "role": { "terseLabel": "Liabilities", "label": "Liabilities [Abstract]" } } }, "auth_ref": [] }, "us-gaap_LiabilitiesAndStockholdersEquity": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LiabilitiesAndStockholdersEquity", "crdr": "credit", "calculation": { "http://www.msasafety.com/role/CondensedConsolidatedBalanceSheets": { "parentTag": null, "weight": null, "order": null, "root": true } }, "presentation": ["http://www.msasafety.com/role/CondensedConsolidatedBalanceSheets"], "lang": { "en-us": { "role": { "totalLabel": "Total liabilities and shareholders\u2019 equity", "label": "Liabilities and Equity", "documentation": "Amount of liabilities and equity items, including the portion of equity attributable to noncontrolling interests, if any." } } }, "auth_ref": ["r102", "r153", "r649", "r846", "r971", "r989", "r1063"] }, "us-gaap_LiabilitiesCurrent": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LiabilitiesCurrent", "crdr": "credit", "calculation": { "http://www.msasafety.com/role/CondensedConsolidatedBalanceSheets": { "parentTag": "us-gaap_Liabilities", "weight": 1.0, "order": 1.0 } }, "presentation": ["http://www.msasafety.com/role/CondensedConsolidatedBalanceSheets"], "lang": { "en-us": { "role": { "totalLabel": "Total current liabilities", "label": "Liabilities, Current", "documentation": "Total obligations incurred as part of normal operations that are expected to be paid during the following twelve months or within one business cycle, if longer." } } }, "auth_ref": ["r90", "r198", "r236", "r318", "r379", "r380", "r382", "r383", "r384", "r385", "r386", "r388", "r389", "r580", "r583", "r584", "r606", "r846", "r1038", "r1066", "r1067"] }, "us-gaap_LineOfCredit": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LineOfCredit", "crdr": "credit", "presentation": ["http://www.msasafety.com/role/LongTermDebtScheduleofDebtDetails"], "lang": { "en-us": { "role": { "terseLabel": "Senior revolving credit facility maturing in 2026, net of debt issuance costs", "label": "Long-Term Line of Credit", "documentation": "The carrying value as of the balance sheet date of the current and noncurrent portions of long-term obligations drawn from a line of credit, which is a bank's commitment to make loans up to a specific amount. Examples of items that might be included in the application of this element may consist of letters of credit, standby letters of credit, and revolving credit arrangements, under which borrowings can be made up to a maximum amount as of any point in time conditional on satisfaction of specified terms before, as of and after the date of drawdowns on the line. Includes short-term obligations that would normally be classified as current liabilities but for which (a) postbalance sheet date issuance of a long term obligation to refinance the short term obligation on a long term basis, or (b) the enterprise has entered into a financing agreement that clearly permits the enterprise to refinance the short-term obligation on a long term basis and the following conditions are met (1) the agreement does not expire within 1 year and is not cancelable by the lender except for violation of an objectively determinable provision, (2) no violation exists at the BS date, and (3) the lender has entered into the financing agreement is expected to be financially capable of honoring the agreement." } } }, "auth_ref": ["r24", "r152", "r1076"] }, "msa_LineOfCreditFacilityAccordionFeatureAmount": { "xbrltype": "monetaryItemType", "nsuri": "http://www.msasafety.com/20240930", "localname": "LineOfCreditFacilityAccordionFeatureAmount", "crdr": "credit", "presentation": ["http://www.msasafety.com/role/LongTermDebtAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Line of credit facility, accordion feature", "label": "Line Of Credit Facility, Accordion Feature, Amount", "documentation": "Line Of Credit Facility, Accordion Feature, Amount" } } }, "auth_ref": [] }, "us-gaap_LineOfCreditFacilityInterestRateDuringPeriod": { "xbrltype": "percentItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LineOfCreditFacilityInterestRateDuringPeriod", "presentation": ["http://www.msasafety.com/role/LongTermDebtAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Weighted average revolving interest rate, percentage", "label": "Line of Credit Facility, Interest Rate During Period", "documentation": "The effective interest rate during the reporting period." } } }, "auth_ref": ["r87", "r92"] }, "us-gaap_LineOfCreditFacilityMaximumBorrowingCapacity": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LineOfCreditFacilityMaximumBorrowingCapacity", "crdr": "credit", "presentation": ["http://www.msasafety.com/role/LongTermDebtAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Line of credit facility, maximum borrowing capacity", "label": "Line of Credit Facility, Maximum Borrowing Capacity", "documentation": "Maximum borrowing capacity under the credit facility without consideration of any current restrictions on the amount that could be borrowed or the amounts currently outstanding under the facility." } } }, "auth_ref": ["r87", "r92"] }, "us-gaap_LineOfCreditFacilityRemainingBorrowingCapacity": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LineOfCreditFacilityRemainingBorrowingCapacity", "crdr": "credit", "presentation": ["http://www.msasafety.com/role/LongTermDebtAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Line of credit facility, remaining borrowing capacity", "label": "Line of Credit Facility, Remaining Borrowing Capacity", "documentation": "Amount of borrowing capacity currently available under the credit facility (current borrowing capacity less the amount of borrowings outstanding)." } } }, "auth_ref": ["r87", "r92", "r378"] }, "us-gaap_LineOfCreditMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LineOfCreditMember", "presentation": ["http://www.msasafety.com/role/LongTermDebtAdditionalInformationDetails", "http://www.msasafety.com/role/LongTermDebtScheduleofDebtDetails"], "lang": { "en-us": { "role": { "terseLabel": "Line of Credit", "label": "Line of Credit [Member]", "documentation": "A contractual arrangement with a lender under which borrowings can be made up to a specific amount at any point in time, and under which borrowings outstanding may be either short-term or long-term, depending upon the particulars." } } }, "auth_ref": [] }, "us-gaap_LitigationSettlementLoss": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LitigationSettlementLoss", "crdr": "debit", "calculation": { "http://www.msasafety.com/role/SegmentInformationReconciliationofTotalAdjustedEBITDADetails": { "parentTag": "us-gaap_IncomeLossFromContinuingOperationsBeforeIncomeTaxesExtraordinaryItemsNoncontrollingInterest", "weight": -1.0, "order": 3.0 } }, "presentation": ["http://www.msasafety.com/role/CommitmentsandContingenciesAdditionalInformationDetails", "http://www.msasafety.com/role/SegmentInformationReconciliationofTotalAdjustedEBITDADetails"], "lang": { "en-us": { "role": { "verboseLabel": "Net cost for product related legal matter", "terseLabel": "Product liability expense (Note 17)", "label": "Litigation Settlement, Loss", "documentation": "Amount of loss from litigation settlement for amount awarded to other party. Excludes claims within an insurance entity's normal claims settlement process." } } }, "auth_ref": ["r1027"] }, "dei_LocalPhoneNumber": { "xbrltype": "normalizedStringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "LocalPhoneNumber", "presentation": ["http://www.msasafety.com/role/Cover"], "lang": { "en-us": { "role": { "terseLabel": "Local Phone Number", "label": "Local Phone Number", "documentation": "Local phone number for entity." } } }, "auth_ref": [] }, "us-gaap_LongTermDebt": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LongTermDebt", "crdr": "credit", "calculation": { "http://www.msasafety.com/role/LongTermDebtScheduleofDebtDetails": { "parentTag": null, "weight": null, "order": null, "root": true } }, "presentation": ["http://www.msasafety.com/role/LongTermDebtAdditionalInformationDetails", "http://www.msasafety.com/role/LongTermDebtScheduleofDebtDetails"], "lang": { "en-us": { "role": { "totalLabel": "Total", "terseLabel": "Long term debt", "label": "Long-Term Debt", "documentation": "Amount, after deduction of unamortized premium (discount) and debt issuance cost, of long-term debt. Excludes lease obligation." } } }, "auth_ref": ["r24", "r152", "r403", "r417", "r817", "r818", "r845", "r1076"] }, "us-gaap_LongTermDebtCurrent": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LongTermDebtCurrent", "crdr": "credit", "calculation": { "http://www.msasafety.com/role/LongTermDebtScheduleofDebtDetails": { "parentTag": "us-gaap_LongTermDebt", "weight": 1.0, "order": 1.0 } }, "presentation": ["http://www.msasafety.com/role/LongTermDebtAdditionalInformationDetails", "http://www.msasafety.com/role/LongTermDebtScheduleofDebtDetails"], "lang": { "en-us": { "role": { "terseLabel": "Amounts due within one year", "label": "Long-Term Debt, Current Maturities", "documentation": "Amount, after deduction of unamortized premium (discount) and debt issuance cost, of long-term debt classified as current. Excludes lease obligation." } } }, "auth_ref": ["r203"] }, "us-gaap_LongTermDebtFairValue": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LongTermDebtFairValue", "crdr": "credit", "presentation": ["http://www.msasafety.com/role/FairValueMeasurementsDetails"], "lang": { "en-us": { "role": { "terseLabel": "Long-term debt, fair value disclosure", "label": "Long-Term Debt, Fair Value", "documentation": "The fair value amount of long-term debt whether such amount is presented as a separate caption or as a parenthetical disclosure. Additionally, this element may be used in connection with the fair value disclosures required in the footnote disclosures to the financial statements. The element may be used in both the balance sheet and disclosure in the same submission." } } }, "auth_ref": ["r1051", "r1052", "r1053", "r1054"] }, "us-gaap_LongTermDebtNoncurrent": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LongTermDebtNoncurrent", "crdr": "credit", "calculation": { "http://www.msasafety.com/role/CondensedConsolidatedBalanceSheets": { "parentTag": "us-gaap_Liabilities", "weight": 1.0, "order": 2.0 }, "http://www.msasafety.com/role/LongTermDebtScheduleofDebtDetails": { "parentTag": "us-gaap_LongTermDebt", "weight": 1.0, "order": 2.0 } }, "presentation": ["http://www.msasafety.com/role/CondensedConsolidatedBalanceSheets", "http://www.msasafety.com/role/LongTermDebtScheduleofDebtDetails"], "lang": { "en-us": { "role": { "verboseLabel": "Long-term debt, net (Note 12)", "terseLabel": "Long-term debt, net of debt issuance costs", "label": "Long-Term Debt, Excluding Current Maturities", "documentation": "Amount, after deduction of unamortized premium (discount) and debt issuance cost, of long-term debt classified as noncurrent. Excludes lease obligation." } } }, "auth_ref": ["r205"] }, "us-gaap_LongtermDebtTypeAxis": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LongtermDebtTypeAxis", "presentation": ["http://www.msasafety.com/role/LongTermDebtAdditionalInformationDetails", "http://www.msasafety.com/role/LongTermDebtScheduleofDebtDetails"], "lang": { "en-us": { "role": { "terseLabel": "Long-term Debt, Type [Axis]", "label": "Long-Term Debt, Type [Axis]", "documentation": "Information by type of long-term debt." } } }, "auth_ref": ["r24", "r1019", "r1020", "r1021"] }, "us-gaap_LongtermDebtTypeDomain": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LongtermDebtTypeDomain", "presentation": ["http://www.msasafety.com/role/LongTermDebtAdditionalInformationDetails", "http://www.msasafety.com/role/LongTermDebtScheduleofDebtDetails"], "lang": { "en-us": { "role": { "terseLabel": "Long-term Debt, Type [Domain]", "label": "Long-Term Debt, Type [Domain]", "documentation": "Type of long-term debt arrangement, such as notes, line of credit, commercial paper, asset-based financing, project financing, letter of credit financing. These are debt arrangements that originally required repayment more than twelve months after issuance or greater than the normal operating cycle of the company, if longer." } } }, "auth_ref": ["r24", "r39", "r1019", "r1020", "r1021"] }, "us-gaap_LossContingenciesByNatureOfContingencyAxis": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LossContingenciesByNatureOfContingencyAxis", "presentation": ["http://www.msasafety.com/role/CommitmentsandContingenciesAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Loss Contingency Nature", "label": "Loss Contingency Nature [Axis]", "documentation": "Information by type of existing condition, situation, or set of circumstances involving uncertainty as to possible loss to an enterprise that will ultimately be resolved when one or more future events occur or fail to occur." } } }, "auth_ref": ["r366", "r367", "r368", "r371", "r548", "r684", "r815", "r1028", "r1029"] }, "us-gaap_LossContingenciesLineItems": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LossContingenciesLineItems", "presentation": ["http://www.msasafety.com/role/CommitmentsandContingenciesAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Loss Contingencies [Line Items]", "label": "Loss Contingencies [Line Items]", "documentation": "Line items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table." } } }, "auth_ref": ["r366", "r367",

"r368", "r371", "r548", "r815", "r1028", "r1029"] }, "us-gaap_LossContingenciesTable": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LossContingenciesTable", "presentation": ["http://www.msasafety.com/role/CommitmentsandContingenciesAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Loss Contingencies [Table]", "label": "Loss Contingencies [Table]", "documentation": "Disclosure of information about loss contingency. Excludes environmental contingency, warranty, and unconditional purchase obligation." } } }, "auth_ref": ["r366", "r367", "r368", "r371", "r548", "r815", "r1028", "r1029"] }, "us-gaap_LossContingencyNatureDomain": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LossContingencyNatureDomain", "presentation": ["http://www.msasafety.com/role/CommitmentsandContingenciesAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Loss Contingency, Nature [Domain]", "label": "Loss Contingency, Nature [Domain]", "documentation": "An existing condition, situation, or set of circumstances involving uncertainty as to possible loss to an enterprise that will ultimately be resolved when one or more future events occur or fail to occur. Resolution of the uncertainty may confirm the incurrence of a loss or impairment of an asset or the incurrence of a liability." } } }, "auth_ref": ["r366", "r367", "r368", "r371", "r548", "r684", "r815", "r1028", "r1029"] }, "us-gaap_LossContingencyPendingClaimsNumber": { "xbrltype": "integerItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LossContingencyPendingClaimsNumber", "presentation": ["http://www.msasafety.com/role/CommitmentsandContingenciesAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Number of pending claims", "label": "Loss Contingency, Pending Claims, Number", "documentation": "Number of pending claims pertaining to a loss contingency." } } }, "auth_ref": ["r1028", "r1029"] }, "msa_LossContingencyPendingClassActionNumber": { "xbrltype": "integerItemType", "nsuri": "http://www.msasafety.com/20240930", "localname": "LossContingencyPendingClassActionNumber", "presentation": ["http://www.msasafety.com/role/CommitmentsandContingenciesAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Number of pending class actions", "label": "Loss Contingency, Pending Class Action, Number", "documentation": "Loss Contingency, Pending Class Action, Number" } } }, "auth_ref": [] }, "msa_LossContingencyPendingLawsuitsNumber": { "xbrltype": "integerItemType", "nsuri": "http://www.msasafety.com/20240930", "localname": "LossContingencyPendingLawsuitsNumber", "presentation": ["http://www.msasafety.com/role/CommitmentsandContingenciesAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Number of pending lawsuits", "label": "Loss Contingency, Pending Lawsuits, Number", "documentation": "Loss Contingency, Pending Lawsuits, Number" } } }, "auth_ref": [] }, "msa_MSALLCMember": { "xbrltype": "domainItemType", "nsuri": "http://www.msasafety.com/20240930", "localname": "MSALLCMember", "presentation": ["http://www.msasafety.com/role/CommitmentsandContingenciesAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "MSA LLC", "label": "MSA LLC [Member]", "documentation": "MSA LLC" } } }, "auth_ref": [] }, "us-gaap_MachineryAndEquipmentMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "MachineryAndEquipmentMember", "presentation": ["http://www.msasafety.com/role/PropertyPlantandEquipmentDetails"], "lang": { "en-us": { "role": { "terseLabel": "Machinery and equipment", "label": "Machinery and Equipment [Member]", "documentation": "Tangible personal property used to produce goods and services, including, but is not limited to, tools, dies and molds, computer and office equipment." } } }, "auth_ref": [] }, "srt_MaximumMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/srt/2024", "localname": "MaximumMember", "presentation": ["http://www.msasafety.com/role/LongTermDebtAdditionalInformationDetails", "http://www.msasafety.com/role/StockPlansAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Maximum", "label": "Maximum [Member]", "documentation": "Upper limit of the provided range." } } }, "auth_ref": ["r169", "r170", "r171", "r172", "r173", "r190", "r191", "r367", "r368", "r369", "r370", "r511", "r548", "r602", "r635", "r676", "r677", "r684", "r710", "r711", "r764", "r766", "r769", "r770", "r777", "r788", "r789", "r812", "r821", "r833", "r841", "r842", "r843", "r844", "r848", "r1040", "r1068", "r1069", "r1070", "r1071", "r1072", "r1073"] }, "ecd_MeasureAxis": { "xbrltype": "stringItemType", "nsuri": "http://xbrl.sec.gov/ecd/2024", "localname": "MeasureAxis", "presentation": ["http://xbrl.sec.gov/ecd/role/PvpDisclosure"], "lang": { "en-us": { "role": { "terseLabel": "Measure:", "label": "Measure [Axis]" } } }, "auth_ref": ["r912"] }, "ecd_MeasureName": { "xbrltype": "normalizedStringItemType", "nsuri": "http://xbrl.sec.gov/ecd/2024", "localname": 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Financing activity cash flows include obtaining resources from owners and providing them with a return on, and a return of, their investment; borrowing money and repaying amounts borrowed, or settling the obligation; and obtaining and paying for other resources obtained from creditors on long-term credit." } } }, "auth_ref": ["r232"] }, "us-gaap_NetCashProvidedByUsedInFinancingActivitiesAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "NetCashProvidedByUsedInFinancingActivitiesAbstract", "presentation": ["http://www.msasafety.com/role/CondensedConsolidatedStatementsofCashFlows"], "lang": { "en-us": { "role": { "terseLabel": "Financing Activities", "label": "Net Cash Provided by (Used in) Financing Activities [Abstract]" } } }, "auth_ref": [] }, "us-gaap_NetCashProvidedByUsedInInvestingActivities": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "NetCashProvidedByUsedInInvestingActivities", "crdr": "debit", "calculation": { "http://www.msasafety.com/role/CondensedConsolidatedStatementsofCashFlows": { "parentTag": "us-gaap_CashCashEquivalentsRestrictedCashAndRestrictedCashEquivalentsPeriodIncreaseDecreaseIncludingExchangeRateEffect", "weight": 1.0, "order": 2.0 } }, "presentation": ["http://www.msasafety.com/role/CondensedConsolidatedStatementsofCashFlows"], "lang": { "en-us": { "role": { "totalLabel": "Cash Flow Used in Investing Activities", "label": "Net Cash Provided by (Used in) Investing Activities", "documentation": "Amount of cash inflow (outflow) from investing activities, including discontinued operations. 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Operating activity cash flows include transactions, adjustments, and changes in value not defined as investing or financing activities." } } }, "auth_ref": ["r123", "r124", "r125"] }, "us-gaap_NetCashProvidedByUsedInOperatingActivitiesAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "NetCashProvidedByUsedInOperatingActivitiesAbstract", "presentation": ["http://www.msasafety.com/role/CondensedConsolidatedStatementsofCashFlows"], "lang": { "en-us": { "role": { "terseLabel": "Operating Activities", "label": "Net Cash Provided by (Used in) Operating Activities [Abstract]" } } }, "auth_ref": [] }, "us-gaap_NetIncomeLoss": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "NetIncomeLoss", "crdr": "credit", "calculation": { "http://www.msasafety.com/role/CondensedConsolidatedStatementsofComprehensiveIncome": { "parentTag": "us-gaap_ComprehensiveIncomeNetOfTaxIncludingPortionAttributableToNoncontrollingInterest", "weight": 1.0, "order": 1.0 }, "http://www.msasafety.com/role/EarningsLossperShareDetails": { "parentTag": "us-gaap_NetIncomeLossAvailableToCommonStockholdersBasic", "weight": 1.0, "order": 1.0 }, "http://www.msasafety.com/role/CondensedConsolidatedStatementsofIncome": { "parentTag": null, "weight": null, "order": null, "root": true } }, "presentation": ["http://www.msasafety.com/role/CondensedConsolidatedStatementsofChangesinRetainedEarningsAccumulatedOtherComprehensiveLoss", "http://www.msasafety.com/role/CondensedConsolidatedStatementsofComprehensiveIncome", "http://www.msasafety.com/role/CondensedConsolidatedStatementsofIncome", "http://www.msasafety.com/role/EarningsLossperShareDetails", "http://xbrl.sec.gov/ecd/role/PvpDisclosure"], "lang": { "en-us": { "role": { "totalLabel": "Net income (loss)", "terseLabel": "Net income (loss)", "verboseLabel": "Net loss", "label": "Net Income (Loss) Attributable to Parent", "documentation": "The portion of profit or loss for the period, net of income taxes, which is attributable to the parent." } } }, "auth_ref": ["r116", "r125", "r155", "r196", "r219", "r222", "r226", "r236", "r242", "r244", "r245", "r246", "r247", "r248", "r251", "r252", "r266", "r318", "r379", "r380", "r382", "r383", "r384", "r385", "r386", "r388", "r389", "r573", "r577", "r597", "r606", "r653", "r740", "r757", "r758", "r861", "r1038"] }, "us-gaap_NetIncomeLossAvailableToCommonStockholdersBasic": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "NetIncomeLossAvailableToCommonStockholdersBasic", "crdr": "credit", "calculation": { "http://www.msasafety.com/role/EarningsLossperShareDetails": { "parentTag": "us-gaap_NetIncomeLossAvailableToCommonStockholdersDiluted", "weight": 1.0, "order": 1.0 } }, "presentation": ["http://www.msasafety.com/role/EarningsLossperShareDetails"], "lang": { "en-us": { "role": { "totalLabel": "Net income (loss) attributable to common equity", "label": "Net Income (Loss) Available to Common Stockholders, Basic", "documentation": "Amount, after deduction of tax, noncontrolling interests, dividends on

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Excludes pension benefits." } } }, "auth_ref": ["r438", "r442", "r443", "r444", "r445", "r446", "r447", "r448", "r449", "r450", "r451", "r452", "r453", "r454", "r455", "r456", "r457", "r458", "r459", "r460", "r461", "r462", "r463", "r464", "r466", "r467", "r468", "r469", "r470", "r471", "r473", "r474", "r475", "r476", "r477", "r478", "r479", "r480", "r481", "r482", "r483", "r484", "r485", "r486", "r487", "r489", "r492", "r495", "r496", "r497", "r498", "r499", "r500", "r501", "r502", "r503", "r504", "r505", "r508", "r509", "r510", "r825", "r826", "r827", "r828", "r829"] }, "ecd_OutstandingAggtErrCompAmt": { "xbrltype": "monetaryItemType", "nsuri": "http://xbrl.sec.gov/ecd/2024", "localname": "OutstandingAggtErrCompAmt", "presentation": ["http://xbrl.sec.gov/ecd/role/ErrCompDisclosure"], "lang": { "en-us": { "role": { "terseLabel": "Outstanding Aggregate Erroneous Compensation Amount", "label": "Outstanding Aggregate Erroneous Compensation Amount" } } }, "auth_ref": ["r874", "r884", "r894", "r926"] }, "ecd_OutstandingRecoveryCompAmt": { "xbrltype": "monetaryItemType", "nsuri": "http://xbrl.sec.gov/ecd/2024", "localname": "OutstandingRecoveryCompAmt", "presentation": ["http://xbrl.sec.gov/ecd/role/ErrCompDisclosure"], "lang": { "en-us": { "role": { "terseLabel": "Compensation Amount", "label": "Outstanding Recovery Compensation Amount" } } }, "auth_ref": ["r877", "r887", "r897", "r929"] }, "ecd_OutstandingRecoveryIndName": { "xbrltype": "stringItemType", "nsuri": "http://xbrl.sec.gov/ecd/2024", "localname": "OutstandingRecoveryIndName", "presentation": ["http://xbrl.sec.gov/ecd/role/ErrCompDisclosure"], "lang": { "en-us": { "role": { "terseLabel": "Name", "label": "Outstanding Recovery, Individual Name" } } }, "auth_ref": ["r877", "r887", "r897", "r929"] }, "msa_OvernightBankFundingRateMember": { "xbrltype": "domainItemType", "nsuri": "http://www.msasafety.com/20240930", "localname": "OvernightBankFundingRateMember", "presentation": ["http://www.msasafety.com/role/LongTermDebtAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Overnight Bank Funding Rate", "label": "Overnight Bank Funding Rate [Member]", "documentation": "Overnight Bank Funding Rate [Member]" } } }, "auth_ref": [] }, "ecd_PayVsPerformanceDisclosureLineItems": { "xbrltype": "stringItemType", "nsuri": "http://xbrl.sec.gov/ecd/2024", "localname": "PayVsPerformanceDisclosureLineItems", "lang": { "en-us": { "role": { "label": "Pay vs Performance Disclosure [Line Items]" } } }, "auth_ref": ["r901"] }, "us-gaap_PaymentsForProceedsFromOtherInvestingActivities": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "PaymentsForProceedsFromOtherInvestingActivities", "crdr": "credit", "calculation": { "http://www.msasafety.com/role/CondensedConsolidatedStatementsofCashFlows": { "parentTag": "us-gaap_NetCashProvidedByUsedInInvestingActivities", "weight": -1.0, "order": 2.0 } }, "presentation": ["http://www.msasafety.com/role/CondensedConsolidatedStatementsofCashFlows"], "lang": { "en-us": { "role": { "negatedLabel": "Property disposals and other investing", "label": "Payments for (Proceeds from) Other Investing Activities", "documentation": "Amount of cash (inflow) outflow from investing activities classified as other." } } }, "auth_ref": ["r952", "r966"] }, "us-gaap_PaymentsForRepurchaseOfEquity": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "PaymentsForRepurchaseOfEquity", "crdr": "credit", "calculation": { "http://www.msasafety.com/role/CondensedConsolidatedStatementsofCashFlows": { "parentTag": "us-gaap_NetCashProvidedByUsedInFinancingActivities", "weight": -1.0, "order": 4.0 } }, "presentation": ["http://www.msasafety.com/role/CondensedConsolidatedStatementsofCashFlows"], "lang": { "en-us": { "role": { "negatedLabel": "Company stock purchases (Note 7)", "label": "Payments for Repurchase of Equity", "documentation": "The cash outflow to reacquire common and preferred stock." } } }, "auth_ref": ["r121", "r692"] }, "us-gaap_PaymentsForRestructuring": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "PaymentsForRestructuring", "crdr": "credit", "presentation": ["http://www.msasafety.com/role/RestructuringChargesActivityandReserveBalanceforRestructuringChargesbySegmentDetails"], "lang": { "en-us": { "role": { "negatedTerseLabel": "Cash payments", "label": "Payments for Restructuring", "documentation": "Amount of cash payments made as the result of exit or disposal activities. 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common stock and may take precedence over common stock in the event of a liquidation. Preferred shares typically represent an ownership interest in the company." } } },
"auth_ref": ["r853", "r854", "r857", "r858", "r859", "r860", "r1110", "r1111"] }, "us-gaap_PreferredStockParOrStatedValuePerShare": { "xbrltype": "perShareItemType",
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The redemption features of this preferred stock are solely within the control of the issuer." } } }, "auth_ref": ["r42", "r43", "r46"] }, "us-
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Shares Issued", "documentation": "Number of shares issued for nonredeemable preferred shares and preferred shares redeemable solely at option of issuer. Includes, but is
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paid in advance for costs that provide economic benefits in future periods, and amount of other assets that are expected to be realized or consumed within one year or the
normal operating cycle, if longer." } } }, "auth_ref": ["r961"] }, "us-gaap_PrepaidExpensesAndOtherCurrentAssetsMember": { "xbrltype": "domainItemType", "nsuri":
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Risk is materially adverse effects of a loss of sales of a significant product or line of products, which could occur upon loss of rights to sell, distribute or license others; loss of patent or copyright protection; or technological obsolescence." } } }, "auth_ref": ["r126"] }, "us-gaap_ProductLiabilityAccrualComponentAmount": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ProductLiabilityAccrualComponentAmount", "crdr": "credit", "presentation": ["http://www.msasafety.com/role/CommitmentsandContingenciesAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Product liability accrual", "label": "Product Liability Accrual, Component Amount", "documentation": "Recorded amount of the accrual for a material component of a product liability contingency." } } }, "auth_ref": ["r792"] }, "us-gaap_ProductLiabilityAccrualPeriodExpense": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": 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"r1031", "r1042", "r1077", "r1080", "r1081", "r1082", "r1083", "r1084", "r1085", "r1086", "r1087", "r1088", "r1089", "r1090", "r1091", "r1092", "r1093", "r1094", "r1095", "r1096", "r1097", "r1098", "r1099", "r1100", "r1101", "r1102", "r1103", "r1104", "r1105", "r1106", "r1107"] }, "us-gaap_ProductWarrantyAccrual": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ProductWarrantyAccrual", "crdr": "credit", "presentation": ["http://www.msasafety.com/role/ContingenciesScheduleofProductWarrantyLiabilityDetails"], "lang": { "en-us": { "role": { "periodStartLabel": "Beginning warranty reserve", "periodEndLabel": "Ending warranty reserve", "label": "Standard and Extended Product Warranty Accrual", "documentation": "Carrying value as of the balance sheet date of obligations incurred through that date and payable for estimated claims under standard and extended warranty protection rights granted to customers." } } }, "auth_ref": ["r151", "r372", "r374", 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Includes, but is not limited to, work of art, historical treasure, and similar asset classified as collections." } } }, "auth_ref": ["r129", "r161", "r164", "r165"] }, "us-gaap_PropertyPlantAndEquipmentLineItems": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "PropertyPlantAndEquipmentLineItems", "presentation": ["http://www.msasafety.com/role/PropertyPlantandEquipmentDetails"], "lang": { "en-us": { "role": { "terseLabel": "Property, Plant and Equipment [Line Items]", "label": "Property, Plant and Equipment [Line Items]", "documentation": "Line items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table." } } }, "auth_ref": ["r630"] }, "us-gaap_PropertyPlantAndEquipmentNet": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "PropertyPlantAndEquipmentNet", "crdr": "debit", "calculation": { "http://www.msasafety.com/role/CondensedConsolidatedBalanceSheets": { "parentTag": "us-gaap_Assets", "weight": 1.0, "order": 2.0 } }, "presentation": ["http://www.msasafety.com/role/CondensedConsolidatedBalanceSheets"], "lang": { "en-us": { "role": { "terseLabel": "Property, plant and equipment, net (Note 5)", "label": "Property, Plant and Equipment, Net", "documentation": "Amount after accumulated depreciation, depletion and amortization of physical assets used in the normal conduct of business to produce goods and services and not intended for resale. Examples include, but are not limited to, land, buildings, machinery and equipment, office equipment, and furniture and fixtures." } } }, "auth_ref": ["r13", "r630", "r643", "r650", "r846"] }, "us-gaap_PropertyPlantAndEquipmentTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "PropertyPlantAndEquipmentTextBlock", "presentation": ["http://www.msasafety.com/role/PropertyPlantandEquipmentTables"], "lang": { "en-us": { "role": { "terseLabel": "Components of Property, Plant and Equipment", "label": "Property, Plant and Equipment [Table Text Block]", "documentation": "Tabular disclosure of physical assets used in the normal conduct of business and not intended for resale. Includes, but is not limited to, balances by class of assets, depreciation and depletion expense and method used, including composite depreciation, and accumulated depreciation." } } }, "auth_ref": ["r13"] }, "us-gaap_PropertyPlantAndEquipmentTypeDomain": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "PropertyPlantAndEquipmentTypeDomain", "presentation": ["http://www.msasafety.com/role/PropertyPlantandEquipmentDetails"], "lang": { "en-us": { "role": { "terseLabel": "Property, Plant and Equipment, Type [Domain]", "label": "Long-Lived Tangible Asset [Domain]", "documentation": "Listing of long-lived, physical assets that are used in the normal conduct of business to produce goods and services and not intended for resale. Examples include land, buildings, machinery and equipment, and other types of furniture and equipment including, but not limited to, office equipment, furniture and fixtures, and computer equipment and software." } } }, "auth_ref": ["r130", "r630"] }, "ecd_PvpTable": { "xbrltype": "stringItemType", "nsuri": "http://xbrl.sec.gov/ecd/2024", "localname": "PvpTable", "presentation": ["http://xbrl.sec.gov/ecd/role/PvpDisclosure"], "lang": { "en-us": { "role": { "terseLabel": "Pay vs Performance Disclosure", "label": "Pay vs Performance Disclosure [Table]" } } }, "auth_ref": ["r901"] }, "ecd_PvpTableTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://xbrl.sec.gov/ecd/2024", "localname": "PvpTableTextBlock", "presentation": ["http://xbrl.sec.gov/ecd/role/PvpDisclosure"], "lang": { "en-us": { "role": { "terseLabel": "Pay vs Performance Disclosure, Table", "label": "Pay vs Performance [Table Text Block]" } } }, "auth_ref": ["r901"] }, "srt_RangeAxis": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/srt/2024", "localname": "RangeAxis", "presentation": ["http://www.msasafety.com/role/LongTermDebtAdditionalInformationDetails", "http://www.msasafety.com/role/StockPlansAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Statistical Measurement [Axis]", "label": "Statistical Measurement [Axis]", "documentation": "Information by statistical measurement. Includes, but is not limited to, minimum, maximum, weighted average, arithmetic average, and median." } } }, "auth_ref": ["r169", "r170", "r171", "r172", "r173", "r190", "r191", "r367", "r368", "r369", "r370", "r463", "r511", "r540", "r541", "r542", "r548", "r602", "r633", "r634", "r635", "r676", "r677", "r684", "r710", "r711", "r764", "r766", "r769", "r770", "r777", "r788", "r789", "r812", "r821", "r833", "r841", "r842", "r843", "r844", "r848", "r855", "r1022", "r1040", "r1053", "r1069", "r1070", "r1071", "r1072", "r1073"] }, "srt_RangeMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/srt/2024", "localname": "RangeMember", "presentation": ["http://www.msasafety.com/role/LongTermDebtAdditionalInformationDetails", "http://www.msasafety.com/role/StockPlansAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Statistical Measurement [Domain]", "label": "Statistical Measurement [Domain]", "documentation": "Statistical measurement. Includes, but is not limited to, minimum, maximum, weighted average, arithmetic average, and median." } } }, "auth_ref": ["r169", "r170", "r171", "r172", "r173", "r190", "r191", "r367", "r368", "r369", "r370", "r463", "r511", "r540", "r541", "r542", "r548", "r602", "r633", "r634", "r635", "r676", "r677", "r684", "r710", "r711", "r764", "r766", "r769", "r770", "r777", "r788", "r789", "r812", "r821", "r833", "r841", "r842", "r843", "r844", "r848",

"r855", "r1022", "r1040", "r1053", "r1069", "r1070", "r1071", "r1072", "r1073"] }, "us-gaap_ReclassificationFromAccumulatedOtherComprehensiveIncomeCurrentPeriodBeforeTax": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ReclassificationFromAccumulatedOtherComprehensiveIncomeCurrentPeriodBeforeTax", "crdr": "debit", "presentation": ["http://www.msasafety.com/role/ReclassificationsOutofAccumulatedOtherComprehensiveLossDetails"], "lang": { "en-us": { "role": { "negatedTerseLabel": "Amounts reclassified from accumulated other comprehensive loss", "label": "Reclassification from Accumulated Other Comprehensive Income, Current Period, before Tax", "documentation": "Amount before tax of reclassification adjustments of other comprehensive income (loss)." } } }, "auth_ref": ["r27", "r225", "r615", "r620", "r621", "r654", "r962"] }, "us-gaap_ReclassificationFromAccumulatedOtherComprehensiveIncomeCurrentPeriodNetOfTax": { "xbrltype": "monetaryItemType", 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Comprehensive Income, Current Period, Net of Tax", "documentation": "Amount after tax of reclassification adjustments of other comprehensive income (loss)." } } }, "auth_ref": ["r23", "r27", "r225", "r615", "r620", "r621", "r654", "r962"] }, "us-gaap_ReclassificationFromAccumulatedOtherComprehensiveIncomeCurrentPeriodNetOfTaxAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ReclassificationFromAccumulatedOtherComprehensiveIncomeCurrentPeriodNetOfTaxAbstract", "presentation": ["http://www.msasafety.com/role/ReclassificationsOutofAccumulatedOtherComprehensiveLossDetails"], "lang": { "en-us": { "role": { "terseLabel": "AOCI Including Portion Attributable to Noncontrolling Interest, Net of Tax [Roll Forward]", "label": "AOCI Including Portion Attributable to Noncontrolling Interest, Net of Tax [Roll Forward]", "documentation": "A roll forward is a reconciliation of a concept from the beginning of a period to the end of a period." } } }, 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Includes, but is not limited to, cost for computer software product to be sold, leased, or otherwise marketed and writeoff of research and development assets acquired in transaction other than business combination or joint venture formation or both. Excludes write-down of intangible asset acquired in business combination or from joint venture formation or both, used in research and development activity." } } }, "auth_ref": ["r549", "r790", "r807", "r1074"] }, "ecd_RestatementDateAxis": { "xbrltype": "stringItemType", "nsuri": "http://xbrl.sec.gov/ecd/2024", "localname": "RestatementDateAxis", "presentation": ["http://xbrl.sec.gov/ecd/role/ErrCompDisclosure"], "lang": { "en-us": { "role": { "terseLabel": "Restatement Determination Date:", "label": "Restatement Determination Date [Axis]" } } }, "auth_ref": ["r870", "r880", "r890", "r922"] }, "ecd_RestatementDeterminationDate": { "xbrltype": "dateItemType", "nsuri": "http://xbrl.sec.gov/ecd/2024", "localname": "RestatementDeterminationDate", "presentation": ["http://xbrl.sec.gov/ecd/role/ErrCompDisclosure"], "lang": { "en-us": { "role": { "terseLabel": "Restatement Determination Date", "label": "Restatement Determination Date" } } }, "auth_ref": ["r871", "r881", "r891", "r923"] }, "ecd_RestatementDoesNotRequireRecoveryTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://xbrl.sec.gov/ecd/2024", "localname": "RestatementDoesNotRequireRecoveryTextBlock", "presentation": ["http://xbrl.sec.gov/ecd/role/ErrCompDisclosure"], "lang": { "en-us": { "role": { "terseLabel": "Restatement does not require Recovery", "label": "Restatement Does Not Require Recovery [Text Block]" } } }, "auth_ref": ["r878", "r888", "r898", "r930"] }, "msa_RestrictedAndPerformanceStockAwardsMember": { "xbrltype": "domainItemType", "nsuri": "http://www.msasafety.com/20240930", "localname": "RestrictedAndPerformanceStockAwardsMember", "presentation": ["http://www.msasafety.com/role/CapitalStockScheduleofCommonStockActivityDetails", "http://xbrl.sec.gov/ecd/role/AwardTimingDisclosure"], "lang": { "en-us": { "role": { "terseLabel": "Restricted and performance stock awards", "label": "Restricted And Performance Stock Awards [Member]", "documentation": "Restricted And Performance Stock Awards [Member]" } } }, "auth_ref": [] }, "msa_RestrictedCashCurrentAssetsIncludedinPrepaidExpensesandOtherCurrentAssets": { "xbrltype": "monetaryItemType", "nsuri": "http://www.msasafety.com/20240930", "localname": "RestrictedCashCurrentAssetsIncludedinPrepaidExpensesandOtherCurrentAssets", "crdr": "debit", "calculation": { "http://www.msasafety.com/role/CondensedConsolidatedStatementsofCashFlows": { "parentTag": "us-gaap_CashCashEquivalentsRestrictedCashAndRestrictedCashEquivalents", "weight": 1.0, "order": 2.0 } }, "presentation": ["http://www.msasafety.com/role/CondensedConsolidatedStatementsofCashFlows", "http://www.msasafety.com/role/LongTermDebtAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Restricted cash included in prepaid expenses and other current assets", "label": "Restricted Cash, Current Assets, Included in Prepaid Expenses and Other Current Assets", "documentation": "Restricted Cash, Current Assets, Included in Prepaid Expenses and Other Current Assets" } } }, "auth_ref": [] }, "us-gaap_RestrictedStockMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "RestrictedStockMember", "presentation": ["http://www.msasafety.com/role/StockPlansSummaryofRestrictedStockandUnitActivityDetails", "http://xbrl.sec.gov/ecd/role/AwardTimingDisclosure"], "lang": { "en-us": { "role": { "terseLabel": "Restricted Stock Activity", "label": "Restricted Stock [Member]", "documentation": "Stock including a provision that prohibits sale or substantive sale of an equity instrument for a specified period of time or until specified performance conditions are met." } } }, "auth_ref": ["r31"] }, "us-gaap_RestructuringAndRelatedActivitiesAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "RestructuringAndRelatedActivitiesAbstract", "lang": { "en-us": { "role": { "terseLabel": "Restructuring and Related Activities [Abstract]", "label": "Restructuring and Related Activities [Abstract]" } } }, "auth_ref": [] }, "us-gaap_RestructuringAndRelatedActivitiesDisclosureTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "RestructuringAndRelatedActivitiesDisclosureTextBlock", "presentation": ["http://www.msasafety.com/role/RestructuringCharges"], "lang": { "en-us": { "role": { "terseLabel": "Restructuring Charges", "label": "Restructuring and Related Activities Disclosure [Text Block]", "documentation": "The entire disclosure for restructuring and related activities. Description of restructuring activities such as exit and disposal activities, include facts and circumstances leading to the plan, the expected plan completion date, the major types of costs associated with the plan activities, total expected costs, the accrual balance at the end of the period, and the periods over which the remaining accrual will be settled." } } }, "auth_ref": ["r352", "r353", "r355", "r358", "r363"] }, "us-gaap_RestructuringCharges": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "RestructuringCharges", "crdr": "debit", "calculation": { "http://www.msasafety.com/role/CondensedConsolidatedStatementsofIncome": { "parentTag", "us-gaap_OperatingIncomeLoss", "weight": -1.0, "order": 4.0 }, "http://www.msasafety.com/role/SegmentInformationReconciliationofTotalAdjustedEBITDADetails": { "parentTag": "us-gaap_IncomeLossFromContinuingOperationsBeforeIncomeTaxesExtraordinaryItemsNoncontrollingInterest", "weight": -1.0, "order": 7.0 } }, "presentation": ["http://www.msasafety.com/role/CondensedConsolidatedStatementsofIncome", "http://www.msasafety.com/role/RestructuringChargesAdditionalInformationDetails", "http://www.msasafety.com/role/SegmentInformationReconciliationofTotalAdjustedEBITDADetails"], "lang": { "en-us": { "role": { "verboseLabel": "Restructuring charges (Note 3)", "terseLabel": "Restructuring charges", "label": "Restructuring Charges", "documentation": "Amount of expenses associated with exit or disposal activities pursuant to an authorized plan. Excludes expenses related to a discontinued operation or an asset retirement obligation." } } }, "auth_ref": ["r11", "r359", "r360", "r1023"] }, "msa_RestructuringChargesReversalOfCost": { "xbrltype": "monetaryItemType", "nsuri": "http://www.msasafety.com/20240930", "localname": "RestructuringChargesReversalOfCost", "crdr": "debit", "presentation": ["http://www.msasafety.com/role/RestructuringChargesActivityandReserveBalanceforRestructuringChargesbySegmentDetails"], "lang": { "en-us": { "role": { "terseLabel": "Restructuring charges", "label": "Restructuring Charges (Reversal Of Cost)", "documentation": "Restructuring Charges (Reversal Of Cost)" } } }, "auth_ref": [] }, "msa_RestructuringChargesbeforeAdjustments": { "xbrltype": "monetaryItemType", "nsuri": "http://www.msasafety.com/20240930", "localname": "RestructuringChargesbeforeAdjustments", "crdr": "debit", "presentation": ["http://www.msasafety.com/role/RestructuringChargesActivityandReserveBalanceforRestructuringChargesbySegmentDetails"], "lang": { "en-us": { "role": { "terseLabel": "Restructuring charges", "label": "Restructuring Charges before Adjustments", "documentation": "Restructuring Charges before Adjustments - Restructuring charges before any adjustments to the accrual." } } }, "auth_ref": [] }, "us-gaap_RestructuringCostAndReserveLineItems": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "RestructuringCostAndReserveLineItems", "presentation": ["http://www.msasafety.com/role/RestructuringChargesActivityandReserveBalanceforRestructuringChargesbySegmentDetails", "http://www.msasafety.com/role/RestructuringChargesAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Restructuring Cost and Reserve [Line Items]", "label": "Restructuring Cost and Reserve [Line Items]", "documentation": "Line items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table." } } }, "auth_ref": ["r354", "r355", "r356", "r357", "r360", "r361", "r362"] }, "us-gaap_RestructuringReserve": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "RestructuringReserve", "crdr": "credit", "presentation": ["http://www.msasafety.com/role/RestructuringChargesActivityandReserveBalanceforRestructuringChargesbySegmentDetails"], "lang": { "en-us": { "role": { "periodStartLabel": "Restructuring reserve, beginning balance", "periodEndLabel": "Restructuring reserve, ending balance", "label": "Restructuring Reserve", "documentation": "Carrying amount (including both current and noncurrent portions of the accrual) as of the balance sheet date pertaining to a specified type of cost associated with exit from or disposal of business activities or restructuring pursuant to a duly authorized plan." } } }, "auth_ref": ["r355", "r361"] }, "us-gaap_RestructuringReserveRollForward": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "RestructuringReserveRollForward", "presentation": ["http://www.msasafety.com/role/RestructuringChargesActivityandReserveBalanceforRestructuringChargesbySegmentDetails"], "lang": { "en-us": { "role": { "terseLabel": "Restructuring Reserve [Roll Forward]", "label": "Restructuring Reserve [Roll Forward]", "documentation": "A roll forward is a reconciliation of a concept from the beginning of a period to the end of a period." } } }, "auth_ref": [] }, "us-gaap_RestructuringReserveTranslationAdjustment": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "RestructuringReserveTranslationAdjustment", "crdr": "credit", "presentation": ["http://www.msasafety.com/role/RestructuringChargesActivityandReserveBalanceforRestructuringChargesbySegmentDetails"], "lang": { "en-us": { "role": { "negatedTerseLabel": "Currency translation", "label": "Restructuring Reserve, Foreign Currency Translation Gain (Loss)", "documentation": "Amount of foreign currency translation gain (loss) which decreases (increases) the restructuring reserve." } } }, "auth_ref": ["r1024", "r1025"] }, "us-gaap_RetainedEarningsAccumulatedDeficit": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "RetainedEarningsAccumulatedDeficit", "crdr": "credit", "calculation": { "http://www.msasafety.com/role/CondensedConsolidatedBalanceSheets": { "parentTag": "us-gaap_StockholdersEquityIncludingPortionAttributableToNoncontrollingInterest", "weight": 1.0, "order": 5.0 } }, "presentation": ["http://www.msasafety.com/role/CondensedConsolidatedBalanceSheets"], "lang": { "en-us": { "role": { "terseLabel": "Retained earnings", "label": "Retained Earnings (Accumulated Deficit)", "documentation": "Amount of accumulated undistributed earnings (deficit)." } } }, "auth_ref": ["r99", "r139", "r648", "r681", "r683", "r693", "r720", "r846"] }, "us-gaap_RetainedEarningsMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname":

