UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

WASHINGTON D.C. 20549

FORM 10-Q

(Mark One)

☒ **Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

For the Quarterly Period Ended September 30, 2023
Or

☐ **Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

For the Transition Period from_________to_________.

Commission file number 001-10716

TRIMAS CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	**38-2687639**
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)

38505 Woodward Avenue, Suite 200

Bloomfield Hills, Michigan 48304

(Address of principal executive offices, including zip code)

(248) 631-5450

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading symbol(s)	Name of exchange on which registered
Common stock, $0.01 par value	TRS	The NASDAQ Stock Market LLC

Indicate by check mark whether the Registrant (1) has 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 the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐.

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). Yes ☒ No ☐.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

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. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of October 19, 2023, the number of outstanding shares of the Registrant's common stock, $0.01 par value, was 41,414,420 shares.

TriMas Corporation

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Forward-Looking Statements

This report may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 about our financial condition, results of operations and business. These forward-looking statements can be identified by the use of forward-looking words, such as “may,” “could,” “should,” “estimate,” “project,” “forecast,” “intend,” “expect,” “anticipate,” “believe,” “target,” “plan” or other comparable words, or by discussions of strategy that may involve risks and uncertainties.

These forward-looking statements are subject to numerous assumptions, risks and uncertainties which could materially affect our business, financial condition or future results including, but not limited to: general economic and currency conditions; the severity and duration of the ongoing coronavirus (“COVID-19”) pandemic; competitive factors; market demand; our ability to realize our business strategies; our ability to identify attractive acquisition candidates, successfully integrate acquired operations or realize the intended benefits of such acquisitions; pressures on our supply chain, including availability of raw materials and inflationary pressures on raw material and energy costs, and customers; the performance of our subcontractors and suppliers; risks and uncertainties associated with intangible assets, including goodwill or other intangible asset impairment charges; risks associated with a concentrated customer base; information technology and other cyber-related risks; risks related to our international operations, including, but not limited to, risks relating to rising tensions between the United States and China; government and regulatory actions, including, without limitation, climate change legislation and other environmental regulations, as well as the impact of tariffs, quotas and surcharges; changes to fiscal and tax policies; intellectual property factors; uncertainties associated with our ability to meet customers’ and suppliers’ sustainability and environmental, social and governance (“ESG”) goals and achieve our sustainability and ESG goals in alignment with our own announced targets; litigation; contingent liabilities relating to acquisition activities; interest rate volatility; our leverage; liabilities imposed by our debt instruments; labor disputes and shortages; the disruption of operations from catastrophic or extraordinary events, including, but not limited to, natural disasters, geopolitical conflicts and public health crises, such as the ongoing coronavirus pandemic; the amount and timing of future dividends and/or share repurchases, which remain subject to Board approval and depend on market and other conditions; our future prospects; and other risks that are discussed in Part I, Item 1A, "Risk Factors," in our Annual Report on Form 10-K for the year ended December 31, 2022 and elsewhere in this report. The risks described in our Annual Report on Form 10-K and elsewhere in this report are not the only risks facing our Company. Additional risks and uncertainties not currently known to us or that we currently deemed to be immaterial also may materially adversely affect our business, financial position and results of operations or cash flows.

The cautionary statements set forth above should be considered in connection with any subsequent written or oral forward-looking statements that we or persons acting on our behalf may issue. We caution readers not to place undue reliance on the statements, which speak only as of the date of this report. We do not undertake any obligation to review or confirm analysts' expectations or estimates or to release publicly any revisions to any forward-looking statement to reflect events or circumstances after the date of this report or to reflect the occurrence of unanticipated events, except as required by law.

We disclose important factors that could cause our actual results to differ materially from our expectations implied by our forward-looking statements under Part I, Item 2, "*Management's Discussion and Analysis of Financial Condition and Results of Operations*," and elsewhere in this report. These cautionary statements qualify all forward-looking statements attributed to us or persons acting on our behalf. When we indicate that an event, condition or circumstance could or would have an adverse effect on us, we mean to include effects upon our business, financial and other conditions, results of operations, prospects and ability to service our debt.