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"http://www.msasafety.com/role/PensionsandOtherPostretirementBenefitsComponentsofNetPeriodicBenefitCostDetails"], "lang": { "en-us": { "role": { "terseLabel": "Retirement Plan Type [Axis]", "label": "Retirement Plan Type [Axis]", "documentation": "Information by type of retirement benefit plan. Includes, but is not limited to, retirement benefit arrangement for defined benefit pension and other postretirement plans, retirement benefit arrangement for defined contribution pension and other postretirement plans, and special and contractual termination benefits payable upon retirement." } } }, "auth_ref": ["r438", "r442", "r443", "r444", "r445", "r446", "r447", "r448", "r449", "r450", "r451", "r452", "r453", "r454", "r455", "r456", "r457", "r458", "r459", "r460", "r461", "r462", "r463", "r464", "r466", "r467", "r468", "r469", "r470", "r471", "r472", "r473", "r474", "r475", "r476", "r477", "r478", "r479", "r480", "r481", "r482", "r483", "r484", "r485", "r486", "r487", "r489", "r490", "r492", "r496", "r497", "r498", "r499", "r500", "r501", "r502", "r503", "r504", "r505", "r508", "r509", "r510", "r512", "r825", "r826", "r827", "r828", "r829", "r830", "r831", "r832"] }, "us-gaap_RetirementPlanTypeDomain": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "RetirementPlanTypeDomain", "presentation": [
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"http://www.msasafety.com/role/SegmentInformationPercentageofTotalSalesbyProductGroupDetails",
"http://www.msasafety.com/role/SegmentInformationScheduleofReportableSegmentInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Net sales", "netLabel": "Net sales to external customers", "verboseLabel": "Revenues", "label": "Revenue from Contract with Customer, Excluding Assessed Tax", "documentation": "Amount, excluding tax collected from customer, of revenue from satisfaction of performance obligation by transferring promised good or service to customer. Tax collected from customer is tax assessed by governmental authority that is both imposed on and concurrent with specific revenue-producing transaction, including, but not limited to, sales, use, value added and excise." } } }, "auth_ref": ["r156", "r157", "r278", "r287", "r288", "r302", "r308", "r311", "r313", "r314", "r435", "r436", "r636"] }, "us-gaap_RevenueRemainingPerformanceObligation": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "RevenueRemainingPerformanceObligation", "crdr": "credit", "presentation": ["http://www.msasafety.com/role/CommitmentsandContingenciesAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Remaining performance obligation, amount", "label": "Revenue, Remaining Performance Obligation, Amount", "documentation": "Amount of transaction price allocated to performance obligation that has not been recognized as revenue." } } }, "auth_ref": ["r162"] }, "us-gaap_RevenueRemainingPerformanceObligationExpectedTimingOfSatisfactionPeriod1": { "xbrltype": "durationItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "RevenueRemainingPerformanceObligationExpectedTimingOfSatisfactionPeriod1", "presentation": [
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which includes a rollforward schedule." } } }, "auth_ref": ["r813", "r991", "r992", "r993", "r994", "r995", "r996", "r997", "r998", "r999", "r1000", "r1001"] }, "us-gaap_ScheduleOfInventoryCurrentTableTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ScheduleOfInventoryCurrentTableTextBlock", "presentation": ["http://www.msasafety.com/role/InventoriesTables"], "lang": { "en-us": { "role": { "terseLabel": "Schedule of Inventories", "label": "Schedule of Inventory, Current [Table Text Block]", "documentation": "Tabular disclosure of the carrying amount as of the balance sheet date of merchandise, goods, commodities, or supplies held for future sale or to be used in manufacturing, servicing or production process." } } }, "auth_ref": ["r25", "r103", "r104", "r105"] }, "us-gaap_ScheduleOfNetBenefitCostsTableTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ScheduleOfNetBenefitCostsTableTextBlock", "presentation": ["http://www.msasafety.com/role/PensionsandOtherPostretirementBenefitsTables"], "lang": { "en-us": { "role": { "terseLabel": "Components of Net Periodic Benefit Cost", "label": "Schedule of Net Benefit Costs [Table Text Block]", "documentation": "Tabular disclosure of the components of net benefit costs for pension plans and/or other employee benefit plans including service cost, interest cost, expected return on plan assets, gain (loss), prior service cost or credit, transition asset or obligation, and gain (loss) recognized due to settlements or curtailments." } } }, "auth_ref": ["r140"] }, "us-gaap_ScheduleOfNonvestedPerformanceBasedUnitsActivityTableTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ScheduleOfNonvestedPerformanceBasedUnitsActivityTableTextBlock", "presentation": ["http://www.msasafety.com/role/StockPlansTables"], "lang": { "en-us": { "role": { "terseLabel": "Summary of Performance Stock Unit Activity", "label": "Schedule of Nonvested Performance-Based Units Activity [Table Text Block]", "documentation": "Tabular disclosure of the changes in outstanding nonvested performance-based units." } } }, "auth_ref": ["r142"] }, "us-gaap_ScheduleOfProductWarrantyLiabilityTableTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ScheduleOfProductWarrantyLiabilityTableTextBlock", "presentation": ["http://www.msasafety.com/role/CommitmentsandContingenciesTables"], "lang": { "en-us": { "role": { "terseLabel": "Schedule of Product Warranty Liability", "label": "Schedule of Product Warranty Liability [Table Text Block]", "documentation": "Tabular disclosure of the changes in the guarantor's aggregate product warranty liability, including the beginning balance of the aggregate product warranty liability, the aggregate reductions in that liability for payments made (in cash or in kind) under the warranty, the aggregate changes in the liability for accruals related to product warranties issued during the reporting period, the aggregate changes in the liability for accruals related to preexisting warranties (including adjustments related to changes in estimates), and the ending balance of the aggregate product warranty liability." } } }, "auth_ref": ["r373"] }, "us-gaap_ScheduleOfPropertyPlantAndEquipmentTable": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ScheduleOfPropertyPlantAndEquipmentTable", "presentation": ["http://www.msasafety.com/role/PropertyPlantandEquipmentDetails"], "lang": { "en-us": { "role": { "terseLabel": "Property, Plant and Equipment [Table]", "label": "Property, Plant and Equipment [Table]", "documentation": "Disclosure of information about physical assets used in the normal conduct of business and not intended for resale. Includes, but is not limited to, balances by class of assets, depreciation and depletion expense and method used, including composite depreciation, and accumulated deprecation." } } }, "auth_ref": ["r13", "r630"] }, "us-gaap_ScheduleOfRestructuringAndRelatedCostsTable": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ScheduleOfRestructuringAndRelatedCostsTable", "presentation": ["http://www.msasafety.com/role/RestructuringChargesActivityandReserveBalanceforRestructuringChargesbySegmentDetails", "http://www.msasafety.com/role/RestructuringChargesAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Schedule of Restructuring and Related Costs [Table]", "label": "Restructuring Cost [Table]", "documentation": "Disclosure of information about restructuring cost. Includes, but is not limited to, expected cost, cost incurred, statement of income caption that includes restructuring cost recognized, and amount of restructuring reserve." } } }, "auth_ref": ["r354", "r355", "r356", "r357", "r360", "r361", "r362"] }, "us-gaap_ScheduleOfRestructuringAndRelatedCostsTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ScheduleOfRestructuringAndRelatedCostsTextBlock", "presentation": ["http://www.msasafety.com/role/RestructuringChargesTables"], "lang": { "en-us": { "role": { "terseLabel": "Schedule of Activity and Reserve Balance for Restructuring Charges by Segment", "label": "Restructuring and Related Costs [Table Text Block]", "documentation": "Tabular disclosure of costs incurred for restructuring including, but not limited to, exit and disposal activities, remediation, implementation, integration, asset impairment, and charges against earnings from the write-down of assets." } } }, "auth_ref": ["r38", "r131", "r132"] }, "us-gaap_ScheduleOfSegmentReportingInformationBySegmentTable": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ScheduleOfSegmentReportingInformationBySegmentTable", "presentation": ["http://www.msasafety.com/role/SegmentInformationScheduleofReportableSegmentInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Schedule of Segment Reporting Information, by Segment [Table]", "label": "Schedule of Segment Reporting Information, by Segment [Table]", "documentation": "Disclosure of information about profit (loss) and total assets by reportable segment." } } }, "auth_ref": ["r34", "r35", "r36"] }, "us-gaap_ScheduleOfSegmentReportingInformationBySegmentTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ScheduleOfSegmentReportingInformationBySegmentTextBlock", "presentation": ["http://www.msasafety.com/role/SegmentInformationTables"], "lang": { "en-us": { "role": { "terseLabel": "Schedule of Reportable Segment Information", "label": "Schedule of Segment Reporting Information, by Segment [Table Text Block]", "documentation": "Tabular disclosure of the profit or loss and total assets for each reportable segment. An entity discloses certain information on each reportable segment if the amounts (a) are included in the measure of segment profit or loss reviewed by the chief operating decision maker or (b) are otherwise regularly provided to the chief operating decision maker, even if not included in that measure of segment profit or loss." } } }, "auth_ref": ["r34", "r35", "r36"] }, "us-gaap_ScheduleOfShareBasedCompensationArrangementsByShareBasedPaymentAwardTable": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ScheduleOfShareBasedCompensationArrangementsByShareBasedPaymentAwardTable", "presentation": ["http://www.msasafety.com/role/StockPlansAdditionalInformationDetails", "http://www.msasafety.com/role/StockPlansSummaryofPerformanceStockUnitActivityDetails", "http://www.msasafety.com/role/StockPlansSummaryofRestrictedStockandUnitActivityDetails", "http://www.msasafety.com/role/StockPlansWeightedAverageRiskAssumptionsDetails"], "lang": { "en-us": { "role": { "terseLabel": "Schedule of Share-based Compensation Arrangements by Share-based Payment Award [Table]", "label": "Schedule of Share-Based Compensation Arrangements by Share-Based Payment Award [Table]", "documentation": "Disclosure of information about share-based payment arrangement." } } }, "auth_ref": ["r514", "r515", "r518", "r519", "r520", "r521", "r522", "r523", "r524", "r525", "r526", "r527", "r528", "r529", "r530", "r531", "r532", "r533", "r534", "r535", "r536", "r537", "r538", "r539", "r540", "r541", "r542", "r543"] }, "us-gaap_ScheduleOfShareBasedCompensationRestrictedStockUnitsAwardActivityTableTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ScheduleOfShareBasedCompensationRestrictedStockUnitsAwardActivityTableTextBlock", "presentation": ["http://www.msasafety.com/role/StockPlansTables"], "lang": { "en-us": { "role": { "terseLabel": "Summary of Restricted Stock and Unit Activity", "label": "Share-Based Payment Arrangement, Restricted Stock Unit, Activity [Table Text Block]", "documentation": "Tabular disclosure of the number and weighted-average grant date fair value for restricted stock units that were outstanding at the beginning and end of the year, and the number of restricted stock units that were granted, vested, or forfeited during the year." } } }, "auth_ref": ["r141"] }, "us-gaap_ScheduleOfShareBasedCompensationStockOptionsActivityTableTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ScheduleOfShareBasedCompensationStockOptionsActivityTableTextBlock", "presentation": ["http://www.msasafety.com/role/StockPlansTables"], "lang": { "en-us": { "role": { "terseLabel": "Summary of Stock Option Activity", "label": "Share-Based Payment Arrangement, Option, Activity [Table Text Block]", "documentation": "Tabular disclosure for stock option plans. Includes, but is not limited to, outstanding awards at beginning and end of year, grants, exercises, forfeitures, and weighted-average grant date fair value." } } }, "auth_ref": ["r18", "r19", "r141"] }, "us-gaap_ScheduleOfStockByClassTable": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ScheduleOfStockByClassTable", "presentation": ["http://www.msasafety.com/role/CapitalStockScheduleofCommonStockActivityDetails"], "lang": { "en-us": { "role": { "terseLabel": "Schedule of Stock by Class [Table]", "label": "Stock, Class of Stock [Table]", "documentation": "Disclosure of information about stock by class. Includes, but is not limited to, common, convertible, and preferred stocks." } } }, "auth_ref": ["r40", "r41", "r43", "r44", "r45", "r47", "r135", "r137", "r138", "r139", "r206", "r207", "r208", "r280", "r419", "r420", "r421", "r423", "r426", "r431", "r433", "r689", "r690", "r691", "r692", "r821", "r950", "r969"] }, "msa_ScheduleofSharebasedPaymentAwardEquityInstrumentsOtherthanOptionsValuationAssumptionsTableTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://www.msasafety.com/20240930", "localname": "ScheduleofSharebasedPaymentAwardEquityInstrumentsOtherthanOptionsValuationAssumptionsTableTextBlock", "presentation": ["http://www.msasafety.com/role/StockPlansTables"], "lang": { "en-us": { "role": { "terseLabel": "Schedule of Fair Value Assumptions for Units", "label": "Schedule of Share-based Payment Award, Equity Instruments Other than Options, Valuation Assumptions [Table Text Block]", "documentation": "Schedule of Share-based Payment Award, Equity Instruments Other than 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"Collateralized debt obligation backed by, for example, but not limited to, pledge, mortgage or other lien on the entity's assets." } } }, "auth_ref": [] }, "us-gaap_SecuredOvernightFinancingRateSofrMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "SecuredOvernightFinancingRateSofrMember", "presentation": ["http://www.msasafety.com/role/LongTermDebtAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Secured Overnight Financing Rate (SOFR)", "label": "Secured Overnight Financing Rate (SOFR) [Member]", "documentation": "Interest rate at which bank can borrow U.S. dollar overnight while posting U.S. Treasury bond as collateral." } } }, "auth_ref": ["r1049"] }, "dei_Security12bTitle": { "xbrltype": "securityTitleItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "Security12bTitle", "presentation": ["http://www.msasafety.com/role/Cover"], "lang": { "en-us": { "role": { "terseLabel": "Title of 12(b) 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"http://www.msasafety.com/role/SegmentInformationPercentageofTotalSalesbyProductGroupDetails", "http://www.msasafety.com/role/SegmentInformationScheduleofReportableSegmentInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Segments [Domain]", "label": "Segments [Domain]", "documentation": "Components of an entity that engage in business activities from which they may earn revenue and incur expenses, including transactions with other components of the same entity." } } }, "auth_ref": ["r156", "r157", "r158", "r159", "r278", "r283", "r286", "r287", "r288", "r289", "r290", "r291", "r292", "r293", "r294", "r295", "r296", "r297", "r299", "r300", "r301", "r302", "r303", "r304", "r305", "r306", "r308", "r309", "r310", "r314", "r324", "r325", "r326", "r327", "r328", "r329", "r330", "r331", "r332", "r342", "r357", "r362", "r658", "r659", "r660", "r661", "r662", "r663", "r664", "r665", "r666", "r667", "r668", "r804", "r807", "r808", "r813", "r850", "r1077", "r1080", "r1081", 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Reportable segments include those that meet any of the following quantitative thresholds a) it's reported revenue, including sales to external customers and intersegment sales or transfers is 10 percent or more of the combined revenue, internal and external, of all operating segments b) the absolute amount of its reported profit or loss is 10 percent or more of the greater, in absolute amount of 1) the combined reported profit of all operating segments that did not report a loss or 2) the combined reported loss of all operating segments that did report a loss c) its assets are 10 percent or more of the combined assets of all operating segments." } } }, "auth_ref": ["r159", "r278", "r282", "r283", "r284", "r285", "r286", "r298", "r300", "r301", "r306", "r307", "r308", "r309", "r310", "r311", "r312", "r314", "r803", "r805", "r806", "r807", "r809", "r810", "r811"] }, "us-gaap_SegmentReportingInformationLineItems": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "SegmentReportingInformationLineItems", "presentation": ["http://www.msasafety.com/role/SegmentInformationScheduleofReportableSegmentInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Segment Reporting Information [Line Items]", "label": "Segment Reporting Information [Line Items]", "documentation": "Line items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table." } } }, "auth_ref": [] }, "us-gaap_SellingGeneralAndAdministrativeExpense": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname":

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General and administrative expenses include salaries of non-sales personnel, rent, utilities, communication, etc." } } }, "auth_ref": ["r117"] }, "us-gaap_SeniorLongTermNotes": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "SeniorLongTermNotes", "crdr": "credit", "presentation": ["http://www.msasafety.com/role/LongTermDebtScheduleofDebtDetails"], "lang": { "en-us": { "role": { "terseLabel": "Senior notes payable", "label": "Senior Notes, Noncurrent", "documentation": "Carrying value as of the balance sheet date of Notes with the highest claim on the assets of the issuer in case of bankruptcy or liquidation (with maturities initially due after one year or beyond the operating cycle if longer), excluding current portion. Senior note holders are paid off in full before any payments are made to junior note holders." } } }, "auth_ref": ["r24", "r846"] }, "msa_SeniorNotesDue2028Member": { "xbrltype": "domainItemType", "nsuri": "http://www.msasafety.com/20240930", "localname": "SeniorNotesDue2028Member", "presentation": ["http://www.msasafety.com/role/LongTermDebtAdditionalInformationDetails", "http://www.msasafety.com/role/LongTermDebtScheduleofDebtDetails"], "lang": { "en-us": { "role": { "terseLabel": "2023 Senior Notes payable through 2028, 5.25%, net of debt issuance costs", "verboseLabel": "Senior Notes Due 2028", "label": "Senior Notes Due 2028 [Member]", "documentation": "Senior Notes Due 2028" } } }, "auth_ref": [] }, "us-gaap_SeniorNotesMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "SeniorNotesMember", "presentation": ["http://www.msasafety.com/role/LongTermDebtAdditionalInformationDetails", "http://www.msasafety.com/role/LongTermDebtScheduleofDebtDetails"], "lang": { "en-us": { "role": { "terseLabel": "Senior Notes", "label": "Senior Notes [Member]", "documentation": "Bond that takes priority over other debt securities sold by the issuer. In the event the issuer goes bankrupt, senior debt holders receive priority for (must receive) repayment prior to (relative to) junior and unsecured (general) creditors." } } }, "auth_ref": [] }, "msa_SeniorNotesPayableThroughTwoThousandThirtyOneThreePointFourPercentageMemberMember": { "xbrltype": "domainItemType", "nsuri": "http://www.msasafety.com/20240930", "localname": "SeniorNotesPayableThroughTwoThousandThirtyOneThreePointFourPercentageMemberMember", "presentation": ["http://www.msasafety.com/role/LongTermDebtScheduleofDebtDetails"], "lang": { "en-us": { "role": { "terseLabel": "2016 Senior Notes payable through 2031, 3.40%, net of debt issuance costs", "label": "Senior Notes Payable Through Two Thousand Thirty One Three Point Four Percentage [Member] [Member]", "documentation": "Senior Notes Payable Through Two Thousand Thirty One Three Point Four Percentage [Member] [Member]" } } }, "auth_ref": [] }, "msa_SeniorRevolvingCreditFacilityMaturingIn2026Member": { "xbrltype": 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Excludes share and unit options." } } }, "auth_ref": ["r529", "r530"] }, "us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedWeightedAverageGrantDateFairValueRollForward": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedWeightedAverageGrantDateFairValueRollForward", "presentation": ["http://www.msasafety.com/role/StockPlansSummaryofPerformanceStockUnitActivityDetails", "http://www.msasafety.com/role/StockPlansSummaryofRestrictedStockandUnitActivityDetails", "http://www.msasafety.com/role/StockPlansSummaryofStockOptionActivityDetails"], "lang": { "en-us": { "role": { "terseLabel": "Weighted Average Grant\u00a0Date Fair Value", "label": "Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Nonvested, Weighted Average Grant Date Fair Value [Abstract]" } } }, "auth_ref": [] }, "msa_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsPerformanceAdjustmentInPeriod": { "xbrltype": "sharesItemType", "nsuri": "http://www.msasafety.com/20240930", "localname": "ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsPerformanceAdjustmentInPeriod", "presentation": ["http://www.msasafety.com/role/StockPlansSummaryofPerformanceStockUnitActivityDetails"], "lang": { "en-us": { "role": { "terseLabel": "Performance adjustments (in shares)", "label": "Share Based Compensation Arrangement By Share Based Payment Award Equity Instruments Other Than Options Performance Adjustment In Period", "documentation": "Share-based compensation arrangement by share-based payment award equity instruments other than options performance adjustment in period." } } }, "auth_ref": [] }, "msa_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsPerformanceAdjustmentInPeriodWeightedAverageGrantDateFair { "xbrltype": "perShareItemType", "nsuri": "http://www.msasafety.com/20240930", "localname": "ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsPerformanceAdjustmentInPeriodWeightedAverageGrantDateFairValue "presentation": ["http://www.msasafety.com/role/StockPlansSummaryofPerformanceStockUnitActivityDetails"], "lang": { "en-us": { "role": { "terseLabel": "Performance adjustments (dollars per share)", "label": "Share Based Compensation Arrangement By Share Based Payment Award Equity Instruments Other Than Options Performance Adjustment In Period Weighted Average Grant Date Fair Value", "documentation": "Share-based compensation arrangement by share-based payment award equity instruments

other than options performance adjustment in period, weighted average grant date fair value." } } }, "auth_ref": [] }, "us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsVestedInPeriod": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsVestedInPeriod", "presentation": ["http://www.msasafety.com/role/StockPlansSummaryofPerformanceStockUnitActivityDetails", "http://www.msasafety.com/role/StockPlansSummaryofRestrictedStockandUnitActivityDetails"], "lang": { "en-us": { "role": { "negatedLabel": "Vested (in shares)", "label": "Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Vested in Period", "documentation": "The number of equity-based payment instruments, excluding stock (or unit) options, that vested during the reporting period." } } }, "auth_ref": ["r533"] }, "us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsVestedInPeriodWeightedAverageGrantDateFairValue": { "xbrltype": "perShareItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsVestedInPeriodWeightedAverageGrantDateFairValue", "presentation": ["http://www.msasafety.com/role/StockPlansSummaryofPerformanceStockUnitActivityDetails", "http://www.msasafety.com/role/StockPlansSummaryofRestrictedStockandUnitActivityDetails"], "lang": { "en-us": { "role": { "terseLabel": "Vested (dollars per share)", "label": "Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Vested in Period, Weighted Average Grant Date Fair Value", "documentation": "The weighted average fair value as of grant date pertaining to an equity-based award plan other than a stock (or unit) option plan for which the grantee gained the right during the reporting period, by satisfying service and performance requirements, to receive or retain shares or units, other instruments, or cash in accordance with the terms of the arrangement." } } }, "auth_ref": ["r533"] }, "us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExpectedDividendRate": { "xbrltype": "percentItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExpectedDividendRate", "presentation": ["http://www.msasafety.com/role/StockPlansWeightedAverageRiskAssumptionsDetails"], "lang": { "en-us": { "role": { "terseLabel": "Expected dividend yield", "label": "Share-Based Compensation Arrangement by Share-Based Payment Award, Fair Value Assumptions, Expected Dividend Rate", "documentation": "The estimated dividend rate (a percentage of the share price) to be paid (expected dividends) to holders of the underlying shares over the option's term." } } }, "auth_ref": ["r541"] }, "us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExpectedVolatilityRate": { "xbrltype": "percentItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExpectedVolatilityRate", "presentation": ["http://www.msasafety.com/role/StockPlansWeightedAverageRiskAssumptionsDetails"], "lang": { "en-us": { "role": { "terseLabel": "Expected volatility", "label": "Share-Based Compensation Arrangement by Share-Based Payment Award, Fair Value Assumptions, Expected Volatility Rate", "documentation": "The estimated measure of the percentage by which a share price is expected to fluctuate during a period. Volatility also may be defined as a probability-weighted measure of the dispersion of returns about the mean. The volatility of a share price is the standard deviation of the continuously compounded rates of return on the share over a specified period. That is the same as the standard deviation of the differences in the natural logarithms of the stock prices plus dividends, if any, over the period." } } }, "auth_ref": ["r540"] }, "us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsRiskFreeInterestRate": { "xbrltype": "percentItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsRiskFreeInterestRate", "presentation": ["http://www.msasafety.com/role/StockPlansWeightedAverageRiskAssumptionsDetails"], "lang": { "en-us": { "role": { "terseLabel": "Risk-free interest rate", "label": "Share-Based Compensation Arrangement by Share-Based Payment Award, Fair Value Assumptions, Risk Free Interest Rate", "documentation": "The risk-free interest rate assumption that is used in valuing an option on its own shares." } } }, "auth_ref": ["r542"] }, "us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardLineItems": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ShareBasedCompensationArrangementByShareBasedPaymentAwardLineItems", "presentation": ["http://www.msasafety.com/role/StockPlansAdditionalInformationDetails", "http://www.msasafety.com/role/StockPlansSummaryofPerformanceStockUnitActivityDetails", "http://www.msasafety.com/role/StockPlansSummaryofRestrictedStockandUnitActivityDetails", "http://www.msasafety.com/role/StockPlansWeightedAverageRiskAssumptionsDetails"], "lang": { "en-us": { "role": { "terseLabel": "Share-based Compensation Arrangement by Share-based Payment Award [Line Items]", "label": "Share-Based Compensation Arrangement by Share-Based Payment Award [Line Items]", "documentation": "Line items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table." } } }, "auth_ref": ["r514", "r515", "r518", "r519", "r520", "r521", "r522", "r523", "r524", "r525", "r526", "r527", "r528", "r529", "r530", "r531", "r532", "r533", "r534", "r535", "r536", "r537", "r538", "r539", "r540", "r541", "r542", "r543"] }, "us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsExercisableNumber": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsExercisableNumber", "presentation": ["http://www.msasafety.com/role/StockPlansSummaryofStockOptionActivityDetails"], "lang": { "en-us": { "role": { "terseLabel": "Exercisable (in shares)", "label": "Share-Based Compensation Arrangement by Share-Based Payment Award, Options, Exercisable, Number", "documentation": "The number of shares into which fully or partially vested 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Excludes extended product warranties." } } }, "auth_ref": ["r1035"] }, "us-gaap_StandbyLettersOfCreditMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StandbyLettersOfCreditMember", "presentation": ["http://www.msasafety.com/role/LongTermDebtAdditionalInformationDetails"], "lang": { "en-us": { "role": { "terseLabel": "Standby Letters of Credit", "label": "Standby Letters of Credit [Member]", "documentation": "An irrevocable undertaking (typically by a financial institution) to guarantee payment of a specified financial obligation." } } }, "auth_ref": ["r0", "r1032", "r1108", "r1109"] }, "us-gaap_StatementBusinessSegmentsAxis": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StatementBusinessSegmentsAxis", "presentation": ["http://www.msasafety.com/role/GoodwillandIntangibleAssetsNetAdditionalInformationDetails", "http://www.msasafety.com/role/RestructuringChargesActivityandReserveBalanceforRestructuringChargesbySegmentDetails", "http://www.msasafety.com/role/RestructuringChargesAdditionalInformationDetails", "http://www.msasafety.com/role/SegmentInformationPercentageofTotalSalesbyProductGroupDetails", "http://www.msasafety.com/role/SegmentInformationScheduleofReportableSegmentInformationDetails"], "lang": { "en-us": { "role": { "verboseLabel": "Segments [Axis]", "terseLabel": "Segments [Axis]", "label": "Segments [Axis]", "documentation": "Information by business segments." } } }, "auth_ref": ["r156", "r157", "r158", "r159", "r194", "r278", "r283", "r286", "r287", "r288", "r289", "r290", "r291", "r292", "r293", "r294", "r295", "r296", "r297", "r299", "r300", "r301", "r302", "r303", "r304", "r305", "r306", "r308", "r309", "r310", "r314", "r324", "r325", "r326", "r327", "r328", "r329", "r330", "r331", "r332", "r342", "r345", "r357", "r362", "r658", "r659", "r660", "r661", "r662", "r663", "r664", "r665", "r666", "r667", "r668", "r804", "r807", "r808", "r813", "r850", "r1077", "r1080", "r1081", "r1082", "r1083", "r1084", "r1085", "r1086", "r1087", "r1088", "r1089", "r1090", "r1091", "r1092", "r1093", "r1094", "r1095", "r1096", "r1097", "r1098", "r1099", "r1100", "r1101", "r1102", "r1103", "r1104", "r1105", "r1106", "r1107"] }, "us-gaap_StatementClassOfStockAxis": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StatementClassOfStockAxis", "presentation": ["http://www.msasafety.com/role/CapitalStockNarrativeDetails"], "lang": { "en-us": { "role": { "terseLabel": "Class of Stock [Axis]", "label": "Class of Stock [Axis]", "documentation": "Information by the different classes of stock of the entity." } } }, "auth_ref": ["r167", "r206", "r207", "r208", "r236", "r257", "r261", "r269", "r273", "r280", "r281", "r318", "r379", "r382", "r383", "r384", "r388", "r389", "r419", "r420", "r423", "r426", "r433", "r606", "r689", "r690", "r691", "r692", "r697", "r698", "r699", "r700", "r701", "r702", "r703", "r704", "r705", "r706", "r707", "r708", "r719", "r741", "r759", "r779", "r780", "r781", "r782", "r783", "r950", "r969", "r976"] }, "us-gaap_StatementEquityComponentsAxis": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StatementEquityComponentsAxis", "presentation": ["http://www.msasafety.com/role/CapitalStockNarrativeDetails", "http://www.msasafety.com/role/CapitalStockScheduleofCommonStockActivityDetails", "http://www.msasafety.com/role/CondensedConsolidatedStatementsofChangesinRetainedEarningsAccumulatedOtherComprehensiveLoss", "http://www.msasafety.com/role/ReclassificationsOutofAccumulatedOtherComprehensiveLossDetails"], "lang": { "en-us": { "role": { "terseLabel": "Equity Components [Axis]", "label": "Equity Components [Axis]", "documentation": "Information by component of equity." } } }, "auth_ref": ["r16", "r98", "r100", "r101", "r192", "r224", "r225", "r226", "r239", "r240", "r241", "r243", "r248", "r250", "r252", "r279", "r319", "r320", "r343", "r434", "r563", "r564", "r570", "r571", "r572", "r574", "r576", "r577", "r587", "r588", "r589", "r590", "r591", "r592", "r595", "r615", "r617", "r618", "r619", "r620", "r621", "r625", "r627", "r631", "r654", "r678", "r679", "r680", "r697", "r759"] }, "us-gaap_StatementLineItems": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StatementLineItems", "presentation": ["http://www.msasafety.com/role/CondensedConsolidatedStatementsofChangesinRetainedEarningsAccumulatedOtherComprehensiveLoss"], "lang": { "en-us": { "role": { "terseLabel": "Statement [Line Items]", "label": "Statement [Line Items]", "documentation": "Line items represent financial concepts included in a table. 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Arrangement includes, but is not limited to, grantor incurring liability for product and service based on price of its shares." } } }, "auth_ref": ["r978"] }, "us-gaap_StockGrantedDuringPeriodValueSharebasedCompensationGross": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StockGrantedDuringPeriodValueSharebasedCompensationGross", "crdr": "credit", "presentation": ["http://www.msasafety.com/role/CapitalStockScheduleofCommonStockActivityDetails"], "lang": { "en-us": { "role": { "terseLabel": "Restricted and performance stock awards", "label": "Shares Granted, Value, Share-Based Payment Arrangement, before Forfeiture", "documentation": "Value, before forfeiture, of shares granted under share-based payment arrangement. Excludes employee stock ownership plan (ESOP)." } } }, "auth_ref": [] }, "us-gaap_StockIssuedDuringPeriodSharesNewIssues": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StockIssuedDuringPeriodSharesNewIssues", "presentation": ["http://www.msasafety.com/role/CapitalStockNarrativeDetails"], "lang": { "en-us": { "role": { "terseLabel": "Stock issued during period, new issues (shares)", "label": "Stock Issued During Period, Shares, New Issues", "documentation": "Number of new stock issued during the period." } } }, "auth_ref": ["r16", "r97", "r98", "r139", "r689", "r759", "r780"] }, "us-gaap_StockIssuedDuringPeriodSharesShareBasedCompensationGross": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StockIssuedDuringPeriodSharesShareBasedCompensationGross", "presentation": ["http://www.msasafety.com/role/CapitalStockNarrativeDetails"], "lang": { "en-us": { "role": { "terseLabel": "Reissued shares (shares)", "label": "Shares Issued, Shares, Share-Based Payment Arrangement, before Forfeiture", "documentation": "Number, before forfeiture, of shares issued under share-based payment arrangement. 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Excludes employee stock ownership plan (ESOP)." } } }, "auth_ref": ["r54", "r97", "r98", "r139"] }, "srt_StockRepurchaseProgramAuthorizedAmount1": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/srt/2024", "localname": "StockRepurchaseProgramAuthorizedAmount1", "crdr": "credit", "presentation": ["http://www.msasafety.com/role/CapitalStockNarrativeDetails"], "lang": { "en-us": { "role": { "terseLabel": "Common stock, value, issued (up to)", "label": "Share Repurchase Program, Authorized, Amount", "documentation": "Amount authorized for purchase of share under share repurchase plan. Includes, but is not limited to, repurchase of stock and unit of ownership." } } }, "auth_ref": ["r1041"] }, "us-gaap_StockholdersEquity": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StockholdersEquity", "crdr": "credit", "presentation": ["http://www.msasafety.com/role/CapitalStockScheduleofCommonStockActivityDetails", "http://www.msasafety.com/role/CondensedConsolidatedStatementsofChangesinRetainedEarningsAccumulatedOtherComprehensiveLoss"], "lang": { "en-us": { "role": { "periodStartLabel": "Beginning balance", "periodEndLabel": "Ending balance", "label": "Equity, Attributable to Parent", "documentation": "Amount of equity (deficit) attributable to parent. Excludes temporary equity and equity attributable to noncontrolling interest." } } }, "auth_ref": ["r98", "r100", "r101", "r127", "r721", "r738", "r760", "r761", "r846", "r863", "r971", "r989", "r1063", "r1111"] }, "us-gaap_StockholdersEquityAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StockholdersEquityAbstract", "presentation": ["http://www.msasafety.com/role/CondensedConsolidatedBalanceSheets"], "lang": { "en-us": { "role": { "terseLabel": "Equity", "label": "Equity, Attributable to Parent [Abstract]" } } }, "auth_ref": [] }, "us-gaap_StockholdersEquityIncludingPortionAttributableToNoncontrollingInterest": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StockholdersEquityIncludingPortionAttributableToNoncontrollingInterest", "crdr": "credit", "calculation": { "http://www.msasafety.com/role/CondensedConsolidatedBalanceSheets": { "parentTag": "us-gaap_LiabilitiesAndStockholdersEquity", "weight": 1.0, "order": 2.0 } }, "presentation": ["http://www.msasafety.com/role/CondensedConsolidatedBalanceSheets", "http://www.msasafety.com/role/ReclassificationsOutofAccumulatedOtherComprehensiveLossDetails"], "lang": { "en-us": { "role": { "totalLabel": "Total shareholders\u2019 equity", "periodStartLabel": "Balance at beginning of period", "periodEndLabel": "Balance at end of period", "label": "Equity, Including Portion Attributable to Noncontrolling Interest", "documentation": "Amount of equity (deficit) attributable to parent and noncontrolling interest. Excludes temporary equity." } } }, "auth_ref": ["r60", "r61", "r63", "r192", "r193", "r225", "r239", "r240", "r241", "r243", "r248", "r250", "r319", "r320", "r343", "r434", "r563", "r564", "r570", "r571", "r572", "r574", "r576", "r577", "r587", "r588", "r589", "r590", "r591", "r592", "r595", "r615", "r617", "r621", "r626", "r631", "r679", "r680", "r695", "r721", "r738", "r760", "r761", "r784", "r862", "r971", "r989", "r1063", "r1111"] }, "us-gaap_StockholdersEquityNoteDisclosureTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StockholdersEquityNoteDisclosureTextBlock", "presentation": ["http://www.msasafety.com/role/CapitalStock"], "lang": { "en-us": { "role": { "terseLabel": "Capital Stock",

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'2+Z'=T48BGV+?*FYYU^1+F)22M10,V??GHYA_QW2)YCL$6K3:-?\,,%&5 M3T?AJYK7VTCSPFW:,&1OMMM ??^Y]BKGCJD;INDS"N^%/]D7";@4G" M/_,2<_5>A,&;Y!/_<'!O4?8_&DS^//?ZH?IBK"@1_5N*2GV4(R[#]7]GM^ M$'I@S+KWPX-%_,"VIQ>>%%]HH;<(R\+[0P]3^U:,5/;2!+^?K]B#NJR4&4;VYB7&$(58:'655G8)>3V MOEV-I1:.0M)H9T9V?+_^GIZ17\ FF.SF G>7JAA+T]/O_72/K,/4Y=G)<4HR M/OG+\5^;3?&CCJJ<"B"'>Z<)!GL#\]#6R6F#4M14WZ[(R,7-]6>2[-Y,CA1E-FZK;H>SLW M K_IGDAGVO0WV_]?$:\T$YFK;-+_X4;E9,4EC<6USF7Q0\/*PD*&44D@M.I? M!$6AL[\G5_?#"X&9Z79X/0#;F'U_%K\\NGZ MXZ? 3RQMOSTMN3VRS9PT! ?B,3[EO@Y.DO)%C01$1FGDHEP MJ7IO-O<.CUZV'9V6&(A4CD@8&BD:H[I=]JSXO9+&DBT MF[*G8B?/YZ*CS(A-Q&#(M(&1(P-,/GM"S>YVQ+OI86A,"F? B+M"CS.*;ZD1 M+*_MC34D%AJ@!X92%4(6U5SE0$A6&J1T0X0HH<5T,)3"2 "Z&-T+ERPNE MMT104$36 E&8))=W!+D+/"WNQ5 &(C,/IY#!!)$R@$^0%=@.36(R8IRJ*!6V MXH_Y_C$9JHFP ;FR&7"6(7NL7 H#;4F15Y#YEE!-QS!SA&VQ&$X6W? *PKG[MA7"22%0!A[*OYPYJ()8@QI)96%=%@OR63H&/*J*LBL$305CP1@,!5%P3)7S(-MX>>TR+)Y? &O7V@>$D4*Q8L8-IJ@R$""H&I[WXJS7)Y(V%4FFQW8:<4.WR]('-M09=DFT%O-:E8")R=*K.D[2N(7:\E;NX9=F;SL-LY,+)U=&HPY=352:)PZ5TP M$-*0S:TT5GP>FET1#%N M6[$%)\>$J 5/GG^.4EG-8 ^@\%HT:.'A1HGO?4X[8M96X)"&)?]IA(]6455)AF#8)978@[AV!$:PF(?P[F"&-9[!7P??^6 M"C2<#*F#%2HY)YD$,TU(#^2N*H$^KS5!HFUQ/I)9Y:N-O4=)@F;L1K#;KFBJ MLUZS!GJ$R]5]UN<#-J+R;>CF0UVYQS58!]_DC)IX5$F>GM3$<#H$^12GX GH MX\/) EYA2&/4?/#6LM=Y']\;IU]9&=IG5#KCO8ZBRK!O%\!U!==<6X?[$8^ M"?0#H_]\)+8>V9(@25"##ZAKQ3'ZD3[*\"FCJ&9Z;0>M4FEGG8BKUR<5Q1[6 MO#*]JR)G@P"!'67VN>$#?^,,N>E8B?;^9JR-%<'V-VK.1;DSR MCF$X-$0K%8'QSR_]"#8^&JIBI+,1 M,206\K9^#&/]XJ:\S/2$L#.I.=:AH>2_$,_I5^TEKS\)[ON[5]>>[/9V6^O M6[]{KO.3:,TZ1*]1:4+53):6^M,O1+91>.1.3OBJ\1+_HJ#.UU,IW";8B$U4 MI;Q^*. !S*2S/'[VWVN'QNS/X'T\EU\LMO[3CXN6UW?U6[V#WT>5VJ_-5:]W6 M0??KN'Y)V;W#5J_=6XOMCG>$F1),@UE'AX>[S):R>+>QNS&E*67,9X=^6W0\ MU53&-R#]%MKMKR7R*?;=\C/O6OP1)J-D*0=#^OWG8TU_&]@ ML[)\.@K?U;S#M:QI #4OW*8U0_9FLP?8]Y]+/^7<,W7--'U&X?TWA;SN)-QG M8)+P#[W$5+T78?";^?#_'/B? *N/5"C,C' 'Z4_\@& >X"*83]AG]):$7,P& MOJMP1%S.@QT_%:V8N1Z\A%]ZW_ZZ8?'QB-:>BU#A7D1^LFK/M\@A*JERCVI9 M\##&?3,EL//&.0_T9WKC8\6\Z_!M02P,$% @ FXM8606$#,R+7$S,C R-"YH=&WM6%M3VS@4?M]?H0VSE,D8B=. DY@!E*8 MS4Q;6L)N!VU'L8X3#;+D2C+@_?4]DN,"\;9IAVZ9A3QD:)_;=^ZVQDN;B;WQ M$BC;^V7\:ZM%7JFDR$!:DFB@%A@I#)<+\H&!.2.MUHIKHO)2\\72DF[0C<@'-MI<_X.:WHEEL!>]6>><:>Z'W>\D?%V!M$;!Y!--@9 M;@?=/J3 (C;88?V_PP:*(GLE8VPI8+>1<=E:@K,?1]WVL);T05G=AF'0?!; MP[/NC5,E+=K3*%]=5FIN*6L92%IP:35-,&R*!+.Z'%E\T***+V3L_6Q4>FJ9 M1 FEXXW _T:.TDHQD49OSCE&1CR%B[(B7+XU^_3@^DIZ75O.G$]%E0O.!Q6Y?$.ZKP&/,'P@_[A MR*.[D4\.3TZG1!/)_NGT^.TW@>>2(?"X&_G$_B3X[PIM"HIVK2+A-OFC/6M/ MVF1K|G)S(OP$H[#7#YK$+I%4B%8;##>VBDI3GN =7I WLWTRHRG8DDQEHG2N MM&^G+2>TN,'=[0:CB-LD2-,Q+@CHL3\NF,^[8YV"LTXG77),S MJ2X$L 4X -1ZCFN:PN'(0/<%U9A[49(30,LH+'C M,8/$A,X/^E;YZR0+S:W3?GB9+*E< -E/ M?#C"G5Y$]&178> 27 FCI7&@N\A5 %S0W$]<6(<9,+6I9<>%MM>;+32-5?6JLRI&YV[M6DZH6,TDW^$5^6IDMX-J;%NYK,MW\TDE=7T@"TEL%4=7"?S_E?<4=)U;AP"-NRKE9][E'OAZ2G^K> M]EK>?=\WC]RG-5.VN1'A@O/_9&;A'"3!Q7P@<$BK&ZZN6:;?T 7_IY2OQKH; M^N@2,4IP1FIXC\+A->OAN0:>1-N_P_T_!S(;Z!)]'V,Y!< M:?(G+A-RU\8Y^GP8<._&Z?@/X3L^L[\XK\R5\8<)L09!W1*[=8)YU43^8SJX M$J%S[*3"WB!RWR'@O<>AJ__]<+;C#X4_5!+ P04 "::BUA90'DOD!T M-0 D7!, $ &US82TR,#(T,#DS,"YH=&WLO6MWXDBR+OQ]_P]HS.P1U6L)-M2G<)5PUG4;YT^VR7[3'4S. WRUX)2HRFA<1(PF7/KS^1*8F+ 8.00"F1LZ9= M-NB2&?%$9$1D1.37__Z<847'(2.[_WU+W)+^HN O:%O.[!S7__2[5W>WO[E M_W3^X^O_UVS^S[>G.^'*\XFV(N$RP"C"-O"3R<:"]$8"__P@S^<%R0\NB@: M^<&DV8QON_2G;X'S/(X$15*T]++TV^!"DFRL#R6EV=:0U-0L:=BT1@IJ6LC2 ML"$LF5(XO.%I&.DF7C45-5ANZFIJM)$&.E-65? @RH%MF<@4[0M54R5-A3NQ-MKFO8&@Q&.MR@XY&A#B03Q^\=1S!GF+<77CBAKRFR^=?&.(JF%Y___SYL_4Z M"-R6'SQ_5B1)_9QIC?ZKI0^7/__/]KC<71TT8Y;+Q.? YRB4J;1_$1B12I"4B7E?GIUB:3L%UNMIN?Z;9?I=LO(FBF M%UVX"(2V@;WFCUZC\W6,D=W.Y.L$+$LBM3?ROF?/RU\:E!T4@P_M%^VQ1H-(S_ M^FLCPJ_19_JHSYW_^(__^!HYD8L[P(EF2O^OG^//OGZ.GSSP[;?.5]MY$<+H MS<5_;=A.."71VX7G>QC>[!Q>D MQ$/_JV#;VZ*_P_3THD< 9QJ[_C9[PZ*^- M81.0XZ$)>1)V+KJ@9FRB:FY<]-P0'!"C45/1&YT1EPU]R.0N"%2I=>_85:/SY>]J-3A.0#/*>Z26*.7]- M(H 7O3$*\#<06?O2GTRQ%U)IZ08@/,^84/+;V^*21_1&/NK^1(%-?SP17(=. MA'LX>'&&.":XG({3T]1&VU'!?6V0GU=!O&.> 1A@D/<;A!E(@<7H14 \,T!"]7 M%Q$(T%\;H3.9ND3Y_&9GELM2T7D,;1(J^;O&.Y)6A/POH7W15N9AY3D2' M'9+IAHWT%PE&X2S G? BO^,NOGU>_2_\FSUA[W@S&\YAR;IV\:-WE?590&+* MD/DS00DX-EZ^E)(917YPX&O7[BIL?N2Y]51WQ>'?U'L_9FDP$. MMG!D"K]FHF& (GPF(UQX'P+GHQ=]E>M[S8+]5O[]^>\ST+!?]#&?.YK$EWV5Z MWM!%SF3CT^@W69\5AFA(U,.V)X9AEWZ_SW,3S10_&M1?^CFF"C;]"[!?X\< M' A4!>"-AM'E[7^O*M[W-\!'L/KT*557Z5]@W 414;-T+6I*,OP_O6_QW7R8 M]M*E!:8J+5X1?Y/^G;]D\\]\-Y-!88 ,L94;Q3.3I:9LS1^4?'/(S%0&9O:> MP>;I&:RQ1@9U?S*HQ9%!9Y ,^XI[@60PZ"##BKBOS"R/N)MLS4Q-C>7\,[,8 MF-GAT%TA0Q[HMAD@PQ*#E>(8+$ML34TM3BKEHYM9"09C,SK^TX;7O4Y=9^A$ MWS$QY 7;@6]HS'/AAD8 1'+/-3B4X%^#+^I[\&?8?77 %TLO>\(1\&WWM"?X,KPXNBF:.6%@ $+43ZZI5Q'B6&!<4>W[2LO7D=:W(_N3=118H[$ MBZ/[/W42 JW Q?WH[EG-A:!(?AS=1ZR\$# 0D52. [N[646)88!QWYK/H;(6 M=X4[\^SP@COS&0A?8)14X?XY.[S@+G>F!,J?,AT%T<>E[H>\Z-LT)OP7^O>/6PY3B"8,T M?FSNX0J.UJ^S4(0VC!,7Q"_GZ2;=FDJ.4J_J2> MF& NXK$/)B[!8.H#*O"!#]5.8ID+B[NL.?5X^5XD"IS-1K647%*/5X2)I@+ M![&IQTOB#G,Q\!8E]NAZ_#BQOPX&WP;5T*#%PUCRQI9J.Q.9* MAJ)..0@72?!*QGG.18$6F(JJ\9 1LPJT2#97,F!T:@5:),&9"]VD1'T,?)A(-M]/,HPMRZGDU26Z84\F^DP>,J!^Z09U>%Y#ISP1LV25Z@F: S%QDYB.3?9HY+ MVA=7!NG,!1_8)7N1:&W_>>G#K<(GG&*@T8G!K(!>$[:6TRC08##8&4!.VEL' M8S ;5]@)6TMJ5<]LI*)XMO[PT,0/(N??VX5.=Z=?PPWFH6%E=G 1QUX6M*J M>BYQE++DM(PE]5Q",67):1GK*8_F5'CE-'GHI\)KI'DN<:):KH;FN82#:KGN MF>><2]:G*[K=Y+O&:8^_S%<:0&D5:]$$?8.02>_[6>\$Q*XYGV1]G+]RL4:"D M3)84N!MNUBC.42Y+"MM^-6L4IBB3)07NB)LUBC*(,IV=$@=$%]T;1A3(849@#:]4HIG!Z1A082:!]%DX2,8 MB!^T;Q0_*(-KY40-VC6*&I0D:R7$"MHUBA64)&LE1 C;-8H0E.+ [%.6$MFL4 M%RC%]RF,$>Q' RY=%(8/HU[D#_]XUP0A9H'S@A\#/,)!@&UZ566D@/T(Q$ M9V&Y9S[$P *GCA,6:%<]+%!1[<1^$(C%$#-@ULH2^Y[_JM(4]@>AIG8&YCU M=Y^VJ:V2O,@2^'YX\HUPH<+&0)?8\]P_4EC^9^%[%8,^^4UT^P0M%./O.]0GXTY9EE*57>Y^@%$X"]H55&K:BI#57:W3\^ELF2IZG[Y":VM MHG)59(E]K_QCHI]$/(Y$?)E]/YL-Q!>8G27+[+O5;"&^4.*S[TV7B'@&DGYD MF7WWFP'Q8()3[/OMK,A2.:E8LLR^[\Z:+)7%*6;]^,Y/%-B+ QM(?/T)AU'@ M#"-L=SW[$0OTL()Z%^FF-62><)?%@@E/<)\X0M2BC MREWC#G15.,6LMUV)7.WZKXK,!@8J@8_S69.9C6%4 B?UMPB8#;=4 A_G8X\P M&QEB-I^[_C8(LX$K9C%Q-G:'SFQNF) /J:)W776&66M M)%6*@K*"BO.Q,ZH2^V0)'? 6W,ZH2_60)%6=C9QA5B7\R4SI6>R/#]$KXDQE(MG(V%850E^LD,-&IO7AA5"7TR XGSL2V8BWN&0002Z86^Z]@TA'4+#'0'G@>8 M(Z)'L.;/+3Y5Y]LL=#PEOM;L82[^R+KHGE:CE]1DQ& N\.@Z+$K0-MZ&5A@[GP(YL:O23VF,S%_]CHLA+M,9D+!')LL.+;F\Q% @DV'@/?G@VCAZ"' M@Q=GN!3Y^19@%(T!%=WI% $^9KM@45$+W60V' =R.X0[BH=3T[XQ[>W]1RC MA(%KU^:5X8+!D6?2W[W'$]0\.X$^QYRXIOZCR61$L Q@,.M)QO7D.4@%DX'G[8"\ M<5Y_1>&- BR;X"D=X2$,87A@%LWTB%55E$G,1X JHKGQ(*5V/512]%I/1\)1 MPHWR!!],!<2Y}]N2178>0E*QG0%V=.@9&.P6WYY@%]5T*#G(":5VR.Y<0(\ MIQ%0Y4V0A)Q78&V- &AYV"P\^T)9A%:!0UZ#B)2L3T2]KBRN(5W!TXUVSG MJB*V8OL*S-5PG(4-+_/=!M:A6@5K[3QDI7)[$(QIU#.PZ66^!<(Z4*N@3\!! M4IC;@6%"4K@WLQDMS& [(<.LHX1!SNP%G(<\NSD,NF(NC,ZPI3]R%HA0\\&@Q2Z"L@IX\!ZE@+BK..TZPX M979C@ML%A#\;K^?"FR6E%C+NK-A/:H6_9T5=') M7+2=X5J/D_=H* 41S,64N;YBW+HZ# !E@+H],L*8\<1>*4O# H\4L@;(*>O(< MI(*Y]#C+57%E,8D'OI\N$[]J4&4N-LX$2KA1'L-#YZ%Y9C%:!8OL/(2D8CL# M].C0,S/8=;X]P2Q"JZ!!ST%$*K9'PD157%FV\XKL7YYKM7%75FQ?@;D:CO.P MX?EN-^M0K8*U=AZR4KD]",8TZCG8!'P+A'6@5D&?GH.D,+<#PX2D<&]F(UH, M9C=DN'64<(BYW8"SD&>.TZPX979C@ML%E# ,1<6Y'N$H74,IL_L!WY"+ "*] M,<;1G3^D7%BPY@J/NV%X#&O1\8 '<.UZ&6+ZS6$$9RZ,)A!*MIA.U>Y]WR7\^0JM-66F]8">"1V!H2\YX3 Y_.OCN=,9I.:0IVYP- F#J#^7>G+ 9#,8LD79/.)@Y >3 MV.Y! 2XL4^KOR)U1"ZJ/AV//^==L*6K]G14#M$@6NWYU. Q\-QS5% [.!G8+0 M4%6^.!O(* (\O1[*)369C$DR0NDC[RV36L;["@VB1C+M8!WK8&_S@WH]P^(C> MT,#%_7'@SY[_9]^?^S/R&9F?^P$T=N#1[!"^-%WC&GP7)A+,0<\X?FUU MN,2L-UYU+A6JMIAUY;=QZ? O,C9S+61!@;_A&F-6#^>+PNL!G8SBMD,"AX1.GE#T#L[? M4$@ /?*H_1W'/PJUQ]LT5ZC=JEP@A0EPD($\O.# {[4=WY#WQ\W,L^&]-09* MY6(^3 #EG0D]Q\R-XR%OF""FYX^.$'IE C65BU6=$#6EI;^4!8;!<]*L-) M,G%* D.]D7;E@&S/L_N&%>\??&&)XY:)AE.'# M)8:3L(D#REV53\/HY2W\AVB,@^3WZ@3)V1+DN7=`CMGE5ZY?*8U9A.BS]4K M9_?'I*XH&+'_7#) +X4P]V*Q@%KQMWW!:#+_-U1 +!\3J/K'*1/KXO?@35 M0ISI8E1+Y6* '$]5BF:.^P^H.-;E\.3XU6;EH)H=UE>*RYE\U("+E- M9[=/@/K]I?D(P6S$\D-9@W7:'KS=X0C$(ZQ:3J8J52Y]6. (N69C:BG!N\-_S9S066VU!*OK#_!OODLRGB[]R11Y;W=W MET6IMUO/OB/P"")\Y[Q&@Q&,Y1D)8)Z^)X$] M,1L58Y93ZOZ<*K"!G2HQ&V_;Q:EXT]<'(W-^8<*I\Q$S9J,J56)>29(G,YO3 MQ:R.+*?#CBHS&IQ@EE/EM&-5968C(E52B&6)&;/AC"HQKRS)8S8L<@73>$'D-M)E%1)(TS%YEX8T?8.?9NWX=CLG^!?Q).FI5QC66F8V-,$O^ BMB59G9R,3V M-N"+3O5XBAS[^G4*]^*PZ]E4G<7)W%$<1BHJ6O4;M!\=[_D^A\#L#6.Y)ST[M^0Y72/B8C79P[I]_IF-H.SF_C*O[QPT('MD3G%YO>PPO%!Q9S;JPAE^% E7 MF(W4E$QO%KQ&A=G@#$O,*A\VZ?]!(% MP1MI/8"G?@",ZD[\F1?-;[]RP]'KD_LKLWXIS,99*L:40M<89N,G>S/E.HR< M":B*A]'\EDJ+";,AE2IQI% 983;*'X24,%E02]H9@4'!]NR? 9C"2Q>O[Q MVU(>)'SBXENXE+R\.B+!;*'#8084*@',QAI88P 3K@FS@0*FN562KZ(RZ^7# M4CWU0^3^&OBS*4WEA =NBNZL7!C_@>V'T;9"$O!..ZGMVU;2?..UY8'@"[E2&\ \AW1A)E-X!T]U(KILB;88 MOZ]$AE-J+Q89IS7BS9^2H,.Q=W^!FYUW3B\'_7W(,R!]A@^U;V\?!OU M $$$8%E=7@7V63W8A"@2S1U(N0"F&H*$&;C*EQ3E..I2LH_59F-)'$@E@;$ M,BQME=GH659+^PI-T#,;;P)_\ACX]FP8]68#XC$.B]NE(T_$_YK!1*Y?X,>&-MKBVK%QPY/B%+3;F0YAFJ6E+(+@(*VA^E#P(59_@)3Y#C <]5(QB-GT]SH- ;MD^>D\BF1L7XN&^:0VJ) M@"7%NSX[KQ>@7?U9 ((6_SG&R*;CL9V7SE?X06'FJ)HJ::JE8:SK&K8&@Y&N MJD,=CPQU()D8_2\QWQ?WA-&;"W #BC3'F#2SOM"4EJE/HR\ `3L:7\B]\- M>FGG:SA%7GK#T'?]X,)/!(VCT9<1C+,Y0A/"?;OX"] 7A\(]_BD\ 1V]OX@A M\L)F"#-++@R=?V-X,+R#_ODS>:\D??'!?D_'(2O2? WXALV_;>.C'Z\7%S(,Y MDZM@3(B9L0CC (_^VOC3;N*;C4Z?M($4_)% %"R@)OSZ&0%"""%3QJRS!P7/ MP"(GUXH,%0Z$@2X]B[(D8\X&QE#DSD$()8[PAB;B![H_/C_K9_?27T^MW^ M=6]U"DN#9V6TO>O+'T^W_=OKGM']OQ*N_^?RM^[K]?"Y]WNW#?8E3 M4/;:PC]0. ;=%?F>*%RU+EN"(NE:.QUVL2/;1R8:G?_ZDVQ(7[82;@FX*D/ MO7EX^BY\]27J^= ![C);Z'XFN?2*2/&S*#<%#9"$'F'O^5/Z2)P<04:5 U.X(+ M_F 9_(V]XL53.L(^!+!.0@K&&-@-'.0/*SQGZ-M8^-[+-^SLS/O;#)9X4-AO M\;Y\OZ 60+1+YFMT,7)>L=V,@MF/#T[IX?''4^']'] [XO!\\$4*M!T]V"K H/3X*L M?[)_$1YNA/YQU*2QIUKV^YEGWPMMU5M']#I8C*%JWA!T(TQL*_8B0)X!-B M^P U\DB-O.08HUS%H0V?-"? PB#&YK6FCM^8;1D$3>RDN55C(\#2BQF@LNZHD M"L2RW%\5L4)0H.<^&&A76_'T W@=C91LUSPCY(9SU:,EJD?CJJD M8-3!SFG*NFZV:V;],)-G(0R&,-H0-8G^E- JJ+_/&@%PBGR38)2%) M0;(1?YR,.'FL+DU?OR23'?A1Y$\H*EYP$#E#Y"9SIM,/OYX[U=KTM?'YJ)2C M6F\+O11M+U1E!<\3?G;"'"+1=1!KWI R&IWO0:[0Z]Y<]W\7,N\OW^/HX0G$ M&CS(JV.L5Q^183]?X=/U*QI&=++$:P_FDQ10*(13/"2Q-UMP/,&)0F$XIK;! M+^6MO4:!9G\":@*75+AR/ MCH'>=(C(M-LM2U<), _K/3%R<"U8(Y? 5[_7#%:EJ%M_$IJR1L_W_8HV6I9 MLE+(HY268IB%/$DS6X;^\;_^4WK%-_N$'[_M6',-=D4V<1"N%"FKX*\2>.L ML<:?GGZ1DPY11V3W*[@TT3JZB75)TK"#MTNP U>,,!C1D&P&17@:^"_D.0M[MVVQT'K'GA6_N"_(L1D!$]H.W4I)OAQ10]I9EL%WMP?/(%#_IM_\PL6H ABX?>K%,[N> M3%W_#0>4Q:O"$E\ _LO"-K^L&L)Y)!77 MM>V Y,G%_Y .ZW*JWMHDK"U)PB58N*#U@C?A'[YOA\)5X+S@'(M?5C9NY,]> M@&A0PM2!/9?PZT/0]W_,:1'2DVW!&/)-.':F8E5MDN.2CZY8#\$C6'2P"NUO M\)%V:MSB8W6I.BYF2),LY/[_SC1V$1) ** 3#^YUB<$ M28VY^-]L))+D3)$;_XE?\?!&6B>E5X$1@$-NRS'/7 !X/"T"\PV$VF<:IF%V MX^BCK*!%#/*__F0ILODE%"+LXNG8!(#@44].%)PT*55 48"V1>Z$#[MKS/(MRMR%.U>TA-KHF.N;<+!DC<.3QBCN(QGNJM]).MB9IM&T#$DZ*!)O,!2)OX&E M& =)3#6@*S/\B6*= _P9"7&C-5L(R=HMN"B,A(#NGET(POWG;J8-&L$A8&+S!W/#P#P%&^H? P,D#EU5"VGA+S! 1-]##FVA' M'2%M92=TAQ'YFFR)"38]X(1>.@WP$%,1D16!;DB' O)LX9.R-+(!F$U".!O\ M$]Y+QA+.AF,R&G);.D:R 1R2!%L=/)?QL2X*- WL)6F6E+&7;M8P,A:4H4[^#"-M_(AU.0OGPJDW.K_C,_=V[4=[%9FVN%;7K--N%K^6.^F#IEXHM.[];>U M5QI9NHJFP>@\4'<3)XI X8)9,8P"WR.FG?LF8##OW@1ZA W)*7_!PA6*4+P? M_TYA+YXQG07AC##P:OGB:P96;I!-U#&;,S*7&C=!K!GN?H&&[Y4Y;Q!GC-O_]%P" H\(,WMJ,X#MQ &O^E3 71$<\,7 MX03T/KPC2&U"T$OT_"R1&-]P,#!^R:KW++#P'_L]HG'[= CL<'V\:47$H,^7N+6-,K'2]>GF1ET%12=V+9AVBM M^Z"EX%9?0%Z+V;(D,VM>B]0RM4VCD!02O=56]&(R9)26([FL#4U:>W- MMY0XJ';+4HIC7SM[A!K.VDIA? N@]#ZQO8-+T)#/?O VM_],1N>.JMCND@:E ME[*WU;-KI=^/;]_Y)L(<#I88%^O[4G#KG5E6#Y;=K]I0G&W58%LOMB%C M=LT-R?C/Q$0LGW] [%O@<9XVA%$H[3^TL[2&G,>RH[=F^D5QL;IB&@$EHF+S+)3W)A9\.O!I>*W@P-9^$!UZ)@VRJL?!K,5V%0 M=A=YBCRW- 5TX<7A<;BF*E34\KDDMW2@FOBKKA3V*CLHZ4JSVE#G8^_D)?2>* M^YQA- 1;ES0YK4Z:^9Y3#'#-Q.B!30.:^REOZC-[$[Q/BMXI"W%J1X&J^3EV MX!-G624=$K^H!!V7Z(25? T&YB=%,WP=DN,6'22;)_*':?XC@O E3% @OY*B; M8G<=[DR_1)YB<9H33Z$>-)#B5WJ,L]6OB9AOOJYN(M*X6-I&#ULPM[DYJ.TN(6- A]=Q:M MW[(]B^E|C]7]VN:;\ [;YXV"A8)YQ^NRWEOW MU*X,<+LEQ1S/E.HCM33MXPR/?1]E&BW#+*;Q3+NEFQ_WU3G< BRO G!3N=Q' M8G(;X3L#G8*!/*O&>O+'>@HK[G,(PJB& &W;#1# MT%JJR4H_GLV&KIQ%4K*JAS+6TAUB<-*U!..Q[+-6DFK6F_F&X/P$*$WKZ5&8 MN.)=+&WW;\DF/33->%,%_ M>7X4D_!YJ[9G[< UOW QKPL(N>(&O>$R.? GK!0GRNF_")G/[U M"Y?[.}"XW)?8PZ3/9M^6PUE\-AVU2CSDOH4.-6$6 M6HJHL;AFD5SSA,.9^WY_@]NLNH!$R;DI40V=I7*=Q3X<9:G=Z/R-%%(Y$4T] MI?H'/G#3OXGZ3& MU5K7_YHYT=ORH1M$E?\(:8$*U>C8YO]/BA0<^;<5$,K&5PK50&/9J-S_3IV M!@[/V:\12 _J&+ZSQS:/5;G1Z0%I4<1]O5HQ5?IP96]K7CZWNW?/MROMY,8$YQJ M8X.8K9T!4L9%\7D$AQOAX?'Z MB:*YQ^[T-K=V^9FN49>"7:;ZAF2]4W?Y6YE:#:TN5LG3RV?VXIQ9RTPP>5 M95!*]7N>[^'8Q0>GGK=9ZU7R? E:;=R'Z8"%AX;M/#\V\IMW2>W@*R^L :X(J MB7EW)BI*EGOX9%^J5!'BFV?]Z=83HK$_@T?8H4BZ6\D*2 MR=#%UC]R'T>S<(5T_)5" FF65]2$=\2::D4TM;@]S5K1A8,I-YAV*-P!&O[Q M'/@SSVXF(QP,,1Z-/IKU)DT\<6S;Q27M*=UCX!G9-GT/EUV3WOODE %.OSY M>//?>7!2J1/?VIYU%MKO>[.JR[U9R5]Q:]99V'Q&:'KQA%^P-\,W@3^A*53P MQ'\XT? AR%H),X^#Z=>C."%FZ88CA_W8?O>[7KU5-^[62>*ZF*]AMM>:M6ZV MFPMC8YKNLS<[MVO,77IC6>-R,>1B^%X,M=+%4 8QU S15"PNAEP,SU0,Y=+% M4&ET9%&5+%'35"Z(7!#/5!#UT@51)8*HM!7X_T4 08%,;-G.Z+_IY1G>'F' M$=EEGP;^/1M&(2&AO34HHF2;_$;M46TIVN'<$7(^C'IU?3OL>G8/R(_$<[+] MH&E682%E]{HN*DKN- 6LS*H^V++U[W<; &,?1#N^D.!SI!$>FV#9,CJ,.XFB'-M>5T$)#KE"C,0CQP>3@. M]R0A[]\Q:<&'[ZX0]OIU2IKT9E6P2J/3UD59*FI?M6*K=LTAM<(A1,!Q3T]#&+]CUIZ3TG"+&[\ %

[AI63N!S"^^/&_(L72:Q) MT\J=3\^#@WLCA/!+ &38S@NX PXYDH*4LL,.W7=WETF44#9+"!,>IT'?Z<.$ M5TXX]4/D_@]DF0(YR5FS<+_CS;]/_@Z%9T'+[U\579&SBNVF__&@;!\;"S2 MRM=29.5+]6Y8PK"JN/&5P=>,,,+Q\=7F^*KSPK\CS'AT?!D2&_CB8 RSE$$Q,SW7L6'&_H M3W+5&I]S.X<=-M^4RL0?RNH%&8U.6Q8U,W>9"6\D4BOD[3 0"T">"? M91>E6W)@(ZC-$[-;Z0.]5122B8>^KWO^;DRS;A"30GL1E'6>9ND.L)HA]M1 M((SH]I^HM8LZ3XSCB"4<[7 B"L210OHAB7IA_;8YCEC"T0Z/H\$ V$4Q>]D8%^_+MSO.H<;L\>HC$.DMC^.=:,?
2HRB$!HN:PYXNC"M88TU3(T4\EH;(EMK]36*]-2*-H5D"\417]C8XB2NKXIQ%%4;13M"]X7BJ*X MA9VRH4Z,pC5Z-.H5*"\41]1_G2Y]%@//:Z!R"GGT_0]I@4PLOB7L>;N+Q3:6] M^PT4)B\6Z06D*I788>*;F\SU)2@,AVUB1&K\5"R.PX/Z%Q2%0XOTU@.%]'$@ M4HI6&!!ED<;99H$W <<@2#G>FH3"# M0]*24@>%V.9 K",0=^:Q, -$TKM2,D5-
8B4Q[QSR.1X# \4)"8B 62O&;MJ: M0RJA-4=EI&LOLQ>D)HD;?,,>SGX"MV70\($NYIBXK*2@_IT^D;,B]D^?V;7AL%LH-A&CU)XT?S[2Y.O3B6>'50MH.K@.NBW!&F*(AE:4
MD[B78]^%Q2+=I&__6)L9"=CLE'Q#H3/,L^VSM\=9ZC3WJS@W3;&Z^XR/..@1E?7A+H/RWJE, MU6)Z-P7)V'^4YOZC!OYCRZA19@'2"MV!KQ4"?)T"OT;I//SX=0>^7 CPC49'
M;TFYFQQPX'/@%QY"WX9_1WRMT32]Q4!L]&16MJZ[]]J6YQJ^"E7CCN+L)VG M#*%NXKMIBFR+[_$]E00F&\36*L978:?.BD._[M#/YJMLAWZ;0C!WSB^'/H<^ MF][*5NC#
!H=K56GXP8X]JN$_5,Z+!(@9S;9^%EO1E!#;N_E]O[FO0Q?4G3T(G_XQQPVZ;,N43A^1,Y&@5:(0.LUJ@7DHE!W M4=",) HJ7=MR=Y3BHL!%H13OID!1H/OQ^<\RX]+ 1>%4HJ ?
213H#KW&RD8E M=7L^TV1"^-=V7CI?X4?ZV@D*GAV/)I]KJ_=8M+/*6%GY^L@(,]*AG[@4TX(M"H4>;##& AJ"%P3O?@,:"IX?P=-ICJ4G.#"PYP"YPA0%D>"/A @NGWEH9CO@
MRA*LV"3? Y-U10@\O'(9 W=."V,((/C"_L+65,.EP-*5EZC#DJ1\Z! H7 M 791Y+S@+S\=.QJG&'ZZ,;Y!N9 6MZ]# *<[*VWS+U1MI(B>. MJJF2IEH:QKJN86LP&.FJ,M3QR%
'DHG1 \KM1GK3>%ZI,T7/N#D(,/JCB48P MQ0OD_D1O(<'Y,AP!B^\H_YYH6TDS&AV-~+%<@,KQXQ9K%R#L."!7P9@0,V,1 MQ@'1CW_;S2(31(PF*8/PD!9R1!:^?D:=3>S?
K"V,4K3%6D(VQ:WPO=<5>MV; MZ_[OPNW]YEP_W5]?WO>LK 7[K/=S=7I%9"+T^_//] M^K[?$QYNX*OOCT_7O\%UMW^_IM/]?BU\NGOH]7YA=
!Z;]^-74DO>^/FV1UDM2!RZS?,#+/Y]3>9TZQC)/MF7*E6$^.99?]KU>Z@*[U!UZ8H1H9#0-AFN"(I6E$3WE6"52>BJ7D51$WSTUJKP]=5?$]_P__MMY8X;_-GNRL.
({T19(EG*0H>CG,+T.O%09V:/LA0XO=7_T3<6/EK+9UQG-_X ?SI"<-9$&!O M^"9$ 3S-I;D# K+_.0LCF@]3-"8S#CL\+-?1?)4QQ':$$JA*N5S6*%:D;#@-M,N% GS @?
EO7L_L+=OP*ZH>L*]W "8&*5[, ?C["M'P;UIV'41^]9EUR9(F> M1*8JY=8P%VK U1R0F>R6-=]B]W"(C1EL(8LT=QP.-6)*LPX*DOQ5UG$(CDV M0+14C6O)BN#Q*-
X=B\A480$?=75]8^:')'D2K+0*]?L&\Z/! '1O9L8>]'43/ MD1/0O"%AZ]{5XWG96\OG2.I;H*>1.8RI#,*)!&RA#\@=@2]1V#1@D)/68>/ MP*>P.^?30@C7Y8R40>56_[DJ/I*K_WU<9
ZVO#;R$G/Z[^U' MCIQ7;#?_C0-_D\A9!!S#4F3E"P]OU!"!,_*O6$!@FR.PS@@\,,:!0@0J$D=@ MG1&X9NB>"H'K2)/!H6($8V<6L7W"0Q>%H3."_5'$^*/-
:0^CP)^0_B*SR+PI.F\>,"HTGS<#5K/6I17%42AV)%%.*!H=Q< +0: M'564M**2;SD(603A21-V<\&15&F*1GM]>69('9Y#A>8*7P_L^Y-,,V%$TNE3
M!8+,_HST#4UGD4/4*ESQ73!UZN-U[W +-FB<5-0 7^Z,D.31#VB!0!0%SF!& M&\[V_7O?(R*?!?&]WQ+FHKA,,JJH52IT;%,L=TNRA\O" E18NX\/A/V$^
M3=G"+S9ZA]Z]YU[R^OA=YOU]?]'KN3VO.@M$('L?- MJV7#@4[LG]36;FFRGO6D-D-K&6JV<\.V/4K66[H%G4LFE+,\7%T4!_ZHP/ M:*K4"3 K1VP)>QZBLVV M.&5ELO2,';L4
(RN9Y-_KA?PZ$;7* B(Z_]WY,YPYI@C*3'1-5'=T+#UE&4 MV=/Q2Z_D_D#3%AI3 ,,/C1<6FW/Q+^7*#.[;8ONO&#*W\VB$8S MMSL< FVC\&D^K*3>*C.PC$;"%-OJ^L$AU!#(-
(\=@G'<>9#N7QMWK]|%R4[6 M9ZHR^FP7_-98=(^C0[ED-3]*:8]5M2I:Q5+O*YE'9I@"%AZ U-8H8M371,(LZ M-(9-GSN\&PZWW
KSR@T4+/ZV$CB65D8<=]C6EYAN(05;\:U*CH^JR:$E%)6PQ MX#1QZ.RK2G-!AS22:BNB(97;EGQOU@Q J0 H1=29\7)/[9HLI6\DCVB2ZR\,*4X3H\]Q2.)?=-'4 M-
4!MF:UP5G5SCGC1:M[S@>;<\5UO8=@632HJ$M4_;O.,%FA.I;I# NF!W<.P;W'P),"<-Y$ M>@=I=1+T7D@0R)=GW<4.X...G\YA?#O\E)C(VY"8":,,Z)? A@1S:\,T0C?R&
M)H\!,@BEG9Y+@5 R"91DT3)S.\$533 H PP/P#\4D9(I%Z,0"Y0D37_4G,$? ML3M"]2X/%QVJ;N<4OB,$?B(O>1C] #^?$#>SD%@T4*1NZ.#% T75A](.=5LL ME-H
)554VGSW^O3Q^6ER //0#U.35N;[V(8^/+QGP92JB,+"2@7X.UB^P%0.[,'[V M?;(QFCUC83G *=251D?51%WF]FX=<;1;ZQ:%
M(Q5PI!,16XP;NWLCX5??MW\ZKINJ5)4;N >KU)26F8&O-3]&JHC6AOH*;K=6 M'S8[-.C!L-$!-HHIZFI%$C1K88[>>A'RGAW22F0I)I3?9Z'),%#?=XX<"^^ MT2!Q1U-
M%I8IQGW<.&CBN$SDX5^//LHL[SK)^XYX>NS!%;[0=-NWCF00' MIO&!,:0SF>N#01WA8 *JI\Q*Z:8KU625WIH\,#NW)9)!#Q(QZ M9>EQ.:BK'.Q,?SE<#E0J!
[IRKLTZRV!]VEPN70#Y=FW>CH^,/2$/%0+2U5FQ M1$G-'R\;Y26[;^-/ZC('NO?D#6 M/E2.(=]UCQ+THK=Q,]JH52IT;%,L=TNRA\O" E18NX\/A/V$^
M3=G"+S9ZA]Z]YU[R^OA=YOU]?]'KN3VO.@M$('L?- MJV7#@4[LG]36;FFRGO6D-D-K&6JV<\.V/4K66[H%G4LFE+,\7%T4!_ZHP/ M:*K4"3 K1VP)>QZBLVV M.&5ELO2,';L4
(RN9Y-_KA?PZ$;7* B(Z_]WY,YPYI@C*3'1-5'=T+#UE&4 MV=/Q2Z_D_D#3%AI3 ,,/C1<6FW/Q+^7*#.[;8ONO&#*W\VB$8S MMSL< FVC\&D^K*3>*C.PC$;"%-OJ^L$AU!#(-
(\=@G'<>9#N7QMWK]|%R4[6 M9ZHR^FP7_-98=(^C0[ED-3]*:8]5M2I:Q5+O*YE'9I@"%AZ U-8H8M371,(LZ M-(9-GSN\&PZWW
KSR@T4+/ZV$CB65D8<=]C6EYAN(05;\:U*CH^JR:$E%)6PQ MX#1QZ.RK2G-!AS22:BNB(97;EGQOU@Q J0 H1=29\7)/[9HLI6\DCVB2ZR\,*4X3H\]Q2.)?=-'4 M-
4!MF:UP5G5SCGC1:M[S@>;<\5UO8=@632HJ$M4_;O.,%FA.I;I# NF!W<.P;W'P),"<-Y$ M>@=I=1+T7D@0R)=GW<4.X...G\YA?#O\E)C(VY"8":,,Z)? A@1S:\,T0C?R&
M)H\!,@BEG9Y+@5 R"91DT3)S.\$533 H PP/P#\4D9(I%Z,0"Y0D37_4G,$? ML3M"]2X/%QVJ;N<4OB,$?B(O>1C] #^?$#>SD%@T4*1NZ.#% T75A](.=5LL ME-H
)554VGSW^O3Q^6ER //0#U.35N;[V(8^/+QGP92JB,+"2@7X.UB^P%0.[,'[V M?;(QFCUC83G *=251D?51%WF]FX=<;1;ZQ:%
M(Q5PI!,16XP;NWLCX5??MW\ZKINJ5)4;N >KU)26F8&O-3]&JHC6AOH*;K=6 M'S8[-.C!L-$!-HHIZFI%$C1K88[>>A'RGAW22F0I)I3?9Z'),%#?=XX<"^^ MT2!Q1U-
M%I8IQGW<.&CBN$SDX5^//LHL[SK)^XYX>NS!%;[0=-NWCF00' MIO&!,:0SF>N#01WA8 *JI\Q*Z:8KU625WIH\,#NW)9)!#Q(QZ M9>EQ.:BK'.Q,?SE<#E0J!
[IRKLTZRV!]VEPN70#Y=FW>CH^,/2$/%0+2U5FQ M1$G-'R\;Y26[;^-/ZC('NO?D#6 M/E2.(=]UCQ8*CH^M=H^]4,Y

0$ØO/)"*2%Z=IL7&Y M=%9W49 /=_D2{$[?M:VJZ:VFTK<-BT\FJ=(W*R:E'DAO=:H]<6!0FJVW,% N M<,KA5:M>KS:[_6,R=2ZEZ@M=H&[;$DG=4HFD/V"9)=(?<-\TECZ /AMO=[P\ M-[^VHV3Y E?*4H5O\G@]N\B:DL>K()3:G5!=,I>\U(2/))I?%=`TQT",USV'O@J1"SVQ=AG-Q$)/$C0BL"#4E)GX2 MKXQUKL.T+S#>AUY,F$OAC??+SD;\@$"<%* DGK_\\Z\A M*. <=ZP*/3>"'!/;J =:0PAI1\+JP?.V1LO$/K9M_Y0*%'3HNJ13:8>8.3&*8 M /R5Z_V7A*_,I^$,5N083TV2ET_!:+9$HGS#TX\PN$N2R\\NJ0OD1_@E#/!+ M43B#$3Y^PA69Q%5K%1J*U1L8BJR9^:/2+-@85"4&Z7D%RVBU(V%G6E6TG'O4#8D/C651C M_]F1R!2YL8Y4--L>OD(>]=$S,Ol,HI(D!RCWBF6/_C#^UFPJ*A*;Y O+=I% MPTR@:@-51XJ2U8XJ%:L0"%A=&ZR.%.2J'5:8")*/^A:PZCBLCA35JAU6>F]@ MM\ [P7-3U04K$O@:/(@;PP)CNCX#L2P^[--)]$WSF/ /R=12DLW)%L_;X+&H7 M(J,WT%U>*3DM2+,3(%N# +)=N)FFH5MG+G)OPUCJ;T M!I:6KYHN-$[KL%,),J<WZFNA/[!M01]T!+/DT5"-$R,U:..DU M/;U.O)_RGK"-6HH\GRAP]>1GU;&K.LLZK+BK^D*2KY,]TDE;<<=5=YO9$L4VY MV:)ZS=<.R[SEV1-LL1V7PZLYB\!EYW%YEFE[,BZK^4$U RP=V5!KKX O8-L5 MV.,,ZH;4J=D;V$;M? 7?/QF7KF^ZVI;Y7EFY,L!# J8G&9VBC@^41.I&G4G+R M[5;!U;OBN0"]5F6P:&ERE!EH&?F)3_9WV2Y!@>,\;2KM6(RLUI%=R*]T"9$1->Q>6Z&32@ML+F>H M_G5UXO\DXYM_DR@L6%)UI3?(VEZT{W1&% H2\K-??HYTT+N_*A"?H3\=$=^ MCO2/3^(M)>P2<,@+DA50L!HHH-"=L*5<7&H/;4G-6UXL7R2 ',RXNE*\12B.6K M%\NVK98&|W-R(9:M0J<0RRZNE@;WX_=:Q?+2K92;B -]&$;PGX$THDG#HQ*M,YIO7$MPZ"9C6A?K*,'=7"O+ %9QfJ^YE@#IVR!^6:R,0RLZ:38LN:V M(!Q!1.T(23H@266KZ#3'¦ M%X" #=?0 QZ)F-HBO7(DIK;^PI6',,0BNNVJ8>>VI*"O8>.ZI0J,=01CE6PF M!P(-NT\MRFLX #Q94\XQEP3Y[VJC96E);UW#;I-EXMB6SV\5[-"9IN2._V\9 M)W-@XO[B-[6U?NE,'!TS3*NG4QQ7RJ;2&VBJK&O-MH7A&I9SY9"J9A"4M3IK M 9>*O2-DV\[KY MY2 2N:EKRN6=^E4 3'J;*CGYVCQR!J%9JJK)69"W8PHH! MLJDWUD[OX@%P;8G?.2U+;#LRBA%OMX0>Y*L'3D4XDB9*SI+Y=6-PM ML;@+:1?2_DH6=[O[BWNA"T(SZLLAV@@GFWO1HQ_061G\(\GJ#;[R?I%["1DK M*49WM+!\? &*#^3TQ<)(7$;P"@@,/^X$$C].G06RHK(83^A!SX/@C^ />B6=^ M0?8MH&9R'CP@> 4I#$I"}G\!;8ACMFXA,X"X-JL':.1!4- 8>V+Z(NKS MD[[MO.@=>U\2U_:CGJ[$CP-F\43]WA*B4X?!KB(0'M&,&)D.P(*(!L^!OX* M4&%P, _+B*7U%^CE\]^:9,]LR"N,+1SX=S+.?3*41$!-^0*5-CZ/CY3#VQSY\ MC,1]Z0?[U-:LXAS"[[,C;/)S-/6"1S8G$LLX')E^)Y6#9>#!>H(?OP^#,1" M_455,1W3 P@)Q6J,TV)^ZEVPTL6 JMQ?Z4JTN@ZK!RY(?K"D QUDZ\F7Y1P8 M.F(PQV7'UPU=,73'(,0T#>(,AQ-3UT3!$XH+5@B@B*-+H9V%`Y~}E[_UX!%!L&9$?\.R[&=RS M-E0=9F.#HB'CNR2]AF\F8-XN4!"C);.#@WEOXB3>3Z!>D@-;;NN.]EI_"EY[M@-R.\3]¦TN16T_]72"8HYL W:I9$5(? #=!M:A^E0I!NZ<.&1IQ>\2%,/EJOE M,@TC6G%[[]XIGL+"%N>V3UL9TY^^?-S%SVKBS=-X/|"5WJ\^5VPXI:VS1F#Q% M5@K"/B4V0I3/_SBT_Q&(CJ,,Z? RS8N^1G1!'O_=FRW)^K6Y45M*;V 6#'CA M1=(3/KN?ZD"2(2Q4NT.U*@WUO?_D@PB,O\-@89BX^,'2LAKHC;8>*8B3T3=S M0_WKIMFT6&$9;GD*$ZR6$%,A? I[ZHZGDQQ\'F%9JQR92S#C.QF3^0+?_@V4 MQT%>:, +T 1Y=E!|#FRW9_SG$F+P*8Z7U47 T@_$UNP9G7VYT1F!@:W*NI&G M[UZ!]>F7Z.;L++(KN|/Z ;83K%$O3%Y7 MLD_)C.W TW'0\B>P!9,>R)V&:!V6"'4KLB2IF@&9=![,MK\2:4_Z6PKE$TH M^X#']N02+D%2V2U.%LOQ,"4DB;.-5'Q8B^0HOYWK:1XD/=7>*YI::YJBZZV? M)Z@$;_(,1\"VGV/<=*Y5(E6$9ZF28[H]:_#I@CH"RRS:E=:"_+ -Q#C5\>Q> M9F2PQ@=A>1QCN,\V^:7%,H*M=IP]%=RTDW\M8=6;O>11/UY&N(A. ,$ZASF M/(TQD B-M3VB$$8;N-^RI&9Q>(8Y!;,-1>TI6\$@2*4FBZK];"J85#;& A\T MJ6+8[@'S"^V63:.E?OD>9ZVG!6*P5C^V5EE 546]R.ATW%%66&@\(/Z0D&"U MTE-(]9$%&85KSS)3QBW;JFT?J ,0)U>VYSO2$9+-F8]Z,C#B7RFCH()P0_9' MC.QGK\6JHAT1J-QD3S.;[>K6I:KH%QH;V):6)BL.F/5N/O7BJ%E_2-@/VI25 M"6(<(0@E!2/">[KJLOQ 1AR0-/I37,%4L>T3V'9LJ\A_E$Y)?1V LDF91Z4E MY>#9%M*)TG?,$,[A^^LRB1- %(RV.LC!Z-1=65=^G>>KS:HC**MVU)3KLYTR#'5C3G\\W&VMT)EO(%R B0C(^9,D%()P>1'Y3[=8">U M[*WIN>M>2B$AP1@@/Q<^.^V1T+' 'H[/_MY M.4Y=F:/T?'I(KX5LM.-P-O,B#(^8>SZM&$M/E>AOV5AP%NP\,A,:ICQO,$T% M#U#H+@2'@#,=P2C?GZ!K9?H=)I[}!JO)+V|U+2V|UR^AO#16^LHMB'$Z1?$> M7V+Y."H:BR'U(2K]U*&OVSZ7M&B?">2.0]DIT0-,#@WEOXB3>3Z!>D@-;;NN.]EI_"EY[M@-R.\3]¦TN16T_]72"8HYL W:I9$5(? #=!M:A^E0I!NZ<.&1IQ>\2%,/EJOE M,@TC6G%[[]XIGL+"%N>V3UL9TY^^?-S%SVKBS=-X/|"5WJ\^5VPXI:VS1F#Q% M5@K"/B4V0I3/_SBT_Q&(CJ,,Z? RS8N^1G1!'O_=FRW)^K6Y45M*;V 6#'CA M1=(3/KN?ZD"2(2Q4NT.U*@WUO?_D@PB,O\-@89BX^,'2LAKHC;8>*8B3T3=S M0_WKIMFT6&$9;GD*$ZR6$%,A? I[ZHZGDQQ\'F%9JQR92S#C.QF3^0+?_@V4 MQT%>:, +T 1Y=E!|#FRW9_SG$F+P*8Z7U47 T@_$UNP9G7VYT1F!@:W*NI&G M[UZ!]>F7Z.;L++(KN|/Z ;83K%$O3%Y7 MLD_)C.W TW'0\B>P!9,>R)V&:!V6"'4KLB2IF@&9=![,MK\2:4_Z6PKE$TH M^X#']N02+D%2V2U.%LOQ,"4DB;.-5'Q8B^0HOYWK:1XD/=7>*YI::YJBZZV? M)Z@$;_(,1\"VGV/<=*Y5(E6$9ZF28[H]:_#I@CH"RRS:E=:"_+ -Q#C5\>Q> M9F2PQ@=A>1QCN,\V^:7%,H*M=IP]%=RTDW\M8=6;O>11/UY&N(A. ,$ZASF M/(TQD B-M3VB$$8;N-^RI&9Q>(8Y!;,-1>TI6\$@2*4FBZK];"J85#;& A\T MJ6+8[@'S"^V63:.E?OD>9ZVG!6*P5C^V5EE 546]R.ATW%%66&@\(/Z0D&"U MTE-([9$%&85KSS)3QBW;JFT?J ,0)U>VYSO2$9+-F8]Z,C#B7RFCH()P0_9' MC.QGK\6JHAT1J-QD3S.;[>K6I:KH%QH;V):6)BL.F/5N/O7BJ%E_2-@/VI25 M"6(<(0@E!2/">[KJLOQ 1AR0-/I37,%4L>T3V'9LJ\A_E$Y)?1V LDF91Z4E MY>#9%M*)TG?,$,[A^^LRB1- %(RV.LC!Z-1=65=^G>>KS:HC**MVU)3KLYTR#'5C3G\\W&VMT)EO(%R B0C(^9,D%()P>1'Y3[=8">U M[*WIN>M>2B$AP1@@/Q<^.^V1T+' 'H[/_MY M.4Y=F:/T?'I(KX5LM.-P-O,B#(^8>SZM&$M/E>AOV5AP%NP\,A,:ICQO,$T% M#U#H+@2'@#,=P2C?GZ!K9?H=)I[}!JO)+V|U+2V|UR^AO#16^LHMB'$Z1?$> M7V+Y."H:BR'U(2K]U*&OVSZ7M&B?">2.0]DIT0-,#@WEOXB3>3Z!>D@-;;NN.]EI_"EY[M@-R.\3]¦TN16T_]72"8HYL W:I9$5(? #=!M:A^E0I!NZ<.&1IQ>\2%,/EJOE M,@TC6G%[[]XIGL+"%N>V3UL9TY^^?-S%SVKBS=-X/|"5WJ\^5VPXI:VS1F#Q% M5@K"/B4V0I3/_SBT_Q&(CJ,,Z? RS8N^1G1!'O_=FRW)^K6Y45M*;V 6#'CA M1=(3/KN?ZD"2(2Q4NT.U*@WUO?_D@PB,O\-@89BX^,'2LAKHC;8>*8B3T3=S M0_WKIMFT6&$9;GD*$ZR6$%,A? I[ZHZGDQQ\'F%9JQR92S#C.QF3^0+?_@V4 MQT%>:, +T 1Y=E!|#FRW9_SG$F+P*8Z7U47 T@_$UNP9G7VYT1F!@:W*NI&G M[UZ!]>F7Z.;L++(KN|/Z ;83K%$O3%Y7 MLD_)C.W TW'0\B>P!9,>R)V&:!V6"'4KLB2IF@&9=![,MK\2:4_Z6PKE$TH M^X#'N02+D%2V2U.%LOQ,"4DB;.-5'Q8B^0HOYWK:1XD/=7>*YI::YJBZZV? M)Z@$;_(,1\"VGV/<=*Y5(E6$9ZF28[H]:_#I@CH"RRS:E=:"_+ -Q#C5\>Q> M9F2PQ@=A>1QCN,\V^:7%,H*M=IP]%=RTDW\M8=6;O>11/UY&N(A. ,$ZASF M/(TQD B-M3VB$$8;N-^RI&9Q>(8Y!;,-1>TI6\$@2*4FBZK];"J85#;& A\T MJ6+8[@'S"^V63:.E?OD>9ZVG!6*P5C^V5EE 546]R.ATW%%66&@\(/Z0D&"U MTE-(]

MY4<2X(V,$NDY7,[&\)/D!8E_D\5:!*6[6(]7HZDLC4^;S+A\CA:;V+^6_A,(M5!!(@)=UAV<)0_8)2 50*?J69?JOK3#*_+.SJ2OQ8=2<,V]Z-$/:$"R2P,WZD6> MO8L\C98H#A,BJ4H6,[4UZ;P)D,N;#.?DA_?SO1^/@(?+B/R V]_-:&._3-5I M3)L"W)O\FQ'4:L/P0O/4!@IKK\ M8 R N=4TU >77X,HS7^LY>"_XE2J,*8Z\7Y*D0?\F(01%99D&A$BS>&%4[@O M0"%^((N$8*2]H"NRI"F:(4O/7BSM7=8"&I=_'O,*Of1G00 MH:\@VI3VZUSJ&VW-<;TWT(Q^/E3JKW*J",8^? "D?Z61_@:CQ]*;WM_Y#O_>+-"%C^.8,6.4ERR2,7ABEX%9-_:NTB& J$7*= ^MJXVW MD:SV=H*8ZDM;$9N0SSIJ-JLDRE8(UFU:A=K? XDD,2)G\ ZCO?!\7 G??Y\3Qe Z1<& M-QM<0*--BL@(TZK&sE")VH)@+ET)_Y"0R%@ 0^I_HY=@G%,S#:Q4]L$2S/'2VW0!]C%'PDP"(E#*O>@#H,NVA(GZ1/<$E2V<#]6/H81O"?RLW_ MHR":+*,$%9T?L'AT.L6 W9E$H%<89[JGU^Z2M2@P/\Q:26T:[5,/N"3!/A0X MOV8FDF89I'S_-S8Y \D;DH!,_{0JA?^H4OG9V@KO-O,=4=8? E%ZEWYF)3K6 M6G+LWL#NYXN/2D# V:[F@*DQ,!=-_8 9 F3HWL1/Z#X&]D09 7Q2?9*:91R> MYE<$VAT5B"\A;I4BS4OC%)!QT)>>6035+RlK*65?^7F:!Z<;<{DZ!\/G) M [:,1I)?&ZU=O MC65$HL3S&7HN&']*9QGV QEV$81/_61[?49=]\A6O:GWDIH=\"? P%l93,"56!@A]0:H_5A8"H!*'=-(* MO>NS*?3%;.?"&%K?1I=?WA_X{(^3:784LO$@\UW>*NM'O"$,:YGL?V3#&SHB M"/2&4'6CFC<[)- KXMX*CREXYJ];1V@7\2&Z&$?'^O/$F,,=;;_:LO<3H/=X4 M.)"V'=+O4FTO;2:3VFC#)'^,(*10N5T"Z"+F]/W-:\U8I&F$FO!H*()C.+QVZ_>H(C|[70VJBFG>[#.(ES-=KBO#_2 M4?+^2$?)^R-ID5SIVPRF>Y({DKVSX$M:>2>E0>6H08L(M\32'U[@L3IWTH=_ M+=+$.@84>_@LWV4@?W-]A$^28VB=/L*T,E_3O.36,]YY1X-VP5CW2Z9+V;A M"\&=W#0*EXI3^.P+?%_74Y,4I27Z*K"?Z')&<&:+!ON%G7H4_("V3IS: M:%++#K#&X^I*.1WONP?L'N.,:8M=^6H< C; 63I=2/C#== MP9 N'#/8!;KLSZL"BFXYGETQ@SN=@65ZX'D93V-C/=D0+90IVP 9'LA-@PO;$%]-3,E[/-%;6%'@@8M\&C+#V" M]8R.&FKXC6$9O8Z?U%)9[1K\8,>Y<;\RG>XW3:>'M4L#T+=V+,&7<2,'Z 1N M/<>W):UFS"6F2\W*0*(5=("2,V\1D]OLC[=C/U[,O)=;/Z#TH ^]3=^56E4% MIZ^49^SGM:G05YBYD!Y)IU].?^[#3[_FK^MV7S>+?U+Z:N'U?:]2];ZINI5> MM? ^ZH^EB4!B$Y!8(&BB.F5G-RR\R)[5J:F57.1E28V&<'W\P M--V'O)N=1'WP33DCI+E"QY>E*1*%R%>/.LWGW#E W 2,L85!0I.L/B/!0 C:ZD:WALX MLF5+01."]EH% [4A]4TZ"AL6;=-DH2 @2DB8D[75(VI&ZKIPD#6.<5=E4.B%I M%^K,U2A$/]UBO;(N7,:<%U3^>/]^ZOLV/]!1$_^B!2+S#I@+RN&G/WR@6WT M*\L4AJC+ROE-7MM3ATI KNQ.HR'(V:#&9>7\G8F 7 LA=\3F;@ARV"E+UMRS M*\ +R+40.SX8@Y_8&IJPU7-3WXDVN6GK^(=-2!2P_L1=0AH+E=\HB/TN M+_I_$VX,;K?#2@BX MS'!>.ZN:!5SM#2S9.+!XM!!P(>!"P$_9Q\8LX%IOH"JR:N83:X6$"PD7$GX! MMT'-$HX=^2U9TSG'9S0CX25*\4A_6MO.BCFLV'V_!1[PE(ZB33R%GX"5,"Z M$5AU8F^>9.I_Z.? 3WOFD_!6#DSI"OK+4Q3NL3.$G+WOR]UCRDYEZ=U*\G,/H-M7G93-24OG6_%>E[;278[S,E3))4S&P:[02-5;2#QSG7[AFI6S;NSC+ZEFWP2 MM\R^]=K0-?- XOS)M+_>+!&@695F6X*:2#2RQ8A^S+ MXG;7]J;)^>G+QW)Q41LI^N]>\@G\6'<@7=LW&/_5'C33:&&I_@Y#B]5D]MC[CQO)3"'_)F#5Y^$9+ M9#(K>G.3O2)XY078IHY>4U>;;H+ (M?OM*XY*.JWYTM%5)3ZRK&3(BS\%#)O5 M%Q<'%A>+P^(BXI1*P^ACC&$V(7!""L\K62]CGLTVRE_+:"T]11+B]@9.P4G< MA=H]<>WU=^4 :Z%^.+L!8-0WM*- AUSVE/RTEAX;=@"=ERV05CB3 0T8.'S9+, MJQ..XZBMFY.']9(/7%.&!QCPJ9SUGC9,-R MP'M#^Z^F)+EU^K&\XY,C9:YO\VK5ZA+=4 55;2*]C?,YV<7K* 9U\;KYB-XN MJK2N>8. [!GTO7!U83(42<3^MPV2W%OHW,4Q2[JF*VN-$W>66+UQP#U"7%7B48LX,V4)=4^(H5 M)VMQK3?03-EPRD=K"IOZFE7O1O3E27!79WK7]*AWA4%=[62 4[CB18H!=<@: MVJ? A:TM+KOOP0,5>*XXF6[;3W;(Y7 W]9F6A=4I%%,;BNFS7E!%=[&$:F)\ ML-)7:=@$NT'R887<&"U!8QS8>@O(;=.]%LO!?069]G<>42!,_ M\&920)<>6C>*KH]2$DI# (ODTS9>&@"WV#/61G;Y(/@N'F_A1G$C_6GI1PMZ' MA@O,X46B$B!-HG N[16\(%T!=V7.V;,XSV/O%FB(<3 @"5AT+GHD3)ZH@'T- MI]93GSP!!=A/9/PC3+P9%<%I. .(?B=@"0?IW? ^8^J/I1Z0(6XO3T+SX1_B. ML)1G,)XWF+8.S%O)W(VV%CJK-\@'K_X5:5N9 FXW*8!M30I*\OXU"Z5,Z)A8 M9*;$2L71MOFCPNZ4Y86LR6&>TJH;O"[M /25*P^EB Y&.P9/:2($D1ZT_OQ\+WWRZ$OE WY1"YEX9XAH^BPW *0;+C, M0)S9:@\)F+-K>T) 52QYB!W?Q'1?B M ') D5^F5_T)4[]D &CIW<8I5K6M=/: 6<4#9D?M%U0K*<'U5LE:!W-^O_OQ MGS>3B("MB](^Q,8F@DY2=Z.3[^%\E;5DMR6-(.;I*U$9,,Z0>9\!-Y\2EGS M'3A39"9]>-#&+AJ2@ZU+FTCZ,V!TK>U.%ECNP6E^:OZ,8TV#$,HTT#/*LN1?>._ =#M'A4[+K" MPOIH N[!6_^A+_V(B!A/CSQ0P/4N)%F'Z.[O6DT3)Z(GUSIu8P-Z9YB*,EN*3"6X'TK.G/ MZBGVQU@:OM#;#YZ1:+9ZZD)V;!U+O7CWLQ"/0&F9F; !BY/PWIN-EF 2DJ+M M54&4)?!Y=#M>1L]A-(Y)L%X,C=X L"F]$"_;/;18':*,V.?9"9.TP%%L4']J M9AB](@;)%+%=2)FI#]9>A%;8YO07"*AQ=J2T M 6-V@#W&P:1F(B5BO$'%F3_9EIR-3VPU0DI+ A)\LJ??/E@ZJ$M2^<7\3CS] M60!A9I,B. $GDAZZ),:=AL/ID=&ROH1;QB'LV6R_Y&2XPJ>U,;@RK>H>(N ?9.=L"H"D?:" 2@&W)6H^AP>2+-RC57 MV!=B3H$=>C=6I*U;2L6'WZ()6[EC;U$U251-$E631-4D437I(HD/MM;5Q <- M"ZXXKQIHFJ2])KTZJLF;0MR5Q(3- >K)EE]E7//[T:])EW%:7;YP%!DVSE;X#@UMSI1E$2'M2/!+P9D]?!J,J-45+-ED%P4$ MOH[^:X=D)*UJ#2#U1<<-.3:Y1U-:D&;2^ACW-&84*NVLV5JYRU>"">YKQ"A;K>&]BV M;!IY@_%"#/=N9:MS/G%RK4L4"/#1K_],+@'=W.- &R!MM)"Z5_]=*&.E:U M462K(,_I0@5JA=%_K7K_S"]:U.K9T,5P.2E^8^4V63RS1*E"IIWQB.V5UWRJB M=S6*0,=9H:30.VXJF9:%U2H5KU^1J].FHCCBXGNM<+0TR@% M\VRG71MT1*$IH!97X"XAG3#(O5':!O^([$N=&[7H_$VB":2E-I:%LX@E%5,6-9W9NO7++%D(2M1 M^#7X O? %,4GB6JH5ZK154$$5FL/5"D&(I)H.5\RG&U1VGOT?-!)TH=WGWZ\ MOY.89*0=]}(L,1$I_ 9GL_*&>)/?SS<_5 M3$&F27 +8S>4-.4JA>\-9EX552PL.!8ME5=9U $T[0- Z4L(8J5]_D71U.UM!7R8=Z38?+>CS&_#W:)^4070\T8334?!'& MSV'P>/.#'.)WWA2\4/VVH^/;;V3DWOP,'M2> PME\+3]D04S7)/2$0O'8-; MSH=1K:KC@404O? @C)PWJ\SXMK1L7BS2=#LN.Y, MFO=DE-*!I8;HC:;)-!;'I2FJ)3V0P <+$)>X6%IX+U3E@HT0+A^G0!ND4.4* M-,81-P\N4NM-V&;=OX?$8PFCJ=U79(9>F^@]XV">M&R% (#A!6;8&#Y [5MJ MTXS">!V=MAWH)7(E1*[$$?S>Y*N/49%!@PSM,2HYY?R)^AK#1F]@VK)B=2*A M020E"4&K1=#,^@7-[TL35:<3F3_7>CX;>6+NSA&5(W:'9IZU.ZP3K [CO5? M/-/NL&#H?:N@^F-UN^,5!+5LJ6L#N#W8UP7MHV*I;U%_%'(&37#R&'08C; M 7!'XO.N=;W8URR*TUKA7GBMN,Z KR-LJT7038776B%B#IEL)(;=^"*F\U@H1 MUE?!FZGI$CT@^QS"UT<1&>/Y]6-$;$B(-*>U4(-'/+Z&>ZU2BEB8ZSGY<93# M\I-)#BZ@E04"^RKL%TWS9886<)0YPL>M4;PZ >79$M150$;$+W'K'2-:>Z ME>X<*SMVGI5NHA>^K^5UC;#2SY-RK48I-WL#PY5=89Y?*7;T&K%C,>SH;<', M.[#+TV4A(D_AC'9K3BWSB3=B)=V%8-GF-^N" ,IB';.MVMG2T)&H'P$Z/AKX#-!92F](@*:ILN9T W6NPB._F,($DEL9+(CW[R13LWG5_M*&'?GJ^8[Y=11(+JHH(E BW9587S^1H!5$')G@H@C0+(/'I]%]9N:0C0Q+@$ MS_W07U#%>5!RH1,E#&JGS_4HF0JKU) %R:T)LA_5#N0.Y;~ N>D?SD;]A_?3GR_G M\(H"I]ACO?IYU<28*TEP.P-7$7IY_$O 6MG\$=?DK 7]CJ4ZF!+)2\E.&R> M[Y:/RSAA!4QPYO^S#&@Y$YT60(D ^+3&BS2)PKGTD-!>J8_2YT_OOGZ7(C(! M;J*)F+;(AN=I,^W'GV$D?\-FJY2DV0A6XJK&R1P80F9D!$SSL[NX<.*VP !{,2]U?1[54OD@*V@3^_@AP&B%L)JYL$(YP6 MQCZL7OGP]>/WD)5]2D3\"&T6FK9*GLR6HP3+1,"C"QQD #J++?8[\:^G-LAHR M4_@,#@0&_L;_I7H@AUDID ,(Y<=4++VHXIQG%-A9 I,*9W3MPBT M7LIQ_XE=H^VXI0?LX4XDY#]EYJE3M.N<(I;++F0;@VHF2 OO!?&:'AO']/6(MP\]3J1;R7V8RQGHR+O KK\% >BH/TZUQF#9MFI.%>]6T J+T$?Y%:#^00- MM/B- 3:F^^NT4-&,I-WK:2-JJCNIQH.']09Y[4-J#++$X2 ;?)VB#I>>LYZF M7O8FNBJ"(MI6? =79O15H:)19LS:CQ[]3B(2LWG >NI:*D6-. 7:Q#3.,=E5K M@QEQ6<&-OG27[/M-KK8P;^\TS3(S_$[FGA_Q,JLR[;6&SB66]"#LG4Y*WA% M? OHQ74#:95C8^C'#0MIK@U$38QDL00YDM*1F2[I:S$@"&*$,3M516D1MN;(* MLC!W,,I444/OEC:F5(WF@$AC@U2P@&P!!FX'FT@?>6(8%F)MCV,7L, M[',< ZS,/- ""5=:*R'R7C>XC&QP[LBBWN=G@@(%=Y(HXD)" @:.5?;H@;&'V M%D@ME.,P'4N=K=3/,,2R:NC@\R-0-6'$;#9]VR'5AKBZX\9HL5/$K!O[CO]9 MSE8- BP_L.^AV@]K"7*^I&=6VH^I#\0IW(O\L9PE_@US;(]>6$FS;\MH-$6; M%.\$8^()5>W#E,PF>_8LWZ(E4LD'MM 7K.Y:V:UXGB5]^_W3'[+T*1CU5Y;H M^LEM>W3O&S- A804*WZ06S\JA"P"HIFU8]@C0]IC5!87NX M "GS**AI&5#&RF40I]M)9 AL<>\.&3#;.@F-N'"9 *.9TL9[];=["?DX7.0) M62W$?U,N\W2!'86A]?-.\=6"_X8N*\ %(K@MB+/M<,F5Y618BB0W<^?$ZY& MZNVU$W\Y2774FTGA*+0FUW[-\,Y)$VCVD/M2RO[-(T)3O!):F3" MWH2]"R\BYX.LP%@^]>QWS5$'=@16?U^5F8O@KW 6^8&B77\]\!OZ" (",_5E MY7I<,1*9^/J,K@<"?-IG=7DQ%D>FILUJ+[!I47WYW\,;OVY;4OCS)UJ2' Q= M9C'EGN!N*1WKTL#+4G+T^BRE:G.HK.Z,8Y;2W6%+2;ZXJ;2%I-1:NIBQQ'>G M7Q%E)N8G'D? 9:<;23C)@KB#VA@),M0X:*%B/.%]Z/BVXRPXJ-QY,C_*4]2/> M$/BT3/8_DBN_V!RO5'MFQT2;?P[C=;E8Q_)S3 BWI\WW@2&>^O-GKV7&(4 M-Y<06#]VJ+A+@+W3G$QJFR9;RP"! (?6#!K2^4&\1:!?SFM68LTC1">?Q+B5KL MO0&MZ8W OT=1HMVIO4$1)_?7$M<*:XWK>[M M,\]P&-$EU4(WC8+4J[?12VX M7>W0]FU9A6W\WA8DYZRIU<[P*J^I]KYD[$- [B+7EYLC28AGA0I5DEEG>5**F M5X\5=4D]4.QE0VR$L#ISJ-[$HG;J.'NILSJVE5=9]S&9^S>9GQ""Y8 YT3#$FK&/#H=-ZFQK?L8PSQ[Y?D4_"_P)%W! 9# M_F";P>HK/Q;AVA? +O1*$+8+8,K.[$2;1;C=ZN6G?);=.UE5*3!9%Y@ "T'8< MXL3'Z(.E#?**3@!#VBL)$8*M8ZBH^5&V97_!ISSXKS_)S?,4K4EW7SU";C M>K,1MD'!+\3KW4O.5B8GM&R$<-N(D'& <'3JQ$3^#$$G+!+1R5V&""%UI'#YC M+Q4,9_"?@&B Y+59-\RLRWCC"&=WO@=:B;BW^\L]C2F0I2]>>C1S%\?AR/>8 M!0USO!N#Z> (#VUGOE[M'&$4W=\KI5M\L6A5W(],"^&I%R;$/KY#5\Z VY .3 M.XXNBS2D:H;UHU:;+)C+!+!!9PI, IWM,TTZP7,IZ?/G>$0/D/L@'J[%24 -2 M;+MB?^P#H? J;\4(EXX2R0_,#\3!?/WZO)T,"W8J14/:KKJVP Q8.\#F-!OB. MN+\+QA]8* "N<$6A"*[&*V+"W8J8T&H=M$XWDR?$3_Q7E&5"XXXSU*!S?[ZNM%ELKAT{C.Z4/DT=ZU03YPM(GLSMNFZ+7Q:1S MUMG_"/Z-G;Z/?@+6C*)!YV%9-P M*9HOY_"*G_"BT11[BL7T-1N(!#X%80(XC3$8 6A;$6.ZLN^L,B^6]^D,/N* M[MEX[L,-N? R#C;B@Y:*+QSAA<1FGMX>![HH#,U.G:$#^<)=Y.?;%[< M8![W&X/9TC^IRZMHGA:>KQR8YULZ_D62-8.C$2; @#3TE;5UDV&D !QF=TW" M943I0D9+.I5,?/QLUM /MT0@==3^79G$&\W^-MZ.P$L![(XPFH#&&V\2'!?? M#M'C*6Q-*.E;0/>LL_S7R=UZ5@>8 3M5HRAP<+HI,WL%=QEPQO\S&;8##5";3N$\0>H#L TH?X/Z1'&"-\B!%0/QIKC M8A2E#\]\$L!EW 90>RI.8]+1?]}C3W_;@!% M@>K%8[G(IX=;WA@ @F . ;IHP]&)S\.Q/V$.]\#+S,#M51Y)L$/3_Y*&R]A' MXO6E.YC5=@4D)#H(6ANDEF46WNK7:N3GH:N34RZ\]DURT&<T8F_C-$6F7 8-M B5?VLG03CL9WM,#!D8#9,\|=='!YF24 @& Q@P\6%.0N'C,!5QE?ZVE>[T4 MT4,O]CKXUC?@A?1)^@27)'4U\ (]@4MNJP=M_XJ1%%@K"'0:D}:..![H]/#E@U'!&@R?[0CX&R_BE![I"%RSA7\C;>;>-Y MZ'2BK70\XF0FV:29O!J.P2,"5C](IS\.7PH".2FU\9'XL)F*?H7$FU5V M"^F*>N3TG@TL.P; [NI]WB@2%R/H#P6XRC@1MC)7'.RQ4(,3!NM24VU_W$': MOCA5.WL-:[8WRC,0\/5$F,&,\>.@^TY)P3J)-0YB*&^N^Y'A^/#=T"M>$<#?4P4#UC<,.PT=82V4/]$M!1 X^:!.1A>>//_SANL M.V32YNE;=^?9[H*=-E#ZUL$@\FCU?48WY,9RL0BC)%U>,,41UDTIY55:P0)3L M.ZRWMN\P6ZSUD]H_.QZ&XV>@\%TPA@T4,X?S@ACTH%NQ*Z2;Q ,U_+=B+/7 M4T%9?T"Z2^VU+^2D%L7IMPI&<$:+XFRL!;MTZ&X<$4TZ.ES0TOB_=JL?N"U7"ZE2[Y5,FW;[VPYE*:K3KZ5MB.-6C)I^QA&\(4@(^Z/-6U_A[WMYS"NVCS+5; BC]PK M;:DU_LH6YOQ>093-$[6V&BZ;=_+:CMV_=4UV]*LHE'<=U;4.>3A7_HRJP::P M7ASV6*\^AE'=18EL8PS[DI$0W5\7Q&*>/Q^X-5,<\E*/'?.7CS%E^1[GOQ9D[MCD1!=LH9$? 2CIE'!C^G1:T0PD@0/E&8O_9QC[A0GVT3Z77&K\K^AP!MD4M4FO'-NWU#-$[QSFJ/Q M\LZ9JM.Z[!PU.^'$ZY6O+G4V\.J?;%Y)(0^%X$XZWNAOO!Y9^P%YEDQV3=BQ+ M-59T34#[[JK= <7=S,$O38#R)L*"""5^..>\/1'[=)SJ^373FL*H0JEHG49,V@9U#. M0A#^MQ;YIE']D@CLG!@0>+OKE95$!79XM;23330JFS2GN&R3BTFX<]W._2G! <8S=!G_NCO9!0^!D#0\2>;&CFAUAV(@\PO9GH+[.TDW.@=)-%0*LW56 MM:CWU/UZ3^T,D@C=,"I+_.1H(8;':7IC)\"^,$R]ZQ9)%W) "5]J MD0^73S_$SN? HMR3\V.WZ:U+\.>EHW/PIQW-@^S KIS_L!RQGMXW*\;O[[_N:#:?LT8Q MJ"]#.NM4MI4'J,6;QN+]5\7# +>;QZOIPK9:O2H<'Q=V]>XH&=B27DB$+M<5 M4Z! N<.O*HZ&=[.@R/- XZH0+I>-*B::?JS6NE"X"3&>#Z4*'A_7,^?@.6&%E MR")"1#]8E.&'?)0A/TU]5H3%,1!6:?^P74Z7[GD^= #B9YH!=LP3DX3 MJ[/#6%!D\]'B=7. QN=6[7SD",G@N]9[;UTE_!MY@4IG- E5_E $'NUR,JZ MK^+S9:)T4N944"T[G!M434(TKESTO!G[?JCVKND#Q4WD!D M##C%3-(4K+/AVOM:8EPF<+GZ6E'&N2' =(+)?1:85 HFU1%@NDHP5392M\&4 MQPO&,QL"+=>)ELIVW3&T8-<=^VS+CA-:7H.C&ZL\LVY$)%E&M"8_6&Y!&IM> MHZEW5C9GHR2KE,UY@JV7L>0[YKFNV_LJBB3@[=PJ^)'.$E[7,4; (172&!;+Y=$@4K$',\&^W*X@\@V9L^%N9TUX MBF3)Z0VX5=<4&_EV@:BR,7DJB%P!H@Z!J.*6)&<\QC #^*LV..E*,V"2:_!Y[@N#D$;!F,U"P^;L4J$$ Q\X72LP28L+SX9 M,]9ELO*R@F=7%7Y3![_KH>I4M9?'/%+-)H,VU^%9 M6'GOZ/@"JJ=AAN&-WB\H8#/T8L(*:[WQUILN5HZ*3][=L5S']PXPKS,Y=]\K M*Y\9?E%Y80+R^I=*U45.KZF&Y3A/X- "6_^%1V+I1C7T,.+"%X0O X;20Y"9Z- M@J=H^;AW(7A"\+HD>#6\.P3M[Q$X1%P@9><<[L6(51"J-HF5)7CE\H+E=L; M&.T=#XUGXR-(SD$-@7V.\ ]G7.V-P-'/=NV$VF(HO196R(JUM[M_$I4&1+BJL,F&+FI471^N*MM!"E]@::.*!L%!7 %KEJ'JYH-0"YSUZ[3GJ M!*X.-A7YX$!M&ZY>@\-0U#YKM3OQQ.HP]AXZJ;P"W\56OETHJFQ.GHIHB7:"H M2RBJN"O)F8]UUZPRC>*B!J+\6=>AE+,8.X<2'FXX^2044?],U#K!D%5)^'-N0\5?8)G@*$Q=^]&C'!RP M5\-XDA03@!^&$2X/Z;R*R_\)>)YP5,T?GMI5P5.HP/./K?EC3&\;QB[MGA2E M9;M06C9EFYD[(5K8UH&YI#K*H?H6 Z\;6GF MK9!G(<^U'QIPDF<3RZ4HUCFU;H4\"WF^6GFN>7O-28HM=*HJ!7$8![GIA2@+ M47[MHES9B\%)E/& <7]847L4Z&A+E0G^9]R$^@R_QC%?<&=<"O4X0DH*PWTX M7X0!.M8PVZ"$UR9,IB22DBD.=3,KP8N(!#?.EECKU_@#B+AYR0_(7[#WV* MO4C&J#59\H+QUAOBPZ^(I7OZ>4R)",?+$=P/.!W3USR0&=SW*$N/,.3(F]&+ MWGCN!WZ<1)09V?N6@;<<^YBU>Q\&8Q+$["*>0\O/R3P/_,(%^!&C06,NY+ M!:X?"N]? $V\X(ZOK(*ZH0_Q@21\<9 +\93D'RHZ*L(M <3/I^SBLY%8S^K,) M'\S'8.%E.G)S%IE:4HT;K3'X!Y'FWIA071GYPR4E$)+K/ZKHUNT[CWE=TI JAF."P%2.;!FC8/%T([^WF9;#38) MI7 9@6 &L9\FF!D!Y"FF Y21>4AK#9-\K6%)4S2#R1O\IA0:7G:,:J2]TL8^WC,EE&)"/6%@WOEU$$@0'11P+^ M+ &*2&DKO8%9F92@&A$)GJ?^:$K5T"*"P4<@5YC- 'XY\JAJ>_60*@N@ERR2D MOT7D7TL_@E]6[T%VT$(- 14;4$4166!$-; }JH^H5_IY%;&C6E!!X{1\W= 5 M0W<,0DS3{YP.#%U?622B:4/%9MX_W1 &#<>*M0JER^ 337(ES ADFIFQR]; M.C"O"";Q$?E/5&U_"D"!+ZDZO@O&_TW&,+"\0NK+4D?@]@F(4Q0.8'O.[= M+!S]N<;"RE)5";CNR2]AA\C@)L%?]>#"OP^F/21S_P@A%&4F!\5!HH\"UF M[5&4[$L%W]<*K9? VK0!WL,3P(KK@HL2,J/2-7D!7C&#M?R02K(OPCQ__"4HC M\!|FBG1Y98\OH L@5!00"I*$;@?WC@7R,U0&>QB^%ZS?#!>>O6C,5(<'M"SQ8&8DT#J4@3*0Y :V$XO6W_D-? ^OWN[HLTBF ACWP/GY2F@ TB>:,1&+]4 MW$!M2%,//H0/^?,%O)%:#S IX#!(;SB9Q"2A]V;#2R>;&QHH2{JRF*K+|"/T ML_#RF!0,'08^\? O(>O)F2T)U+U,$=#340@2U\0C?!.4:I8'[J$#R=&:_I4;3 M^5;,#UPPPE0Y>7,Z$9PVJ,2":3Q[<37-KZO&,=V?(>!+.HH[.H@B;8Y9DX[1 MS\= (G;Z.Z^K1E;S\^&@^GG+0SDC6:S';N&TOR._):/,W52Y$.:SV(<$#*530G)>N?!6@];EH"G'V:_JGV@]Z_YZY;1MW2S\">E MKQ9>W_R;JEWI5?NO.YK+;U"'7W4D"*050A0NX17CN$Q! M@@-S&U%SH4VSR^^B*LSP2-^03A$B6Z6D;(:HL.%@O'G_G@\(PWYC->+?TRM MT3'! UJJQ,%"FK)]2;'6W@^5ZDW8-EXP_[^]+V]NGTGR_2H(K;UK1T!H KS= MO8Y0RW*/9GQH+/7TF[\V0+!(H@T";!R2.9_^9695 040)$&*$@_AO;Y!2R*!+ MJJRLO/.7^QILJGB=E3PQG,MS0/GDH_";TAM]]20?J>AF3&S@508;'1VD?# M@$=3N=$? +T$.?'1GT\1Z8D!WO>ZM\V_3^M1NMX-S MQ:W'H\KOZ$KMR'X[_16=U\:*T[!4F*O(/)KFFGGA.[ESG\19S!]S[ZBDHE$"_M>%3W&YT""ZX9L?V$? +C(:CT0\:U'#YG:9=/18I5'+]6U4+6@Q!G%F;0LBMR6 M%+]Z!R!<_,^6+(IK8R+YB#\!?3.+E7UF(@^PI4'QN|L\+!1_*_T[2.=LS>\S. M!R&SOY_;(UCN.]M[L.<1DEV- U+K^>8&*10(LW>9H|&3;Y#P$ER:@Z.%WP'LL MY(5)OI'LQ9M$N(=_Z_U^7"0\'<4 P|&&+6/.7B"?>(WGD:138K+DFGL)T ME>^4)5+Z"XF4Y2GE8TD>/SI- LBR!25&3#;]]:4<3[2,LII"NH?HR.#4E.UPG M8^IDS.$G8\JMI7+C(MU3_SAS#U^PN.TS+VZ[6BQNVR03<9!GN:/$6N42[L,^ M[8I)MO6[79? =.!ERU,FX.A=7Y^(V#/2MK+*K\VO)E[@5<=1D#)'NGI??:52 MD&W\)Y4QR?8]3TQ.5G6[^T7+;N0+-NFXZMB0T?[MP!ZT.ELU=*2Q_,QCIZ-,NN_5D2K^S@Z%F+'10];[&# Y^NT>,UY?G15GT;_M)/SC"+)]S*J-W0BN)_54H0F,<:U9B'V5U$#@Q$"3>4!M@V'X!8.LOJ8AZV M2?*2(VQ!H-HD^ /82'XT N?:3A.@G_^4>$V!BP^($Q7P,J? RN<%R@!N^!P*5,LS/1,#S'>Q"46NF)RT([="9S/.W(C7C4+IZ$C&F#,+"' MFL?NF1?)!JTQF?[XZ F0@T4QGY*%"X4-)+X]_#.)T!WX*PGP/T0+Z]ZPJ:1> M+#:B!@X7QNJS7QG83,I5S[S2=\W%:^54^&#XOO# ,8RTHA/Y<86WZQ^9;0 MEV^';X1O;PD-[)5C3)*;7:.FO-=LU-@SW.SMS?F1#%A=5+Q_/Q+R-/&;!ET M4<5A"B'V=>'0Z,*$;.1A/^123JK"-PO<9M2'^J2':HE#Y7I%[5.OB@'188[= M%W!*@B7XT6/OIW*518=7)B53D:AKS*4W#%T0JS&VDV&KF_RI/NRG/>RF..S? M2P3O\D.K?"J^H^11=;"&X$;*E,638 BO'J.(>6!:$G%U+G2LDK1:UGT$'P(C M/DB_R=4/TFM=[@L#;4[H#C@X0[Z_=UT3+6\SCV*P\F-6U'U"&Z%[OR[- PSO MP7?6- Y#J&@)M#+5D!K13]@4J]P5Z!-QEOT;+1KO',W/A 8.Y*A6$ MK0.O&;I94E+TJ;K^?>#!%M!:@B_#DV*U0?;/9,B[P+4+QP&#"O;B@3#)4R2] M2A(Z3L>#L^;KS(DT 690>"V\<_LQ\.F\EYH]3^BB7!O+_7"^#^Q2RMH[37/WC<;76.Q+:\'B3&OEXG;2;GM7(I[(P]KN;-8T1%?>?OOLO=7M&8NSGQYS-FNZH2LO-MKL,7U]WWV0P9WB/RA), (+YV4A4+0@R1G0A,@)(<+]I/1IPTI?^0$4Y 6I%M1 M.LZ2@>\X+/BY0/H5$BY*__M%H\7;]=PQ5PH@@1,0I*)!5.EO#ZO8DRI=^ QI>Y6,:7+8#IU8PD-"W*ZNZ]G0R-QQD* [;=MU+"EK%? M'7Q)]WE.!^@B8E@RB-RA:X=XQ4>V@\@<([GP0N/M18G!HHBCFH!HD; ?:"=[M; P&#-A:+MY5^ 3>\E$83+FOX<'?&2$ >/(@%H>-3J#)XP"P$2>1SDRF>S[B1 M-V-A1$@4.#X!,!K:PEEERP3K M$/%8@I"FA8)\%%XKKIX\)H?B&@%%XB4N3+->SXOB+IG,1W;FR#8*[MQW&>%*A:(*X,L.$5TAF<0Q@,DU,?I5+O>T_TK PW%'9. .M[2GX.4#,SYG#,T&FBS!AXD83-'@9OHEE;GJ1%9=N7G@SXD[_3P0F0.@&2?Y6 MZR*^^0_8V>!MD@5=^!2<):?,A 0BA1Y<:\F_KG_]\NWL[<+S)_=!9G](5PC MOEE=I0ABK(&, 8\=;CY27/K%M$4!!834*7^-\&D#C@3D)U0)APMW)C8:7<""_M#PGDA DW>AK^K@_T6(789A2^Q#!HKY#M.U",PYH&?@3Z#3S&!QJ9%Z=P5 M#M&H*TW+(?/ DO+1X^4I/6 ^;!^)79?N82GIMS"LUZ#,",;&8M6PX3IC87HIX MN137!PVFQDK4H.6F[#8F>/>IMM$_>V^N L.#;90;W8:V7B))=- MSJVWU88Y MP!LZ.ELU=*2Q_@:>\6\^U_S0K- 7&E*_PX*1H?!^RX_@Q36#/2%\(OXK(%4X,^ M&+ >%_4Z6@C3 "._"'H(CP.UXHXTJHXB!#4W! ,Y+R/,?8'.PQM"G)1 B+ M51%L*&89%3%ABP#0+'33[*#\&VH/E,$#S#$.P:Q'7I?