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PART I. FINANCIAL INFORMATION

Item 1. Consolidated Financial Statements

TriMas Corporation
Consolidated Balance Sheet
(Dollars in thousands)

	September 30, 2023	December 31, 2022
Assets	**(unaudited)**	
Current assets:		
Cash and cash equivalents	$ 34,660	$ 112,090
Receivables, net of reserves of $2.7 million and $1.7 million as of September 30, 2023 and December 31, 2022, respectively	165,820	132,370
Inventories	182,330	163,360
Prepaid expenses and other current assets	24,610	14,840
Total current assets	407,420	422,660
Property and equipment, net	316,690	277,750
Operating lease right-of-use assets	45,650	47,280
Goodwill	358,780	339,810
Other intangibles, net	184,510	188,110
Deferred income taxes	8,510	9,400
Other assets	20,400	19,990
Total assets	$ 1,341,960	$ 1,305,000
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable	$ 81,530	$ 85,210
Accrued liabilities	67,240	46,660
Lease liabilities, current portion	8,780	8,280
Total current liabilities	157,550	140,150
Long-term debt, net	395,420	394,730
Lease liabilities	41,150	41,010
Deferred income taxes	26,270	20,940
Other long-term liabilities	46,580	56,340
Total liabilities	666,970	653,170
Preferred stock, $0.01 par: Authorized 100,000,000 shares; Issued and outstanding: None	—	—
Common stock, $0.01 par: Authorized 400,000,000 shares; Issued and outstanding: 41,418,417 shares at September 30, 2023 and 41,724,762 shares at December 31, 2022	410	420
Paid-in capital	684,440	696,160
Accumulated deficit	(3,710)	(36,130)
Accumulated other comprehensive income (loss)	(6,150)	(8,620)
Total shareholders' equity	674,990	651,830
Total liabilities and shareholders' equity	$ 1,341,960	$ 1,305,000

The accompanying notes are an integral part of these consolidated financial statements.

TriMas Corporation
Consolidated Statement of Income
(Unaudited—dollars in thousands, except for per share amounts)

	Three months ended September 30,		Nine months ended September 30,	
	2023	**2022**	**2023**	**2022**
Net sales	$ 235,340	$ 218,530	$ 683,990	$ 680,520
Cost of sales	(179,410)	(170,200)	(525,840)	(517,800)
Gross profit	55,930	48,330	158,150	162,720
Selling, general and administrative expenses	(32,290)	(32,110)	(104,410)	(94,480)
Net gain on dispositions of assets	120	4,760	70	4,540
Operating profit	23,760	20,980	53,810	72,780
Other expense, net:				
Interest expense	(3,950)	(3,600)	(11,620)	(10,510)
Other income (expense), net	(120)	860	(30)	850
Other expense, net	(4,070)	(2,740)	(11,650)	(9,660)
Income before income tax expense	19,690	18,240	42,160	63,120
Income tax expense	(3,200)	(4,940)	(9,740)	(15,790)
Net income	$ 16,490	$ 13,300	$ 32,420	$ 47,330
Basic earnings per share:				
Net income per share	$ 0.40	$ 0.32	$ 0.78	$ 1.12
Weighted average common shares—basic	41,425,208	41,995,027	41,477,095	42,363,919
Diluted earnings per share:				
Net income per share	$ 0.40	$ 0.32	$ 0.78	$ 1.11
Weighted average common shares—diluted	41,673,381	42,181,440	41,706,867	42,590,777

The accompanying notes are an integral part of these consolidated financial statements.

TriMas Corporation
Consolidated Statement of Comprehensive Income
(Unaudited—dollars in thousands)

	Three months ended September 30,		Nine months ended September 30,	
	2023	**2022**	**2023**	**2022**
Net income	$ 16,490	$ 13,300	$ 32,420	$ 47,330
Other comprehensive income (loss):				
Defined benefit plans (Note 16)	10	100	780	430
Foreign currency translation	(8,360)	(15,180)	1,060	(32,950)
Derivative instruments (Note 9)	3,380	7,070	630	18,740
Total other comprehensive income (loss)	(4,970)	(8,010)	2,470	(13,780)
Total comprehensive income	$ 11,520	$ 5,290	$ 34,890	$ 33,550

The accompanying notes are an integral part of these consolidated financial statements.

TriMas Corporation
Consolidated Statement of Cash Flows
(Unaudited—dollars in thousands)