F#_43* AKPT!4!(H0 MOS8B-,DT',7UV0,0&8-[0"J?,"^:,1$:D\(\G6&CRC,1]OG4*W?#QD\Z,@- MP9!4>0DT V<=19]B=A@3O!O>D34@KI_ F1V3:LA&>/$)LU7*0)0K8R&PY[*. M:7EO8%\'K?AX;6@) V-&$V@<6 &7:3]LC J62?KH(7AM811 M+*R3ZJTI!6"^*O[^2^[!LQIU/lZ!K.7)^O&61$W*RH"ZY\WJ93H'XY.:%D*N M%QWMP_-*-
UQGZD;*,$AF6(!^!,=D.DH\@A"+^CG=RS MS.[/D3;S63(-@"U=_!+&8%PTVKAE,\0"I=@EXR-+F@Y@F0_PP$O99*XL;D,, MR^0\V<^W%]JG3YJ1/LV0]1@C$NJ>RPR LWFCJGA%2; M?FQJNS|:<.+DT'1TX;8'X5PkE@@@6P:PQ,G"-XH*BT+A2#%$89_,)?+ MI4=[^ ;89R`]6!0%X;8YO#T94,3]7WWM{!!3&^C1E]D(U5PB94Bl<""5R4+R# M5GDT<6?
X&_@+5H@E(=C'0'1[*#*N\]_@(ZBRHO'SC?SSA?PS_<\^2U/#]S: M8^TSHA+_#0B,60.=R*L^XM=DSGD2O\4M9_H5<8RM_1FX:"##DY$39:G>M_^V MI[.?_XGI^20D+%/Y NU3/#2T-^+AXG/IHO"LOPY"6[NT9RCL='B"DWT<_Y0M MY7?4%D2PQ6WB'5A-7%F$&'(^CM-] 1Q*R^-&42(X,$ABE"P4]/'<*9E?BHP2
M#Y7G0F!],JM*S5LP.K,=7/NH=7QQ$1YDMAP3"V00]NM-T?(W-9^;$4:Y 3V- M'9@O ;F=,B,|_KOY*7""/4.MN;'!C M)KAEEOC3>9,;(:NQO9HD-_Z#9>^D""(H?
\EP*0.IY$)'<\CK*$#*;DB\)=X' M$N]7$5X$,7$P0 <@"!,XQ)"Z\/-3.,3 MBBY#++\N9+^832LR'-!C,E19QR Q<)6<^ 9$$]UW<=:G3W%1D\4H2X<11S;X M5,2E"]@ 11-
RF'8^1R9DJ/LD_++<*]4(D><<'AYP3.B0*)(_]*-4CC'G+SY3) M-T5@P9KD*\A<(5U :*3GOKN:)X3)3)598]&0"."B/9*Q/5S2%+EOR5!XSL MS-:8%\P1"KJ4+5/N
]=#@IA>H824U35D,A;UDANESW$% H/+8S6PC#_%\!&2 MI/8,#0BRVDB4B[CR$FF,AZ67TN_7 $O!8!4?J"03C)"L_MU&F^6>:L:"&7CR M&'++#3!XE X=LQN@.PIG?
NQ$;1",WG\)C5+T9_!FOB B W(//#HMHQTHX\88N M*-:KHV9BHY'8*"4 LR+ZXQ,0'S-L#Q0'0'J/R0]RPN;RI^,'9* CVR"3^7/E MP03%3%,BO
QKMO6IV\]HI(%2&=>#0$ERBO/P_\@-"XX#Z 3ER\A;C2EPHD M<;DRB'>TU;D98_](*\5'BI>-69;L)CXPI<2.\)!O?=,YY#_CJH/%51(T\$HZAK"J&X$75*PL]'U5(I8ES-PCJK8
M^Y/[$LIE)=.J7!.ISJO#Z^RC*(9/LP2)@M^\8 J=(4]H(OV,B&- MTY"/K ^ G[$"8!2)=#/7E'*D3DD$;D<_N3R0,VYM/KF(R\)PL#VOL_SP2+I M+W^\N$V=4;*E')NJV#' I#)>5DLS8;:'1=
[H*F*0!I[*< U#&Y#E$Y3#47V MNK1^XL$=HCZG5\!&\,;-A_8\W9&AW8*F(H/&PQINHJ0V2%QO&*)P$9(OO&*]2PD"_MD] "U4;,SL4)4,/F?AD,HWL08^3%3"

8DRPI^CB!BCA6F#UHQ!S6GD1>-KAQ2J M'*F?_I^(_]F;X|\&201+!|$"YT$F#-B'AK;MXAW;PJ*<^1+P6KU2*/*JN2|B(DD;" MW "S;&+'E=E_Z4Z3B(T2/!K0EDY$@M;UT7H.PDA'CTY:0Z7[W-!1AID3MDBYP'JX[#P(.S.?#K>T!!XDW4@A)87K<#S>5& M+[S,0^=K$-RGCJ /Y@'&1,I7I,ML0@E18*F<>RA0HH YZ1FG2L@:O<0Q3",W MWDK@#AI9P60*73WYG-0%P*0/7BVX6[KJB,G\"QY'2;NV6A9J:,7*A-T3+$^O MX;HJ54F9\I--?7E\;1(\%,7,Q&4C9=-#(&O$'<+OH!['?G%U^_?#YI*U, MX,';Y7K@%!-/< A^&/Z"'3@V!I$KGO+AV2:P1OJ9C MVYZMT.(V%@*T"+5)N@ABOH M6X4+# /0JYX(!M$'S'+'CLG/GPJDR"H3AB>-*, C@3%K(XT-602&I=;;, M%>_7A:4E&0J7JQP%O-<-EY!84&>&44(_MI508K1ZL<,_L/$Q-.R:AC@O&EZ&DPT@9J2D> MWR7''+[*(B)=$*7'VZ_N?OUQ^N[_ZM77SYH%U>W%S?77S2OEW= M? OW]V^75;=746CX;T")FVUBSHHGU*Y.EIR'LE=;I"\A]//%%P#6.E%G,5N M>1%G%L"U9V#%_7#1B0=UTVZ_EC:4!P[V.;Q_RI/'0"+0A2/WAYIQ#LGR%&I: M+$"+G D,)F003\ (@&4_@3AIBO+PP@2%X[A2S.E1C|P(TS/#I_;&XM@)!R?*H,2Y14MQW#Y5!U5#7, M-[&'_']1S87_P+L"+@PO+M4_X+&^,MLMHY5F)+T! E1R/7<9'3TLO$ M'1'\]@U6$U,N(WYWY+$?KO#.R>3%"'O/&2,W4E";3IG71PS3NRFL7BH_X#[4 MQ3N$E-F%V_4?(*$(5G%OAVZ@KHV2S,^1%Y1?3$P:P^K)HP-^#P;>R/3!N5\" M0?1%LO#,8(3> (R7S\,l9M<6KCM%)*24J.RNGYM44C7@DT=]2\D'*,TN3|'|D MB=#/MQ?@NDZ8[<63N20G&*0,7.3"(2I)_93;*Y@H2ZTFPB_!I))C\1CJ9R! M*^4!S<8Y'PB3G_R[0IS\7.NS^./(3) I%31)GY:G8+1R+C"?13V:#]?"OWL M-W3#Q&D6T,F\OOU6G92M*,L8$-]3^K#7,]K;LGR^6BN)4H6/3^YT#+,RW]_Q MP#(L3RX.;0;ND@9E.[&CW+N7/)A2LEEMB^*]YTM*>" :\lS"MWS5;)F&E2Y? MU*"4!Q^/JQX%G.FK7#P_HW86V5\6HH;/1+KJRK?4=%3I467%=?")5WW3Z&?Y_W=JQUD\>NQ+2%/_S 1.;;8V1$9(5LHO:-5I%$F/\IL0LUG[%A5%Y75_AF;B3A MV^_0N)X"(PQ3%SP4@34IJ5T6"6,H+<=+3>"F7.D/&+BY!+>;:=<4,J;&;.*H)\? M!R$\'LSLB1TQH;1GE$R685&@\!27R(TE(EI9\5]*:-'\$,'^,--"G;25+PS4 M)?Y^FL;4EA<'"*A4-BVJ 236/0RIO'1%& E3)'*SK]2\[D @O|)Z67UM-4'L M9V6T@E>Y;>Z6K7X#2:S(7_4F+OIN*I<'Y&OZ"?@E8@[(* AB].W@;[,87 .1 M$5'7! Q]?:=%\P@(1")&!.R$!/Q#.D^X=)#18E&R@0-3.C; 6A M=)1S2!]N:6SYYC]+4__WY[]_GJR|WM0=MP:UMSI,20?]\2@-:0W.$'6*U40"*-0K7-3 M?#;X/DO"0%\9?^/NK4CSY@H!QO0]16V;%75K \9]8M&0(&QL)YDF!+|L_7 MSY^O^47A>;<"O7^ZNQ_QV|>7R^NH(K\X?&!X8LESDC!MPJBTA3 /9=SCSX(V; MLAZ99SR.S+,,WYGH[EQX=S[G]*JM.+ZE*^<U)N<!+%9$V-N21R(\"'E(H?9 MEW$+USFY(K'MG3H]MGBI59'HU.!D2]98C;P_>_:,.+'AUL9,^-?TQ\%<\ZB MBL@O,HA$,/P*!0?@]\O365F2JJ$TL4@#$\1@)F2XM9F&&)B/ ;>EV4M9W+,X M.NHTY!Z/88091 MEVGF&0U? P"S0AF3'!B|/I,"D4@L1TE(R1D2D;XKFB]2 M:F(>UHN"C'|27U%$?QW4-C$A?:QXL1V&F.3DG64K4Z_Y+&&DO6HHKAMU"!<3 M8%FT1=95Y=IV=-S\!^,5I;D#Y2C!>(SXRD) [F<@B3)YUPR.<468>,PLVIQA58(9P4^QP3F\A(?1LVK0HZ/?C2?"T@>>V1BZ$=S@ M*&VT5W?]^>)N2[MBS_=65$%NWW9;5CZ9 3[)LB"4X@)?R2,; M$Z5I"G[PN^^FJ$FD/2Y 1[B.K;TY2PM(S]X:LC 5%ERH2]UNY4)%1'"*43+8. M1LVFM QDX#^3X9A_EJ+/-K5&B9"0*">5/8'H'T$33%3'BPTN6Q8O,,)"=]Y19$=P>0<4ZH<_P4U&:\H1 ?_0 M9;+6%U-P04)P&4M7!5KXE^J9'R*X<7%;NME= 31Z_'2B4>UH!^?ZL$K-<5*>@>K@!I3,[0QZ8$DWFI>/$2 M;B\\]"-:.Q7^=-1#W,+]&EK69D"JL/MSI'W(5! NIP+<@#GR/*PB:U6^E(4S M)EO(L&=0V*3YWSA^\@UWWC','Q#:KY_I WH2 M'.%/_]8N/GR\IN;OZ0%HK_>7U[>WO^+M,N]W>P0/?K@/<+"7AS_)&4]]'Y/B>O>1:Q=_(?/TOT5M>GS="7?LI7%98 F-(^ M^9\%$_3[1J_=1#X0&)CBQ8)%#&"1GQ9_WS&:G6H7QJ&6?KI94_JFT:KV5SY MJ#4XM@<([IV@".BF9!LQ]S11Y<,O//GSA\RRUBZH M=_0SU85HW]SH>XX*E7$\6P<5'!;,"6$[:&7SQKV(>Q?X,_1,AG!6D<1M2*.I MZ&.0M+ 5Z\S%VN)DRJO4$U%)[ROO!& 4NZYW@H9P(FI7L\1?@T:?-16P"-S NTMSVM^>;,\]?D>TOH5Z=1S7-9WET180"=:FGF^P5>6H0D(V|*0(6H\!3"MEYV M@&!A2]\S5R!!9>R<*]5TE4@3HLYCQJ9I)K& T) 9^VC>8[LIA1#2:+&LN7%R M>47>T5FXS5V4C!_#+_RJ4.B!#_6_BY^6$QG/G '5*)D M$DB)_+?:CYJAI_@9NA5B3N;3*V97"<_#PUJ@SNA;KY0:7_R#9?1>Z[+W& 0@ M-L1+5R8&6V)9"B@?USI0:[4ZG 4GP\D& @?(1B5;V'.-6!33&;$M=3=QW+N, M_7A\)&MU6BOLTKX-(.R#'0YY4=?lOZ9C ZM2D:(R K919!"*TW3!;6BQPW>5^EA<"'&9H9F.8U9SF M.P2-H.ARY=H43 $UXPNG+4X>+Y27^R+X'YWR 3,S3 ,P.?=Y8ZRMM M5&CB\(=Q?X, .1,AG!6D<1M2*.I MZ&.0M+ 5Z\S%VN)DRJO4$U%)[ROO!& 4NZYW@H9P(FI7L\1?@T:?-16P"-S NTMSVM^>;,\]?D>TOH5Z=1S7-9WET180"=:FGF^P5>6H0D(V|*0(6H\!3"MEYV M@&!A2]\S5R!!9>R<*]5TE4@3HLYCQJ9I)K& T) 9^VC>8[LIA1#2:+&LN7%R M>47>T5FXS5V4C!_#+_RJ4.B!#_6_BY^6$QG/G '5*)D M$DB)_+?:CYJAI_@9NA5B3N;3*V97"<_#PUJ@SNA;KY0:7_R#9?1>Z[+W& 0@ M-L1+5R8&6V)9"B@?USI0:[4ZG 4GP\D& @?(1B5;V'.-6!33&;$M=3=QW+N, M_7A\)&MU6BOLTKX-(.R#'0YY4=?lOZ9C ZM2D:(R K919!"*TW3!;6BQPW>5^EA<"'&9H9F.8U9SF M.P2-H.ARY=H43 $UXPNG+4X>+Y27^R+X'YWR 3,S3 ,P.?=Y8ZRMM M5&CB\([4GD<1M2*.I MZ&.0M+ 5Z\S%VN)DRJO4$U%)[ROO!& 4NZYW@H9P(FI7L\1?@T:?-16P"-S NTMSVM^>;,\]?D>TOH5Z=1S7-9WET180"=:FGF^P5>6H0D(V|*0(6H\!3"MEYV M@&!A2]\S5R!!9>R<*]5TE4@3HLYCQJ9I)K& T) 9^VC>8[LIA1#2:+&LN7%R M>47>T5FXS5V4C!_#+_RJ4.B!#_6_BY^6$QG/G '5*)D M$DB)_+?:CYJAI_@9NA5B3N;3*V97"<_#PUJ@SNA;KY0:7_R#9?1>Z[+W& 0@ M-L1+5R8&6V)9"B@?US[0:[4ZG 4GP\D& @?(1B5;V'.-6!33&;$M=3=QW+N, M_7A\)&MU6BOLTKX-(.R#'0YY4=?lOZ9C ZM2D:(R K919!"*TW3!;6BQPW>5^EA<"'&9H9F.8U9SF M.P2-H.ARY=H43 $UXPNG+4X>+Y27^R+X'YWR 3,S3 ,P.?=Y8ZRMM M5&CB\(=Q?X, .1,AG!6D<1M2*.I MZ&.0M+ 5Z\S%VN)DRJO4$U%)[ROO!& 4NZYW@H9P(FI7L\1?@T:?-16P"-S NTMSVM^>;,\]?D>TOH5Z=1S7-9WET180"=:FGF^P5>6H0D(V|*0(6H\!3"MEYV M@&!A2]\S5R!!9>R<*]5TE4@3HLYCQJ9I)K& T) 9^VC>8[LIA1#2:+&LN7%R M>47>T5FXS5V4C!_#+_RJ4.B!#_6_BY^6$QG/G '5*)D M$DB)_+?:CYJAI_@9NA5B3N;3*V97"<_#PUJ@SNA;KY0:7_R#9?1>Z[+W& 0@ M-L1+5R8&6V)9"B@?USI0:[4ZG 4GP\D& @?(1B5;V'.-6!33&;$M=3=QW+N, M_7A\)&MU6BOLTKX-(.R#'0YY4=?lOZ9C ZM2D:(R K919!"*TW3!;6BQPW>5^EA<"'&9H9F.8U9SF M.P2-H.ARY=H43 $UXPNG+4X>+Y27^R+X'YWR 3,S3 ,P.?=Y8ZRMM M5&CB\([4GD<1M2*.I MZ&.0M+ 5Z\S%VN)DRJO4$U%)[ROO!& 4NZYW@H9P(FI7L\1?@T:?-16P"-S NTMSVM^>;,\]?D>TOH5Z=1S7-9WET180"=:FGF^P5>6H0D(V|*0(6H\!3"MEYV M@&!A2]\S5R!!9>R<*]5TE4@3HLYCQJ9I)K& T) 9^VC>8[LIA1#2:+&LN7%R M>47>T5FXS5V4C!_#+_RJ4.B!#_6_BY^6$QG/G '5*)D M$DB)_+?:CYJAI_@9NA5B3N;3*V97"<_#PUJ@SNA;KY0:7_R#9?1>Z[+W& 0@ M-L1+5R8&6V)9"B@?US[

,H,>@-GB)CF4]/|1K M="Q"WXI$C<^BEC*8;0W/<1I>AL'I]YD,7H9I6"Q261D,P/\\U4X. W6AAQZ96G<2!*I8]"N+*Q%NL9F3VB;M_& 51U/ M H=EGNQTSP$E>E#<6/!H$W!O4YT-H(IM/0IP*25PJ)*L9Q(A&:9!::$@6NU MBI28$?2WIGFATP^8P+$-2_LE<&RC[-,X(B<(4\Z04*GZC3<0J>#UZ"UB3R3 M<*5M71[[Q!(XMN+ G0D!URT?#VZT2.(Z;MMNH=H\)',X(*;6U$ 3] M4#*XVFN8@U"_1^:XXKGUB?S$$SBVT?.&"1S,**E#:I : 9B)YA.F+\/!?Y_/ M7{&L(A=%>]"UKY5*3)%1[Q(67Q2P7C5O,_3;B0_ME770#L=:H]OHUJ\'YO@ MZF2BK<-T&#.KA=[NI<(.0N]P"W%9W727A0&QN=8VTPRB*D(!$#:I0^L=91 MH/V2X1[;99!:32EV6JA56)*R%!1\?KH9G! MR5(O3$3D,>94S(TZD)67!^N^?_^F11OICQ]+ [E&U#=^ZV8;GVA6>:>?%!"IG M 9[Y"#Y*0T(M.>/C]6M]N@UC&@55CT7R6]'NF-Z_55=[}>KHU1AQ.3.SWF&? M^,+(,D4!/)2$],&'&8))44R3P-&(8ZFQ';31?U\7PY*DV-]7+9J@:MR.4Z4 MSD4RF2"D0$YXY Z\+!&$] *_]%;*HVGMN>FB?KX'!Z7),?7\NFN!_QB=TM>< MTL$Y7R(W!9/AE;"FSNQF$&(HX(463F*TA1_-G?WFR_KY+AR8*@V;9FV;\W3O M\BZ2GDZ,CB14@R"#<>23\PC.^0#9U!4GR^@B6N>Y;8[NA^'PD2AX;8^H[@/B M5Z5L=QD/O\F#.@V'WWJ-QY(6)03##D!0#HVJS0.X,A%FVI@P,A7523I*BC:LEF$U'R'R Z:U;6]BTCG(X)G*>S(G!EC6W==^.)I;5MQ8$[T]JVT<5C20O:9$T_ MT]JV2FO;BB;]R]ZB(X?"W^E5L7K7(!LZWK.E%!;)R>PPMM 9K5Q9N_6T-'P M=]NTMJ.C[3;JW6-.6RE"IGJ4.*=#]2D10A:V!N52\3$Z+=G/M+9>>>MXPK6T; M)1W3U=GBIO#=^70R#<,\&'Z^VB8;$[V&S!;0]3U5J5Z$P3B/ M=H# [8WQC=B!2PVOGBWN8+FN\8C@^R_]U/IG63UV.U!:99V\,6(6ZWK1K.NI) M..07$5F0HHA-DD8/!/^'?CT>"VT>U1RG&Q/G'4J9DR_@66VFYIR#*'S--+:H MHLI6M;]#V=/:? NAWYZB)!*B&)MV>*5^X4%)Q!5DS.D5K,"+:9.A7YTJQ*L,V M]33VM8R?K\T1T^GVFZ./!\VYY:X%B.UV"7RLUJ>N,TX-RS4#V$9GA4(\FHS MW3S_HI3"5FAN&9)01!+9,Y0V/4)=:,2."1[0/'CBP>004 M?%31G2W&,,9$KTE)#%C0DMP0AA"lE!""2\?4)L>/:)#JMF,8"\6[=PSDA(7 M>2OF/JJW=]O2/S3:D]T9($M)9FA0NG:]S(#1R6+0F!);#[\YFL7_?(^/\SWN MR>&G$3>^7R9!)]T](A@?R9NI>8@>18*4D!E'BD[*'V]@^>>>KV^75/6.-;L78 M1QS3WF# >Q:,IY)!JU+'IVD+,4L!5D962BY1YL?CW&ZY\)_O]7$>R3TY_!CC M]>>CO-FS?(44G&4UO=6!*W4&%YUCX'70(S0F_X*CS>+QO,G;K/SG:WR'96BR(@C^>R[2'1KBV9X'2R^. .0Y^'$\,EIP\ATS/3NE10@%GH54PBHG49CS7U%Q$>QD$>T MB^X6XS*;6]%FV/J>C+[\0'I[9\,IO@1O]\&:3&VB9]D&;*7M'=A<0)4BK25 M2=K)F4"M1 Y;VZ-)SKQK(3_,NW \=%CK9+=M#/%F1&\UCL]>8IPNBW%'I?[V M\!X0]W!GBW8/6R)OU-FA?O_E(7!)ML!L*56'J.GI4M8A&B4@E*B=L)(Q5/K MI'DO;@NOKF%64.A85MYZ!1!_)4ZF!Y8T7D*-W9*GSI%/I2HY#-C#8 M6:]W\F1K^7:X+,V.Z$!Y.Q-A!W!VV^S7H=%91E\'@ ME("@N$1P*0]PGDN=$Z46]\,[Y,$]QSS^^+ -E+NT=A=O|,O?J/,:/4_J1+R^"3C@Z;;0, MH%=Q&4T6:',3 #V49%N*R0"J01363-M;&N78 6,I\&$?>7;PP*\LGF=.$R2:QF! M)\=H%Q2U2(/5;HB"[!R+3MG6N1Y7G,\TE/Q@B7:(XUY-ISWQF58ET8$-I8"R MD8-"4 HJR)+/DC9>AS1U>><_$>T^5**=7/DEEODI/Q%,^%BXD*\M[2VG=8)0 M&((QN02A@S2E=?.1%3">GJX?(M\.5W%7(;T=#=,"E6 .LR<.1K2T5.TD.%2> MS-=4'JK9?.JV-5(G[B'RCEM=6;_2H[GN4\^\)P^GHXJ%6JO[0I^+CSJUO7 M?6R^CL[E\E(:=%SX)]329Y"!,=B HXHZ!?IDTN/N?P#N5;)@]"&##$^R4\#3 M%@9;& (>8:&W^!RC_V$;'FY5,,"[50Y= _3,,3DP^U]FV>UH4+|-LE#ZX]\+@N>;;0W\#V^S7H=%91E\'@ ME("@N$1P*0]PGDN=$Z46]\,[Y,$]QSS^^+ -E+NT=A=O|,O?J/,:/4_J1+R^"3C@Z;;0, MH%=Q&4T6:',3 #V49%N**R0"J01363-M;&N78 6,I\&$?>7;PP*\LGF=.$R2:QF! M)\=H%Q2U2(/5;HB"[!R+3MG6N1Y7G,\TE/Q@B7:(XUY-ISWQF58ET8$-I8"R MD8-"4 HJR)+/DC9>AS1U

9D[H8'69\G//7\U+/<*E&4T=3<[1J M1@C:>!FYOMH2B1Y M&_(X^!=&&Z6!M\F_@2R4;2:<(\B6H2N2HO$BUAE6VYTVVQ;JDX5W& E>)B15-H'HVF>"Y\FR;'B42?
G6FUIT[E6C%Q)SRQ]9,Y\!F9=&CND!; MJ=B?CUQUX+&RC$;$J7GLJJ('8E[#4;T7\86QQ^?,7ZIG$;^C.1WW8*(B
M&X;J/=V"G$+$-3VT:L*:0Z71O"ZKHKS'5E5/KH"P<=7?/GKNY1"W_ MU)?UZ_1]KR(G:@=&=$MGN*(+&*J3F.DZD!$'&E#D^TJ%?GM1O2Q.LW)/OY3
MF6RIA"RQQ93+(M&GW!$7]+3,8ZC99HDT=C,JK+ XZR&I7<37#8>,&AM.XL[AYI7WKO%5-7%!F M:GT\3!FsI"(Z_E*W#=?O$+56.(&8#PZ^?-
)\$R'YXU%0CPM3[UH%.N'2{C'^(>OG]>P ,.;E+@= M-7VFW=T66XL@934WKA>FGQP\7:,7@KNC%Z9HF8&\9W\9S$E>_4/R7)1/BA*- M!9Y;:LP-3S3L>ZZ,VN,?
V;&S3{\>QK>LTXU/HB3B(Y"W]%8%MXFCW-3OG]A, MO6X9KSS+BK$H:N_7W9RI:(EQ36O10O[X*T)/GEL2T+'D0'^?)%=\5Z@B/YU M)Y]L.&$_Y3.^SS-YPDTG3M_F'*<$A! 9Z
R&=M=EK/%O.@_M0]V)OF:3_GQ[MUP9^0%_Y^;UXD7Q6V5QY{\T-%B I?&9<=ZQ+>IBQ[N0*RUM4NDUO6E=P]-MI-TKBV")F,_CTFX>Y\W!72DNU7,_*P2<#?[&QQ;1+BLTU2-
+I]@CUKI>;^3L M7>]Y{5YEQ,$-^V=H'XO-2I_;&X>IKB:\;_EOV<)?;G18M:CJO8%AG$<9XT*BD?;JN=H;T$P'-'GE"M;BFJ._7&E^-#-GF(Y\NQ^9%' M!FLNGN:9*P-.C@_O:]W?LR?
1CFTJU?1J"%*AFB].^05.S#(=K$)*RTE%I-]- M8,0@3P2^D?B>* [I8ESS[&SNYC(17I'N!<-M.BANU]X_CSB@\2!Z#9UEX>%4E]2K930J>,!EH M?;=<-
MWI5B:76M/_7D4(\W8HLB@%S9'Q^/VI]UW-V_#/LW,0"PI3GT\M15F& MG'K'R&RRX9L7>\-G/HO!1/)%8[A#\C+T^K^K]L(AH;P/7.Z?!F\%XK6G"/$@ M%|[\]T*W]QS5EQ;4_R4PK,?
O&?#Z17'08@)RWU7%FEH[W53N\M-RTY\4V(% %55R*J0CJN8YN:R-=7%&))]I5 T$2R9\@%3QO>\M4\D;1TI;^;*Y1G?N"94383; M?XL1K"'7LNI-
W/R$2.2]@'QOF,^)>6#LW@!CC$2P\I,ILCA5X8M2D^7@L!R- MK6;<@;U66B=lE^[N3KD\9+2QLX8&F2WH&1WUW7Z&D8V/EFLWMT#-B*-6B'M4 MH)%62(VN)V?
U*\4N>.P+]8"UM.9"ODH8\CNPUSK)9BWF.:IP,/R.Q^|Z ?<6 MV8T%%D:&VP2G;S.Q@(+_W5OTP)R-_XM8W$',9U[/>DWD9]_2?*=4)VJS_V5 M4#A]N?R+E/^CD\^'8=$?CSD:+424?
IB-'ME X)!H(CW#?]'AZ@W|BT)ON65%\B#.T*4>0,/]BAA*OSN3S693/T"*I M:O;WJWLH!&Q'A[[6BH_"QQJ7*$S:\V#2[)&,V2*M0P_E.Y?.5Y7W?!J4; MJ?
<%OT_-1IYRJX1:1ZS"K6V,I-CI[IV2ISRHU^CZ^9T+^]EHS;% M8PX;-E=5G.W@=5. "52Q);]!TU6!SP"#U-2.+&;*#+<$WB5+1[A5?KA.>9X@;U^IXW<,#/R1U>HZE=AGZ-;!Q2J
MJQFM?$CK7F28N=+M<.MY"=/2J%K*,6?';4*NDYZJ>CVIL27D>4@:,#N'U@C"CJ"QUQBG4T"*VA%*0/# MG/9CP>* MNVXU$_MY1G5F\6F-AIP M^C-
(_&ULU+U[<^,XDB_Z_WX*W+GOW*B) M,+KY %)S1CWUXW(]IK%6>WK/1<4.!IXL]LN@E*7=Y/OT%^) H2R(!""1K M8V'$];8M$9OQ@z3"02B[ZP9N2XYHS\&=>?P/U-P[^HRC_
MD3]B<+/&M2C*>PC_K7GM3?'P5.9WVVH0> 'J"^L_+?_F>8Q'U M@AK'4>I1 MF(H PQ2GB,=>X*>Q=W7W-R_B&"5>; M?_Q--4-PQ8$4;U,UO_[K7[[5]7=SX'GA3_W3_^E M>_S[T?
-_ALW3?I9E/S>?[AZM\E,/RF']G__/KQ^_TF_\'L-\4]5X0Q6!*O|; MU?SQ8T%QW: ^R1)^# URI]J_D3^MJK)>?<&;._XKOR>\7(E8 M>'X6A)"$00Q1X,N?4A]#C_,84XPCCZ)5O?
LJK_@&_QUK3[49^N2X?S&0HSZC MCR6OBFU)VY5,TE*K>$O^WZ1HK?JSBE>@U\YKK8E;Q;RW\|&SC?_'__Z^<] M?_I8K.>2<+V,<_4|(+%6BW)1/A>EH.=$V7^W*RE+(X?
%6F$D._\K'R>G_FZ MKM1O4/W6?+&?C_;S$>+79<\9+ND$8-T3/|-"^A@/-3S 3I3%_;@(=3$Z62TP MDL1?0%$R7DHO\02[NR_(MH)W&#^LOO '_*3FH/HL/A:,.VG:[!]R4J]0G'@\
MS*2#)S(s$?6%U".I/5D8)51^)K*(KH9FZNRW:XJ4UM=MTO*.?.MN.K*@V("U_M) RE6MX#)DF#5Y^*F@,_^*N>6DVB-JYG3I"P4KP]15 (H&A"110HJIVV<)+.(>NH*V^NK]O-
V"OQ6.C6/TJH^\NH]SLO'\K+Y6K+ M/]3\OEHEGM193_A0A'(3AM* 0.+)W9F?$4&\((/-C(7360"UT,Z^_]I70%$' M#7GPNV(-!QHKHYZV.GILC-
$S!3Z(C",%5M+2$?:/4YK4177$QNYGNN]9*;L MC.>K-\4C+Z]59>8UBO"<$192B#"4KN17(UA&@8^]"-*,(U"3"C74>RCD6=6 MXH86^+VGIJFPQ_*/*^=%4IDIHK9
VDIWEOD3"E9Q^M-=\?BS?*?5+?G#7]6. M1UI$?&YJR9-/4O&#!X!?;\@_81-8W/_GCX1BL4 MZ*4"KWJY_GH%=]*!7C:@A ,M=.[\EI>9%4>.T,+,+^I9OJC+!49I$E"
(8H##G$DERXS,OL6L65.+C^*.U#C[X"T MC/6A'D\SU:,]O&58UDP37>7'8XM8T!R!CK6P*N,N0,S/F00[#E<#&K6G7,TBYV6AURQT#@@LLFBY Z)?@!R.;+=C^EQ_ MX^7"!)-
\G=A5A1#R2)##@7@J1"#Y2*0^S *6141D$>9:V83 M=&9>]AJ]@+:TP'I/RWEC+0XDO1V!]'-C'8K]8"B]._:FNX,Q\4+3CA53^1%/.61"D M#6%+=@-
!R#/K8D<+M,3TPWV'TD^'^ZQE,E,R37&,@GTG6;<*]AV.M%BP[Z0 MPV#?Z0?LE]ZO$YY55_X0U'*5?'NPT:E,3;KXO[L!@5RL6*9@"&+] K184C2 M4/Y#,A(PDC".M'8\)D3G3@QI60
[!L" B0L.P;3PU%OR7*-DIHH. #)>#TTD M=K0X:I%<=*4T ->'YLFGTKN7I0''_4/)OTK?.'WGK;7_B]6Z=DWVCJ!>; MZ[HN<[*M,5GSV^*3%%]ZWA**=<.95%I>U2O/ITD:9#Z,.%.9T(Q!
[*4$9@(Q MQ*B79,%0%/YWRI_<\?TAMWV"33PTA QS<6,@[J ARR4GK6>'8;9YP'551S=,7?+!LKG@?8H$CX3 M&3.+52E;7;_G;=X798J@-ZD3'5IK!H>V108,WMHD3HIPA#XGJV<1*
<2/G M4G8S:W5.;/![2]F!RZ4KW,C&20I1&0S*IG9BNH%D+3NNH:"'/0PL7\+OB!C3L.%)D$\FM%%J+P&**;2+N4,&-WC-7 M=+EX?^*%X>)Z\-+,JBMIP4_O/ANLGH(?
+C5PU50['UV^XY*]QE=/K#?N;K[?J(EOC MV^X,>11[F)'(ARGF5VECV?*DD M+M!P9AA3M$1:,\PX/WZ&D<=1Z*Y PU:3,=>%P=F;MW?
W#NGCB_"LO'W/*>W'<#1T\N9'O$@O>2Q2&GW31]+* M);$(4@;C5*AK!93"C&(.:1+"A427N&;6#DW;,UL]#X41 M-32#BB'8< 2Z,Y?#8,!5G\=TU20UO9[V]CNN87'D1ETQ-
2B5M$MD,^-I./1 MS7<]7Z2%]CWK4K'J0]?K_&=[K{GS.OSVRH%%6@R$)_J%.@XT!_@W1. M^NFMD@/!S>S)A,S@=T7>T4YJ0CBK/=6Y,1?;74T(-=QG33UJ??1Z7VR^UM+)
M>9L_YHQOV,XE>LOI6OZ'K7S!(B[W4! 3/X/("WQ(.E]NM+S(CS!)?.$%)HZ' M#M'Y0XZ2!5 I'JX Z[D K_(-8,5;LE"'!![D_J!1/YN>FTYAJ'X8Z1E:I+;.[\AIDDN?*F]#<.*H4/!=B_./W^)JC?
KHN*W M@:^;AUSE/S?[)>W3OI,CS'WVUQ AU ?(VOV_,WW_]=/.A2=.7'VQ+W2SD M"3 T3(@*=X&!X#@U]@)001< <74L."FIW:'@^6&7.0*
<%.W@0'#ZZ4NKC'S9"S1RD@>H3&SPNXI.BDB\M&Z=(B5P&:: M:2KK!35"CJ1Q7AGDXTO7-SD2\7P5D.-'[53P>KTN_E352=\7Y=MB2VJQ75]3
M6FR;6ZN42W)2SW<7>3S*F(<)9%E3'P13F'DAA5Z49G'*_#CSB8ER&E&?66U5 MS@,'Y8ZJ=!EQSQX010FH=$'R&JBD1#-=-L-83\MG0\YP9>Y(@CW-*W!]-N;
M%C:58SC#U2$K'!O9#C/:BJH4*UB>6QNI02X1l1VEY=X452V)[Z-Y70!XF)BD MN&R+*7\6h\-^:I3]I=.-_8^.0D4*"->B3V8I&FLKC,VD B10,I#+TK"4)4\
MLCN#75"%!4]PF_T9.$CQZ2*GMB>Y2\ZVZ3GP#SJ'CHI/%$^_/*G2[9N%3I!? M %CGY\]+RO!"I]/1057OI2%MN':N+&_2=\S]LRQ:LX M"V+,/;D8<5\ZU\0GD%":P(B$?
H1(*@3UC';^=GS,O3ONN (-6T#1-:Q"?2G. MFMOH^=$SW&K; &>^WIY,,%=[=EHR)-7XAF9?]6K.6[7^K-]7VM>YPS, F(=-U5:P^!J?]LZ0_U%M?\^GM>K6C$ M1<(1@0D)&40Q$I
0CF&6!(*E/,389R;NLEOVYD[<:IE%50[=@_6P#W#;?ID M4TRUY;D)XPRXO@(-WT Q#GY7K!NZX8ZG5<\[?[G),K-L+S-/%BTVYH#366,.
MI\PMW,YC#F"/FX#,0L7.S!_7KCT^,UA1#Z-0J.8AS/,AXH3!3&04IH% 6<)$ M$LCER*@/D Y9+3V_I"20T1FBF2G5@D|0#]#P\KLG2<K?)V3IP6NK-A)A([MLDQ:)!>U-
R8@/+FO#3IHNA"%&4! 0RSA,H?^(0(Y1!FB81]KR D=@R MV6>)S+QA\LM$XID6&H]!27L9#0..^N)=8SE5!W64K@GEU$Z*=3^5QD4FW M*_?[HID5WO$-?6J_5"F+!(N3&)
(LDBI&>"Q5C"#(8X99&C$OB(U2=LY2FEG9 M!H6K!Y3M%.\\6MJ+Z^48&^-H-N+;K*+CHKE;.L_067J]'!?WQ"(Y\8)EZ>SR M#F_R?
W8'BYN]6.>L^>5ZPV[D]Z*O^/Y9O,\WTK'\5]U/6W/.O<1UGVR0X@C MQ-+0ASST5&J+7%l)1#D,(\XC1A/D>6FLS=Q(_(#SH[|=]FI$4D.,T0[":Y ^\/!+JKM?ZG$ MZ)V+*
[*3Y&!F#390+S+^MV,?[!MFMY_(--N5&#Y 4G8*2+\A)<+-9J>4%(MA_V8ER1KFY:O;--Z6ZJ.+QOVA;!53.^:RBU^TW/VFL@',*U7<>]%F1>GD##5 M+!9I*
<0AH9#%,2,BKS.Q>C,!FS/'KB3C %U:O.(\[5:)J#<<, *2R^E MVG':Q0QCPYCA;-.H9_E^A,DQ,Y2?WWQ0Q69)#?:,?(K@ZGYBE7)K,$,=D(M)<6N-2?A\EFYD61_;*NZK=N"A?RF](1
AZDR,R/L*F5F+C:739V&>,RC%)[Y MZ5E6Y;Vl;VH)%&^7$,F,OKLRV .T[Z/#R%W\<|?E>]QO^Z2)CJDI/ +.$QC"(>^@P% MBH77C7[%H8>%"1!.%'3BV+MKC.;P6?H_=']X0GQ#*]_
M6.(5/F07Z5ADGM<@XIJ)UZ=.>S9KH?#>CH=Z2OCXFFGY)Z.0UPH MLF$PT5I:HPC$B$Q6\8=3XRT6?1@19AA[&'O,,D&Y*)LSVWJ7^KS[81] ZO+W M1!QF)$0>Q"(,
("*!@,1'",:!3WR:A"QFB5&JLC[MF16TXP3@>]@-U8%\/l8' MXF)0I5;NC%GCYXU?[1OMWE,7YZML.5*F,&XK"]Y=<.D 'I67I:GA70?2_+8U(OUOKLPT82N1H-=/O^(_BO+-
M&E=MAMC*CZCGB22 41H%*F%+V@ /?\Y AED91[*>^B.WNLUP,[,E&*9[]MR! MECW8\ ?V#+:1,]7TI.$1-$S:E1*Z;(+T+,UBL!L>Đ,R.^ 7W3"] ROFM4AM>
M7N@.Z06PG;\Q>LF@E@EG?2CUHX]OJL'QIT^[LX=5QM* HB2&:8*E:>0,0;)^ M#1GS?!Q%/*#AZI&T!+.'9NB::*)0\K:"KDG:8K=(<2.4BP/E^91E+/ACE%
MQS!PLL.BH7VU.ROYN@)[^@ZSJ'1%=94.-4EOV;PF7?&/$I2T7[2*%I4U:!J MVPUO'#1I<_+[ZM.VB1I$C!)"I;\4I*DO'28J=TX,^5!XW">(A_(7HW]DTR1G M]HI:(FJ%?FAI]H0-
[QL.HV9&5"TA[43KT!"K3TI3%H.'!X;U5; M6E?W6:<)+GO/51N H_NO^F_;'HV*?,/9:[Z1/]2]!]Q77C[FE*NN<"N:)E[@ MJ^U2F#*(" MAAEE3H1B34%H#EG*SNL0CU.;>&-+64
)6D3,\UQS#2/=-T)+GI M>69#%G1TF^:65Z"XLT8%;;GF!HB.CO#"..U\FEAMC'9YQ"Q(0X8Y4.(P2GP9Q2I"AHW^*SNS._9GL*8L;',<0\33& MGMP!983&$*% P)1E?
03M1N*./$SHWM|%P-D51ZZVI;-J>B^^T*3&57.AYOF MSN=2- QW.XV\+,V9|C=C KF\XG%$8_G[&>?$/'FYXNS#9O:,\7SU3KH^l=,M-M_OZ!R8%RD;?%^#IGFP9>Z*1A&A$=A+
(2'J);"3E*:66E; MVDU1\T/J4ZZX(5[CBNH4!3-EM09 6VFUA1M)[!!CM#HK?]BKZO3(BZBKMH"] MRNJ_8.>&W);-R?W3X#RH#X"NDC1(B< A#+@((?*%7'-3',.(RC4X0'$L4J.B
M[".TYD[MD'__AMMZ='7'17<':WDD.X;;WDKK" TS%>Z)/C>2{2F[6W4^TV2H#1=:R(^ 1)D/04^'+1S7371F]+HA5C0CFK M4'&2R,+E*,8$/;Xl,?KTA>=^7_E=4TVGRP8DL<=H3.
[DCX49=WL;'NZEH=YS^#1W,A>+K3A5G9W<-=3G"$3=>=R\(.7;O'HH*KQN>DQ_V-#U5D7U56ID$^K?9GT<2>28BRV,LRF- D585>Y08X(#%,U#7M$'M1
M3+C>/4F7;&EIPB4W*'M&P9WB]$HZWCMNFO"^04U)9U,Q;CL6A]?NM*#']9<6 MUQV38,@EV+%Y!5X-.&V.$_X*>F;!9S%^P##?7.A7>'R).,$KX[CLW!A5:70-
MXD@4I!F>D%JNWZ!$<85%%YV.,+V7=!=UFESGH+W58<35$<8*SE. HB'V(6?= MSHSX,!41CY,T#;.8QZ9'U$XL,\YS#WO2_TlZ9lY+L_R
M1J.J&;8KC;+RO2R.N2\@91Z&B,N6&,C; MIKIM-40?F;90.41$;Q-M+Z>9G>I%5,L<+7S?XK6_SDOJ?E-PI,"N;HL>#CX MLOVF+!YSQMGKI[]7*E5^MQ'7%V9=4>E89"EF M$
L_D_J7H (CT*Y*68JGITQQ =ZOBS^!:A@#7BD^ MI*+^=5CW9L>+F<(:P*NGS/. 9J;HD@?08-9SH2[96*)FK/SF #@R# :$%S4: MYH \-R@6(S@XIVY=^RX<+.U'RJC'(?'"&"#/Q2[])
(5AD_N*?<)C:I8R=Y:6 MB5Y8IY&S=+BPAZ3Q3VKEVEZ80^0O:?EJ U&4TZ=,I40H%LJ/>8QPGP!2>A3 M:7TB#C$-4YCB.(1FE
4FQ5H>$YA9N/2T6MZ'!C633C"0L]F7"2AF4D8^C>#_MDW!6$E?U!X[&7[:FP#GQCNH$G'W04LOZ1M1M:RU5U[G8J/2%)A$-9S&F?A## MB-!
>NX>@9@E2&YP5!O+,/,S8G37993:S-K7M:[;T[3*V!O'2U,K7:%@IJ'& M)@KJ8Y@KA1VE-:RRJLC]$B:[UDWR7D5UY_*]C^0$RS+NF9UV?6S8.>(2UI M_6JDYR0>5T9'PIJIX
DYP>],^V%JB'518Y3G8R]>&N6,4*>:HYQ[U-4=>2.D2 MM\U],*B#=3?%7[\'e?YW\[X1CIRNSR3)ZU<==$ST:QHSY.($"B43NJ;'W\]PT#,#ETAGOM!ST)":Y83[M!S.#K:?#;_P>?
9IX8Z/L<\\ M9UOO9;0J?4H93W$LO:&4JXJU/H$DJKA* /3#* Z#@&M=)M C-W?HNBU\X@,XJZZ+BL#F-9I%^W1,S+%_@W$_6X6,P,1?!5
M/N'#ILKED[UVX;98YS3GU4U9$UAAEOF[K1QST6\N>?%_^3?' V4S=L@W$ MMMIJZHR_V,[30-CA1M3D-9MK<-6WUWBM"N]lW9(_,*UOBU[Q)5>$3[RNVPUP
M'V=8!22A3,0(9IFZ#A?0&*913"!&+$O|+$%$K[JR*>&9U[)?2E59F*KDH8>B M6,M_JES=E#*Y_V6 XK@UF!,;,[/09%-U;(".#W!;@)83T+$R#$3-!)C)Q;EY M@+.]0.<,0,.;=>8HC-
ZP,QANP9MVYD(>WKBS>-]NR_UZ6TE+7;5EK%K3TFWX M^=OB'N>;52."MJ-P&!'(OH]XIAZ#]>!R+D*>L'"EPL-&9>4F*BHOQ-E!;5D?[_FEZBP8"M,5_'AG0?_&B
MR[BJ0GZ9DZT:OUJE*$.4>1Y,J2\@0E1Z5B3Q(6."T3A(4YQ0BU[>IVAI?<4O M;M_=WV&E0](7WM8]A$Q/XZT1L+NYBY^:BG2B4-U^6P2ZPUF'-_?&9')[>?>0 MQ$M?
M4A:8W_<%BH%SJ"#]O"=N<_0V!_,JFZ^9W71)%!*\;OZ M.::]LP]$G8Y5V$H>-)U5D"GW;)/"6.7C38<:+D4M!/L'^2=G?K<7!D&H;(O
MG!:/O'PR5(WS(\RL*";?'!.YI_7$C:0GM.LZ'\W:YQO.3 MHAWTGY]^VJ+8(B?UATU5TEWHX36N\NKK0\DQ^!QYJ_K=I+[C7]3,
M7F_8N[7G&^LP'7CN@,C=7=D$*L&;,^K(R8H]#S. M(,)O"#&/,10)\3#V?!KIU0DX,_J.UJ0+(&Q(@IZF:0+E(2#C]L2!F&86PTQ"_MBX3(DW)(\>*-
M_#+U09Z.LG&\]Z3E2B_:L"^\\874C=UJ7R,"^[Z?9 3#D";A7+@\!HGZ M1P0B%.),.=8I3R#VDQ1&7N*E M<9A%./9MLI3.DUPF6:F)O^<=79-
N7#J@Z=F22S&X)%VI4A;Y/8/H,7@SBH%Y MQM*T=*X2ET8H+9N_"WR41]3QBL693TPV;YQ^3&OZF==:71K>YP;8&9_H:,+ MM%.$KTZ#;>:FG?7HG
IMIXE#6699K+;GL:GJ<'76YPAY3@AU4]YA\V-+95S<+ M7^-*K3IGYPA*(XA#!#%,.(\Q8R#F)?4_,TH-XA"F+K8YIJ'1/6R7._ML?Q1[B?S6L4/Y0;@UZ_7X./'-
_T=C43SCH,#61DWIPLCO5 SX@,V@>>)3Y7OU MXRP^!;-T(78T%4OU(+;9-!;(644=3.@L%H>P$'X8F;!YW>9NB>!ER=DM_MZ4%^R4(8SB M((FX#[U$((BX%T
2TQ#R($MC@3F.$Z9_:-^04B9DM4\$4U/@[P(JLR2V$DYAH M.*072VKH8/9"2H)MP<[-65UN0VQ:52VIZ3,)?>\,[#F&"CMQI.OKC@?84Q MQ@]O(HP^:5G>6'I0+%]+A^F1-
SV!FM9;[[XK)XLSUOQ8F;)M.]V?Q3M<;J3O M5=WPL@D5M"O6*DA%PCR.8!BJ(@B8(DA8%,'8HYA2/^-!U[JXYI2KN?VF 8]M MGU-0/'3%$HR*)[J=*KW(YN(&SI.0VSW_(&>0:!T"
Q8;%RICDG5)J$->TI> MJC.!;O\BR.@!.S817)?EGEQE.OF M/NGBG%2,.RZ.R+Q(NL4Y8<_E6IQ]WDYCVR8ZIS'-UW)##WM4FR^(PD_]!88Q5 M/P>;^C#C6)6)BSU>1CYL5;UY$$B,
[LI+4G0T[O1LXW82'3T5O51E_,4T%M=8 M.3+_QSSK2_ M^Z_Y7;Y1QDQ3%O>]+8[+!TPT<<7EGL7F'3A+&,)MV\O-M.G-Z^T*ST?&G/R;NVK,/2+$TP$$2!AP*)O?NB-$
M9H((&"29EV#&{JR6-_T.@XM-AD7;P5OUR@\Z#YH+Z5+H&JZX#:3-%F! [PKL M60\M(]V%D>$?AV\X7*%= .5J*,^(EV77?!>P'3D'3@<:U\R)^*0KV9[Y>K]+0 MXV&("/0)Y1!ETH//$AY
+Y4K3Y;Y 1/IZI&7I-!UY/NA3=1]2$!;NWI"?7)/ M:!A4W&.0^G*5]0,H?!9"Y&<4IED60C^*8YK%"?(9-7>*;'!PX-^0[KZ9)111 MS *:>'*="[U,789)(6&QJ 3)BP)O51^34S|$'L@;%V*RS"
($QP1G%(8A32" M*)0^,B8)A7)/&R":4)_&6BU$+Y'?INM#1\92:KV%UD86LS5S4@SC->\YSXZ6
MK[VPBZY$SX5YOJ@3XN$4RITCXCBC81AZ.FIQGL3Z,EK@2CQVGP!)HZ6<1L.%EWQ+X#H MN7-PR5#F.7E?:U6;^"ZGMR7>5)BV2IO.43JS[T "!$TNV(^#,VY,G
EL9BYV),%0YO$+]08RZV?L9'= M+E'O- 8J=/>F*\!^!2%XRQ_YNGAHKA(Z*C>@)?5(%M_Y=Q=+Y)MD?YC+-_VP MG6?UN?[&2Y7>4O)OJCCC(_^PH<4I_UA(>\?KS^(6?
[]HP@[R[R7'%7_+V_]> MDTKR1.M5DB9I@+((($HXC:;>$##W$2!]#S6$ 0B8)$:&V!W+$TL]_5,"A-VX!# M<"=7!?!J+5G\ZQ78\%KEE]7X^]_W"P'LZ'G=2V+L9E5;>$]8 ZTW(%7'UN
M/[4]JS@WWN&'/I?[M!QY(XY8&A!\P=@,^=-8 FK;27_B# _)<D?/> ME,5=B>^OM_6WHLS_R5F;">BOX@!G&>("1DR%SI,PA)AF,8RRA/L1H2G7VWH:
MT)P]2M3T.*_;'N>/ZC+255-&2>Z17FT?0%UH'C.8P#@=/YH|'$,/4"6 @CT' MH&A/"NR9<)=4;"'R!3$G74J+!;$,11[&I4Q?M0U3/4H7MRB?U%53Z0MLRT$Q M(A[XW.\[@8)&""
(2R.V=8#&4VSH41#R)D3"J^#)&;/ 4TLZYX;)NZ, Z<:+ MW(AM&ACJ](6?#[+%46=01T%N49(;5P.&=:Z,.XC<8[=HI\6S9U89\:L]&N M?8VEKU8$!2$+50]G3Z6DQ6K;$ZKBB
$//5]$?LB-ZK;>I32S"O=T^R6=-]2O M0'L1R?)"TGG8!'3;"1AFBKW#X6N+PYL.A#:Y,N:ZV>%,V12I^GLZ@^3XK[7)FG M7[\5U-VER [#X#Q^ ^/.W4V94|?
X%EQAD3LXQ0RFF3H4ZHQ0F*2>%Y P MC7!B%,+0HCJSAN]XV*DX7J^;,@ /B@OP(#?9C9:#5ZR0GY35_D^F39NU0-;S M]0Z@[#G #0L["\+.KR^8R*SJ[L\6C27O=AC
L/1+1^CE\U+NKR7 M4A4;WC?^?+OEMX5T//YKB]>[+DY-]*%O F[03,%F]}FM1\?2OKTLVW+5HODY M6WT8KN?,O"^U%;#CMF0}3,W,RFQP&E5LN003]]
(M5@07]^%R"1S#8BX7C6,;-MA;PI"[:EJB[CPH\U2SC+(|>^*NP2Q1 3%,N?D,?BA,,<:O5W M'*4RN]O2T&U.$#0"ACDKXQA-!Q6=2&[]=5@(;10VG!3]@D#A^,;$7"PU.BC<, M!DX_;+?
7>'?_L"Z>.&\\D,^-]!'5VPD"[,4B3F'$0=P1203$(O%A%"11['F1 MYQ%BLK\X2VEFY?QZ4+6$?^>(G:,RLP[LK?!\KFOU7V###^Q0T>]HJHE3HAXIN+4J4<7[IW2%K[]L%$5?-
K>22H5Z%;:B';9 MKW[C5:W2M|OTG_^0-N2;_/U:;LGQ'6_JZ:IRNJ];:E-,=Q6CF"9>ZD,6Q$SN-MD3,A%5]NF6-
I"!+$@\/EVG!XEJRF7M]DG%>B^1*]!?"/T%>C%!W77#FFDYGS71F8!R9]R/LT^[J7;9Y]Q/O0!{$?080A"A,(.IW U#D2 < M"C^C:6@4Z!HC-O?.>%]V?T!<)]_<'#;-+;(C_ RWR-
8XF&^1-01TM44>([7L M%EE#Z*,MLLX[E@DS*JN^V-S([T#U5M+Y*P[%M8.91[C*68PH#$](P\F&6 MQ13R*/6BC"7(\V.C7))D)@G.?-[7D=R>NAIDO4VCI:,9+#
O/GCKQ%>D9@EZZ M@KE*:IDBMVP^BZ;P1ZDLNNJ9[L!KO&'2K^B.P?X#*Q>D?KJFM-SB=5\M=^4G MH5RQ8PQD)>4=4=^#./8C&$<\%CR)8DP\B\+3>M2UOO
7EZ'NB5N6HM8$4G-W MZ0X7R[O,+7W0GT7OP.E8N -]3;JFDO7-%&3F&S(C!%SMEO2(+KN5,0+B:)A M]K;9#6$\7W4E\I_Z +TJB[#*(A^GG@]@\!2'*/.E5Q!G"20933C#1*2^5@;M
M.0)S'VQW)/<'08JHGCDXB\FXXKN0U%##S8345N-I2492Q^2KK9,*'_;*>7; M1=1P2IQ>X2:?LUN>WW)2[S?[KW&55U\?I-UEGS>_X3)7&=Q?Y'KGK[B'X4.8%A%F &
Y1!D21^&%&C@RM=PC.KXH>-?(E7-6A*1]SC\B[?7*D@ M,U6U*>X,ZQ=]HZFW2L^!D9D2*PX&T=4KT# !6BY4K]^>#Z 8<;,Y17SM]TC,K8$\9U'O2=@DF&BC]*>@\V)AI;_#%>@S
MR79 #?@ OS35@9KB->XS5?3E=YS HD'X1?):[$YE^YB,,),63#5N=/ -[LSO M79=[79TY]NL_;ZZ_K3(18!*$J=P@H!2B&$4PY1F""">%"!$6<6ADEI9E?V;3 MUM-:(J7%
[,1]1A9_V,DR#%]H!>4$]DIN_R3G4RC*2C]4^W5WP35$:9DJ42 M3+PYL.A'Y-EDVJML#D !QS(ET MA?TLH'+C&44PR[P41BCE,6;)8%ZFWY>B^+,"\8!#X"V3,@??-4#;=RVSP*%
MF3D^1*&C#UH&P(#U\#H5\5U#!!=A5Q=H $)[!9_:-X\P3PX/&Z /4W^>?V M8.;/D=?_8K/BWNMWDY*^ MDTO^N%5Y-JH81_M[F.VVTI69KCP;-F1<,

M15C%$!Y:TI;U4$<@TS/WCH$PL|$[XE>@AZ-C8%>JO6=BACJITQ*[+I*K&J[:5%XL'7M9/*HVUOMXT}JEI 2*)K#R:^BB}(\{CC3 6D,Q^2 M*$RAB&*:B3B3_X_,"BZ>)S:S >A)7X$'1;RIX<-[\FTOB+85:V1<57$$0#VK MX H6,W.P1^1FA\B[/2*2MLO2B=,2,JN8.$)JX4*)TT(?UT?4>,,=.TS_FF.3K MO,[E:A5YQ$-9RB$.$B07^ #!+/0|&),.8!*(T$M3DP[Q@[&-]-BVW_MZ3\], M6X<@Z"FGI6AFNOA10QYCI3O!N2,=&XZ]$j=$,FY!UZQ#+@0[QMEWSSZ)K M:/ZLC?FM2@#;%\;WHYCC2'B0^!F'**1"Q6H0I&$0)KZ?$M^L];(9^;D#+ATS MRDE4?+2MP|0/ XX,XS%/ K&&K4V8#S3 >HH,7^+UA!\S2H, .'5X-SMDH#G'DB1C#U6*P:4TK[MPU7W T:H-T*Y7-^-+G7K$)W9ZNSH-JD0 M.MNU%9#E[O72_ -MSOUIO^FSZ\RA- C,IO]Y+PEE)'9LJ6WA<\;L>W%H8CEN MUA>!'T'}1%MPWO@+N;1=,#@P7GQOXLX?+,59/3'V=>G?V.%Y/K*ETK;]5.RGG]$]L4A'-#,QM MB9FZR3(,?.E*;+2;&A/+:K-T[*"\40R#=_:.=0 MG*6,M#TFCOP#"P86=03L 7J^XE\PTF6U>.0^\,FEM^^7+H+UU7%ZVI?"WNG M0W$:L)!F%*8LC2'"7@)QE+HQXBD&0F],##:,QE1G]DH[3HAJ3C$GAO0LC.H MU6Y=LMX,:SU[-1N"9J;**7C6E7N,0'!/]HO4[S&"Y5P)'[-!+/89*EVX MV<)*!;RE2_UQJ#C^^FW9J88;8;S@"KXPNMMN3%NV7Y&=HW=Q\5B&^X_+"4V MVWN,"F6W^S@!Y'+[CU&1#G8@XT!>G)78WK_]4%5;SE9)YB.>8!\&?H0@"F,? MDB#T((VC$##/N!X1K]3>?H#.S&G8Y=56;4U>U%XSSAC)XU?YJGVYX@)?>DNP M!3.M/$PJ;&E>@9;J++#F$I\1RGS9X0.6E,@5/B3J2"CR3[%N5=S]8*#%BKJ?8G]8S/WDYW8KV-\W+)^%*U8V\7<&K+-[5IF!Y!L4V#MJ##38/^2XI2=Z^W];>B MS\I75B2H%20E,%(93,AI!J -<*Z*^P5RSQ!3GWE&M8Q,'T>HS^1QHMWUV%VE M\@2PTXW6.T'$-%A_G-(+]H1GS.H]EFZNS-X!I9?-[CT6>3+#]\0KECMZR)_? MYQLL)?K(Y3;NBZKU]EG\O6KOWEQ3NKW?KM5&^RU_*#G-VX(&W9]7Y1U_L\N M6.Q1G&#B0^]Q#**(,)@E-%;_) *3A%,46F0|SLJT1:S!(B7R(Z^]OZE>CSU' M@ U8W"*S 0 @RE M:%X?RK% FQ27<,_=9\4)KS|&HQ:7L&MW>G%*U&[Y>%8#M.VS^%F\S=«!>\9X113-S?%00^:AQYX -5;^^8="= M6;4$PI&A-*6^J.FSA.;Y;,,=QCP/Y7W^_1==0V670.(3,*-G&2/R1+!R] M<19+SS$2:YBW8,.BN2D\C.R_*1ZY!!K296S-]+BWO%*_4W9XR_J"_1KOE') MOBN?^DC:0@H'$IGC?@89BFB,.8DH"GE-"*IKFVT8V'N-+^6"A"*#4!,/@#M M& %-9B1XM2EJL);|:.|N*;_=@'JTX9V?BPO.KB[CU+5Z!A"G1<@9XMT/!U M!3K.9H=4WS#/#ZV=I9X-8B.[?1DZ(X;<2F:W!">P8)--G MKX[0,#.Q)D X3=?4D-;JS'5LW.5.6S6$&YZSZCQN>16SV-Q)];A7UN%6#G'] M/:]6L?2R4!2$,(P]#A$+"$SC+(*A+SBA2/X5&=U_.D5D9OU5)*&B"131*Z#(M@M\58<-4H, Z06W+A7;3%$;B6_>)#;_^C@BD]KU=(+'N5<43(HRN+8\]> MD"G=UD"KVEOO*\)3DG"/JKAU+!4RQ9 P(K6212"M8]88#/?)CC0 8K]49@D6V\RS\R.>^Q %!'A!UV!M[,$UP#(5' M!4\SP;(T[N!YMS%)%;\0G)Z8-C3OV@B]*USTS-1EDIH9J7;*W!=MR4_FJZ3 M;0V8L0AX0%(B&Q%P9ZMSO<,F:1A6&FY#V/@'^GW]35!2!=ZTK5 M.]HPS=*ICJ="(*^++RVO?@4CV"'[X!+H-CLJD]=@1VO8,@LV'-[!5I^@63X M16;$(*#_(C-C&?5?>(,.C@:< SEV?N".V'*'#,X!.CB)<#^ZG?M!6W)<;AIQSK5.; M"T&ZH*SY&8@N1D:/$:],7K/%\F386,=$,C3_M'ALW0WN.\;(A?5]7VOKT5V7#TFM=XY6=>P+&7PH#P M5&Z@$8)9G')($.4T9BGE3/N\=1X6YP[W?[UN[U](MZ+&^B[?3/,Q[9"_/,IF M]D:G5'=HJ\XKH#COSDA&O%^U%@R_A'F3=]M?_GXVH/A7W8>C1SZ>2$><>YG M(KR8HS\O<$.G?V9*=AN ?^?L3NTR>"7W(VTSQ+8B|A|2F"4^AG$],HA\X8D M#CR(0A(@Q&@F8|/FZ^<(S;S6=63!@*YAKX))I/3\71?RFZU"5J(;.[!32),.)4:>?B M$-VEN!ROP4U1Y0T(/1>]84"+DNMC[RF9'6GT63*+:O24L,\U>O)Y.XW^L)%J MPJOZW7?E&/!/Q:9H8WV;NU68>;XO%V HTBR4*[$G8(IP!G$MU3!KPE;;;*8QCI:,,CRB=T1_4*#.FZ4UL-X1QI[ABE19570^3G M^JOSBF4F"_W&V7;-/XN^E^:^U$R490$7L5R20R1=Z%3EF 4D@2P2?BR')(CB MT$2%1VC-K,)OFD/TR$?Y'AJO.*I8L4\/WGIQ!4D@3T.0ZK.S.0>&6(0#B'F M/DF2D.%,!";Z;4\)9H5_5KKAL'*#W(VT5Q+8B|A|2F"4^AG$],HA\X8D M[J(3ITC_D1D#1+@DQ-H:C%ATJOI8+,(F$H-CWY 8@3B*($A)#I*-$NA"< M\CA*B!#)11TZ|K3F|AZ.FE-TF=M6$;DQS/3,AR,DS*R%-0B7]^@X%F^N%AT# M2B_;H>-8Y,D&'2=>,3^\'E9_^2RNJ30=)5>%9/*:?\P?.9,[$?FMR*4#V=21 MJ59!QDCBQP325&[VI0\1PM3'"0PY"H*$I5+-?=US:6/J,RO^D!_E0F/%41O1 M@B5O:SKE.Y8 ;GC2/^$T!WO_LP}I=[#K%"CLUIK0$:.8&I_2"VQ<|%ON'L=_('VKE M '!AM+C;]%JOGWC=IVF^W?+;XBNOZW43LZ_\58CBC*0,04$0AH@'&:(I9 E MV&=R4QC[S+>HQ6C+CY8N75QF<4#1M':Z) MNM8,.=U]|*;)5VT:!/[U:I@R#B3#ZB+1GF67A=LO@\Q997=+-A8N_7X96,>U MX2\M!Q*"GW?C7)0&$R\W>VF7G&/A4F8Y "2<^C$GD>]3W MB-R=&MV1GB X?TR+DIZ/0,E4M S Q21WG07_;@ MJE]+WN&=:DU!7=VOGB*WI%UK3>&/[EWKOF=YC8s)1![20"QB),T%E&&,J/D$CVR,YN"CHDK M<-=RT<1N\0$CAN=;>F!]'G4YA\CPU*M'YYMKB>(5V3#7O35C^6(H[F>"EM%"_%>HXO6FSO T2]?41 MG8Y?S8.3J?W0@\BB5]@<!5@87%6;!S/+R>0^3/LS"X2&$,P=CE ?[#E$QO-!3Q(MXC=_^\)THC?X(;_Q^N^;O*Z:A),5S5B*D(B@'U-/=> CJMUW!D./"C_!'HT) ML4LG.J(UMPT=I-5TM$%#0,NM,3P1'--T^-R X69F>P+Q0P1D%^6]E[1)!(7 MI!:=E=%Y:M$QI1=*+3HK\OG4HO.OV#?6;*_^UZO8CR(B@E#NHN0_2+ ,IBJR MDO(P$6$8X2 5ILTTN[%G5EUUD;X"#_BIR8%3&P/:T@4/*E3?GO.M=Y7IF"JM MVMZ^]P/#Z_=#P'#0U8PE,9R5>FYCHS;UIG/>'?8+K,?>2%6F<|$.M46_DC MMKGTM+A7M3'>-'4SIE2%C8^[KJP^EBMEQC,8X32#"#$!4_CT&=1$'],O$8 MI>*.4IM9!5O:JBH,&%"_H)7M.'1ZJN<,$#-EO 0+BUQ[#1F=9=N/T5HXWUY# M[..,>YV7|%3|FE(5_ZR^<,KS1[40?>*]E4((N9Q&80;]E$DO682QU'0_A2{2 M29)$@4^Y49_J,6(S* IMB1D'Y8YP==66RL?K=?%G<=ZD1MAF5< M1WA'\F*4U*(60D?HYP9"ZQWS\,3K;:4.]JHWQ3W)V\NWR@(UE3@Y>X.K;|>; MYC]H]_6(U^H@=>5)X^"G? @8Y%CY$?LJE)^X350:+TRB4GZ)(-U!IP\#,=F1 M'U!)N77;U0|\SX.J;(';!!O-LP|KN*>CF'.#:&9:>F[@)TK,$15L0*N-]T/ M Z9F1E(_QCDWHG;1SCF0-8I[7@++2 34:MC%8J&7"#V.BEXTCKEI5X7?/Q9X M\QI3?)W73Q+ULCOU\X21@')/U2Q$$"4I@IFZF(58FL2,>1QCK=#H.)F9S;0B M!)KJIH\[]?A.VF0FQM%[[C>ENH (-\^6S<%- -5+E\39,FK:MOX.*J:GX'= M&4%UVDZ[PQ3@6@8IU$\1WG#B[B>^YAI5^WP"C!%'CPH^O+G&H.V?0%X]<1QJ=LH>-DI MG3:_/^1$F5ES\V)[YK7VKD C$VB$ DJJ]RI0^D> <]GD*+"XV_4O57%SD:S!; M,48GT^&H/N-EO/R0)1N=P&M;Q=$-<7-GX]_?E0'K;T#\U6.QZOKKWR3%V5S M;-OVMIAF68IX"GV:"H@HCV JG028',1Y@#WA^7CUR$M2Z#@+FE1-3,B0MLGN MR0]*4^C!- MI(,6!,@7)$@C*;JN;S8#W%9)D(HLN#X$T-U4B"[1W#:%9H%S-'1C+0P+# MBIT&R7$,]@N2ON,P2 UAVR[XF:&[69T.I1U97W9$66QL-11NN;*:OVAW9? JZ_M\::E9\F_R=4S?^3M ?'YEBC7&];\ML;#!BG795ZITJI-(*Q=,3_Q^K-HNFWY M*6-)AJ&'I*U%@;2P&8GE"I>*+,GB%(7"]*7G CS/;*,!9D2T;T94[[D#F/VQ MK>KF)F&7H14,)F@M,.EZ1\X_V%29K1P-\^" >]#EM?2]HD:[2JG3O($L!U>& M.X% *U&WW6EO'DOOQTECJ1>8 T<'Z$MPO.@Y_O3\/PX?TG2EM>=B\W=;=?& M=L62-/ 8SV <<75@E B814&JOB,"Q<3WD0A7=5'CM=Y:,1S=Z+3-$FP%T<0A7X"$0\RB*.(0P\'U..Q:O=EE'!E+;I=QVNPRRN^ .] M5<56,C/S?[C4VFT?Z^?<,^Q?O1MZ\; [5SX4ZU:_ZZ!DSFZ$:TM]LJLTU^Z.Z M*Z {OS6E(>4+?*PY_NBL>?Y9O=ZI&V5[#QL9<1-$TA.KU3>=1,[5C M/%^.]!0()[_.*XG7K.;R??ZM6"9?_\U,.!0Y536UU_TT$B4/>T4< M'W415=02K%=&O8?-5\'K]?K==TZWZM;K&USSNT+%A\R6PK$Q9M8W21KL:(,] MQF&G=.,,>KGXYP5DO@Z,"+K8,ZX@T7OZWGK6^WE848'4R6X%7;0MDPZ"G@YG0VWTNBZ^9?1GP M!EKFVLR,"@S94\4*W^;KU@B]$X+3)NK8YG"\VNR;.6#;Z84]1Q"ZN]5W*4- + M7_US!.")^X&N1G;73:^K(I^F82:P("*/$1'5!%-:2H8Q]$.?B\ C&6=&=0 / MDYK9 I[KJ&=5=W\$,#V#Y@8&,T-ET5?/>3W^:;EG[*WW$M7XIP76Z:_GI&?F M-:5MT9ZFDNK?-R7':U56]W:,%*A\QP:X:XX-U\VQ(7ZVBC_@T5NR;]#7LR)S M FJXR?K\YL,5&"(Z,'F!;J+YX*O<#I32U*B[V]>/,%K1*$H2O@5]PO*.PVP M#K=EE\+D[FZR&? FE[RM;@7/B#K/=..9QF+8#[OAO/RE+++8/[S?!HEF:89B1 M(6:V.AUEH$B#AK9*:2C]35%KWC6>@F Z$,.-(>C,3,2:%9@FC):A6/&QETL M&],AW# 8H_.XI4_1=)]X)JF*JU7"6&I\)F 7B"PW"T(!C'-! P10H(G(F58 MZ^;5Z>'G]@<,.L:##FZ4^HA$6, L%2%$*59=[X(0LB24KKHKG @ S%;23W5@=IP1SI)AGR2RJHE/"/E?6R>?= MIG$K%W>7!AN2C,9QG$+])3%$GO0F4A8+N;.,?"^BG$>1,Y);IT/42)TM<^Y MT23]TH-$W<&N>7>I[!Y)]6'E7LDS'"8P#!618H2%BK+&$"?I")A<1KB +E(M;I>&U=Q*?CX!;- YE/C>0S@"CGM5T#8Z9!=7("%\R@_N4T#.G8!^0_"%RJ$^!`MH)L$??)=RP+ANR.1,Q=17S\=GYJ'2^/UPC837$O"5"B."RlOA3JK@JXS\[OLF7@EX+_]C\ M8H3M\VS5WF"5$L.$B!.8- J=>6<0AX7X$@R"6T0DY4BK4_S@6O"Y;6^&,G|L.KLT M!0PQK0=QE@1Y$2)RIT5YFD)$I%[0;SMS#:$Z2FZ#?MV(M M7_E2;WZK=DEJQAZ'YG S6Z;V>'S AE2H>EMNP&_5(/51WP/1!6G;(YD!'S-K MHP?-#!Z*H>16'HLNC<4\&$.AAQZ-Z:ON$V@Z9_9ZPYJG;HJJ+G=I/(,-3Z72 M&% 41@@E! :A.J45*(&9R CT@I@@P9&7 MR=!=OHC19.AY0B\!L9FQ.I5W\JIE\J]=P[S3892VS]Z7YQ.SWXU=+9>I8@/E M MDL1FS],!DO-F":9,58C6]>&OW78E/S-[A<%]S#((AB0:(P]5+MTMSGB,QL$ANRH*$++>L+ZQ:7/(C- NTUS):V.? M3HEJ45#[K,SZ%,1=R&Y7,ML. Z"V5/"C53&/OOJ8J6PIY@?UKZ>?/;,.9Q MM+IZFU=T751;.<5-2&&5)DE&.M1U;ABM]_PYG.;>?8;KVIU];E04)6&F=Q\$IA% M. (0HX!Y,18G9DOQ?KL!^\M.?]WP"KXE*+S.&F'?R1YN6E MDH9;6:A9=.(C9E^[|'+K'E9#A+*:;E M_P-<4_F25_]X7W+^07KK4M?KYKY#"--@R"#B1]+MUF$,2244QS.[VHHD%)*F- $$M45".76)XH6F;>>&98S(67W'.75-1@@ E">A% M^9'QJ8S!_M)+C#;__SW6%E/X9[VG,DK8;#6IRGKU*_Z>WV_O^PB=ER:13Q!, M4"C4114?9MP/8)0D$1,ASH* (ZUC]HY'G#M*VM/2L\;8XU;S(F$,(I M&8+Q%=/BL&+VNG7_L@K1O4I4^6>CJ9^%5#8Y33E9 M\[9,R\]+XR3TJ0>C0%'(5'VBYA8OSXAZ-(M91E&_2;\U*$XT2M5B?WUK4;-H MP /@WY6I,G1S)K#3\U$<0&%7X6@H?B' GC*8J.9D7O%(2T17%9#&B2U;$4E+ M*,*27!OV>G[C429ER5G35GS9M'lO*TK28/EF[N58'$P%1O!+$TQ1D((,$> M@B).> (8Q3>/,J/GE.+F95\L=<5 IZE< _13]3|#56LP?^17X'Y&GBI"'Q\9+ M;MM7)H;!M@E$!.R .YS,K, >HJ\M1 WI*S @[LX.Z GIR Y,$%O4#N@)_MP. M:+YEGCS:QG#4@*V#OG.ZW^9"4N12)HM;*V:CSJSZ7;1UQ\U@!PSV_-A<:S$$ M;USI\Y7-S!280C9#U[%+0$8YIX:D%PDL]M8-@F(%J.8*=._$^W^0U_R@74_;< M4?G$ZU7&A9?$L8 \] *(TE2U0 A558B(93CV8NE0F+@3X^1FMBD##QDW)-M* M;:W7X(>&;L,$Q!GJGA DD1I'*$0<6_UT,38O]:XK)?& M[SEI;11?\[M\LU%W9$A;K=\!;%$D1.CQ#$9QXD-$Y$\X)0QZ* M\P0).4-K! M]FZC>:SL&K2>L+YE;A;\6?#2\TI=(6"V)+5T84/X>(/:5*]SYYWJ">G(.YT@ MMJAWJB?X<^]4\RWK?AO%=E-7-_A)I;2T;;_KE>^%V(M3N7Y0+X$H3.1R0H($ MIB)"E,89Q:$PI*IQ@LS,RTA/5&X\&ZK&{3!,(.;9:I87L.84RIJ1_*=*2= M-J@8$LG]=GE%]IO2IZ_YU5{QYB6 M"%?\+6__NPJ2+!9,$"A0X+65QH@7S[WC'9=QAS,'M\PU3 M220=G#W'H&/Q"O2<@5<|;W]M)F# ?/_6F"VU"!M;N08LDFQ*?^'@LB4\Q_%F MVX',RX9V#DG;8OP_.2[E'O>M2NSB'J8AP@B21+47%E$<5U7H2%2SR0X0X(.%> M>^$Q(C.;IXYLWZ9>$0:2,GBKG4?-<^*^](RLZZE>]\RPH,TE%MK0;(2L>=2#^>8L@)%R%BGO0: M(MV,J-VH,RN:ZLJ]+)/ZROTJ#=*V:Q?SNZ*M>?_K$(5QW;*6S7A=MA'+*%7] M2(P+TJ3V8RV6(G7$_C-]ZOA#\YO>]W.)1W[W37XK_YVO[WE=22=)+I UIRIS MX/!M3]==VEU:48$BX,8#QN2,+ M]SX#1<:@RFDGQKCULI3 S#!-,F]6FO207;M2I-T8RY4>/63ZH-3HLX_,O[&? MBLV7[9K['HG\Z[*\+>\W-7N_QG>ZW^&S \S\K99TH2(,%&7H'UPANN7E?;Y1 M*=3ZW_GS0$QK@1,,S/1"3WSPN^+"42+3D)16ZG1^U,44,%*PH.)5*^Y*.JN/M0M_LZK=]_K$DL:$8A453P2K[#H%DH:lOH]BK1@TBZ3/.5MZ.?JKIN M>GU?&_AA)]]?P UK?'3Y_^M"">=5->FKN_A!>]FE;EAY(V=1D/+&;L8"'-? M[*(,3'VQ42%M7;'3@RJIB8V*]#:I^XX1FCN+0I$&Y8ZV2JA4Q/4+4=1&M=0E[*;Z6@K]IXL MZ.A:'-J.RJ]_2.L*:[M#V7-XN#EYU9%MY*1U]/7%3E9UA!B>I&H];[!N-YLW MU:URO7ZZP3G]K7I3?.7KIJM[ER]D']G?9,R9[=%A(*#C"2BFP&/U4Q,GP!O5 M4:WEKD^1TG2TVX@_]&*OW+6^6 MC'5-.5%I?''W1<5TNZN'&:=4"'4+,U69HR3*(*$\A+XG$A%H2\2K8QMIUS- MG22\CB\;.<+O'!;%$U<'9ET3V;XP #*M)^1D5O2B-8MC;6;4>G)/YQI&[9EP M>-W$)2:NKJ XX6G9:RDN83RZJN)T<#OK^;;KSK0[^]I754@2/PT]D<+(%Q%$ MB/__W+UK<^,ZDC;X5Q"QL;O5$<8L+R)SGYRN:K.5&R=LJ/*IR3?WJX/4WSBO"'!+$D/ MH5'-PWF!W7>XHT+KI*;W,KK#?(H)S2=2U./:V&K(HQ>Z81J-B?ETL?RVF#_H<$AMWJN))'F$,IS"(D(8HDDAA4!*2 MPB0G@J*,Y!G=X68/G:'/-0U%H$O5>=9:.8:+W5IUH;2.)YFUH(:*,"YQCSBA M+B*/4!CW'O&TB ?7@#V/N]]]=7@T\.=6MI6RZ>Y4T3YT9?B4Z8/NG;+4U8 MK$P0M4L$^7&ASR|1%\OKIEFG10T:+=XKE=?:=7S$T5:P7H&ZZUC_@YZKV9I6 MXE]K90 _OZC_T;?N301+GN8,.T9@+@6%B,I<;Z8R-B,&2%!E$)>89RW%)"Q+L)+]'D3$/G^L> M@IHUN.6M/25UK7GD^WR P^9 <+I9DA^'B 6^$ LE^QCGR'ULO)^C8PNPG$?+ M;<;SLV,W,U)5M])4[_^FG$:3##%!92]E2"7,I.008<@@+6@$\ZSD64QVP>56 M\7N]5(:^HMD"0]C1^S@.D9TYN5AP-UOA(I.SF>B5*9 -.$YC M5 7O%7-?>_L?]E/-[^*OID*JVMG=+1=S]2.K0WCO%K,I>ZW_=[O"B42I;40<ME(BB)*B@+2,!<0H(4CM'Z) (.&T=7!D86*%_"*9(SU[!-5\\Z_ 0[5IL?OFU MJM,J=UN&05LZT-'!<(;=SA(,";,CR;,XJPO3+B]7H.8#_-G\=0!/PQ>,0-;% MF?RHAL<7G'V;Y#V.]U7SWHWV,H^PN^5TL? PIEB]3)FZ4=W.S%'RZFL@R%W"' M!2P2RB"2O(!E%'-8%"F59<0+D3F=X?NQ,?1QY%X?NV?-1*AJ+@!3;(/S##B M?F!M -[]=R1H>2C?#=3R\9A];PO5HV (W!MN,;ICZ7(5? $VX:W(?)L:^0K\ MJ"/7ZY>,YGE6NR(K8S:[3IZIQ$BR(HEQC&!D;!PSB'B)&:.$29273E&% M)RF-O%5R*$UY'B3+([H0HE^V60I4N=):HE GLR?IC'LR>T[<@Y/9LR_XJ>MG MLM2=FZH[L32Y#9^FL!7;+4Q2&@O,LQ(F))]J=X1+I:P1@@3%B&#$8R2RR8M8 MTH6MNIZ@Y/+%=NG9KX,U'?!A.@=\,9N1906>A?(G:!..#L0IM.RT-@ ";CK, M$@2*(C DKT!#-)SFGI$]D-Z>HC*JUIX1=5]GSSWN'EG09 NX) 1W7AEX773+ M .Z*TJ\^%TCAIBYM DVX5-XC;'M=_G?'&>W* PCSW8O^8W!V[QKP6>VW5Z^F M@A QQ4@_D15I6V 5(HWB) (UA3G3AD#0AD'+USY)RS).8)SG'MIT#^@@-K!@U M:=*AK:OHD[.=L|S ZE>BD! X+D*>TCOU$K 1S:N?0._ H_44L!&0VU?ZGG/ M_1U[%P]$[?R^V+^(BJUH*GU32Z63[J3I2F3\ <=\NJJN-5W%Q+T.TMP>__(H MS7D>$2A*@B#2'<8PDS$L)"(''T0SEJ5,W^LO8&3RJY^F)+%_-.@6;D"V7\DV?]9M|%6 M"LH%78%I5:V-X=-']Y,WB_UPE]{LBI3#*!8*SK@L(:8HA46: (Q$+1)*'VQU. MA +4ZV1B!TU%VB 8)Y^^QY*9$>K?4Q6G\(LIX1V*,H20'C/@0.$^Y6C>6, M4'V56$Z].EX5EC/,[U1@.?>L^ZG*#[5$-*>KGQ8ZG7CU0_QK/=6%7NJJ4\ZU M5^Q''#P*9,.(X(H3G3L%EC4OFSIF!H:4%YB5C*<9MNQ#?6+\@>W #D7[U?88$ CGD@J6JB^M5$"@.(*EB#$D M)(*F:,,B\C>^;H0"B^_*R 8YUVM"P5T,V<[Q#R\JV,BVCM6%XKJYU/M$/V/ M,,Y4CR]?M2QMT9SH7I8[GI/?8]YAL1WZ^;.^3;_8AM]WW9-GY11%N42YS#&.M.N0V*@N(TZ*$#$NNY*6%LB9.@?+VM ? WLXZDG;2T72/H'1"U.\H;""=75\L+ M(O> >W=A0X7A.U >-SC?'9*#D'V/(3QS!9=-51AS3&XNSJLZ7'T2L:R(4L)A M3I3_@3 M(46\A 7')64Q2I/"*63_- *F!S<6&,*@TY:LZ&*4R)V4Z5*7-IVN5_MN=/ V9?),"X684M$C|&]RJ38)"P$R|L[*%RL<[36CO]DBA#PK0E^8U,Y[H54=URZ}\FK"()456,!C32.TNF/H) M4\DA2>) (H%*F41Q/YN)!]_>S4W('ZE:?>5E_YET>K+_VE@D@?K%'W6(*--9 MZ1HO\Y[28Q>#JERK.LIY#@NA.^_E*(8X0X7;P-*BS,.LRG#:@GIO;SZ'1?;>M(S+W- X'Q4@%/M0H_VU@F.VL,&C4O,RN)M4THKL"#4=@ U^'IZNV&9UB)YPU M]L @D'EVH3RJO?: 9-^ ^PQQ89#_K?PRG9.YFY+9W:*;&N^PW9M$:9)REC)8 MRC)2WEJ,(8YD 0LJ299C)N+(;;=G0W3H@(]-8?%"@=T3H.7">\MGA:>=>0F- MDIM="0"0?^J A<2ALPCZ2+Y-0H$%""=S"VS>]3,8^MA^N6:K]7(Z?S#[QYE> MXYL(C*DX7ORE+$DLL0=2F]$"Z<6^L,[0)Y"P6,F/*]2DS%P/BP\0(]W.;EL"- M\KD?7)OQ>D%K9TN&!LS]KFZ+59W.;0=Q!6X; EJ.!RKY<@DD@Z^/%PJC6Z!*0 M]JW316-YNC=\N\)-6" ()3T4&,.9<;,-2 G&2"Q@GC&2,QAG)$K>.)T\G\.(I29(L9Y"F,H4HYP@203AD%&5)5A1IFCL5 M[[H<+2^73P?K[J D?NF?7?O/'L?(TJF{6')'-T[3:^)HFZ:'H-,4L2Y)2ZI' M\/D,%($Z; (9VWXX3>0==+D^Z:/U/^YZT+-1TI?>%DUAP4G):P%00 5F:0T MYA"7L60I2J.T:N(YB;|FF9FNX$ M[1&-^N=L;9I/WND,?MT0:K5:3NEZ58?@+L!N2W;0IF0/>8*^+WFP$/-P".? MD.\+='@B?O"$GZ9=,[9^6AN_Y4@KDVO^/^MJ0UK$W)!628RSF-(<*8V/EBM MGA25 DI,69K(-')LF.U&?F"-[3 #>%.CI&FP!)XU/X!L&)D[RM,)O89\!\.V\?GY12<%F6$9 ANNKD#G'DOCWKX:L'359>B$ MJEWER<6XQ:LN@^]@>M6%P_E9NTTKJF9GVQC629IR',,2PSQCVIJA$F*>%C"+ MDB++49F+S,DE.T%G\+BCQ=[0F @IMMZ31] M:TB"#PW1@/7NSH@5R"BJIAFN_W59>TF.%.N!L4EE"3) M(,]2%'(BT0) E*5:*3M4BS02#8QHD?$R*]EC9U3;T@,K_2>3 M1K_AY_J8)#BN? M5_LH;$KJJ7<..JUVP1MC61@R!FZN]H/H4=0O9QE1H/JY MS0FXX^9A_5P%3^8);$F/+)5<07DT,(XC^!K;9;3%Z)+)BE_V&1)73_IHN"3 M2,0ECHH49GDJ==]CA$2@ A892HF(X3<;DA.$1KZOJ0A!HBAID\G%LH3T_L! MTQG/W"$0YMIGZ"1LM@;C9YWWS$Y?-"+X??%_.?X]%SL,\R(GDA.,0ISR&*BAB2]$QAP?(2)5+&.4%N MV8\]<%T42Q11FB$2Z M'2"&95)$L$!$)"DM6(:E9Q4"[X_[S8H1N*AS.'%=3]ZZI0E^VNJIB^">E0]\ M 0A0L, >"/\"!CW6ZGP=@S+:SIPX<^!D6#9\V!]"[=M'L1Y M,<-971:A8T+?@7P3]E[$?"V^* (ENFB/!_YZN'F_6U4HQL?S\]XE'OM:)?@ M.OI=L$C-CQ3Z=I5 % D)*:,."QEE*&"URGA9.';\>/ Q>]J4KB(S|Q0]=S ++ M&B0*1+97X9=QWY6,V M{(P +\LR7';ZU("E!41QD4!:YB5,19'*DNJNW85;+M? 7ZO7X4+#TPAXVJV> M V/DMGXVS !MM4'+#OA+\0-:AJ[AB70\A2V$L8%B 3+)G7G8.1D4F^(#G-) M_8>ZM%W*]KYC>Y%9M? &+7^=!D_"W70NVJ=L9%U@29;DR6NH@!R8A+KE:95,< M8M9]JSK5/"OSX]:RU>2+"5IE.(HB.8;\N5 M4/-H>7 M?(^LM1Z;5\!B]2B6;.]J1^&TTZA9'K1-%ZEQ!O2X_[]:=!1^:D- &<+*LV>0-),S4/CXZ;0!5G M6P;(-$AHD-=)!ZD)NT)DF!8G;8?A/XZM6?>O;B^86V!KN>F\,92/"1#9/P1 M\1OVPA++A%,6XY#9-%;V(F&0QCR":9P7952RO(B<0LL0XP{1USY+(AR MM\#6?H)#^RM=\D#3!QL&P)\U"\XM-(S@'9VF0!],90@N^,?7 M/RK!O\Z_FL,9^BIL4V=UDO&8E+&((2UB7=*=IK L=-OE,B(D$D7)&'8,2[,D M/7 \VC9V4W.@; O8\-

?@0(]W]5T]H63O@]&QPM:?1_R'@N-?5^<79QM_M_DF7QQ2\]51QIZQ_M4TT_2Y6?\S)DW8]_Y?@OY'I_-NBJIH<:1QG+&8I@VF!
M$42,I6J#6*:0HB3&94E17CC=TH1@:NB#GT[*$:]Y5/;*, F>-9>==`7=VV(% M=(]-\$%G@_TM=/ZZ_\S9;53'G@_'^^':.5#3L@88_8!CL),#KIADK\)N9BF]F
M*MXB(_YB$,/GR_NS]%;9]!>#V)-K?_G8'M$]O-Z%D1F*DI=CI[V 2OG!AK; M-&[H \7 AY>_=4Z6',)5SL+1;[N"(^%HE'I &")>Q592OY"5LZ,/%[5B*^A. MX(KU2^X'9]\Z/4;^$-8&
[ZO7=0*IT/],#;_]WI9\/]?C:RX>5*X\'77W !9IV-_&-_"Z?D3H&W0-8O MS=K?5_0UONMD[8:EMARKZTB2XMNS,W&E=ZK1.8,T= MXZ&'3K+ *98Y1!!A?3>\H FD&4]@.0T+1"2-
,)O5+;F@IGV**=PO%R*W[2: MDXL/]"WGU>ZT8O1I>@>5;/2IQD*^OTHV^SB^HT(V&l;^[>K8[(,Z1!F; QJ^ M:W>U6D[9JHDM;&N7)I)GO(B5:>8$HJR((,Z2
I;"9PDK9)E'3MF"1ZD,O. 9 MTFPN/* 9:OJB?"!7^W@,(%M#=Z'8KA9K3^+P9Z2]$@6S'<=HC&P$>L0\U.:^ MAWT;'?U\%+-9VY03HPAA46901IQ"Q%)*C[O #*V)-
M$!B*OKU*=]#H5[(+9733.B?O/)H:'9/B@W&.\.-W,[HF"B'O8R./6WNGTA MTZ6)D?_XVM0#UZ<;'TDU;7J++)GD9I7$.DU+W^L.20X+3"$:IX'DA$4>8NZQS M9^@-
K&@=DL#0[&H=>@XSNZ4O(!)NZN@,@O,;:"E:H-7P'+51UT5+T?=72-O7 M?-=*[1XOGQ=+XTR;S)@;?:RU?+U9<#$A#!=YD3+(..$0Q2B'),*TGF6H21!
M2<8RM\6SE]XXJ^D."U=U(I?.Z&H8 9H3UT6V'T;,53<8.%[+\$6X>*S.5M)> ML%SWCS_R^FTE[.&":O>;^\V>B< RP8K=BNG7RZ7Z+HR%H:^;1YHRB28 ;&,. MKJMJ_61Z@U1-[?
6;V:*:SA_NE#\O_E #KQ8W9,;,MES7^-). B>UB>1BSG^H MW]5;\0G*6(Q8P6"2%YE.KLW5=AE)B!)4B!SSC$@K"_.>A!K8C&EVFU1=LF7X M"I"F!CZK>0;/FFFPKNH>:*SEVQ00-
#M=WG .U.FQ8+ MS>=E) 9_-)_71FC02.U:L<$\WG5DO\:?E;V-\OOA>7A[ZW,:3\SIUORIS:? M/7?PIX;5T6[XWXW$1^('WAUO'K%?BZJZ6151]K!YH#^U??-^DZSS4#P%PY M
=(<$PEM(3SOMPP C)M;H1D 0ZTG:VQ,4R FHNK)LN/$0.T5WAH?(,[0H# MF5M8EYOP?3%=EB.-%]#E)ML-)?CJ^[O[?=+KHS[USF_GZYF5F5=#M\;V*H9
M&O8AZGL2]9NHRX1QLT3W2V*4J+.8ZD[49B^]C/0+Z=3X/EQD;RBS/>&&BVD M_+@(W?CQ$T^X.PRWRD^93Q\>5Q_)_)]?UD;'M"?27/L7,4ZY+ ED*(T@RAF"
MA&,",2H)301*B,"]W%U+,"*M"$.-'70D#>[#_MU!POB9SV"!X0'I*_@%"OFPD#-8;HH?4R.T@S@M]V `"XAUWE^33M'I> M5&3VVW*Q?OZ^6.GL.+,/6 M^^RSJ6[4VR?
5VWC[^=0V^?;OQZ6 8;G;R'$<1Q0G$)67*M\PYI#E7:U^>13AF6.2XM$M\ M>>N)<=S3D5]0&%*"UYD-NQ/T%G-QWG4=%&U^O1:*E"0R/5T!Q";IL@@V?5SL% M%V[GH'U5;TH;AG7J
JA9?HL9L?>BWV1F_!SN\6?(R4L/CF2/0Q^.UFB^?W!X MNMN$\(//[!2C^F%>"*2O,=5G;QC-.92;2*"M@E!8$(J++/T9"N16)+D5;)B(2 M3M6$CM 8>/^PH6BJ)+MM&HXA8K=7N%!.-
^N_*<(>:0)M!XY1&'47T"/B MOO/?IZCW7GYE3H;0=>6C24D3CG"60<9E 1%*,DC5CAV**{JC4L9$*07:06V@,>' M'WZ_7A,#?
QIRCB'I>U!8[\P!?3>BUO*YK/U/B)"N,UV=_"QM]=\!#NRH3[V ME.]"MA1L\3#7):'4XMA4CJHF!8MXGB()4U*6NH ZA241' J!16GN_\!)[;*|K|CF:J?VVULG?
H45321KA6'ZV>=3]V_OZ/;_HTM"T<|%/,IXOEQLO5?VI+ ME":4TY1A# 4G3&\'2XBY3'#&4911RA!E5BU(G*@.K*Z*#V .@UM.[,^\|(($[M^\HX"!QN6GR !*BY -L-IN'#X^+<'BG[T[]!$/,
[W;-%+6G43/=@+QIF.- M=MCF+%%[W]9?=,;U!M=67IB,F5Q)%$6412G6A*E4G,,2PC2B M!(IX4K*X ML'\)8]@<=>VDG1'ZFFY9@^NB-[OU6I1")'!\-.&*>R5W[@PT6A,G,?:[
MZ9I'_^Y9>6$ZGZ[$M^F+X%^5X9P_3'7_*H2J^K'8C;[LEC]5(%)2>(\D1F'MB%&E*"7.88E2# N*$I%@D7.WW;<V8'5J&@"SC078,L&J/D ?VI.0,,*:W$& M.UCM]NOAP7+3T ;G;Y?
AY%Z_P4GL4&4<[(B.6\W]"8B#H@YN;U\8^+*YV#IZ M$:8#XTV3 ,%O2/5X/3?_T>V67\A,.6[5A!2Q1 E-82&TM1$E@U3M6R"ADA52 MR")*K>ZL0C,VL"G:W# _U#?,,;,L/8(H30.;-
#V++D^?]_J53=%[H%; NYFU M_5O[07']j:O|#K- LPD4N_4/G]!\5CP#+T::2M<49%F=?V5K40&[R>7]C>LC6 MXN\[Q_8O^AF$N*S"V9[5]^Y\M%+F1IN:9V.!/^>Z2YV2[HL@E?
BA,TUNY1[5 M[9E_%*Q%#M]E)Z7@DWKS/XYOZZ;)M5K?<3CM-3WX2(O2HB*5$:QI'>]FYE7&>12O%E?:Q*\<+]S'FTN*84;KBA+.R(V(?R$Z/ MP?&HEG[$*=A?
\8D[5X5X.N\FJHGlY?\;C&;LJFH%+_L^V)US1?/)@O'L?N= MI8 #&_.&#]#FXK?<&#W7+ F^UGV.=5!^PY!]Y0%[U/]M\V" N=E7#ZP&Z'G M#(17E0-[*J,50' 6O%L;P?UE/Y?
T1LNAML'&X/R85O_\^/I1S-GC$UG^TQ2. MEGF4)KIJ?4PPA2B3.DZ$E3!B49[A@A2EC%W\R7,$AX_HVI('FC[8D/N%R#B[#/9BAG(X3E+;E1OQ5;X?5?#^CT_$W"J<8W.4?JBG)7I
MP_RFZ65VKUm7IM/&MVD)5R:%R&0."OGI\$^90IP)!%&-#&[;RMQO_SG0C-E9JK>?!S?[=KK?5Y.8>07:66KY M!AW&C;/48?YV2GWGH_F##XAO(L
[$Y*CF>%B@]XWXP-3\3'!]\=|T*)ND9532 M0E(HTEPW\8R5Q4:$PB0G248B)+%NI+Q8D9F=Q=X9W$;B:L)K-I3QC.UASE/Y")V!U[5,T^*M:^0AY_Z,*LSUNI
MKQ"_S!9_5=>T4HL]6TV2(N.21 S*)$LA*CF'A*$4YFDA1(9E(K%5W48;8@.[M,]NL25V[2%^B&^IJF]#0]TT1/8:;G0J&0L--(R\ PC^?M$?"T-FEQTB]3:YI MC]
G,T_IWO%4##^N+IW2KP#A3OYH._]N)\" MK<<[35ME*#&2B!1&<28A$BR%.(2LB)A62($1*IJ^TQ(H/?0#*2"[>]%/8CE] M49M/O5U5*ZD)V.QT92-1J.?
T!>9U!5^"/TSG#YT'C&]IO=KTE)B@/"[R)!:P M1$5.%QB\!"=0IE(I-Y-Q+]Q:-0S*Y4AG@>(7>]3UP^NP;N6;5/\)%N:0]MV^ MSJ:$ZIRW]>O2/,SDV1F;-Y\2-
VMU<.:W91AT&*]KNVUX!J0"#=?_?W??^ALW MDN3Y_?Z*!!.[YP:45O>GH%?5#_UCPO M!,FY9(3BU]]3!@C.
O""&DVP@7ZH=@;E6\-9E=UU+X957]^G4P[8=C>Y:W),77G$G/,WKT=M*GCW M/"*3$8)7@G^5.I^ZU WB+PMQ(ZN\K.YU6G3KJVB);GI1)30*"-<;R8PK9PCIO1R4""
MF<8!/KHB=\!$[S[LV+!H4&4.E'F5l"2 V95 .P..5-L.!F"D<-E\K=FJDL'B M#4N.X3=;UA-+UFP/_UU79>DE63O;+@P"JBN(4YPFZ@\O]+PL37D@,U@%\3Z-
MJ0.1_+L4CZOVI/BI+.ZP6N.^:W\^],-9M; ^A)C9)O-,'(#;Q)<0W%!! *\3 M/BZD]\K@ Q3FK04^+N)>]>_(I;8*FZMSLNB;[.I*L4W+ ;W9>OO_OYA53ZK M+Q'WDR3(O!#G?JH, ?
@ASG1[:R*R0&14T)B!@IS&E*>.?.I4W7>T96W];// MS=)XF#4<2E/]G@ -@F-;W+!*">AI8(MBN%19N$OR%/^]"XYLJE#0 "X9#SV,\CRC,!"E^<#91-F.(3&H7H7] R[H^;,\%O*RA
MV=!",#.,09R-!##6L+-GTJZR=5>H/KT7?:;-8S4>4(>'&$;E=!5*.$QDWI#! MJ*![H8'QIRM# /T.^3K_)N_T]NRK?-"%CH:VAZWM%]^]S_8[?1SWU/9&&4 M8IYQ#Y,P3#"C>O:W#"3-
69K(+ (Y^>$\S'ATZLFB#5-HP-5%ZV3NK[;YF/Q M S=^=/":G\21XX!=]R MLMOOM.@=^,KBZAFL4OQ5ZL8C4ERJW1>]DS^KI9MW5+=3[W-%AIV'4R)3D= (
MQU0W=-8.>![HQBD/=E,%/Y8\DWL1E>LX)Z7E#+S+_]BQ[I_ZY9,LD) M^T.\)A/'9U__X<\>W>U$WO*R=?7*C9)Z&_Q=""Z!#K]LZ,5[-DTATH_Y8%\[MQ#R1=\^.
/6TC]99>'MB-BVKK[==P,;JP[O-=)A&5?8YSZB8])F@IUD/$(MJ,.<1D2*V(M XWLAQ"?^?@'YW]UF!W? %!;?.9FPI V#?(+7;P G(+$%S5 MET-(SUM^;@'*7G6ZS1IV9J@-7S]R[2
K]M0/LGK;V?614/V/9Q&6648Q85Z$ MF1^',&61B*@GU!^@&<8GZ,V1E].FCGKR9TUW.86?F3EQB K,@IP%"-A@&(KI MR$;U)7K_I)T;.I6V:UVT?
H3.T@W5!%+5FDZ5JU^3N&D^&1^'SI@4=3&\'A M!\)QL5P=S(Y0F?> -"[JWD'EQ.5VRMH]!V_I[WJ217%,E/)F M+%9JG#(?T]2C. FC(*9>)!(/L,'"$VLPFNRZ,VJ/7D^J)-I6V6$:--EP[3%
M1TV)%,3W95^"]+U<*0CK/M$C^^G/,.T_"JJ9YKN "J;U&Y04R!*QBTX1U*K7EKR\+\4WM]Y=E.GR5K=-# M>U+#*ZODK_>TS5>_PDJ[JMQ]U!PRM%TE"29YG!
=44-TB4)V9O)AB$1%*LRC+ M4R^'N3Y.D9PZ2$%_0_=KPNT7LWY\>%B!^X$98&?J%'&)"-0UTM. ^0!J7#?E- M^_TU"RX])*;B.O.3G"0XLI?$%
(!]GXGQG;;ARH;J"HQBD/=

,!TPRG#H=I/9SPC,F!&V:9&U"8V""U|O&8 M1P@Q4)7E1OZYA'.T[B- M6P'G:, ,P"D@+&*^IQ$Q#_XZ1<8N"GP^0[*0L+'${('ATVO,%B0V%F<8+3;_MR=(GJDSE]@AY^?
NR7LB4>YXZA& N(XJ)%_LX39,()[Z@:K^3^GY,06[./1(3 M6S1-<.=EY1>\F;YI X];,/,K:,\[J'(H]3',DD"M0O1\0C&,QSX@GE"
M9CSW0.'E\UF:.B3Q>'!/]^=M&]>.&;1FQKJAK>T3,#,)\^+]-%IQT4-\L<&X M;YV+))HEBN$/*?;-=6X9>JR?OF0",M.X]=V4'(XH6;1
$)&,$[W2&4<8N(K2!@&0XB1N(D3GA*PL63K%@*Y M.11+#"B P- CG8& 8N;*5(OBSVI%]6**U@UU6]5Y4+ IQC]!XM"FH\&I@Q?9 MY!*WF:MJ#]
>>HR3B(=W36PV#B37_AF20;PCX+C*G"<;3%\.Y0R[.M$=E\,R M17AGJ1ES@P^)L)4?/ *N![C5,'=.@S>]IUMZR\K.[;F,4V M]>0"M;R8:\>^V*<5Y"R)@4&:?6&G.(^,2F6E,?
NKS:8T1P49ZLWQBRR;F*JO MT%59Z ,OLN!+V0^*"=(P2*@&)PYUFXXXP%F:QM@+62QBF@4B PWG.DQF8HW3 M1-$.5;N).DR%6)W?4YSQ7 1!%/B)3&$]OF;DWDBE
MSFD2MJ'$[8W7=8AC[/^P!_>]=3[?OP(]\>G19_'#]5\ Y_Q_2/O3HXID MO@ZHOUFP^U2I?:R7A:SKMKMDL /6 5NF-X1"5%?5^K45;VOBKOZ1EP7?&P;^-/KWO]5?
\Q77U&^;E2:M MCF0V8W@=D)K8=+U;/BV%+)2*E57O67E/JT(I5XUNZ+)M6[*KBD79=|?^MJRU M[N4KR7OEZZ9OJJA?KI:UF||KXC&=-GDS/R&8#9S[X3@VDPZQM;*,+NC/9D@=
M@C6TK"Z7M:W1_K!(9YG$D]037$- DB'/M)0B0+ NH9M8 Y MM/C4F]RN2%G30QU!:"WV (=QPW2N=,"=EKE@%C77^O*<46P]6&SF*NM],?;+ MJP]< R^>
[!:XSG^6Y5U%'[XO.5U]DW?MUG<1R"!@5"0X$2K3RXQE7ZH73VA M$##&G06K4:/L4H8E5J2.M?0]W ^*H[JEW<;S^!\-(WDGHQC7.)2 P[=MB,:2+
MUH0=26[>)ND*!;L*25LT0'61)B*.E$2.WCY;.:2)$,"=2*/KX5_X=_UC_K"L MU0D2$-_4E9@(E,*4Z9V!&,)_B_VF)=&Q&A4^@B-J4|&/574 MD>TVR"UA\^_^,71.?_X=R
P\:\#%|>T&3@ADM2DXMN9L>X,30@VW"*MU&U!_JK.BQ^+-K>SZY7V)(M'J;L\O/I=Z4!!5U>/=5/>*W5X^WQ3E>*1-\/Q MZUT&G1=$1+"8XCCF2H.3*,".QRG.0IXR(F22^]!A8)-
P.,'Z]TQUW4S6;*$- M7SIM9,9N"F)W)[ZJ4OJF-=9MEM)EE[!&?YB0BF*>1 M/ANJS59*TU1MNZCD&?%%Z(&&,!VA,['9[0O>-F1-1AV#8#*SB0Z$AUDU&[G!
M)NJ$5(Z,S#$JLYJ)$Z^5/13EY_9GK+_SZ=E(?V%VEM)F44AEK[P,/&]*=I M'"E%)9X?L31.J5$-QRB5>9RAFXZ-'5-(BA.ICJ[2,Z6W?LJ7]3_ZH*&?^=*3
ME.#0BQ@F0C"H(TT>W*)R##.SKZH[-M)&!*>QR$"7H^FPGIKB/E&+&YNU$;"'Z@$Z7)77::?ENU$S*>V^8JW1B-;L)Z MVS[^LVR^EV(AO83ZB:0X%#I_-@^H4G?2 4V#'9Y"^)
(KJNK;LW5WH2VT2N_ M6QMU"[AB1G-6&0$!X:4E]]K9$Z@7X--F M])7P>$Y(E.)8&1M.J(PPI7Z,)6>2RRP7OC"*AYS-R:NZ3<^80F8/O9G)F050 MF!UR@278#)V-@R/;9,_'K
;K;+A>6K'S%W31R/8+O9?ORGNZ+:!:OC"/FB03+ MD$AEN6*.J10$IPGU D$C*B*0Y3I&:.IPIFZOUPPND*:-?.!IG-;<=8&5F:EP@ M SNV#E_9L/;?CO%_2KUDKOYU//^U ^R>I*W
M%2WJ55>0O*F<6$@9R"A69QP:9+KGH^[P%X@ "Y$DH1?DU!>AQ4'F(%Y3CM7 MZ,;JS98'F'J;(VJF[VX!LMQ*#%A /0]MVP2YO"O0!K,!6^AG]6[VG0?=60@P M%HY,ACG=66T(&
(Z71@6^@.7))\\E;Z[S|[_SMACW]]+.Z^**UM_U_W41PA-= MZ5RREJ&E+CK0_W!9B-U?#*Y6K366H-ERW_PX\3TWP M0 U/6J_[F(#QGLT36K.+-
+_ZR5RU3T;_B0:LZ&R4S6/I+M'/ZL4O=^_HFE,] M:M-_2 ['ZB#M+L9'1=UV)N PWF/@=-!O'= G) 4O)A2[2#NRD)^E5S7D3U_ M+-(3>V)K61QZ^>V*CJTF8ER$>$7#GHH3?!"?
B$+B\\l"LT*C.H MJ&|<+*LZO2-+SE9Z-R[2L)KNQ)7P:I_=,^&-VL3QY0-=7=Z7CT7S[E%>-I^I MWMLUSPN!/CXE.8PC$D:8^+&',T^&F(=QX(=>+,+8J%$]C.SDX>F>M/[*MB,4
M:EP.M-WL\6LXZ.=(';9H,]38F5>0#0-9G;E M1.ZP Q48P2$8*3<"+#9;\1%[]X5XI_9)B\A/4Y+(%,."RI!T*4WNQUU4Z'5&DJ")-%EZ2M(O+N"ET(BW0
MZD$%M2I&.BC,6;5(NRO.7HAT4*!#94B'+W31[_SYUbz>=40DBR5+F9]A&82^ M4C,OPEDH),X8S6G&TS00H7W#'\AU:$ZO>BP;>SS[(HHE;QI#&0#/SHSB" J:7
M]BBW/SP+;:%)D_*4)35L^X65W^7XN>R%/47 MV5SGO:.Y7F01XY0&#,=2J.]I0#*<"D_BW,]9[@5!),S*? $T)U;S-6&=!->6 M[T#+3DZ#9J;>CJ&]?F&^ 7:-
+2WI3;7//@LCK%6&!GE2JG*^U6__SEYJ/^ M;-5+H;M=F;O_C@A^YOUWOLPPC1T3%_VJ.3OJZC4NF)4#\,B2LSD QT4,.@!/ M7&G9GYW6K1>_KZ4("8]3%@@L>!ZH+3.1ZIL:Z?
F<(B-1$$:11T!MV7>6GUCK M-+$V0@;LO;X+@=D7TEXPF&IM9)]@6N2P#*[ZJN\N/F\[]8."[751/WP5W)$^ MW32&P:RT;3;%9IJ+"(,@")6RRHQ03+(@P2R* AQ[618+R9.
1J9>^5>286H7 M_V#'6'-VV\84/ZWG-QWPZ5/ '>"@PJ]=RBTX,[WG;#^]!!X;W'}_=$KM 2S?!B;4OP4XI&=V=|%0/KGOH7Q;.OBRR M>UF6@Y>EW YZ*ON7Y>&@,=*M;1];2?
_D)H#SRL]I)!KT6IS-%EIZ9>B'<:K7 M9N5'&TSXI2R>9-U(T3>Q39,PS'+/OYGP0TR"A&,6,A]|/@M8P/.(9-ZBT\MO M#:T:L^/*:/Q#K.)++*8P-XR\]R0O$Y-
VRT+V[$:.KUH#]@.,*7S[BW&"V#Q>.5A?B#/5NS0_8/ M^;0L=K*SC*'Z-! U([KK@O"P[@6U+S($TVU9, @],V8\B@[9LH%\GF7L(EM[1Q]B<[JP? M4S -<+S^&\
7.3(G9+KU!+,KB//5%B.$\B @F?L8Q)7Z* R:%D.J8G$]5]A M6A.;C WE'46PIL-Z'#(S4^$("..A.P X#^ZR7X]*YSG8Y0.EULER.BWPTNV7D
M%OC^!/]QJ1O:'MPO[^Z;!U6E]!*7]XUI8LO1!2;6T %=I A7;,,$LB7A2P? MZQ>GW#:OWCSEY3@JIS?M3@"!:,I++$"]IY.R6FW>CZ\ZV|H|&##K?OIB^'! M_+X(NKCKVC+K%-
?.32[%@@O*XE2W(\I3]9G-2(9IGOLX"+(P\G3F3&YC4'@U02-- QI&PX]C=LX4KAN],+H?O&6YD>L1K, - MP^&[I\[>7^-UE2[N;%G[0^.('!ZC+CK>-G9M/=OLI?/[YT]I^,*C.4F%+[$7
MZ#BH(?4Q"Z7$"6%Q)H1(8B\##:^R9&1BI1XTE-$^K&%B3-?1N4VK 7KYK$$W MC"7. *5%;+!&/4^;5L\'(X';6(.YBNTI>Z?ELNEKKAR&.@[$R17<3M;-N8-
MPYT)UEY4[=SU+$IKQ-]ORJ9F_KZLC2MJAC?-Q(>7JO M8"T@3/^/RX9^U91=URN:QK MV=1J&[!ZV%(LBYM*/JB-QOO?]=.2M?K^M3'LG:L7/.(!%W&*/18%F @B, N8 M@I-
Z41A3YLG8]+N@4ZIFVQ2T'0.7/7-M@FS''I(]^VVH4NQY1V+B+8\FI^^ MW3VLTYZ*5WD$,&.RU_BOIXLZPKHAU_9QI*RB]\/'T>44[=[V&H_#W'7R*H_% MSM$R\^.!>6>!9?
SRXSE=3;$[#3%F2>9&4.P\I, ,%;IF9MA^]E-QE$3\%>9%[TH\ M'(@DQ80%']8A37%&0Q;%1/#03Z%|S5X2F=@0;#1^;>GV.
[[ASHK.W.CLFUJ%N9T>OM5?![WJDE7K+5_]&Q9X)&8Q M3[?,Q^3+&281BS#D8AX*ABG/@=W%GQ!8RX%W)"UUK^7X)BKWQDB6VJ?L;16 MRG=$GK-
T[^6:LZO>$:$.:=ZQ2RTZ/,AB659?RD;6_ 29LI6_5Z5CW??;W\K M;[^7CWI/?OMJ637/UX7^)REORF71?% OP(VL]'!1>M?WF>B[C.01SY/,"]7N M.9;Z?C'#F8A\G$94>#%+:!!SX]X-
KKF;6-D#SX]1QS1JN=;EV)IMU'1\H\ + M_0L4_HEX_WJ!BJH5]NA>5G7CVVlAJlZF,!AJ*&#Z-G%O7< M(L4N6O.+,H;UM'4LHQ:G%F&FVYWC2K.=VU9H9'!>B1\)J/S++[P>L!.EA;
M@ZF@'6M8X)SF?*T(IH)KI\G 9$3LO%#]2+#U1+!WLEH^<6UXDH.*0<7M.UFK MJ_2(MLOZ/Z2X:]L.A=\6E*V7"V;Y\OF UU6;?1T08(TCV5(L!!$[9#3C.(T M#T,L RE2DF2!SG
JK";C=.I]H;1&A5EHSZJ:P81K='WCL5A(Q3#,.OT3]#, M8?9#/!?8MW=O#MZ6Z9V:;\4V>K?SN'K.AU==H WS>H2%9K_+*W'GHYL<8D>> MO>GXG-4?.#G<+
[V(TQ.T_#BLU^D%6!-9ROIS.WY=BNOB]2N>UT14(@O M95&M?WQ+ZV5][H]QB\P?TO(4)X!&L8=)3B*$A_P@72[%WNBS$XJ! M;9:@0)M9Q GA@|F]
(7)!ULH,_HHE=R;0$@M'A@Y*?59S9@G-2Z-E MNPP\Z/6^-^LHI?=Y\9?6^-,1YK|>9,C(9)R&.PTQ79&::!VL6%$4XB98&2 M5.8YC4TC7V.$)C8V'>E-=M>&..JHFP?!1L$Z'0ES!0',8-
A*#PJ*F8AF%1D; M77BV\)B)>,,8F=`U=ON(K[*ART**|32+2?KW@L?A8)Y?AKC-!$))CP*<9KK M;B5I)-)0>#XURXD>)S-YDG-'%*VIPK[\1Z Q^\"?+S!,+?=DG6 $P;A,CK['
M1XC,^MD=%,3EU_7$U?]G]JO_U?E*JKL\3;YZ__];%0IPH=2/V/>C'QNY"XY MDX^)-;OE#/6LZ=[R7_^-WC_\^W^A#8MHS2-23/X)7>IT2,4GZAEM<[B/]P!W M^DA.!Y]G
AIF41QA;!%4/@=L_#8;]GJ*;#|5]G1<T6 :2(W$?<]9?;8(KP,(MAK%<%M9*#0HZG?2,+W^]L2OZJ97&--^% ?NG=C(W^CSJ6Z_;)@%%TU63TOU M\E^5-:01Q2'!QV\R"YEAJO:4N
XW=*>$LVM#<6C!^9I0C(BSTX)B[#]](1? MY?+NNPZM/>(TP[EOKV]]@<|%|[8]7R'H:TV4%M,OQ@VK]F M_5\I&WAM;.U;STQX.4"M=RX.]E9@>>#HP >C/>LYT
J6E\=#NT7@7_=OS3]N M*GY=W=;5^[I9WK<;SL^R^5Z*;<]EPZ^]R5H3VY*VP0:ZJ?3GKZS0[;>O.,L* MZG@QWP$8@7-Z1^ .%YB-,('$<1]JJ-
!6.PCYF7/N(=`O,E$H>/SG/1!9F/,*@N;%/NV)K8GMR6ZA2%9/=D]%"Y M?KO]H*Z]$1^RAO)2SVN1*&^90\'*.]A&Q=&#,MO!S _S&SU_*&>0:0YO$!K M'E'')%ISB7;8W/9>Z#A%?
QM[%N!]CUNH'&V(*#$UZT[)+9 OMU".5[<A2"WSI<[LZ3.#^#\?EY44NQE"ZM\>[!7E MA= B+1OX:?FD?U1[P+OEYMY%'/H93_,(IY&,_ E\]8=ZA]BCU/?#,-?.?-!D
M[_EXG]B,;ZGCE2:/EAOZ5NT?YGRJ9N;\!WU6,)N_%@(-I&@3*WLYT%"0OD4% M6HO2IET.A$&]--]GO7GZK4!H*Y&S+CNO^!Q<37.?D?-Y1\7/_TCVYM"_ @N6 MAX7-
(SK7+&X4M91L<:[Z6]M1^/MR38$9'B6/ @3VD< M)6D .A&8TYX\V27>NM'TUZU4XF/.B$.N.D' &ZXLY\&1N#Y?U3O61L'VDHV^.M.?9$XZ\L
'"U"0=0GG>G#8=D;SMM\<09O;F_ERMU1[T>)ZD;I>EVN3]}3=%K MNAU[6\|:?E$8Z#U\N5JU)4I*X=6)?9%F&&..##HHV3]*S^V[^D@9_\.Y(MRQ8-N\|_$H+'/A4*
M_XCJH2I$<'4P(0){81YF/F$QR87%)._9GX?UF.ZW_=AFV@SF=`N[V"WX*L\D M9"SPXB#!(O4D)CST,(OB'$>>+R.6\SR-8_#H[5=Z(N"YVH(G(74_P%=!$F9? MI?
FQA7WP.Y[674[U^]VSA89\Z3;8NYRA-6N.6|P[@\IEP_OSF9J_;TS(<\V-MPW>WNFUPA#7?=)U==\IZHLN5!O:AK+[!E?REJ"1=Z4/:SW19Z,W]@F3"HQGS M,2>ZJY-@*4Y)
[&,IN.5KA6/*)ZPSXTW@'$WC2R,1VBT!@&:|"6E0MTN0.>9N<"#1#7'/5%)4D49(QQ 2O, =*?U=+O?<8'>K/GY2?=8'[+TOU''
M%/I5LX5ZOL"SAF&HFYFK";&$6:L)8+085VP%AK,1QC#J,X\UMH)F?]2QW3+H?=P MU++WORN#]+O*7-%&WI75,V0"T<&;)I8C&YIH310P@>BPM.,FP(F@P&/:GHQ.
M)Q&-2F.5YG5XQ=GRND8%&B9RC5]H,;>KG:]WI7;>ZNCSN7A8:O_KQT\H?=& M+3=.K3&Q+FD2@/%=8*>UB%7ENI%='_M'+9+!'D7+;$OL"@.8/K\4?TUW@IX$P$=
[6E'2@>RRBC.IC7 M7^63++!|E%[FN]U/GXS@BA&+NQSDF42)U3@/!.0LAXRCC3.(H]CDF M@D>8Y3+"F0@S'>54FBX6A;S3^3RW *5VSZJ1CF2=CNPQ;*PO/6$IT!OU@:,J
MIISB,1G:EE=`W7[R=S_B>V?N[X!?Q)X/CP+73%^@GNV+P1CPNMV7C(>]X09N M.EQ=F<<),)S7N$X\9YIGI'4G6'_M&R6=RT7WV33K%HFVG >#T7&\XABSX_5
MT2D0"4XE#W&8TB#R(AKD*5\\R8J5IH;Y&"F(G@\)FKL[9-/.JVF+P-2Y2:@M M*ZIDERBZ4O9ZA>YIH_9R,&-[%+IS;[OJ)\"OTU' S#XQ+F" ?2>V%-&6Y,5X'C'8
MPN\2RY&9/DIF5EM[2MB7!O/D]9.|[^GZ+]HO]#.#URU'&PR'1*118D7J\.G MLHV8Q.H/=?@D..(L#!+*@CP$I=:?Q6&G(%.3-LRZ4V"&L#E M
MY8M!T03K,O>A/9D/(!>%N3XK*7LD0Q^34/W!8BJP.I"*(.6)$#2"%D"XP0U< MSG $-=EU37,'F=E.Z5P0M'&=H>Pl.9?=]X\+XZQW!0$2,W>N/B[D?M_]D6MM M#5L;2/@JJ!7.0V?
RRHOJWO]TEZS57\X6!<9F&0!SB2NKM%'F:8LIACF01A MFC&>AV9S($!4)X_4]<1U_=&:.BHWY"\0;2LKH;IK@J>I,CM&R2K IYM K)$: M<("N!TA=CB-EH?D R9V9 A.:,]L&
S[Q@)R,[SG_3MZ3^]D_4%QW;L2OSTR MW1J1RW7&B1] P@S0%. M.T^W)@W2S< ;MP^N(<#9AA.(&'1/]X $O,V\6ZAL>L&; NR@+!]FPLZTLS= M8)'9>K:,"S1LS0ZXRS*
(5NKN,86>X",+OI3UIV4A/S;ROEZD'F4BHQD.\S31 M%8D>SC(_Q)3D):.IT9HRZDF/)[(;RCVNBYANF?G;2@M/U1B;SRI0^O.%NB_JA PPS] M\0N/Z=
(0=:6!__B__VO|&_4'H[7\O__K_P-02P,$% @ FXM869+K/ CF MH0 #I8' !0 !M!P)$B'O8X.*&Z MM4@B12%\^<+#/<*7?_D??UQ-?OJ>YHOQ;/JO?Z)_)G_Z*4W#+(ZG7__U3W_[
M\@L,G_[^O_W3/_W+_P'POUY_^O6GM[-PS)-;IOC3[^/EMY^6W])/ M?Y_-_W\W?WT<>*6>3;__OBW!I^]F5W?S1=2MR_8H2)S8]M_G,^SX3$) -A M8(4C(
P)8#)S8)P!21%&C2+_U|=_)C(YH5,&SH%,P3D#EYP$^AG^I(!&.]U]-MZ&0_<|_+K]XMT@_(7O31??EO_[IVW)Y_<___S[!|__^0_G_QY-O_Z,R.$ M_[SYZ3^M?_R/)S__.^]+FEIK?
^[^]NY'%^-=/X@?2W_^7W_]]7/XE]X+ MI9N&LL!B_,^+[IN_SH);=E)_D:Z?GOV)\A5L?@S*MX RX/3/?RSBG_[MGW[Z M:26.^6R2/]7\4_G];Y_>/UCR:N$6+]?E[9_#
[,KG\A,_OYDA(!#6[M\N;Z_3 MO_YL;ZZGJ3-\[[-4_[7/^&_A*)38CDI"_Z?]W_W_VZU_,?0+!T?/Z*WUC_M\[++("32D/Y9I&M.*L^HOEW(7E MB!JAG",6
D(),44H>$$T6"Z)LL9IXO)#E@O-"R2ZT\(BA3]_G7W_&3_XYR*'M\H=.()TPGBRW$LQI=&^VW1?\V5$0V2>I(\1L8C:@97* >6>2Q]RUM*=1?;V
M:@^IWE;HJWGX:3:/.8YV8[.9:YCK,E6M/4_60-C?_-VZ.GSBY_92N M9_/E*'EJ-=>XR;7W(&0.8!,WD(T(A+]H?!!5E/]HX8-PP-K'P3GR;-02'\-\ M/(N_3.-
;(%'RB#A"&]PV@K$M#@$U354 \6#9@^# VX?#Z;)L M! Q?YFZZ&!?!KP'-K'?$,)2#-!H$]1:V[\23]=G/ETWPD:6(D@S19Q2&HX6+@,=>%-I)ZA5C^BPT M/%
!Q(!3(=E%PE@2;T/ZG|'5\QDI^C"'>L$_QGEG|[,;]+^>V;64PCJC2Q MR:(P')$@&)/H^4B.'C%/P1 >T36N (R1!:R$$|TZ3NK)N0G8?"%_O(\HOG$>
MKZXHUL091.R$"@DSM!5IE]"HR@SH[-FB3-J? U+\LSR!T"%M Z5&K)M B2O M8D05+-._3J>)CJBVC.TA 8-I"[N.QZ:SG-7K*1!UTED1V4%@.Q8^B!PV-;!
M<:Y,6P+&&_SCA_F7V>_3D26<:FX<*(?1M6"$@[$Y01;)*"T(]>2\;[9G%C[L MZHK\(*@X4: M8:([&C_/\YGW\?3D$;,):548N"]0KF@),!'B=BF*I) I,*: MU /&H]4/0T?#-YO51-L21#
[.%DLW^?_&UYWK)'50C!L".@5TNSU%!K*AD FQ M&:-Q1TU%@#Q8^S!X-'SA64FL X.C6+U7\>0ZNIU?-"8K =&K,!0O=L|G"D*$ MH R&8%:<=[6UO=IA &CXBO-
DT0VL\O(P.OGX;3;=W,!HP;V;,,&D=1H$,@V> M>076L"R(}4%(=I;:'Z]XF.H;OLH\2X1-' =O;N9%5*L;V/'T:SG?;A8C&9@) M1E"@5F*8A)8*T'H5&"L6A8Z9QECA0-
B]^F&P:/YNLX)HFX#(^RE^&HIC_#V] M=4NW9FL4B0S61H]Z31)04 D,MP:R=B9Y$:UG-2"R>_7#(-+\Q6<%T38!D7*- M/W^#GO'7V?QV9"A5/@L'R?&$;@\AX(R.H#1A,6D\ ?5Y>1,
[%CT,$,W?<)XN MR"9P\/G*32;O;Q;C*?K"(RY\Y,H'L!$#)!$!^D*.8S2MM,+6X?!XC3>Q!XL> MAH/FKRJ/V03./CE*LV_XI'WE_GL]^6W-L.K:S>!'46I8V#< Q6(9&$%[^^<
M!QV$<,%09T.-$V/GXH?AHOF;R_,%VP0^/G|+D\F&^N!T,)8)0+GDDAEDP"N1 MP8IM73-0|+LFK^QO)D.0X,@L\W,R1?LK\E_%RDD9$&,Y9HF!3 M*@>=
(.!MTD"2YD$SK84T9T'@\8]' :#A2\FS1#BP^K_,734;*6 M)9<=.$4#XI9F,#X$D-D':H4VZLR\B0?+';XAJ\;3Q=>(YO^ES_"-S?]FE:I M'MJ:0!T!2DK*E[=ZE?
RE5):.ANP=.^_*:=>]AV&@X1O\LT79A!. !]=52>.8 MA?__TEM_APLERSE&P?>(PQN-)YH&8CTR W3'@R8S!%S9$<:0^*9=Y$V0TW-8 M3!]^G:PLYH%!\^HJ36/)&WTW<5]'(H3 F53
DJ<@:)#@J4^0$@L^2NN1]+/P M\6"YPZ#0\(WDZ<)K)/WZW7@1W.3_36[^#K^S&&E!>")>@L[EG45*!SY;"XH3 MX8UT+)HZV?B/%CX,"0U?/-80:%.86%46K)C 4R\HSC-
P&TKF*&7@>+(8%R?C MC&,RGWDG_>S2A^&BX?O'.D)MP[% -N9N\GX:TQ__=[H=X=G&(\;"8&,F(1Q M8"E&2HQEHRT-B5=)EWNT[&&(:/XF\AQA#IW3L'I.N;=TF_*CZ)W6U
9P0:A2 M"NV1&X-B<8)E3VBDXKR+Z>=6/@P3#=!"5A%I-5C\R\|/Y/@K?N.,>FQ$^721 M(OYA,9N,8ZF|S*^BF56+%|V"27]ND^@8)SB|M_G;^SX3$) -A M8(4C(
MZJ/O%KM#G&"!@"!4@F48GF89;=8(1;[78*-_N(_\^7GY[<[-8XG)$#,HG-R6X>K58 M)/Q?_.+^&&EB8I8^0!2T%$1;5CQNW"/:1)<5^;,^!#*']4&OB9R-K;]4
MK@8\X38LOIDMEA_R7V:SN'@UC9_3_/LXL7GV22.O-+2)'3;O+,&1* *7 H1 MA!8F"2&CVGNI=@KJGJ=FF,+V/L%52?(-8.@O\]EB\7$^RV-T#4KVB4:"HXF^ MI+!I<"(+,
()R&A0A5.KR(C@%-%O+#U^P@"8+3I7MZ;"8+=VD"BP^!xFD/#:G M:<0 #'^*EZ-IUVI9DE9^N6/Z^)EC P&@CIRCA;2H>\7I08$.0.F?/39:FV\ MK8R8RP@:IE*^3S#UH)$&S,\G5 P2\
WY>8L'|F1V702V82;DG+75#+*/'$.+ MG,%$YD%[H@)UEA&[+S_@--]I#'I*5-[WZR75DG\;8%K.;\+R9HX;Y[HN"O4\;?*>$!%Z4%GDV0.7,@ ME#*8$!O$*DJ;0S2.[\UJ/ 5*1Y
W3*%_GPCK2S?' \^N@#=-7\M]2A7@O1TO MKF<+-T$G\>;ZM]D2OPX8IXXQ9HT?KM.JT\&&SP_3S8^/@N,)#W,"@AD4*!<6 M,"88]#
(;>#8Q4ED;A">2.DP[@3X!>0F=G0O.+]6.4XQ<(MKW7\?.CR>ETBV$ M^G7E<#*KADI'EWFP0 &*QD]B-(,B@L'G#B>&>$TZ=HW5SO(&*BQ09\ M.E?8#=Q*=$53Z':NX?
[;;#K;,#620HB(H2X821(Z *E[6G73@,.9U-IKI%9?U7 MAF?)&<:CU09_XZ]=BL;LM0DL@2:ELX.R#L->J2!(+6,* M@J3@:YN@O10-U"FA5VM43P7M>$S/AY,4L1B..$#?
+Y6W ;&*P744LMST'Q MVI ZTT_UU!<&?#;2*!]WFB-Z\7V*,@;S=!1GKR'?U=6%;F>T0-\U135M)]#0B#QIW\ 2LM/@?U[0-^RIN M3G^.[X6=@=1D)!O0MJ'\)AR^-8OK[?PZ35-
Y35.,F* #@T -1M6:(P?1HXQ] M)-[X)(+:U[7H= P_(66@CA7]X^\\H3?@Y/V6EEN13E#.T8#$.YH5$F^0>!IQ M'PA-HD2W0MC:UV8/"!BH;46OA^[) F[LOSBYE,TC(N/:=
[5QMQ))"9+)*,9 MN+*EC1,-X(A V6AO2> Z,DDK ^4Y6@;J;-$G9J[O0'C\IB/UVXQ#B/ED^]EI90ZLZ]0H09RUJ0,FZQW$>R<(OOFT+-5 MT/EV_"T,?
7&+:Y]=.,XXHE[KZP&$Q4#D3D'SS@!I90W,A*5E8!Y'8MU CB?"F;<< MPTY-\2!(&1R//!KQG2D?*M+6U'YQ(".3Z,F-]HF-_?'>.W!MPT+OWA1V2*;P@ M8Q_R%_?'ZNTIM7O=
]C0#5WA@S%;6] M^?.I'M9]NR0\+ZSAAC'|?)X# M[J=*7_]Y6HIGG5U;WX5_G*!T7L7_N%DLRW?OQ)"I<-)T+!.\9%T%E$#($8@/
MG@:T<8'S3C;OB95ASY%&=\=PEX=%$DO)S@OC;%(4]&?]WBO|S-BE5M/=)K^L. M9>.TUUXP(?#LEZ,;>$1OTACT)F4I4PKH2 H144FUL[7ZXF78NL5&=\!% =+ M@?
(IA8E;+.YFSI67^UC$QYV+DO'(6Y(^86LO![X0@P&AZ?-B6_BC'!T+QBO@P4H0SJ-X16+H.H:@ MH_71\R'BZF&+.QNUXR5R/O8W2^,..ANH*LI\\+:^(M1 51GI,#&*
(8&|-97NH@X;'1.D/<#81 Y<6[6'3\[9?_NAE_=Y/R MG5;$4C6A-V">WD^_(]6S^2VR,-*96&,54HSV&D2* M'JPO Q0,TXFB>\ET_1J8^_6'|<,K N1DH38 B(_S=.W&F]+Y$7W^2C@;C
WY5EPB2@O M?MGU^P^Q,/A"(TL;A;2)*/%"51%Y\8D8E/%AK'T7[Z/!FV3UE5VU))Z T8 ME;O6';^6"]H/XZ_?, ,]&UK.(JY1R#++XB-23@'912)7 $Q:!QT1)LM'SZD9F M+T'#-
B*K"*%Z8F\BA'J;\GB:XE:.PDI6IV;S\L7Z^UWE\-K.6D-4)L2!%Q2W M20X4C"44DJ*9[M>]JZ^>,5?L;P MOZ"-*;%DJ<0QK/RB9"0Y$;&J-[5[EHA>X?5150-@3< G=)[_??Q9#)*G%EC MJ
,>B ?A) 5G@@9"K=?!!6=C;:!LUAZX)5A%?)PDS2,.L'?CZ7B9?AU_+Z!> MNNG7L9^D>U0K%G4F99*ATPX$Y0&<1]^..O3H7,R$DMIM(?93-'.!L[8]2CY
M!NS)UCW#UGDJ]#0^Z@!240G"EQ[IR3IT\)CAS C'22]!OQX3,G"[KYH>]-ER M;L+LK#@86<$SXYD#QX@1!,L8.I]D.S!)A>7*)U=[E,]Y8[=E6_QSE*DA@U< MX&R:KI:%.?
ZH9\G>?)&S M5?DDN#E-K@U 8O.I^M'=EC?5#1=:$BZB(LA%:<9+T"JWT5E@T4HTK3$R5MOJ MV$W)L$:E-E J2+L!S(QR=3V9W:,T*75YY%M"VC 4,]7*: E24PSF,+##8UD8
M2%P:]+.H2JDV?%XD:MB'IMI(JN#!D#5N>><[V,":Q>B2@N+++830G$QC)!*3, MG8HA9V2RCT#H1 #U]M1=&T UY-T ,'9PH!3Q%(WB%*B0R^=!*,< 1J<9J24 M
.O:+P4G@J6WU^[:8#E3RBV$3;/IUR|]?E5[08\A1)MIY" MUN7A-F8/N!$U)!^$$CH3= -ZS=C80=2P[^C5/:VJ.FC"+CYYS=W>++&DV(CE& M)-V!C*HT8&86#-<$O(C&>2.4-[6=]A=
(&O8AO?Z%4SWYMV"E'L4B6ULC:?0Q M2]DEB<?>!A7 6F)&"G!2?R2L6!UCE;9ZA?,6\L/ ,K>8^!WE& ,B/BZ7KC?9A.4^*(DW"YO MJQOM2D!CMA8E@JZ;D#R!H2$!Y4H;@S;2V-
JY&<]3TTPA?# -9I74I("1^;A9 MMV.IJUW\<+-<+-VT5/"(@E9.!",QN$V\-"4E8)/JG#BNH@LIQ=K?3OLI&KI" MN8|>GY;IU%)"
*Y#:ZMK]A!7N""&QU;%RK\H%6T;#2Q(XW'Y4.BJ5KXVG/>0, M_:C?"YAJB:\!)'TI_7=NYK?WS(RDT882C"6MI(83)#RO(]60J?!9<8,.7>U& M$$^I&/ITZP4W9PJB?98!S0">]!PB1C&
(W$1,,ZN>)$93' 8808;+<^TE MSOP@XAL1AW^=Z@EJ?;FK ;'U*2UR8;P&T3 ^W M3H3#@_(2_RJ9:%3M>,YEJH9IWNL);Y6S70\G@KJH(Y;TQ7GJ(FN@,>A1)#"=JJ^VOT33T"?
R!3."SU;)#]RI[V.GCF[L0YN\[""?2FW[M'JYPJ1Y^>_BZ9$,_C5X<']$T(,CY MA/UN-G\[N_'+?#-YVN1HDVZ4B.%2#*$YSJZL661Q$X M]&5,91P]"4-Z4U8#7N++#.\7-^+Q/*-

*</:1Z*K^FD0_(1S(,V2FO*&6TB#,V-M-N'>1;<|9:DV_^A;^A[N9YQ5UTUS<$-#YD/\TZ.L;M)V@QM'$6CJ0Y2EY8P-MQ47.%)PF"A@3E&FIH@^U.^\?1MG05WH7A5P5]?S-LS3=XML[-/W5NC'O_O!+-MS@'>,S^U17$X?J+(^7W710ANZ-D2*"YTJ7WT^QC.NQI6FC-M=3Y[+JO/+[]?25@-l:WGIWWM3A%Z-W!YFW!E=!V*8O#/DI0>-?CJJMP@_G?W-M_5$V3CC''2BA4AF1%L!F*R$S0D-BP1E5O^78RW0-Z_)?&&+5%34@^-!E&;T=-M+ZYG"S?YRWQV<-W,;(E?'E\O\)?0FQ;4,[Z="$NXINH%#ZT]0<,&!1>"Y7-J/#=IX$N]1!42-[QV-MG9]!5:WAS;A1SX3V&;-")-83'FRI1"HCE0FG)TOO8%R6Y*AGUUN+!|K*"-M)BI^UM59Z-;(RN$T#8;X%&4BICDP81(@!E*A5")0)B-K.TQY2-.P#-Z7]N-:-%-M/-1Q^K@09LW#NI#OSN;NM-&+D4U19ZM*TRB*7BOQ-AV'4OMNLTM!4^-"/^0-M/8N*81-I+WEP7DY9#8086U-FW21]R%O}YT9$6:NH'X"2*CL,S;-.E$,BT>9@-M'4^NMGG;0\ZP=;X7MG6UU-)$$N?:<+\JZ2TEX:7;)XZ%R-0K:08,HR&7'1A6-M+HIPCW-7A9"/C5]ML_;!'<,6\0Y$@IZNB.'=^V*AW\WF:?QUNGK'#;=?Y@X=-MRK=S[OQ@I'W*5=!$9677]I1>0F1>;#EF!*J..H4\4$!2>*C^,.N@:N+K[\W7%=30T.KQ:ATU2)<-MESZSS)32M')7CNXK<I7O6})!XZ'[2S>Y$ZW-V2/(%# OT*'W8D.A<@0M!(L-M$R[=.UBGL.I&IBU^84/X)ZTUL#-RU/.GJ.JCIBB6@?IP-N,KD7L.C:23*O3-M5FJ3)0FU,_|=0M>P^0-!8>)%Z)VIH$;-X&8D;>F>$@PSFI6Y I:5=KP)K;JD-MN;3C9=E87=YK>L?,%D'#9A$,!K135=(HPKK;R_L38G6-26-&SS(>.#I<A>IXZELI@KR(F4;M=35P$F]NATH&D%D))D:3(%?HD,50O-MZSB8NB;+/JKAY/\373]*;^+$WO!6)IW/9Z5?Y.(=RKMS27;(&\,XRPBE%"PM-M!*-NY7"60Q"*7M:OJCJ>RF1X'%W$H:ZFK!8=RR^J_7RQN2L^:#WE[\M4H-MD&RB%!R-?)FV*6FY12-&:!FUHDIU#*_=*.UEJIIT(*OAXFGN5TTE-0"-{3^EZ-MI7H\W\)?XW"!X&ZUPH.7,H!A7'(,HS>A=2,-[0TZ0@V:!,$]"FG"X_MX-MQT>A?!-=WLPE8K\5(.^^DX@*(#0DEY*)601:?^,.!0TZ=/U9L,]-MJ67XQ,.='*Wf,"U&/!D3!;? 17%';T7'5*"6!K3+S&75.]EN0I&4U6]%X-M6">IH2FCA7$X6N*:>?CF%GC$K_NB6LJI"\%!9!KWA\-PRI<<93YP%W)?-MJ-I)4)/%OGWCZWS5M(&T+5^RZ]CVX;1+JOWECS0/8Y0D;I8A'8,%.^Z+$C<-M/-W4I:4:AOP;W@/_8#V$]5DS>\EW/WS5=2-M_^$H6Y@$AHYCRW&I24-O=.-MB3:6(RN,E!0<(H]PM"/APC7(8H\U>X1W/JAT.-\118A?!O23T;L=;>14-+S90.XE8KIR9.#,AT=-M!:4&O,P6HGF1M0!M5GW-P:.V]\"Q$9Q>XP2S\3M+!,ZEU^?;ZZO)YTHW60C-MRO?3/)M?N0?S$)@V!+#I&2WT;DE>;BF]PC/%,&=8.6B]WTP<2-]P\6)O2.Q#-M,8VXR+B"!NV<5Q@%S^>WZ+-^L9N$*)D1*99]?#"55RD@PWCAPQ#LOO2-,T:.&FZU&YMVS^-7HD.KF32$;O&$_W#)!^.KR\FY;R@/=*4Z5.1^928Z@JR:O^W*H]$YN#2\)ZJR&*K$-0-MF<%9@E_J&)O5GAE=^VKF(,+.'Q&^7N1+UW6&.X\&@T\6-RQP7CP@6J0U%)#MA'.^^I2JAQ0T.X&]$<,3>3N\<6=X-'.]WU"\D4C;H;-KYV'-,%R.I#;>KXG=-.M063#P6]>(%IC=/D\.#Z L\N@AK!T@F;?@XT9XN]<M]-H/@5$0TAL9-M%4262M>.$]\YR3Z:".TL[ZZ?=U)2'.8.5_1CQ\XSY9Z-]!Y[##\-5WY-(]I-M0@@E1-!37:-3(@$C>0\B&B:H0[GXVADANRD9%CP55/RDBN!L>3>-FKUNY6H8-MQYHQ(RS)U!M@&)M@I&0"F%">{6/BSAOK1/?1B0<3-^R%27UL];.5!N!V9\,Q-M;DKO\8^+$5?&.&DPY&:BVR8$G,@T&D";@-B-M3Q,@GD8;GV:3R;O9_'7J!%-0$;;S60,$:)'%KC"\$0E!8ZSZ(+@A#R>-M\%-C,?N>@-9;^O:'G(/EWL2PR^?\O<+-\]-I-[7DUC]!5DI=+X'S>+9.Y*(P/-MN4SK449RZP)N'.+1!PU>@-/.00ITIPM:=VE!4)/ZWU'>X/R-T@H8$#>9\4-MUI/57]T?AS_,%LMY6H[GG;NSGAS95?SL$(.W3KK@,3RSJ_A;0.;4@1*@W+6-M,N.KIUCWQ$IKS8F'V1&7PD(!-?FEM\#G%&[FJZ*E!VX*>$C"KI,K_S;%-4Q-M&?]WBIO);J-LK:,.>7#)*1-L&WZY]*N.5(:T3#8VNVVCZ6QM:[&-6&Y5^TU-M8+<_13!QB\4XCT.GOU*"><"UUCK!9U4+<;=-!P4992K-1(>"+ED3-H<,U%+O-MK:#)LMKE837I'I84X)*H'DSK#9GE36<.Y/-JM!)U!\O(E-XOA-20FA,0QMFR-M>1W(C"%LUE9K6J%=\K/$#9O2\U%#87Z4#=>+KXX:,:9:R$%]A)Y-EUVP_9G!9-ME8Q(C7\5O*&F=E\)/G]&S>?!&7G:J4=H.VXB"/4,*$"2D@[CCZ(-.@HL._$]M+=AS0-?A1ZC@:J%2#!0YNC'3I'?,/H+:,M)6&NE#TIK/-M*=TCR8LFF$9+A?5)0^EHA@&Z0=1[)4%*241@)HAEC-121JED(P-(0$)-*,++BE8AL<9)!11Y[B5M:/SV"%T-9(.TALF-MJ^NF,-P]=+-R?9\N2G&.@Y<&C:\|**9@RGBP)9G5.CI%0O2_N8:0UTUB^}]3U-MH:%JP*OMW[YVBS'Z7A^W/N\$5W37H]3Q&E^DKY*#]V"^U4W"_[V9;+!V4%>'-MWO;B'_*Z-9J;W/NN=[!S6L5@N-4M2.F_H-A8$CUD;3G"@@LE:H_2J4+XV0[B-M.42\'2_"9+:XF:'?-HOK*L+'-'$# NM$_H7CH"._MRD=&]0]RWCTG@K;UKA5Q,QA[4?.54^SYJBK^(\)RYMY&5,.]NW?=(HQVODQ-M=4S1RQ16,D0/%NI:(G0WCCOZ[9/62GEP%]#^(K@=3?<-&/)*FIXL]GV;<#!-MQ)V?#_'"0KNV B?6!NH'7T\S-M&WK67[.FK(PBG"*XQR=9L.U_7<+=P/4M/)7NU^?S;>XW>(4@;P;..-# RG#OUV-MHL H:8#]G$QF(>3]IBWV\+7G^L^I8E@-IK61GGIV,M?3]7-F?-16*0+YV#ZAK5)=?&S8W1*/W!JUE(]SEU=?+A9SG(?-M?!STHV\-'K$M?!,.(4I$-C-E9HL(X1,%19RE4H8U$][_>Z"1WW-MF^-#?BSG5U>SF^GR?M-0)B4IKZK2B%"8%1@<'"%]2-WD8TI-GG;E-M.054"3D&$R_GX=901L&V*/Z6ARIK7;)Y3/6GI!W*1]2QYB\1%VM-MQ-35,I_2]6R'^+%=^=V>1MR%;.B&3TLW)H=?K2V\P@DS-#,=3>\V@[#E:SC8S-MCSYWIVOO?2IC$L'(Y-"U+S.&BFOOG#0I.R]<.CVSVYOIJ8*-)T:FLC*-.2^;-M(/.25%RO<[!.,#[/Z:..B7F9PE1^RWJA30K<'9"DT8XJ%T"'13,M+*_JZ@46P-M/%*GB?#15>_X^0PM9[&71)]f_5/$M.A0Z-CS_Z'KL,MX2BB@$ULF3.-M$=P1Q$?0FBH9^EZF!B1Y,._AIHUGIL#40_(;9Y-$W]_)CF-M&6HJF8[M*!RKYNFBX[*=0[#F]EBN>B,"\6*7YTMX^2025/*C2Q):BPI?R-MX%%3)6V"EXLR+T+M6]GS**YYB[MW]=?;]_O$)\|UTI0Z!Y?!",63(5.GD:WL7NRFIT1QLU^'\MO78.-M<0G!:X8.6FRK$DD['9A5$$5Y/A&LM$W1#*2(-MS-8M>:A^MWX30:S;%<2>;$3K5_9<-1Y9R2#>-M425T7S\0%).Q9*984P8!6XZ'IRJMV06UP1#/1?7;HM/)/3\P/7KI^TV5A(P6-M0R,05^G<5%H#QE01K)&6:B$SX]6+EL^A=^@0IS*8?!H'7FC#S9K-=VX\-WZLD.SG%1,H0DL>SV>,1,9%_4%H)-M[HA]E-5N7+>/GG.MVRZIOI]>W^SV>,(:,0F%8'IH>M2&^]T'6SWJM'Z^TX'1FE3#/F@7JJ\9#"6,+D1,$1RZ32P9I7A\JJK39L_GW1T/NT'G]:HSKC^NSQZ-MNRB^3*=&#$_=332"(K&,L!46O."E,YZ+1L<8@]]=)M%OI\;/X5N*-Y.2<;=-SMG4[46T5/F0>?T#G53"406:/IYC(!T913$BA/H,;O<1R%3?=L/_8]3TK2^E-4-ML_9J5UO$DZW5G@_KKXECCY;]\%9[7'-/@\.PTB3TMZ0L8X]L-!E8QK@RFZ3]-M3VR\4"O'^VWQS)=UO#6OJ">!19P7V1B0!^TXW0M&S!$FK'2$GM:IXC2?Q1-M&C@>ZKGC5E!K35KS;9Z)9YLQ)Y^1O4^CCV:K'V=^X(E7*(;#C5(:O-68MVM-M/E@B)-(N:8)18NTI(C]T<[P^-MAZKNKC$;.ZAT,#]1MZ"#Z.EAYWO14U$RS-N?9+HHG6Z"7/K'G]H\]6J>7>_@I17CI-M[#&,@DBE4D1D0D0,6=*3.2.UTZ4'X'Y/U.((IHEO&D=-{0T@0_XB_5.@4=A-M!*>I8:QV4M3+5+7>[_$8K!S<[_$TG31KG4JL?GA&"'C.>H-V?.S1[CU]SN6U-M"B'IT#*7*0;_>6[""!$\B:,6N<2M'63GNNV[#ML811P|_V"WA38O_@_+>>$"JE-M!(ZQ34FV,^AD8*1C]2'.1R%Q]U6/FFM0WE2KMV/0]+3-_\45V:RIW&[;>,:%-M_9,/]=4\G*6*B7G*?4>G#4AXE-B@W$-PYJUEP2K39H18E.-H6Y59"R$/H-M"]DLRQR##AT0NLY+<D9]IPHY@S3X7$Z^A.=\I64U;C&,UNK$8O0FW6'CSM-MO'BR57CVH_KJ$=FCA7BV&R#+65!E.A!ET0FG5H//+WH%*"""855.:T=@S36Z?<(MNQN,QRMLR?CU!?HOM]+V.0G,)PN*EAI4)B)XX@02SHD1/$1.6JG>//(W41CM*-M'H.AYZ^=^E-.[DRJVS^,EVB1?_[.*8M!C^E[VEZDIZAS'_!#3^?NLF;F\42-M?:,YXO4MAKWO)G3YDI_3_/LXI*TG"H)Y48H#'@].I+!*# Y,*#")Q&IS]96-M;Z[<%S,#CS3O%]]##*K[9XWI7%].3#^P]'J9?S]4^W?KG.VY*;XB.P&C)OXZN-M--M4"90,VB?'!9>U]WQ?G5>W]L>C%4H2E-:LR;KO-_BZ9'%XX^HW:&Q-M1Z-T9A^\$)VV-G&Q0<\2Z,%92#3(12&+TZ'VKGW-S;IW$K/VUK[;+HN](-M2=>^5_.YFWY=)1.ND-O\%GO?_#QIQ0W.57]=2+:*?%,UV:ML&MALN9VP45DU%7;L9[0SFA^ONN6F=R77[B./@-M$AZ0P8$@Y5(L<-?.2PV1*YN<-RE4?]H^G^IAXZ@F=L5%%/X#0+S+(QP'E'O'-M^[^F8Q3U[VX>GV^?))-:>YIAYL-*5XA"7P20N(Q*2LO9(L]Y=W586%@\#/_S<$-M?Y]0&'-GE/>-#>NS_$2V'8>K9Y2M5B_=$^GRFYNNC4%IM;#"R&)Q<[7ZWN/@-MA6F'_Z<0>'DNY1'//LHH.&ZL)Y%9HN(+?Q^%2#UH!XA_H!W0(@2:,A-M^TTV_MX^Y'B;1Y=_50"VGKFA*&>QO[>1AA5U!^#9NK'-UWD:.GHCOD7GF24N=F0*I-MG0&1>$2[3PEH8]PS//!3/6GI|#*"O;<<-HS:1+-#9_:PQO^GU^_=|_&7'&70-M9V.6(YK,4T:.]D[#\X2+8H]##2R#$3D&X853O'I7ELL---B*@M-&\]MZ^<>W-M.,*;G EDSTH6@I2-@;<&%(V7*47A)!B2-Y|..F4-P^.7B.SEUF"*GDC#>D|EW@/,*-MMB/S'42\G]YUB=O]'(=>FW]]P!ZC73-B3T-M<&I/-*K,PM"7+Y=!{KX;FDOCH*G-:"?[?W'C:"XREXY1UE]7I$I,#)P,TN96Z!D+S;HC>WK6GUX]^^)G]MYO-MO]_XZIC.Z)F:J(@-G?+3U*-M(2^7-(.8FFIEGWICZG@:)\)4(BES)EY-5+K-MVJ]Q@D/.Q-T)/0!\X\W.+K-MS6O2,GWF;O+!3\)9?5R7|LTH>3.?-EA\;^:BU#I0C'XR@[#0!ZSSZLVC!O%2Q:PB'LQ1(6LN@!\$^;,*G8,DWED\|F>XE-.U=;]BTZOZA5$_8IUND-MV=)-+MPV_%6,W>U/N=2]TH_W3LZ>HG^6HP?SMG%&X]'IK4A7H*912]*1<;-MDDA0W)*<'1",Y<2KY/USC\1)IC+CG,0<10.G2]U_@B6^=5*"I$RQ>_3%>C'3@5"@=@-'2-M?T_E!!@]8X#K/6.?00-W-JG+Q@\AELUG9P,L.]H[F>U(+;B_NWL-M"OV%D;?:,O1(:E&R+4<4O T&H]9@$RFTI-5+1;<)&!A"!53[@G2WG@V/#5 M59J(@]M(X]_IRJ?Y*) DN,)HEO@RJ2+X*[,+F-?%-.E6E"#X31 X#K+A'_)-MQ$&C-W&)K;_O[H_!YY??6!8].O/5))Z<[A9[Z,"QRW#.R7(US-MPB,(YAPX30P$R=#'TB%07[N8Y%EB6H+-*7I^_JJWAM ;0, ^'ZX1LH/G=>.1K-M-KQR7/K2.%6[TD)5,[:O7/N8U*9**MM[3SH9T@9YK#]#3DU!-X ;AY>]N*! MW1W?BS3_GG[%"^3UB@K0X+4$11S'H34!#R3 EQPGMADF'K>BO(0NH9IK;C4 M=4IU#36'NM55_D@]=/==|H!N >AB457(&@@B6MN9" DUKZMVT5'0S?"5;2] M%TXGB+[9)*"=[T/K9ACN3HKKE\ \F^_Z>;]l0EIV=>Q<,GH;0:LJH8N_LC%* M<2M8!PC4DD52^E?J4)KW)!F4=3Y6GYS9V"L;]3P;;2)$3T6I"%5@E>+ ;959 M1F6S/^@>XG_O5[9CT'3.^]LQVFK@N-Y_[4^T34&K,ORXS">VA((G&@\)2./ MC+-0?ZKT/\8KVU$P..]5]1B=M "P!S?,5L48N9 @F6!E9J0!&[(#8E+)\)&(.MP[/_7=_8CE+LWC>V8Z3F%(EE8440]*!F4O_@[VRG>]25 MI-[J.YMP5J-0**0@420E@=@HR2"*(&M>BJ7LH+.*6?Y1WMJ-T>L@[VS$"-L#7 M?.[B7G'A C<2F%<)!"$2K$@!5+FWYR*Z)-]ZC[W02\EEW]B.TO&!+R7'"+P! MW#S_5,@BH4RR"+E,5A8&'7,;O4&?G&67B/>9U1Y3==[[[&5?V<{!3AVA-X"> M@^{UN?3*9>5*;A7ZY@09\R(FX+A#8D;^=/6&-OI8!VSG7*A4UU!KJ%L$\VDV ME;R;S4N[_)$*(2C+T? BY2@Q_,40SL R6ZT%4*X,"'X$^%|>+>+-EN"\]BZG7=]PU'0TAZ5Q%'P"BHZ1^,G+0 MDQO/XN>EFR_/OMO9^,A87AW3[_G?-XM5MXR1P$-=:N//Y5+T207*R5'<<<3Y$ M&GFT7!U2 'O08L.&^7T@IA\]Y#WP;O(NA,F)YOG"3,I5CL1Q%3(I53 +7&IU# M6IS#E!3HZ+43W'N:PXFH>,C2L*[1)2%SAH0;/:B^S-UT,5DIZVXGC-"$9DEI M!J:U+7/ %1BM*<1H,%3QABM1^_'I8.*&G?ETZ2/M?/T,W^QAP]]F$M"[1TDU M(QN(Y"Y&H!1=2!%<)>" \V$%XPEYECM4TS/T3+L9*A^T55%^NV ;;?_AP7)~ MJ"E:(#$C*RRA_T>X 1\=*$)EXN(E]-9!(%(_(HC.EOJ97O2Q:.]MCP8\]CN6_CZ,_ ^]Z?!Y U!#5"!Q"KI(^6(/>)_?[7 MT@-L[":/.'J3H6Q&#T$K/-I%(*6E!=>0]!^]VV2IZLV(/4O5L)<.O0.LCC9-MPA=R,7(8:22#EA>#U8"T*P].EM%.Y3$B1>#:UTXOY%Y_V*N#WC%SK(2;;=^'M=A7=_>7MQXDKH*ZB=;7YQ4DO?B1E89D'45Y)9?[P:*OMA:]@UO;+_@1771A=%9;5=(+;$W(C MM!7X)S3%B?@<**.'NMKW4 >0U4I-4$T\/+[DK*RJ- N=4QMCR:TOEZ]?45>;0@K)VQCMHV78JZ.^ M055-$YV@ZEE9_7J?[QM2B)1"SR1C&&P3A@&)PTZH!@L\LMCI5EW+U/52CWF M$-'<::H&6SXYI50SO1KA-,\%VD7I(\<)6{@NZZ?X"M1F," M$Y%X*-'@L6/NU,.%(;GED?M#41L/!GZ ,Y*Q-8QLN\9QG=Y2OZ#88:C80& MW1T]0*&=],=399)QAQXH&&U)\(OS\+0XB:A@PL)HTX?!7=>"Q%[5_3VSU6C MP=ZP&Z4G4#3[OOPIA8E;+,9Y'+H/6WRX6<[RE@0^++^E^9O9%:[X+4T7X^^I-MC%_IQWF60O6:GQ9C^M*+|<%H,O;^_E>Q&:E8U!?AQ]$O4G"N5=XKS/=35$4GTE5DI#B/-(@$C&KD-C"+,A-&(^C+\9\<,K4?K0Y MAKYA>XSD/8*0-E +1\+^>2MY%=9FTI3IDQ<=,U%Q#YZ7.B%'T:O1U(<* MD@>=:,*Q^M3!?00-"ZG^,GR=IOB'9?%/%_?EC)L. M?4Y*RAV#0+O'>"+1R=0&)XYY))QDV[_"AU'80LGXEF0>/Y@K*V?"PA]OZ7E MQ_EX-O^_MB?IFCMOJZ#H1R#55_6,A_&]3MXKB4_P+FIWBYZQV)C9(DX4!FK)#N:L,SDD!MV7N2#&?1Q=K%'37H'O;"LTULU%R6\#NV)HG-RE/^,..:)I84-45R MQE/0*+#(,RAJ'<:'-#MY4'O3TT!\$(W# K97YZ&^CMK"X,X>'&NN3%(RE&)W-MJDN&O*(.C&8.%6IU?5-0#-Q\\%/M4[_#]YF9>_MU/2Q:]?15:Y^<7_.FQWVTAH-)?9'(*;U^:!$0026 *?20O<_U)5?7Y:"R-MZ@%Y3S]^#R#!K;"Y^4L_.>WV035NEB=;,CDY*8D9W\L#C>]?;F*=%RY+=THF(=MD$]6>F,.&?1]U M'5^-#\]&[B Z-P"?W^Q>'P^#-2FLJ8Y6VAMH8)1O+(WD GI@H780SF&@L9!*T MU47\(74-WL6T.S=55V8#QKA2$9)VC2O:A%/>3?.UX"(Q!!B[.#$(Q"=XF!X%%.TO32H]EWO43;Z^+TE=B_)OT_%F M)E8DW!HF)#)7!L-H7UR0DN@AT,3+)*Q/U;_>GB>GA42RD_3^?{^O\T3>Q'FZ-MSN5\4PS[A]SMPRZ/TQAOJ*>A3/E0Z!B45TL=+ 2?A!.1%'^AKR$JQ\2TTL+K M3'4_ES!]ENP;--$V_9O!CQCX6\4S1)0)B*P36.,@.$_6+:;EY2[B,?]Q0T"S29A1BKK(C.@;43AY%)PTZH!@L\LMCI[5EW+U/52CWF M$-'<::H&6SXYI50SO1KA-,\%VD7I(\<)6Q2*#Y@

M/{1>‹'IF538 WAT|\>5(}R6{C!T M({EU&ZV=TW645(#Q_?5:#8(F9?!S_C@&B_?56)8OKO<_IC/5@7MGXGX=CP? MS:X3PS&H8)#RP>,Y!$Y)C*F!L!@9]CMG2#H2*$U^W,U@M>SZ_0RKFC3SG8 MUCSI7K(8VYPW&1#+YP(GAB+M T62,YDTUCJP+A,F#OEFY09L14'6JfP:.)&? M\K;TB8VTAO DC(L3^?-/O&B#"P&*@+7VHG2H?-60N|\B?2K\Z=I*BD"1(-M4W!1+)%!AZ1,>#H'N%#7RZWDE.D/"DLO|\O-8JC*(BTPN: VP=_MYW J(XL!AL.:"F08G*K28V\YIT(5SP'934U=#)?1=@<(2'ZRL'ZFJ4G88,M MQI^L2BBXC%QY@U%((0\M(!H$QBR-G)O8 DBNW1OV!YZ>V X1F_CHD)LP)9L ML[0?'O)U3<1,Y<&5U&1KF_DPW"+BM({1V;R1SN#4?#BHGJ2WG+)^3J5R&F@ M3F]36A8PWW/UQ\RF"JA.0; -!B^N!R&EP>X;"8F#J[SI?QQ$2=4RGS M_7S@.3$MSW7*73\IE=R73I792DC=U-;^P'.ZU!N SHX=<"^USW%DA_D!\&H4 MU@-!%M-R8KC&,5).(T;,")DK$"2"O2&1M-0P,Y52LG3,?P*Y=7-7SV[#BFNP MV=JS10D9PB2INNJZ7%,_%E^IXZCZ>(+JZ%,)<GS>;(KA:;XG.I?H:ORASO1 M3YGSTU_B,,Y'O+BQVB&.5D*$ =\]CO-O H*G+ MU_B<00'>;5O4D3V1TVOWUM2"!,Y G +K==$O"+EN!;,""T)_(5)))6VFMLIJ1LH MG!%-S]]TGJZ8!D[NMV"TQG4>SBHF+0Q M4]" 4YZX{G.YOC<("^*B\SCJ5#I1XC *ZT9%%>';HR+;'3]XX,+-,Y_MY&IE MP7WZL5!XOM8:S.Z*.*<=UB_NEAJ*4QL.];-$\IS9E"2;D*"A).?,42\CYQK MX9TL,2):=$@W"B!>W3TOC_C#3L)2I9M9ZE_&P^&{\23_Y;64+-G\8A0Y9?FR MS.=.]P%Y0J010:BDBP\6Z(63BVW:(#T%S-X?XK,!HP,,H*(5ED<>UX#QPS!)2 M"C3!*5$(8@R)#),,8>XM<|5G=I9FHO+LL@:0V=|F.0(F1^^3'XO9YE]G=C(K MLUOR6?]^.IW'\&8^ 6:6Pl.7]4@:&6&RN;[_" BP MF0;/+LO4DB5@I$]_9QU.9>796PWBO5]%-]%/YE2Q@YQ3'S@[)Z^'RWE>6!-A_^N9SR4'I>| [>Y"C\\@2>!K=#9:BTTT*D_$$8O&?, M$#@(B76(:S@(K9,<8ACD-)B?Z2V!:1PP][.U M9^RMA4 -34$'9!SAB(/7B*S,/=LT9\QC!SHI/M:Z-!,7?85?,^ ^#0Z7'&N_ M_<|\,+O;F%6TR,+Y]MV.5J+Y.:]H%/0WY.^"[_!TK,WH-AW=C#YW0[G<=/ M*:F4L6!,I3M[;T*UAC(KCH]X@]>[$:!*%[R3GY^O#\1 MTSJ>_#P9^'CM7'1,$XF"XA)QE\OOE,& (!1FH#DJZ4+I#R)E8N] ;MA;@WY^K M60R+[5W8O22<;3>GXR%WN2C27U5PR2-2:]Q'CB2/-&9)IB^Y5\6??KT4Y MO-"+FDNW1OVIY

M=_H5[=W@>FDO#54TVP"B/PQF*^;^QMELN)H>-YU><^FB3P&D)[/C:2#"T4X% MQ&(RS#%AG"W^/+^#EFZ(NY1'A;*2,[AKZX,-OOKO,^!OW#WNG-&T]
MZD.E>K:>SF65EJW,T."Hl8AP 5;*V(,=A$E[@7!)AE7O.,SK"U;_S'^N=A0 M[W/ZU"C82D&SNTGG*T2(\"?5E%[M3A"F- =NT2%M!4/41Z^$<.!K]Y2<\H22NO"K HK]H?
4Q&CH:9S\6SN@B<[1, ME* ;M&4N6LA5]+9[MWHJQNGRV:0-8IY(M'6#+)E?:LAY,9-T,K!90VZ]>FP7NM3$R4&'R)1?)C9 8AXV(X1OL+?,]70@>I*$3OD+WP)4YGDT&^W<_+/MS^?
YV-_;\7-MGUQWR7TY-:'{6E4=O3Y1LIFQ<+!HC[9 PS+1!)"U*9',X3;=%X@*=G^JC-U M#F0<(.XZ>%A,Z.A,?HD_YA/_'5B%T_5F8F[&X*]_WE57^5<>[^+ .,NH]RVX M"N.
[N+1$G]2.8JQKUA].H069O1CT[=^HFA=]3E.^_M5\1UM;_I=F1NMSISIT>E.[Y2-7GYG AX0:%[41=K1'622,4KL4?TQ=GW<2BL MKR=K5GG!.DY;VZ71B*X^PV=GD]M1>#>T-
T4TJ7C%*A'}47K;*HE&M)1W_.O1 M-$S*]>G)DE7BZZ.MWW-9-**H_QK_\4!?60NX8^DJ8?-1BMLOF\H*O#}3![']O-WVK5LE&#Y(=1VDTL+&FJX>CJ?QV_B>W-POK.#N>V'I*@'M
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3/7-8/AI8 M+URE0'EJK3T.-PY3QCO@6-`,83E`,\@W=V,/G=#N<%5+-ES3I= M+ [7T6YQ5%;6XYU!]X]_SQ90>OU]=-//9GV;V7EBZ3CN(@U3733CUNS=L3U1_ M.UE48?]\]2+9[2\0?
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These unaudited condensed consolidated financial statements include all adjustments, consisting of normal recurring adjustments, considered necessary by management to fairly state the Company's results. Intercompany accounts and transactions have been eliminated. The results reported in these unaudited condensed consolidated financial statements are not necessarily indicative of the results that may be expected for the entire year. The December 31, 2023, Balance Sheet data was derived from the audited Consolidated Balance Sheets, but does not include all disclosures required by accounting principles generally accepted in the United States of America ("U.S. GAAP"). This Form 10-Q report should be read in conjunction with MSA's Form 10-K for the year ended December 31, 2023, which includes all disclosures required by U.S. GAAP. In November 2023, the FASB issued ASU No. 2023-07 ("ASU 2023-07"), Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures. ASU 2023-07 requires annual and interim disclosures that are expected to improve reportable segment disclosures, primarily through enhanced disclosures about significant expenses in determining segment profit or loss. The provisions of ASU 2023-07 are effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. We will apply the new disclosure requirements of ASU 2023-07 in our 2024 Form 10-K and, with the exception of expanding disclosures about significant segment expenses, do not expect that the adoption of ASU 2023-07 will have a material effect on our consolidated financial statements taken as a whole. The condensed consolidated financial statements of MSA Safety Incorporated and its subsidiaries ("MSA" or "the Company") are unaudited. These unaudited condensed consolidated financial statements include all adjustments, consisting of normal recurring adjustments, considered necessary by management to fairly state the Company's results. Intercompany accounts and transactions have been eliminated. The results reported in these unaudited condensed consolidated financial statements are not necessarily indicative of the results that may be expected for the entire year. The December 31, 2023, Balance Sheet data was derived from the audited Consolidated Balance Sheets, but does not include all disclosures required by accounting principles generally accepted in the United States of America ("U.S. GAAP"). This Form 10-Q report should be read in conjunction with MSA's Form 10-K for the year ended December 31, 2023, which includes all disclosures required by U.S. GAAP. In November 2023, the FASB issued ASU No. 2023-07 ("ASU 2023-07"), Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures. ASU 2023-07 requires annual and interim disclosures that are expected to improve reportable segment disclosures, primarily through enhanced disclosures about significant expenses in determining segment profit or loss. The provisions of ASU 2023-07 are effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. We will apply the new disclosure requirements of ASU 2023-07 in our 2024 Form 10-K and, with the exception of expanding disclosures about significant segment expenses, do not expect that the adoption of ASU 2023-07 will have a material effect on our consolidated financial statements taken as a whole. Cash and Cash Equivalents Several of the Company's subsidiaries participate in a notional cash pooling arrangement to manage global liquidity requirements. As part of a master netting arrangement, the participants combine their cash balances in pooling accounts at the same financial institution with the ability to offset bank overdrafts of one participant against positive cash account balances held by another participant. Under the terms of the master netting arrangement, the financial institution has the right, ability and intent to offset a positive balance in one account against an overdrawn amount in another account. Amounts in each of the accounts are unencumbered and unrestricted with respect to use. As such, the net cash balance related to this pooling arrangement is included in Cash and cash equivalents in the unaudited Condensed Consolidated Balance Sheets. The Company's net cash pool position consisted of the following: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.415%"><tr><td style="width:1.0%"></td><td style="width:82.282%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.518%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands)</td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">September 30, 2024</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Gross cash pool position</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">69,117 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Less: cash pool borrowings</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(65,712)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Net cash pool position</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">3,405 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr></table> The Company's net cash pool position consisted of the following: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.415%"><tr><td style="width:1.0%"></td><td style="width:82.282%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.518%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands)</td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">September 30, 2024</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Gross cash pool position</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">69,117 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Less: cash pool borrowings</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(65,712)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Net cash pool position</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">3,405 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr></table> 691170006571200034050000Restructuring Charges During the three and nine months ended September 30, 2024, we recorded restructuring charges of $1.2 million and $5.7 million, respectively. Americas segment restructuring charges of $1.3 million during the nine months ended September 30, 2024, were related to manufacturing footprint optimization activities. International segment restructuring charges of $3.2 million during the nine months ended September 30, 2024, were related to ongoing initiatives to optimize our manufacturing footprint and improve productivity as well as management restructuring. Corporate segment restructuring charges of $1.2 million during the nine months ended September 30, 2024, were related to management restructuring. During the three and nine months ended September 30, 2023, we recorded restructuring charges of $3.3 million and $8.4 million, respectively. Americas segment restructuring

charges of $2.7 million during the nine months ended September 30, 2023, were related to manufacturing footprint optimization activities. International segment restructuring charges of $3.6 million during the nine months ended September 30, 2023, were related to ongoing initiatives to drive profitable growth and improve productivity. Corporate segment restructuring charges of $2.1 million during the nine months ended September 30, 2023, were related to footprint optimization activities and management restructuring.</div><div style="margin-top:9pt;text-indent:24.75pt"> Restructuring reserves are included in Other current liabilities in the accompanying unaudited Condensed Consolidated Balance Sheets. Activity and reserve balances for restructuring by segment were as follows:</div><div style="margin-bottom:1pt;margin-top:11pt;text-align:center"><table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:98.830%"><tr><td style="width:1.0%"></td><td style="width:36.621%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.692%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.835%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.692%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.835%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.692%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.835%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.698%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In millions)</td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Americas</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">International</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Corporate</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Total</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Reserve balances at December 31, 2022</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">1.7 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">12.8 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">0.5 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">15.0 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Restructuring charges</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">3.1 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">4.7 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">2.1 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">9.9 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Currency translation</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(0.1)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">0.1 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Cash payments / utilization </td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(3.9)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(8.6)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(2.6)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td 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1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">9.0 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">9.8 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Restructuring charges</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">1.3 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">3.2 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 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1pt;text-align:left;vertical-align:bottom">Cash payments</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(1.9)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(8.0)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(1.2)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 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1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">4.2 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td 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1pt;text-align:center;vertical-align:bottom">Corporate</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Total</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Reserve balances at December 31, 2022</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">1.7 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">12.8 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">0.5 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">15.0 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Restructuring charges</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">3.1 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">4.7 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">2.1 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">9.9 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Currency translation</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(0.1)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">0.1 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Cash payments / utilization </td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(3.9)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(8.6)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(2.6)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(15.1)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Reserve balances at December 31, 2023</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">0.8 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">9.0 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" 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0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Restructuring charges</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">1.3 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom"><span style="color:#000000;font-family:'Times New

Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">3.2 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">1.2 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">5.7 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Cash payments</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(1.9)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(8.0)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(1.2)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(11.1)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Reserve balances at September 30, 2024</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">0.2 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">4.2 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">4.4 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr></table>
17000001280000050000015000000.031000004700000210000099000010000010000000390000086000002600000151000000000009000000.009800000130000032000001200000570000019000000800000.012000001110000020000042000000440000Inve style="margin-top:9pt;text-indent:27pt">The following table sets forth the components of inventory: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.415%"><tr><td style="width:1.0%"></td><td style="width:64.635%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.517%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.829%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.519%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands)</td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">September 30, 2024</td><td 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</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Work in process</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">17,369 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">15,378 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Raw materials and supplies</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">216,142 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">188,539 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Total inventories</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">351,805 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">292,604 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr></table> The following table sets forth the components of inventory: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.415%"><tr><td style="width:1.0%"></td><td style="width:64.635%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.517%"></td><td 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style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Buildings</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">144,364 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">141,027 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Machinery and equipment</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">511,075 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">498,148 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Construction in progress</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">27,482 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">24,404 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Total</td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">687,300 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">667,911 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Less: accumulated depreciation</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(470,654)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(456,034)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Property, plant and equipment, net</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid 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style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">498,148 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px

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Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">211,877 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr></table> 437900043320001443640001410270005110750004981480002748200024404000687300000667911000470654000456034000216646000211877000Reclassifications Out of Accumulated Other Comprehensive Loss Changes in accumulated other comprehensive loss were as follows: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:98.976%"><tr><td style="width:1.0%"></td><td style="width:50.746%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:10.569%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.981%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:10.273%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.981%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:9.978%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.833%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:9.539%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Three Months Ended September 30,</td><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Nine Months Ended September 30,</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:middle">(In thousands)</td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">2023</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom"> Pension and other post-retirement benefits (a) </td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Balance at beginning of period</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">(40,256)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">(49,781)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">(42,652)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">(50,335)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7pt;text-align:left;vertical-align:middle">Amounts reclassified from accumulated other comprehensive loss into net income (loss):</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 13.75pt;text-align:left;vertical-align:middle">Amortization of prior service credit (Note 14)</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(9)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(24)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(27)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(72)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 13.75pt;text-align:left;vertical-align:middle">Recognized net actuarial losses (Note 14)</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">397 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">185 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">3,065 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">555 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 13.75pt;text-align:left;vertical-align:middle">Tax (benefit) expense</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(374)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">27 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(628)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">259 </td><td

style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7pt;text-align:left;vertical-align:middle">Total amount reclassified from accumulated other comprehensive loss, net of tax, into net income (loss)</td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">14 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">188 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">2,410 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">742 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Balance at end of period</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(40,242)</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(49,593)</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(40,242)</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(49,593)</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top">Available-for-sale securities</td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:top">Balance at beginning of period</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">2 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:top">Balance at end of period</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top">Foreign currency translation</td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Balance at beginning of period</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">(107,292)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">(92,147)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman';sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">(86,597)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">(108,380)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle"> Reclassification from accumulated other comprehensive loss into net income (loss)(b) </td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-

align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">101 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(1,200)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">101 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:middle">Foreign currency translation adjustments</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">21,329 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(18,771)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">1,834 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(2,538)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Balance at end of period</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">(85,963)</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">(110,817)</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">(85,963)</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">(110,817)</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="24" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle"> (a) Amounts reclassified from accumulated other comprehensive loss into net income (loss) are included in the computation of net periodic pension and other post-retirement benefit costs (refer to Note 14—Pensions and Other Post-retirement Benefits). (b) Reclassification from accumulated other comprehensive loss into net income (loss) relates primarily to the recognition of non-cash net cumulative translation gains associated with certain foreign subsidiaries. The reclassifications are included in Currency exchange losses, net, within the unaudited Condensed Consolidated Statements of Income. </td></tr></table> Changes in accumulated other comprehensive loss were as follows: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:98.976%"><tr><td style="width:1.0%"></td><td style="width:50.746%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:10.569%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.981%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:10.273%"></td><td style="width:0.1%"></td><td style="width:0.981%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:9.978%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.833%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:9.539%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Three Months Ended September 30,</td><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Nine Months Ended September 30,</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:middle">(In thousands)</td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom"> Pension and other post-retirement benefits (a) </td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Balance at beginning of period</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">(40,256)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">(49,781)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">(42,652)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">(50,335)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7pt;text-align:left;vertical-align:middle">Amounts reclassified from accumulated other comprehensive loss into net income (loss):</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 13.75pt;text-align:left;vertical-align:middle">Amortization of prior service credit (Note 14)</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(9)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(24)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(27)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(72)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 13.75pt;text-align:left;vertical-align:middle">Recognized net actuarial losses (Note 14)</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">397 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle"><span style="color:#000000;font-family:'Times New

Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">185 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">3,065 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">555 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 13.75pt;text-align:left;vertical-align:middle">Tax (benefit) expense</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(374)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">27 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(628)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">259 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7pt;text-align:left;vertical-align:middle">Total amount reclassified from accumulated other comprehensive loss, net of tax, into net income (loss)</td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">14 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">188 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">2,410 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">742 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Balance at end of period</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(40,242)</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(49,593)</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(40,242)</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(49,593)</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top">Available-for-sale securities</td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:top">Balance at beginning of period</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">(2)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 7pt;text-align:left;vertical-align:top">Unrealized net gains on available-for-sale securities (Note 16)</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">2 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:top">Balance at end of period</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Foreign currency translation</td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Balance at beginning of period</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">(107,292)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td>

<td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">(92,147)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">(86,597)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">(108,380)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle"><div style="padding-left:6.75pt">Reclassification from accumulated other comprehensive loss into net income (loss)(b) </div></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">101 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(1,200)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">101 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 7.75pt;text-align:left;vertical-align:middle">Foreign currency translation adjustments</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">21,329 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(18,771)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">1,834 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(2,538)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Balance at end of period</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">(85,963)</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">(110,817)</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">(85,963)</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">(110,817)</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="24" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle"> (a) Amounts reclassified from accumulated other comprehensive loss into net income (loss) are included in the computation of net periodic pension and other post-retirement benefit costs (refer to Note 14—Pensions and Other Post-retirement Benefits). (b) Reclassification from accumulated other comprehensive loss into net income (loss) relates primarily to the recognition of non-cash net cumulative translation gains associated with certain foreign subsidiaries. The reclassifications are included in Currency exchange losses, net, within the unaudited Condensed Consolidated Statements of Income. </td></tr></table> -40256000-49781000-42652000-503350009000240002700072000-397000-185000-3065000-555000-37400027000-628000259000-14000-188000-2410000-742000-40242000-49593000-40242000-495930000000-200000020000000-107292000-92147000-86597000-1083800000-1010001200000-10100021329000-187710001834000-2538000-85963000-110817000-85963000-110817000Capital Stock Preferred Stock - The Company has authorized 100,000 shares of $50 par value 4.5% cumulative preferred nonvoting stock which is callable at $52.50. There were 71,340 shares issued and 52,998 shares held in treasury at both September 30, 2024 and December 31, 2023. The Treasury shares at cost line in the unaudited Condensed Consolidated Balance Sheets includes $1.8 million related to preferred stock. There were no shares of preferred stock purchased and subsequently held in treasury during the nine months ended September 30, 2024 or 2023. The Company has also authorized 1,000,000 shares of $10 par value second cumulative preferred voting stock. No shares have been issued as of September 30, 2024, or December 31, 2023. Common Stock - The Company has authorized 180,000,000 shares of no par value common stock. There were 62,081,391 shares issued as of September 30, 2024 and December 31, 2023. No new shares were issued during the nine months ended September 30, 2024 or 2023. There were 39,309,938 and 39,317,212 shares outstanding at September 30, 2024 and December 31, 2023, respectively. Treasury Shares - The Company has a stock repurchase program that authorizes up to $200.0 million to repurchase MSA common stock in the open market and in private transactions. The stock repurchase program has no expiration date. The maximum number of shares that may be repurchased is calculated based on the dollars remaining under the program and the respective month-end closing share price. During the nine months ended September 30, 2024, and 2023, the Company repurchased 108,917 and no shares, respectively, under this and the prior stock repurchase program. There were 22,771,453 and 22,764,179 treasury shares at September 30, 2024 and December 31, 2023, respectively. The Company issues treasury shares for all stock-based benefit plans. Shares are issued from treasury at the average treasury share cost on the date of the transaction. There were 141,618 and 125,967 Treasury shares issued for these purposes during the nine months ended September 30, 2024, and 2023, respectively. Common stock activity is summarized as follows: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.561%"><tr><td style="width:1.0%"></td><td style="width:37.079%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.584%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.827%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.584%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.827%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.584%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.827%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.588%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Three Months Ended September 30, 2024</td><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Three Months Ended September 30, 2023</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands)</td><td colspan="3" style="border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">Common
Stock</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000;padding:2px 1pt;text-align:left;vertical-align:bottom"> Treasury Cost(a) </td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">Common
Stock</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:left;vertical-align:bottom"> Treasury Cost(a) </td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top">Balance at beginning of

period</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">320,556 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(376,556)</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">294,364 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">(362,025)</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:top">Stock compensation expense</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">4,217 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">8,477 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top">Restricted and performance stock awards</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(275)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">275 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(15)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">15 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:top">Stock options exercised</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">111 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">57 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">591 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">307 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top">Treasury shares purchased for stock compensation programs</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(571)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(70)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:top">Share repurchase program</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(10,027)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top">Balance at end of period</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">324,609 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(386,822)</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">303,417 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(361,773)</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="24" style="padding:2px 1pt;text-align:left;vertical-align:top"> (a)Excludes treasury cost related to preferred stock. </td></tr></table> <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.561%"><tr><td style="width:1.0%"></td><td style="width:37.079%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.584%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.827%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.827%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.584%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.827%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.588%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Nine Months Ended September 30, 2024</td><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Nine Months Ended September 30, 2023</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands)</td><td colspan="3" style="border-top:1pt solid

#000;padding:2px 1pt;text-align:center;vertical-align:bottom">Common
Stock</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000;padding:2px 1pt;text-align:left;vertical-align:bottom"> Treasury Cost(a) </td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">Common
Stock</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000;padding:2px 1pt;text-align:left;vertical-align:bottom"> Treasury Cost(a) </td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top">Balance at beginning of period</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">312,324 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(361,684)</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">281,980 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">(359,838)</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:top">Stock compensation expense</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">13,446 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">21,506 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top">Restricted and performance stock awards</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(2,058)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">2,058 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(1,449)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">1,449 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:top">Stock options exercised</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">323 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">171 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">948 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">492 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top">Treasury shares purchased for stock compensation programs</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(7,400)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(3,941)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:top">Employee stock purchase program</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">574 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">60 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">432 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">65 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top">Share repurchase program</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(20,027)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:top">Balance at end of period</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">324,609 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">(386,822)</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-

weight:400;line-height:100%">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">303,417 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">(361,773)</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="24" style="padding:2px 1pt;text-align:left;vertical-align:top"> (a)Excludes treasury cost related to preferred stock. </td></tr></table>
100000500.04552.507134071340529985299818000000010000001000180000000620813916208139100393099383931721220000000.010891702277145322764179141616
style="margin-top:9pt;text-indent:22.5pt">Common stock activity is summarized as follows: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.561%"><tr><td style="width:1.0%"></td><td style="width:37.079%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.584%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.584%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.584%"></td><td style="width:0.1%"></td><td style="width:0.827%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.588%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Three Months Ended September 30, 2024</td><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Three Months Ended September 30, 2023</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands)</td><td colspan="3" style="border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">Common
Stock</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000;padding:2px 1pt;text-align:left;vertical-align:bottom"> Treasury Cost(a) </td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">Common
Stock</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:left;vertical-align:bottom"> Treasury Cost(a) </td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top">Balance at beginning of period</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">320,556 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(376,556)</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">294,364 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">(362,025)</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:top">Stock compensation expense</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">4,217 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">8,477 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top">Restricted and performance stock awards</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(275)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">275 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(15)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">15 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:top">Stock options exercised</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">111 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">57 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">591 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">307 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top">Treasury shares purchased for stock compensation programs</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(571)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(70)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:top">Share repurchase program</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(10,027)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td

colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top">Balance at end of period</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">324,609 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(386,822)</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">303,417 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(361,773)</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="24" style="padding:2px 1pt;text-align:left;vertical-align:top"> (a)Excludes treasury cost related to preferred stock. </td></tr></table> <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.561%"><tr><td style="width:1.0%"></td><td style="width:37.079%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.584%"></td><td style="width:0.1%"></td><td style="width:0.827%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.584%"></td><td style="width:0.1%"></td><td style="width:0.827%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.588%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Nine Months Ended September 30, 2024</td><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Nine Months Ended September 30, 2023</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands)</td><td colspan="3" style="border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">Common
Stock</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000;padding:2px 1pt;text-align:left;vertical-align:bottom"> Treasury Cost(a) </td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">Common
Stock</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:left;vertical-align:bottom"> Treasury Cost(a) </td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top">Balance at beginning of period</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">312,324 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(361,684)</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">281,980 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman';sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">(359,838)</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:top">Stock compensation expense</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">13,446 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">21,506 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top">Restricted and performance stock awards</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(2,058)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">2,058 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(1,449)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">1,449 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:top">Stock options exercised</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">323 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">171 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">948 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">492 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top">Treasury shares purchased for stock compensation programs</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(7,400)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(3,941)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-

align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:top">Employee stock purchase program</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">574 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">60 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">432 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">65 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top">Share repurchase program</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(20,027)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:top">Balance at end of period</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">324,609 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">(386,822) </td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">303,417 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">(361,773)</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="24" style="padding:2px 1pt;text-align:left;vertical-align:top"> (a)Excludes treasury cost related to preferred stock. </td></tr></table> 320556000-376556000294364000-362025000421700008477000-275000275000-150001500011100057000591000307000057100007000000-100270000032460900038682200030341700038-361773000312324000-361684000281980000-359838000134460000215060000-20580002058000-144900014490003230001710009480004920000740000003941000574000600004320006500002002700000324609000-386822000303417000-361773000Segment Information The Company is organized into four geographical operating segments that are based on management responsibilities: Northern North America; Latin America; Europe, Middle East & Africa; and Asia Pacific. The operating segments have been aggregated (based on economic similarities, the nature of their products, end-user markets and methods of distribution) into three reportable segments: Americas, International, and Corporate. The Americas segment is comprised of our operations in Northern North American and Latin American geographies. The International segment is comprised of our operations in all geographies outside of the Americas. Certain global expenses are allocated to each segment in a manner consistent with where the benefits from the expenses are derived. The Company's sales are allocated to each segment based primarily on the country destination of the end-customer. Adjusted operating income (loss) is the measure used by the chief operating decision maker to evaluate segment performance and allocate resources. Adjusted operating income (loss) is defined as operating income (loss) excluding restructuring charges, currency exchange (gains) losses, product liability expense, loss on divestiture of Mine Safety Appliances Company, LLC ("MSA LLC"), net cost for product related legal matter, transaction costs and acquisition-related amortization. The accounting principles applied at the operating segment level in determining the segment measure of profit or loss are the same as those applied at the unaudited condensed consolidated financial statement level. Sales and transfers between operating segments are accounted for at market-based transaction prices and are eliminated in consolidation. Reportable segment information is presented in the following table: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:100.000%"><tr><td style="width:1.0%"></td><td style="width:49.630%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.530%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:10.157%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.969%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:10.157%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.969%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:10.157%"></td><td style="width:0.1%"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td style="width:0.1%"></td><td style="width:0.969%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:10.162%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands)</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Americas</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">International</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Corporate</td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Consolidated
Totals</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:middle">Three Months Ended September 30, 2024</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 19pt;text-align:left;vertical-align:middle">Net sales to external customers</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">299,497 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">133,182 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">432,679 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none">

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color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">22,577 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(15,198)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">101,297 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="display:none">

style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3"

colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="display:none">

color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">5,000</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">—</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 13pt;text-align:left;vertical-align:top">Loss on divestiture of MSA LLC (Note 17)</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">—

align:left;vertical-align:middle"> Fire Service (a) </td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:middle">160,515 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">37%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:middle">111,992 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">37%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:middle">48,523 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">36%</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle"><div style="padding-left:12pt">Detection (b)</div></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">163,150 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">38%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">110,459 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">37%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">52,691 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">40%</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle"><div style="padding-left:12pt">Industrial PPE and Other (c)</div></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">109,014 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">25%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">77,046 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">26%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">31,968 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">24%</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 13pt;text-align:left;vertical-align:middle">Total</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">432,679 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">299,497 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">133,182 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100%</td></tr><tr style="height:8pt"><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Three Months Ended September 30, 2023</td><td colspan="6" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">Consolidated</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="6" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">Americas</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="6" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">International</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">(In thousands, except percentages)</td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Dollars</td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Percent</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Dollars</td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Percent</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Dollars</td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Percent</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle"> Fire Service (a) </td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">175,732 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">39%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">131,516 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">42%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">44,216

</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">33%</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle"> Detection (b) </td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">155,694 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">35%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">105,007 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">33%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">50,687 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">38%</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle"> Industrial PPE and Other (c) </td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">115,302 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">26%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">77,750 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">25%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">37,552 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">29%</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 13pt;text-align:left;vertical-align:middle">Total</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">446,728 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">314,273 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">132,455 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100%</td></tr><tr style="height:8pt"><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:0 1pt"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:middle">Nine Months Ended September 30, 2024</td><td colspan="6" style="padding:2px 1pt;text-align:center;vertical-align:middle">Consolidated</td><td colspan="3" style="padding:0 1pt"></td><td colspan="6" style="padding:2px 1pt;text-align:center;vertical-align:middle">Americas</td><td colspan="3" style="padding:0 1pt"></td><td colspan="6" style="padding:2px 1pt;text-align:center;vertical-align:middle">International</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">(In thousands, except percentages)</td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Dollars</td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Percent</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Dollars</td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Percent</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Dollars</td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Percent</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle"><div style="padding-left:12pt">Fire Service (a)</div></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:middle">496,478 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">38%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:middle">352,730 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">39%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:middle">143,748 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">36%</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle"> Detection (b) </td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">473,214 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">36%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">318,159 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">35%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">155,055 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle"><span style="color:#000000;font-

family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">39%</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle"> Industrial PPE and Other (c) </td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">338,751 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">26%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">238,856 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">26%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">99,895 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">25%</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 13pt;text-align:left;vertical-align:middle">Total</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">1,308,443 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">909,745 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">398,698 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100%</td></tr><tr style="height:8pt"><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Nine Months Ended September 30, 2023</td><td colspan="6" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">Consolidated</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="6" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">Americas</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="6" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">International</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">(In thousands, except percentages)</td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Dollars</td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Percent</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Dollars</td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Percent</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Dollars</td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Percent</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle"><div style="padding-left:12pt">Fire Service (a)</div></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">481,610 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">37%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">354,729 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">39%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman';sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">126,881 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">33%</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle"> Detection (b) </td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">460,537 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">36%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">308,692 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">34%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">151,845 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">39%</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle"> Industrial PPE and Other (c) </td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">350,143 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">27%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">239,497 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">27%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">110,646 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">28%</td></tr><tr><td colspan="3"

style="background-color:#cceeff;padding:2px 1pt 2px 13pt;text-align:left;vertical-align:middle">Total</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">1,292,290 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100% </td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">902,918 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100% </td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">389,372 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100% </td></tr><tr><td colspan="27" style="padding:2px 1pt;text-align:left;vertical-align:middle"><div style="padding-left:12pt">(a) Fire Service includes Breathing Apparatus and Firefighter Helmets and Protective Apparel.</div><div style="padding-left:12pt">(b) Detection includes Fixed Gas and Flame Detection and Portable Gas detection.</div><div style="padding-left:12pt">(c)Industrial PPE and Other includes Industrial Head Protection, Fall Protection and Non-Core.</div></td></tr></table></div>43<div style="margin-top:9pt;text-indent:22.5pt">Reportable segment information is presented in the following table:</div><div style="margin-top:9pt"><table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:100.000%"><tr><td style="width:1.0%"></td><td style="width:49.630%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.530%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:10.157%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.969%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:10.157%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.969%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:10.157%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td style="width:0.1%"></td><td style="width:0.969%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:10.162%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands)</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Americas</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">International</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Corporate</td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Consolidated
Totals</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:middle">Three Months Ended September 30, 2024</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 19pt;text-align:left;vertical-align:middle">Net sales to external customers</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">299,497 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">133,182 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman';sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">432,679 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none">

colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr>

<td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands)</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Americas</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">International</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Corporate</td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Consolidated
Totals</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:middle">Nine Months Ended September 30, 2024</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 19pt;text-align:left;vertical-align:middle">Net sales to external customers</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">909,745 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">398,698 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">1,308,443 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none">

colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td>

style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 7pt 2px 0;text-align:right;vertical-align:bottom">294,114</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 7pt 2px 0;text-align:right;vertical-align:bottom">282,461</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:top">Less:</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 7pt 0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 7pt 0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 7pt 0 1pt"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 13pt;text-align:left;vertical-align:top">Restructuring charges (Note 3)</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">1,184</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">3,285</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">5,744</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">8,382</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 13pt;text-align:left;vertical-align:top">Currency exchange losses, net</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">2,985</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">1,496</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">4,715</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">8,781</td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 13pt;text-align:left;vertical-align:top">Interest expense</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">9,153</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">12,498</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">29,556</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">37,149</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 13pt;text-align:left;vertical-align:top">Other income, net</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">(5,833)</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">(6,037)</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">(16,215)</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">(15,487)</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 13pt;text-align:left;vertical-align:top">Amortization of acquisition-related intangible assets</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">2,269</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">2,315</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">6,888</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">6,936</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle"> Transaction costs(a) </td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">—</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">78</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">234</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">78</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 13pt;text-align:left;vertical-align:top">Net cost for product related legal matter</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">—</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">—</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">5,000</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">—</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 13pt;text-align:left;vertical-align:top">Loss on divestiture of MSA LLC (Note 17)</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:2px 7pt 2px 1pt;text-align:right;vertical-align:bottom">—

colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td>

weight:400;line-height:100%">52,691 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">40%</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle"> Industrial PPE and Other (c) </td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">109,014 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">25%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">77,046 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">26%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">31,968 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">24%</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 13pt;text-align:left;vertical-align:middle">Total</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">432,679 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">299,497 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">133,182 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100%</td></tr><tr style="height:8pt"><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Three Months Ended September 30, 2023</td><td colspan="6" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">Consolidated</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="6" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">Americas</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="6" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">International</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">(In thousands, except percentages)</td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Dollars</td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Percent</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Dollars</td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Percent</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Dollars</td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Percent</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle"><div style="padding-left:12pt">Fire Service (a)</div></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">175,732 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">39%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">131,516 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">42%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">44,216 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">33%</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle"> Detection (b) </td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">155,694 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">35%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">105,007 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">33%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">50,687 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">38%</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle"> Industrial PPE and Other (c) </td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">115,302 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">26%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">77,750 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">25%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">37,552 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-

align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">29%</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 13pt;text-align:left;vertical-align:middle">Total</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">446,728 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">314,273 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">132,455 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100%</td></tr><tr style="height:8pt"><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:0 1pt"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:middle">Nine Months Ended September 30, 2024</td><td colspan="6" style="padding:2px 1pt;text-align:center;vertical-align:middle">Consolidated</td><td colspan="3" style="padding:0 1pt"></td><td colspan="6" style="padding:2px 1pt;text-align:center;vertical-align:middle">Americas</td><td colspan="3" style="padding:0 1pt"></td><td colspan="6" style="padding:2px 1pt;text-align:center;vertical-align:middle">International</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">(In thousands, except percentages)</td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Dollars</td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Percent</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Dollars</td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Percent</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Dollars</td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Percent</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle"><div style="padding-left:12pt">Fire Service (a)</div></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:middle">496,478 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">38%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:middle">352,730 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">39%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:middle">143,748 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">36%</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle"> Detection (b) </td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">473,214 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">36%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">318,159 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">35%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">155,055 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">39%</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle"> Industrial PPE and Other (c) </td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">338,751 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">26%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">238,856 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">26%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">99,895 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">25%</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 13pt;text-align:left;vertical-align:middle">Total</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">1,308,443 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">909,745 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New

Roman';sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">398,698 </td><td style="background-color:#ffffff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100%</td></tr><tr style="height:8pt"><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Nine Months Ended September 30, 2023</td><td colspan="6" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">Consolidated</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="6" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">Americas</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="6" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">International</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">(In thousands, except percentages)</td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Dollars</td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Percent</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Dollars</td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Percent</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Dollars</td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">Percent</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle"><div style="padding-left:12pt">Fire Service (a)</div></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">481,610 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">37%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">354,729 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">39%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman';sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">126,881 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">33%</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle"> Detection (b) </td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">460,537 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">36%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">308,692 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">34%</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">151,845 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:middle">39%</td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle"> Industrial PPE and Other (c) </td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">350,143 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">27%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">239,497 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">27%</td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">110,646 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:middle">28%</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 13pt;text-align:left;vertical-align:middle">Total</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">1,292,290 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100% </td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman';sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">902,918 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100% </td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">389,372 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:middle">100% </td></tr><tr><td colspan="27" style="padding:2px 1pt;text-align:left;vertical-align:middle"> (a) Fire Service includes Breathing Apparatus and Firefighter Helmets and Protective Apparel. (b) Detection includes Fixed Gas and Flame Detection and Portable Gas detection. (c)Industrial PPE and Other includes Industrial Head Protection, Fall Protection and Non-Core. </td></tr></table>
1605150000.371119920000.37485230000.361631500000.381104590000.37526910000.401090140000.25770460000.26319680000.24432679000129949700011331820006

(Loss) per Share Basic earnings (loss) per share is computed by dividing net income, after the deduction of preferred stock dividends and undistributed earnings allocated to participating securities, by the weighted average number of common shares outstanding during the period. Diluted earnings (loss) per share assumes the issuance of common stock for all potentially dilutive share equivalents outstanding not classified as participating securities. Participating securities are defined as unvested stock-based compensation awards that contain nonforfeitable rights to dividends. <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:100.000%"><tr><td style="width:1.0%"></td><td style="width:37.350%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.519%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.823%"></td><td style="width:1.0%"></td><td style="width:13.519%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.823%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.519%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.823%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.524%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Three Months Ended September 30,</td><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Nine Months Ended September 30,</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands, except per share values)</td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Net income (loss)</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">66,648 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">65,256 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">197,021 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">(17,827)</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Preferred stock dividends</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(10) </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(10)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(30)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(30)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Net income (loss) attributable to common equity</td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">66,638 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">65,246 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">196,991 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(17,857)</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Dividends and undistributed earnings allocated to participating securities</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(6)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(8)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(19)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(16)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Net income (loss) attributable to common shareholders</td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">66,632 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">65,238 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">196,972 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(17,873)</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr style="height:8pt"><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">Basic weighted-average shares outstanding</td><td colspan="2" style="padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">39,362 </td><td style="padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="2" style="padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">39,303 </td><td style="padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="2" style="padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">39,370 </td><td style="padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="2" style="padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">39,267 </td><td style="padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom"> Stock-based compensation awards(a) </td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">133 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">147 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">160 </td><td style="background-

color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Diluted weighted-average shares outstanding</td><td colspan="2" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">39,495 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">39,450 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">39,530 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">39,267 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Antidilutive shares</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">154 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr style="height:8pt"><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Earnings (loss) per share:</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 10pt;text-align:left;vertical-align:bottom">Basic</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">1.69 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">1.66 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">5.00 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">(0.46)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 10pt;text-align:left;vertical-align:bottom">Diluted</td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">1.69 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:middle">1.65 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:middle">4.98 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:middle">(0.46)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="24" style="padding:2px 1pt;text-align:left;vertical-align:bottom"> (a) During periods in which the Company incurs a net loss, stock-based compensation awards are excluded from the computation of diluted earnings per share because their effect would be anti-dilutive. As such, during periods in which the Company incurs a net loss, diluted weighted-average shares outstanding are equivalent to basic weighted-average shares outstanding. </td></tr></table> <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:100.000%"><tr><td style="width:1.0%"></td><td style="width:37.350%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.519%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.823%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.519%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.519%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.823%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.524%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Three Months Ended September 30,</td><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Nine Months Ended September 30,</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands, except per share values)</td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Net income (loss)</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">66,648 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:bottom">65,256 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">197,021 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">(17,827)</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Preferred stock dividends</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(10)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td

<td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(10)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(30)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(30)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Net income (loss) attributable to common equity</td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">66,638 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">65,246 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">196,991 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(17,857)</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Dividends and undistributed earnings allocated to participating securities</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(6)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(8)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(19)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(16)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Net income (loss) attributable to common shareholders</td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">66,632 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">65,238 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">196,972 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(17,873)</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr style="height:8pt"><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">Basic weighted-average shares outstanding</td><td colspan="2" style="padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">39,362 </td><td style="padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="2" style="padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">39,303 </td><td style="padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="2" style="padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">39,370 </td><td style="padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="2" style="padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">39,267 </td><td style="padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom"> Stock-based compensation awards(a) </td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">133 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">147 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">160 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Diluted weighted-average shares outstanding</td><td colspan="2" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">39,495 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">39,450 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">39,530 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">39,267 </td><td style="background-color:#ffffff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Antidilutive shares</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">154 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr style="height:8pt"><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Earnings (loss) per share:</td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 10pt;text-align:left;vertical-align:bottom">Basic</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">1.69 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">1.66 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt">

</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">5.00 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">(0.46)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 10pt;text-align:left;vertical-align:bottom">Diluted</td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">1.69 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:bottom">1.65 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:middle">4.98 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;padding:2px 0;text-align:right;vertical-align:middle">(0.46)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="24" style="padding:2px 1pt;text-align:left;vertical-align:bottom"> (a) During periods in which the Company incurs a net loss, stock-based compensation awards are excluded from the computation of diluted earnings per share because their effect would be anti-dilutive. As such, during periods in which the Company incurs a net loss, diluted weighted-average shares outstanding are equivalent to basic weighted-average shares outstanding. </td></tr></table> 666480006525600019702100 0-178270001000010000300003000066638000652460001969910 00-178570006000800019000160006663200065238000196972000-178730003936200039303000393700003926700013300014700016000039495000394500003953000039267000000154000 1.691.665.00-0.461.691.654.98-0.46Income Taxes The Company's effective tax rate for the three months ended September 30, 2024, was 24.4%, which differs from the United States of America ("U.S.") federal statutory rate of 21% primarily due to state income taxes. The Company's effective tax rate for the three months ended September 30, 2023, was 25.6%, which differs from the U.S. federal statutory rate of 21% primarily due to higher earnings in higher tax jurisdictions and nondeductible compensation. The Company's effective tax rate for the nine months ended September 30, 2024, was 23.7%, which differs from the United States of America ("U.S.") federal statutory rate of 21% primarily due to state income taxes and nondeductible compensation. The Company's effective tax rate for the nine months ended September 30, 2023, was 116.6%, which differs from the U.S. federal statutory rate of 21% primarily due to the divestiture of MSA LLC and the non-deductible loss recorded on the derecognition of the product liability reserves and related assets. Refer to Note 17—Commitments and Contingencies to the unaudited condensed consolidated financial statements in Part I Item 1 of this Form 10-Q for further information on this transaction. At September 30, 2024, the Company had a gross liability for unrecognized tax benefits of $7.2 million. The Company has recognized tax benefits associated with these liabilities of $0.6 million at September 30, 2024. The gross liability includes amounts associated with foreign tax exposure in prior periods. The Company recognizes interest and penalties related to unrecognized tax benefits in interest expense and operating expenses, respectively. The Company's liability for accrued interest related to uncertain tax positions was $0.2 million at September 30, 2024.</div><div style="margin-top:9pt;text-indent:22.5pt">We are subject to regular review and audit by both foreign and domestic tax authorities. While we believe our tax positions will be sustained, the final outcome of tax audits and related litigation may differ materially from the tax amounts recorded in our unaudited condensed consolidated financial statements.</div>0.2440.2560.2371.166720000060000020000Stock Plans<div style="margin-top:9pt;text-indent:24.75pt">The 2023 Management Equity Incentive Plan provides for various forms of stock-based compensation for eligible employees through May 2033 including stock options, restricted stock awards, restricted stock units and performance stock units. The 2024 Non-Employee Directors' Equity Incentive Plan provides for grants of stock options, restricted stock awards and restricted stock units to non-employee directors through May 2034. </div><div style="margin-top:9pt;text-indent:24.75pt">Stock compensation expense, included in Selling, general and administrative expense in the unaudited Condensed Consolidated Statements of Operations, is as follows:</div><div style="margin-top:9pt"><table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:100.000%"><tr><td style="width:1.0%"></td><td style="width:37.350%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.519%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.823%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.519%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.823%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.519%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.823%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.524%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom"> </td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Three Months Ended September 30,</td><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Nine Months Ended September 30,</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands)</td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Stock compensation expense</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">4,217 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">8,477 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">13,446 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">21,506 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Income tax benefit</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">1,033 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">2,077 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">3,294 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">5,269 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Stock compensation expense, net of tax</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">3,184 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-

height:100%">6,400 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">10,152 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">16,237 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr></table> We have not capitalized any stock-based compensation expense. A summary of stock option activity for the nine months ended September 30, 2024, is as follows: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.415%"><tr><td style="width:1.0%"></td><td style="width:64.635%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.517%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:0.829%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.519%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Shares</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Weighted Average
Exercise Price</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Outstanding at January 1, 2024</td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">26,536 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">45.95 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Exercised</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(10,531)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">46.95 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Forfeited</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(852)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">48.65 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Outstanding and exercisable at September 30, 2024</td><td colspan="2" style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">15,153 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">45.10 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr></table> Restricted stock awards and restricted stock units are valued at the market value of the stock on the grant date. A summary of restricted stock activity for the nine months ended September 30, 2024, is as follows: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.415%"><tr><td style="width:1.0%"></td><td style="width:64.635%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.517%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.829%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.519%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Shares</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Weighted Average
Grant Date
Fair Value</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Unvested at January 1, 2024</td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">173,851 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">142.73 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:middle">Granted</td><td colspan="2" style="padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">82,905 </td><td style="padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="2" style="padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">178.59 </td><td style="padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Vested</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(48,596)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">164.57 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:middle">Forfeited</td><td colspan="2" style="padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(25,482)</td><td style="padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="2" style="padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">164.47 </td><td style="padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Unvested at September 30, 2024</td><td colspan="2" style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">182,678 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">150.16 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr></table> Performance stock units that have a market condition modifier are valued at an estimated fair value using a Monte Carlo model. The final number of shares to be issued for performance stock units granted in the first quarter of 2024 may range from 0% to 200% of the target award based on achieving the specified performance targets over the performance period plus an additional modifier based on total shareholder return ("TSR") over the performance period. The following weighted average assumptions were used in estimating the fair value of the performance stock units granted in the first quarter of 2024. <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.415%"><tr><td style="width:1.0%"></td><td style="width:82.282%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.518%"></td><td style="width:0.1%"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Fair value per unit</td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:bottom">$181.31</td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Risk-free interest rate</td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-

align:bottom">4.34%</td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Expected dividend yield</td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:bottom">1.19%</td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Expected volatility</td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:bottom">25.9%</td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">MSA stock beta</td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:bottom">0.728</td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr></table> The risk-free interest rate is based on the U.S. Treasury Constant Maturity rates as of the grant date converted into an implied spot rate yield curve. Expected dividend yield is based on the most recent annualized dividend divided by the one year average closing share price. Expected volatility is based on the three year historical volatility preceding the grant date using daily stock prices. Expected life is based on historical stock option exercise data. A summary of performance stock unit activity for the nine months ended September 30, 2024, is as follows: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.415%"><tr><td style="width:1.0%"></td><td style="width:64.635%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.517%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.829%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.519%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Shares</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Weighted Average
Grant Date
Fair Value</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Unvested at January 1, 2024</td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">189,221 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">146.17 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Granted</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">40,787 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">177.34 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle"><div>Performance adjustments(a)</div></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">20,488 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">194.10 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Vested</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(77,544)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">174.13 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Forfeited</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(10,619)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">149.13 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Unvested at September 30, 2024</td><td colspan="2" style="background-color:#ffffff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">162,333 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">146.50 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="12" style="padding:2px 1pt;text-align:left;vertical-align:top"> (a)Performance adjustments relate primarily to the final number of shares issued for the 2021 performance unit awards which vested in the first quarter of 2024 at 174% of the target award based on both cumulative performance against EBITDA margin and revenue growth targets and MSA's TSR during the three-year performance period. </td></tr></table> Stock compensation expense, included in Selling, general and administrative expense in the unaudited Condensed Consolidated Statements of Operations, is as follows: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:100.000%"><tr><td style="width:1.0%"></td><td style="width:37.350%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.519%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.823%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.519%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.823%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.519%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.823%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.524%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom"> </td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Three Months Ended September 30,</td><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Nine Months Ended September 30,</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands)</td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Stock compensation expense</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">4,217 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">8,477 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td

colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">13,446 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">21,506 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Income tax benefit</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">1,033 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">2,077 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">3,294 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">5,269 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Stock compensation expense, net of tax</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">3,184 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">6,400 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">10,152 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">16,237 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr></table> We have not capitalized any stock-based compensation expense.421700084770001344600021506000103300020770003294000526900031840006400000101520001623700 A summary of stock option activity for the nine months ended September 30, 2024, is as follows: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.415%"><tr><td style="width:1.0%"></td><td style="width:64.635%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.517%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.829%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.519%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Shares</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Weighted Average
Exercise Price</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Outstanding at January 1, 2024</td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">26,536 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">45.95 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Exercised</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(10,531)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">46.95 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Forfeited</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(852)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">48.65 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Outstanding and exercisable at September 30, 2024</td><td colspan="2" style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">15,153 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:middle">45.10 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr></table> 2653645.951053146.9585248.65151531515345.1045.10A summary of restricted stock activity for the nine months ended September 30, 2024, is as follows: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.415%"><tr><td style="width:1.0%"></td><td style="width:64.635%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.517%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.829%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.519%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Shares</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Weighted Average
Grant Date
Fair Value</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Unvested at January 1, 2024</td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">173,851 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">142.73 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:middle">Granted</td><td colspan="2" style="padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">82,905 </td><td style="padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="2" style="padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">178.59 </td><td style="padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Vested</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(48,596)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">164.57 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-

family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">Forfeited</td><td colspan="2" style="padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(25,482)</td><td style="padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="padding:0 1pt"></td><td colspan="2" style="padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">164.47 </td><td style="padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Unvested at September 30, 2024</td><td colspan="2" style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">182,678 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">150.16 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr></table> 173851142.7382905178.5948596164.5725482164.47182678150.1602The following weighted average assumptions were used in estimating the fair value of the performance stock units granted in the first quarter of 2024. <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.415%"><tr><td style="width:1.0%"></td><td style="width:82.282%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.518%"></td><td style="width:0.1%"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Fair value per unit</td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:bottom">$181.31</td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Risk-free interest rate</td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:bottom">4.34%</td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Expected dividend yield</td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:bottom">1.19%</td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Expected volatility</td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:bottom">25.9%</td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">MSA stock beta</td><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:center;vertical-align:bottom">0.728</td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr></table></div>181.310.04340.01190.2590.728P1YP3Y<div style="margin-top:9pt;text-indent:24.75pt">A summary of performance stock unit activity for the nine months ended September 30, 2024, is as follows: </div><div style="margin-bottom:7pt;margin-top:11pt"><table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.415%"><tr><td style="width:1.0%"></td><td style="width:64.635%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.517%"></td><td style="width:0.1%"></td><td style="width:0.829%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.519%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Shares</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Weighted Average
Grant Date
Fair Value</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Unvested at January 1, 2024</td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">189,221 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">146.17 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Granted</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">40,787 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">177.34 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle"> Performance adjustments(a) </td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">20,488 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">194.10 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Vested</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(77,544)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">174.13 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Forfeited</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(10,619)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">149.13 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Unvested at September 30, 2024</td><td colspan="2" style="background-color:#ffffff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">162,333 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">146.50 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="12" style="padding:2px 1pt;text-align:left;vertical-align:top"> (a)Performance adjustments relate primarily to the final number of shares issued for the 2021 performance unit awards which vested in the first quarter of 2024 at 174% of the target award based on both cumulative performance against EBITDA margin and revenue growth targets and MSA's TSR during the three-year performance period. </td></tr></table>
189221146.1740787177.3420488194.1077544174.1310619149.13162333146.501.74Long-Term Debt <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.269%"><tr><td style="width:1.0%"></td><td style="width:64.584%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.542%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.830%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.544%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands)</td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">September 30, 2024</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">December 31, 2023</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle"> <span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-

weight:400;line-height:100%">2016 Senior Notes payable through 2031, 3.40%, net of debt issuance costs </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">57,067 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">62,081 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:top"> 2021 Senior Notes payable through 2036, 2.69%, net of debt issuance costs </td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">99,749 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">99,733 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:top"> 2021 Senior Notes payable through 2036, 2.69%, net of debt issuance costs </td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">99,749 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">99,733 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">2023 Term Loan credit agreement maturing in 2026, net of debt issuance costs</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">212,055 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">230,604 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle"> 2023 Senior Notes payable through 2028, 5.25%, net of debt issuance costs </td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">49,949 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">49,939 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Senior revolving credit facility maturing in 2026, net of debt issuance costs</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">36,153 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">59,602 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Total</td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">554,722 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">601,692 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Amounts due within one year</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">26,915 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">26,522 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Long-term debt, net of debt issuance costs</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">527,807 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman';sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">575,170 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr></table> On May 24, 2021, the Company entered into a Fourth Amended and Restated Credit Agreement (the "Revolving Credit Facility" or "Facility") that extended its term through May 24, 2026 and increased the capacity to $900.0 million. The agreement was amended in August 2021 and June 2023 to transition from Sterling LIBOR reference rates and U.S. LIBOR reference rates. Under the amended agreement, the Company may elect either a Base rate of interest ("BASE") or an interest rate based on Secured Overnight Financing Rate ("SOFR"). The BASE is a daily fluctuating per annum rate equal to the highest of (i) 0.00%, (ii) the Overnight Bank Funding Rate, plus 0.5%, (iii) the Prime Rate (iv) the Daily Simple SOFR rate, plus 1.00%. The Company pays a credit spread of 0 to 175 basis points based on the Company's net EBITDA leverage ratio and elected rate (BASE or SOFR). The Company has a weighted average revolver interest rate of 5.80% as of September 30, 2024. At September 30, 2024, $861.5 million of the existing $900.0 million Revolving Credit Facility was unused, including letters of credit issued under the Facility. The Facility also provides an accordion feature that allows the Company to access an additional $400.0 million of capacity pending approval by MSA's board of directors and from the bank group. On July 1, 2024, the Company entered into Amendment No. 3 to the Third Amended and Restated Multi-Currency Note Purchase and Private Shelf Agreement (the "Prudential Note Agreement") with PGIM, Inc. ("Prudential"). The Prudential Note Agreement provided for (i) the issuance of $100.0 million of 2.69% Series C Senior Notes due July 1, 2036 and (ii) the establishment of an uncommitted note issuance facility whereby the Company may request, subject to Prudential's acceptance in its sole discretion, the issuance of up to $335.0 million aggregate principal amount of senior unsecured notes. As of September 30, 2024, the Company has outstanding £42.7 million (approximately $57.2 million at September 30, 2024) of 3.4% Series B Senior Notes due January 22, 2031. Remaining maturities of this note are £6.1 million (approximately $8.2 million at September 30, 2024) due annually through January 2031. On July 1, 2024, the Company entered into Amendment No. 3 to the Second Amended and Restated Master Note Facility (the "NYL Note Facility") with NYL Investors. The NYL Note Facility provided for (i) the issuance of $100.0 million of 2.69% Series A Senior Notes due July 1, 2036, and (ii) the establishment of an uncommitted note issuance facility whereby the Company may request, subject to NYL Investors' acceptance in its sole discretion, the issuance of up to $200.0 million aggregate principal amount of senior unsecured notes. On June 29, 2023, the Company issued $50 million of 5.25% Series B Senior Notes due July 1, 2028, pursuant to the NYL Note Facility (the "Notes"). The Notes bear interest at 5.25% per annum, payable semi-annually, and mature on July 1, 2028. The Notes provide for a principal payment of $25 million on July 1, 2027, with the remaining $25 million due on July 1, 2028. The Notes may be redeemed at the Company's option prior to their maturity at a make-whole redemption price calculated as provided in the NYL Note Facility. The proceeds of the Notes were used on June 29, 2023, to pay down an equivalent amount of borrowings under the Company's Revolving Credit Facility with PNC Bank, National Association, as Administrative Agent. On January 5, 2023, the Company entered into a new $250 million term loan facility to fund the divestiture of MSA LLC, a wholly owned subsidiary. Under the agreement, the Company may elect either BASE or an interest rate based on SOFR. The Company pays a credit spread of 0 to 200 basis points based on the Company's net EBITDA leverage ratio and elected rate. The Company had a Term Loan interest rate of 6.35% as of September 30, 2024. The Revolving Credit Facility, Prudential Note Agreement and NYL Note Facility require the Company to comply with specified financial covenants, including a requirement to maintain a minimum fixed charges coverage ratio of not less than 1.50 to 1.00 and a consolidated leverage ratio not to exceed 3.50 to 1.00; except during an acquisition period, defined as four consecutive fiscal quarters beginning with the quarter of acquisition, in which case the consolidated net leverage ratio shall not exceed 4.00 to 1.00; in each case calculated on the basis of the trailing four fiscal quarters. In addition, the agreements contain negative covenants limiting the ability of the Company and its subsidiaries to incur additional indebtedness or issue guarantees, create or incur liens, make loans and investments, make acquisitions, transfer or sell assets, enter into transactions with affiliated parties, make changes in its organizational documents that are materially adverse to lenders or modify the nature of the Company's or its subsidiaries' business. All credit facilities exclude MSA LLC prior to the divestiture of this subsidiary on January 5, 2023, as discussed further in Note 17—Commitments and Contingencies to the unaudited condensed consolidated financial statements in Part 1 Item 1 of this Form 10-Q for further information on this transaction. As of September 30, 2024, the Company was in full compliance with the restrictive covenants under its various credit agreements. The Company had outstanding bank guarantees and standby letters of credit with banks as of September 30, 2024, totaling $10.0 million, of which $1.5 million relate to the Revolving Credit Facility. The letters of credit serve to cover customer requirements in connection with certain sales orders and insurance companies. The Company is also required to provide cash collateral in connection with certain arrangements. At September 30, 2024, the Company has $0.6 million of restricted cash in support of these arrangements. <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.269%"><tr><td style="width:1.0%"></td><td style="width:64.584%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.542%"></td><td style="width:0.1%"></td><td style="width:0.830%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.544%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom"><span

style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:8pt;font-weight:700;line-height:100%">(In thousands)</td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">September 30, 2024</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">December 31, 2023</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle"> 2016 Senior Notes payable through 2031, 3.40%, net of debt issuance costs </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">57,067 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" 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colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">2023 Term Loan credit agreement maturing in 2026, net of debt issuance costs</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">212,055 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">230,604 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle"> 2023 Senior Notes payable through 2028, 5.25%, net of debt issuance costs </td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">49,949 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">49,939 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Senior revolving credit facility maturing in 2026, net of debt issuance costs</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">36,153 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">59,602 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Total</td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">554,722 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">601,692 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Amounts due within one year</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">26,915 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">26,522 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Long-term debt, net of debt issuance costs</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">527,807 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">575,170 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr></table>
0.034057067000620810000.026999749000997330000.026999749000997330002120550002306040000.052549949000499390003615300059602000554722000601692000
and Intangible Assets, Net Changes in goodwill during the nine months ended September 30, 2024, were as follows: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:98.830%"><tr><td style="width:1.0%"></td><td style="width:82.184%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.616%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands)</td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:bottom">Goodwill</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Balance at January 1, 2024</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">627,534 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Currency translation</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">5,303 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Balance at September 30, 2024</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">632,837 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr></table> At September 30, 2024, goodwill of $447.6 million and $185.2 million related to the Americas and International reportable segments, respectively.</div><div style="margin-top:9pt;text-indent:22.5pt">Changes in intangible assets, net, during the nine months ended September 30, 2024, were as follows:</div><div style="margin-bottom:7pt;margin-top:11pt"><table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.415%"><tr><td style="width:1.0%"></td><td style="width:82.282%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.518%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands)</td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Intangible Assets</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Net balance at January 1, 2024</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">266,134 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px

1pt;text-align:left;vertical-align:middle">Amortization expense</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(13,392)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Currency translation</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">1,622 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Net balance at September 30, 2024</td><td style="background-color:#ffffff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">254,364 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr></table> At September 30, 2024, intangible assets, net, includes a trade name related to Globe Manufacturing Company, LLC ("Globe") with an indefinite life totaling $60.0 million<div style="margin-top:9pt;text-indent:24.75pt">Changes in goodwill during the nine months ended September 30, 2024, were as follows:</div><div style="margin-top:9pt"><table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:98.830%"><tr><td style="width:1.0%"></td><td style="width:82.184%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.616%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands)</td><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:center;vertical-align:bottom">Goodwill</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Balance at January 1, 2024</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">627,534 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Currency translation</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">5,303 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Balance at September 30, 2024</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">632,837 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr></table></div>627534000053030006328370004476000001852000000<div style="margin-top:9pt;text-indent:22.5pt">Changes in intangible assets, net, during the nine months ended September 30, 2024, were as follows:</div><div style="margin-bottom:7pt;margin-top:11pt"><table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.415%"><tr><td style="width:1.0%"></td><td style="width:82.282%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.518%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands)</td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Intangible Assets</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Net balance at January 1, 2024</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">266,134 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Amortization expense</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(13,392)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Currency translation</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">1,622 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Net balance at September 30, 2024</td><td style="background-color:#ffffff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">254,364 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr></table></div>266134000133920001622000254364000600000000.0Pensions and Other Post-retirement Benefits <div style="margin-top:9pt;text-indent:24.75pt">Components of Net periodic benefit (income) cost consisted of the following: </div><div style="margin-bottom:7pt;margin-top:11pt"><table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.561%"><tr><td style="width:1.0%"></td><td style="width:37.079%"></td><td style="width:0.1%"></td><td colspan="3" style="display:none"></td><td style="width:1.0%"></td><td style="width:13.584%"></td><td style="width:0.1%"></td><td style="width:0.827%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.584%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.827%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.584%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.827%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.588%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom"> </td><td colspan="3" style="display:none"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Pension Benefits</td><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Other Benefits</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands)</td><td colspan="3" style="display:none"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Three Months Ended September 30, </td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Service cost</td><td colspan="3" style="display:none"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">2,315 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">1,884 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">44 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">53 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Interest cost</td><td colspan="3" style="display:none"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">5,970

</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">5,918 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">248 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">273 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Expected return on plan assets</td><td colspan="3" style="display:none"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(10,812)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">9,906</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:left;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Amortization of prior service cost (credit)</td><td colspan="3" style="display:none"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">37 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">37 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(46)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(61)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Recognized net actuarial losses</td><td colspan="3" style="display:none"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">282 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">47 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">115 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">138 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom"> Net periodic benefit (income) cost (a) </td><td colspan="3" style="display:none"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(2,208)</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(2,020)</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">361 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">403 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr style="height:15pt"><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Nine Months Ended September 30,</td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Service cost</td><td colspan="3" style="display:none"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">6,945 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">5,652 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">132 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">159 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Interest cost</td><td colspan="3" style="display:none"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">17,910 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">17,754 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">744 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">819 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Expected return on plan assets</td><td colspan="3" style="display:none"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(32,436)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(29,718)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2"

style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">Amortization of prior service cost (credit)</td><td colspan="3" style="display:none"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">111 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">111 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(138)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(183)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Recognized net actuarial losses</td><td colspan="3" style="display:none"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">846 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">141 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">345 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">414 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Settlements</td><td colspan="3" style="display:none"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">1,308 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt">
 </td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom"> Net periodic benefit (income) cost (a) </td><td colspan="3" style="display:none"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(5,316)</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(6,060)</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">1,083 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">1,209 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="24" style="padding:2px 1pt;text-align:left;vertical-align:bottom"> (a) Components of Net periodic benefit (income) cost other than service cost are included in the line item Other income, net, and service costs are included in the line items Cost of products sold and Selling, general and administrative in the unaudited Condensed Consolidated Statements of Operations. </td></tr></table> We made contributions of $3.9 million and $4.3 million to our pension plans during the nine months ended September 30, 2024, and 2023, respectively. We expect to make net contributions of $5.3 million to our pension plans in 2024, which are primarily associated with statutorily required plans in the International reporting segment.<div style="margin-top:9pt;text-indent:24.75pt">Components of Net periodic benefit (income) cost consisted of the following: </div><div style="margin-bottom:7pt;margin-top:11pt"><table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.561%"><tr><td style="width:1.0%"></td><td style="width:37.079%"></td><td style="width:0.1%"></td><td colspan="3" style="display:none"></td><td style="width:1.0%"></td><td style="width:13.584%"></td><td style="width:0.1%"></td><td style="width:0.827%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.584%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.827%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.584%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.827%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:13.588%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom"> </td><td colspan="3" style="display:none"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Pension Benefits</td><td colspan="3" style="padding:0 1pt"></td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Other Benefits</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands)</td><td colspan="3" style="display:none"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Three Months Ended September 30, </td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt;text-align:left;vertical-align:bottom">Service cost</td><td colspan="3" style="display:none"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">2,315 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">1,884 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman';sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">44 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">53 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman';sans-serif;font-size:10pt;font-weight:400;line-

height:100%">Interest cost</td><td colspan="3" style="display:none"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">5,970 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">5,918 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">248 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">273 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Expected return on plan assets</td><td colspan="3" style="display:none"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(10,812)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(9,906)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Amortization of prior service cost (credit)</td><td colspan="3" style="display:none"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">37 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">37 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(46)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(61)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Recognized net actuarial losses</td><td colspan="3" style="display:none"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">282 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">47 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">115 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">138 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom"> Net periodic benefit (income) cost (a) </td><td colspan="3" style="display:none"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(2,208)</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(2,020)</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom">361 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">403 </td><td style="background-color:#cceeff;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td><td colspan="3" style="display:none"></td></tr><tr style="height:15pt"><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="3" style="background-color:#ffffff;border-top:1pt solid #000;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Nine Months Ended September 30,</td><td colspan="3" style="display:none"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Service cost</td><td colspan="3" style="display:none"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">6,945 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">5,652 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">132 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:bottom">159 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Interest cost</td><td colspan="3" style="display:none"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">17,910 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">17,754 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">744 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">819 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Expected return on plan assets</td><td colspan="3" style="display:none"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(32,436) </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom"><span

style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">(29,718)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Amortization of prior service cost (credit)</td><td colspan="3" style="display:none"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">111 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">111 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(138)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">(183)</td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom">Recognized net actuarial losses</td><td colspan="3" style="display:none"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">846 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">141 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">345 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">414 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:bottom">Settlements</td><td colspan="3" style="display:none"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">1,308 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt">
 </td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">— </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:bottom"> Net periodic benefit (income) cost (a) </td><td colspan="3" style="display:none"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(5,316)</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">(6,060)</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">1,083 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0 2px 1pt;text-align:left;vertical-align:bottom">$</td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 0;text-align:right;vertical-align:bottom">1,209 </td><td style="background-color:#ffffff;border-bottom:1pt solid #000;border-top:1pt solid #000;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr><tr><td colspan="24" style="padding:2px 1pt;text-align:left;vertical-align:bottom"> (a) Components of Net periodic benefit (income) cost other than service cost are included in the line item Other income, net, and service costs are included in the line items Cost of products sold and Selling, general and administrative in the unaudited Condensed Consolidated Statements of Operations. </td></tr></table> 2315000188400044000530005970000591800024800027300010812000990600000370003700046000-61000-282000-47000-115000-138000-2208000-2020000361000403000694500056520001320001590001791000017754000744000819000324360002971800000111000111000-138000-183000-846000-141000-345000-414000-1308000000-5316000-6060000010830001209000039000004300000530000Derivative Financial Instruments As part of our currency exchange rate risk management strategy, we enter into certain derivative foreign currency forward contracts that do not meet the U.S. GAAP criteria for hedge accounting but have the impact of partially offsetting certain of our foreign currency exposures. We account for these forward contracts at fair value and report the related gains or losses in currency exchange losses, net, in the unaudited Condensed Consolidated Statements of Operations. The notional amount of open forward contracts was $184.8 million and $110.9 million at September 30, 2024, and December 31, 2023, respectively. </div><div style="margin-top:9pt;text-indent:24.75pt">The following table presents the unaudited Condensed Consolidated Balance Sheets location and fair value of assets and liabilities associated with derivative financial instruments:</div><div style="margin-top:9pt"><table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.415%"><tr><td style="width:1.0%"></td><td style="width:64.635%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.517%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.829%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.519%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(in thousands)</td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">September 30, 2024</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">December 31, 2023</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Derivatives not designated as hedging instruments:</td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 13pt;text-align:left;vertical-align:middle">Foreign exchange contracts: prepaid expenses and other current assets</td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">— </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#ffffff;padding:2px 0;text-align:right;vertical-align:middle">2,210 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt 2px 13pt;text-align:left;vertical-align:middle">Foreign exchange contracts: other current liabilities</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">1,038 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:bottom">242 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:bottom"></td></tr></table> The following table presents the unaudited Condensed Consolidated Statements of Operations and unaudited Condensed Consolidated Statements of Cash Flows location and the loss impact of derivative financial instruments: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.415%"><tr><td style="width:1.0%"></td><td style="width:64.635%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.517%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.829%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.519%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom"> </td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-

size:8pt;font-weight:700;line-height:100%">Nine Months Ended September 30,</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands)</td><td colspan="3" style="border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">2024</td><td colspan="3" style="border-top:1pt solid #000;padding:0 1pt"></td><td colspan="3" style="border-top:1pt solid #000;padding:2px 1pt;text-align:center;vertical-align:bottom">2023</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Derivatives not designated as hedging instruments:</td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="3" style="background-color:#cceeff;border-top:1pt solid #000000;padding:0 1pt"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt 2px 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022100001038000242000 The following table presents the unaudited Condensed Consolidated Statements of Operations and unaudited Condensed Consolidated Statements of Cash Flows location and the loss impact of derivative financial instruments: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:99.415%"><tr><td style="width:1.0%"></td><td style="width:64.635%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.517%"></td><td style="width:0.1%"></td><td style="width:0.829%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.519%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">— </td><td colspan="9" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Nine Months Ended September 30,</td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In 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The fair value hierarchy consists of three broad levels, which gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are: •Level 1—Observable inputs that reflect unadjusted quoted prices for identical assets or liabilities in active markets. •Level 2—Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. •Level 3—Unobservable inputs for the asset or liability. The valuation methodologies we used to measure financial assets and liabilities are also used to value the derivative financial instruments described in Note 15—Derivative Financial Instruments. We estimate the fair value of the derivative financial instruments, consisting of foreign currency forward contracts, based upon valuation models with inputs that generally can be verified by observable market conditions and do not involve significant management judgment. Accordingly, the fair values of the derivative financial instruments are classified within Level 2 of the fair value hierarchy. With the exception of our fixed rate long-term debt, we believe that the reported carrying amounts of our financial assets and liabilities approximate their fair values. The reported carrying amount of our fixed rate long-term debt was $307.2 million and $312.2 million at September 30, 2024, and December 31, 2023, respectively. The fair value of this debt was $278.1 million and $278.7 million at September 30, 2024, and December 31, 2023, respectively. The fair value of this debt was determined using Level 2 inputs by evaluating similarly rated companies with publicly traded bonds where available or current borrowing rates available for financings with similar terms and maturities. 3072000003122000002781000002787000000Commitments and Contingencies Product liability The Company and its subsidiaries face an inherent business risk of exposure to legal claims arising from the alleged failure of our products to prevent the types of personal injury or death against which they are designed to protect. Product liability claims are categorized as either single incident or cumulative trauma. Single incident product liability claims. Single incident product liability claims involve incidents of short duration that are typically known when they occur and involve observable injuries, which provide an objective basis for quantifying damages. Management has established reserves for the single incident product liability claims of the Company's various subsidiaries, including asserted single incident product liability claims and incurred but not reported ("IBNR") single incident claims. To determine the reserves, Management makes reasonable estimates of losses for single incident claims based on the number and characteristics of asserted claims, historical experience, sales volumes, expected settlement costs, and other relevant information. The reserve for single incident product liability claims was $0.8 million at September 30, 2024 and $1.3 million at December 31, 2023. Single incident product liability benefit was $0.2 million and $0.1 million for the nine months ended September 30, 2024, and 2023, respectively. Single incident product liability exposures are evaluated on an annual basis, or more frequently if changing circumstances warrant. Adjustments are made to the reserve as appropriate. The reserve has not been discounted to present value and does not include future amounts which will be spent to defend the claims. During the first nine months of 2024, the Company recorded $5.0 million of net cost for product related legal matter. The expense is reflected within the selling, general and administration line of the unaudited Condensed Consolidated Statement of Operations. <span style="color:#000000;font-family:'Times New Roman',sans-

serif;font-size:10pt;font-style:italic;font-weight:700;line-height:112%">Cumulative trauma product liability claims. Cumulative trauma product liability claims involve alleged exposures to harmful substances (e.g., silica, asbestos and coal dust) that occurred years ago and may have developed over long periods of time into diseases such as silicosis, asbestosis, mesothelioma, or coal worker's pneumoconiosis. Prior to the divestiture described below, one of the Company's former subsidiaries, MSA LLC, was named as a defendant in various lawsuits related to such claims. These lawsuits mainly involve respiratory protection products allegedly manufactured and sold by MSA LLC or its predecessors. On January 5, 2023, the Company entered into a membership interest purchase agreement (the "Purchase Agreement") with Sag Main Holdings, LLC (the "Buyer"). The Buyer was a joint venture between R&Q Insurance Holdings Ltd. ("R&Q") and Obra Capital, Inc. ("Obra"). Under the Purchase Agreement, on January 5, 2023, the Company transferred to the Buyer all of the issued and outstanding limited liability company interests of MSA LLC (the "Sale"). In connection with the closing, the Company contributed $341.2 million in cash and cash equivalents, while R&Q and Obra contributed an additional $35.0 million. MSA LLC was the obligor for the claims to which the Company's legacy cumulative trauma product liability reserves relate and policyholder of the related insurance assets. The rights and obligations related to these items remained with MSA LLC upon the sale to the Buyer. In addition, pursuant to the Purchase Agreement, the Buyer and MSA LLC have agreed to indemnify the Company and its affiliates for legacy cumulative trauma product liabilities and other product liabilities, and a subsidiary of the Company has agreed to indemnify MSA LLC for all other historical liabilities of MSA LLC. This indemnification is not subject to any cap or time limitation. In connection with the sale, the Company and its Board of Directors received a solvency opinion from an independent advisory firm that MSA LLC was solvent and adequately capitalized after giving effect to the transaction. Following the completion of the transaction, the Company no longer has any obligation with respect to pending and future cumulative trauma product liability claims relating to these matters. As such, all legacy cumulative trauma product liability reserves, related insurance assets, and associated deferred tax assets of the divested subsidiary were derecognized from our balance sheet and the Company incurred a tax-effected loss on the divestiture of MSA LLC of $199.6 million, including transaction related costs of $5.6 million. The Buyer has assumed management of the divested subsidiary, including the management of its claims and associated assets. </div><div style="margin-top:9pt">Other Litigation </div><div style="margin-bottom:9pt;margin-top:9pt;text-indent:22.5pt">Globe, a subsidiary of the Company, is defending claims in which plaintiffs assert that certain products allegedly containing per- and polyfluoroalkyl substances ("PFAS") have caused harm, including injury or health issues. PFAS are a large class of substances that are widely used in everyday products. Specifically, Globe builds firefighter turnout gear from technical fabrics sourced from a small pool of specialty textile manufacturers. These protective fabrics have been tested and certified to meet current National Fire Protection Association safety standards, and some of them as supplied to Globe contain or historically have contained PFAS to achieve performance characteristics such as water, oil, or chemical resistance.</div><div style="margin-bottom:9pt;margin-top:9pt;text-indent:22.5pt">Globe believes it has valid defenses to these claims. These matters are at a very early stage with numerous factual and legal issues to be resolved. Defense costs relating to these lawsuits are recognized in the unaudited Condensed Consolidated Statements of Operations as incurred. Globe is also pursuing insurance coverage and indemnification related to the lawsuits. As of October 15, 2024, Globe was named as a defendant in 535 lawsuits comprised of 7,850 claims, predominantly styled as individual personal injury claims and including two putative class actions. Certain of these lawsuits include MSA Safety Inc. or other Globe affiliates as defendants. </div><div style="text-indent:22.5pt">MSA LLC is also a defendant in a number of PFAS lawsuits predominantly relating to Aqueous Film-Forming Foam. The Buyer assumed responsibility for these and any similar future claims specific to MSA LLC, including such claims that have been or may be brought against MSA Safety Inc. or its subsidiaries, under the terms of the divestiture on January 5, 2023. Further information about the transaction can be found in the Company's Current Report on Form 8-K filed on January 6, 2023. </div><div style="margin-bottom:9pt;margin-top:9pt">Product Warranty</div><div style="margin-bottom:9pt;margin-top:9pt;text-indent:22.5pt">The Company provides warranties on certain product sales. Product warranty reserves are established in the same period that revenue from the sale of the related products is recognized, or in the period that a specific issue arises as to the functionality of the Company's product. The determination of such reserves requires the Company to make estimates of product return rates and expected costs to repair or to replace the products under warranty. </div><div style="margin-bottom:9pt;margin-top:9pt;text-indent:22.5pt">The amounts of the reserves are based on established terms and the Company's best estimate of the amounts necessary to settle future and existing claims on products sold as of the balance sheet date. If actual return rates and/or repair and replacement costs differ significantly from estimates, adjustments to recognize additional cost of sales may be required in future periods. </div><div style="margin-bottom:9pt;margin-top:9pt;text-indent:22.5pt">The following table reconciles changes in the Company's accrued warranty reserve:</div><div style="margin-bottom:9pt;margin-top:14pt;text-align:center"><table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:97.368%"><tr><td style="width:1.0%"></td><td style="width:63.915%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.866%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.851%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.868%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom">(In thousands)</td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Nine Months Ended September 30, 2024</td><td colspan="3" style="padding:0 1pt"></td><td colspan="3" style="padding:2px 1pt;text-align:center;vertical-align:bottom">Year Ended
December 31, 2023</td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Beginning warranty reserve</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">14,288 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">15,230 </td><td style="background-color:#cceeff;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Warranty payments</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(8,518)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(9,794)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Warranty claims</td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">7,370 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td colspan="2" style="background-color:#cceeff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">8,899 </td><td style="background-color:#cceeff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#ffffff;padding:2px 1pt;text-align:left;vertical-align:middle">Provision for product warranties and other adjustments</td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">515 </td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#ffffff;padding:0 1pt"></td><td colspan="2" style="background-color:#ffffff;padding:2px 0 2px 1pt;text-align:right;vertical-align:middle">(47)</td><td style="background-color:#ffffff;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr><tr><td colspan="3" style="background-color:#cceeff;padding:2px 1pt;text-align:left;vertical-align:middle">Ending warranty reserve</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:10pt;font-weight:400;line-height:100%">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">13,655 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td><td colspan="3" style="background-color:#cceeff;padding:0 1pt"></td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0 2px 1pt;text-align:left;vertical-align:middle">$</td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 0;text-align:right;vertical-align:middle">14,288 </td><td style="background-color:#cceeff;border-bottom:1pt solid #000;border-top:1pt solid #000000;padding:2px 1pt 2px 0;text-align:right;vertical-align:middle"></td></tr></table> Warranty expense was $7.9 million and $6.7 million for the nine months ended September 30, 2024, and 2023, respectively, and is included in Costs of products sold on the unaudited Condensed Consolidated Statements of Operations. Outstanding Performance Obligations The Company derives a portion of its revenue from various leasing arrangements where the Company is the lessor, primarily fire service contracts entered into by Bristol. Such arrangements provide for monthly payments covering equipment provided, maintenance and interest. These arrangements meet the criteria to be accounted for as sales-type leases under Accounting Standards Codification ("ASC") 842 and contain both lease and non-lease components. Revenue from equipment provided is considered a lease component and recognized with point in time revenue recognition upon lease commencement. Maintenance revenue, which is considered a non-lease component, and interest is recognized monthly over the lease term. As of September 30, 2024, the Company had remaining maintenance performance obligations of approximately $28.7 million which are expected to be recognized to revenue in approximately three years. 8000001300000200000100000500000034120000035000000-199600000-560000053578502 The following table reconciles changes in the Company's accrued warranty reserve: <table style="border-collapse:collapse;display:inline-table;margin-bottom:5pt;vertical-align:text-bottom;width:97.368%"><tr><td style="width:1.0%"></td><td style="width:63.915%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.866%"></td><td style="width:0.1%"></td><td style="width:0.1%"></td><td style="width:0.851%"></td><td style="width:0.1%"></td><td style="width:1.0%"></td><td style="width:15.868%"></td><td style="width:0.1%"></td></tr><tr><td colspan="3" style="padding:2px 1pt;text-align:left;vertical-align:bottom"><span style="color:#000000;font-family:'Times New Roman',sans-serif;font-size:8pt;font-

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