	Nine months ended September 30,	
	2023	**2022**
Cash Flows from Operating Activities:		
Net income	$ 32,420	$ 47,330
Adjustments to reconcile net income to net cash provided by operating activities, net of acquisition impact:		
Gain on dispositions of assets	(70)	(4,540)
Depreciation	29,830	25,340
Amortization of intangible assets	13,810	14,600
Amortization of debt issue costs	700	680
Deferred income taxes	2,650	(6,950)
Non-cash compensation expense	9,320	7,680
Increase in receivables	(22,580)	(14,830)
Decrease (increase) in inventories	1,800	(18,980)
Increase in prepaid expenses and other assets	(660)	(1,170)
Decrease in accounts payable and accrued liabilities	(10,390)	(6,890)
Other operating activities	740	4,370
Net cash provided by operating activities, net of acquisition impact	57,570	46,640
Cash Flows from Investing Activities:		
Capital expenditures	(34,940)	(31,840)
Acquisition of businesses, net of cash acquired	(77,340)	(64,100)
Cross-currency swap terminations	—	26,230
Net proceeds from disposition of property and equipment	460	180
Net cash used for investing activities	(111,820)	(69,530)
Cash Flows from Financing Activities:		
Proceeds from borrowings on revolving credit facilities	74,410	12,000
Repayments of borrowings on revolving credit facilities	(73,350)	(12,000)
Payments to purchase common stock	(13,350)	(29,960)
Shares surrendered upon exercise and vesting of equity awards to cover taxes	(2,680)	(2,380)
Dividends paid	(5,020)	(5,170)
Other financing activities	(3,190)	—
Net cash used for financing activities	(23,180)	(37,510)
Cash and Cash Equivalents:		
Decrease for the period	(77,430)	(60,400)
At beginning of period	112,090	140,740
At end of period	$ 34,660	$ 80,340
Supplemental disclosure of cash flow information:		
Cash paid for interest	$ 7,560	$ 5,480
Cash paid for taxes	$ 11,020	$ 14,620

The accompanying notes are an integral part of these consolidated financial statements.

TriMas Corporation
Consolidated Statement of Shareholders' Equity
Nine Months Ended September 30, 2023 and 2022
(Unaudited—dollars in thousands)

	Common Stock	Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total
Balances, December 31, 2022	$ 420	$ 696,160	$ (36,130)	$ (8,620)	$ 651,830
Net income	—	—	4,910	—	4,910
Other comprehensive income	—	—	—	3,450	3,450
Purchase of common stock	—	(10,400)	—	—	(10,400)
Shares surrendered upon exercise and vesting of equity awards to cover taxes	—	(2,310)	—	—	(2,310)
Non-cash compensation expense	—	2,940	—	—	2,940
Dividends declared	—	(1,660)	—	—	(1,660)
Balances, March 31, 2023	$ 420	$ 684,730	$ (31,220)	$ (5,170)	$ 648,760
Net income	—	—	11,020	—	11,020
Other comprehensive income	—	—	—	3,990	3,990
Purchase of common stock	(10)	(2,680)	—	—	(2,690)
Shares surrendered upon exercise and vesting of equity awards to cover taxes	—	(280)	—	—	(280)
Non-cash compensation expense	—	3,240	—	—	3,240
Dividends declared	—	(1,680)	—	—	(1,680)
Balances, June 30, 2023	$ 410	$ 683,330	$ (20,200)	$ (1,180)	$ 662,360
Net income	—	—	16,490	—	16,490
Other comprehensive loss	—	—	—	(4,970)	(4,970)
Purchase of common stock	—	(260)	—	—	(260)
Shares surrendered upon exercise and vesting of equity awards to cover taxes	—	(90)	—	—	(90)
Non-cash compensation expense	—	3,140	—	—	3,140
Dividends declared	—	(1,680)	—	—	(1,680)
Balances, September 30, 2023	$ 410	$ 684,440	$ (3,710)	$ (6,150)	$ 674,990

The accompanying notes are an integral part of these consolidated financial statements.

TriMas Corporation
Consolidated Statement of Shareholders' Equity (Continued)
Nine Months Ended September 30, 2023 and 2022
(Unaudited—dollars in thousands)

	Common Stock	Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total
Balances, December 31, 2021	$ 430	$ 732,490	$ (102,300)	$ 230	$ 630,850
Net income	—	—	14,170	—	14,170
Other comprehensive loss	—	—	—	(2,240)	(2,240)
Purchase of common stock	—	(9,060)	—	—	(9,060)
Shares surrendered upon exercise and vesting of equity awards to cover taxes	—	(970)	—	—	(970)
Non-cash compensation expense	—	2,820	—	—	2,820
Dividends declared	—	(1,740)	—	—	(1,740)
Balances, March 31, 2022	$ 430	$ 723,540	$ (88,130)	$ (2,010)	$ 633,830
Net income	—	—	19,860	—	19,860
Other comprehensive loss	—	—	—	(3,530)	(3,530)
Purchase of common stock	(10)	(18,820)	—	—	(18,830)
Shares surrendered upon exercise and vesting of equity awards to cover taxes	—	(1,310)	—	—	(1,310)
Non-cash compensation expense	—	2,480	—	—	2,480
Dividends declared	—	(1,720)	—	—	(1,720)
Balances, June 30, 2022	$ 420	$ 704,170	$ (68,270)	$ (5,540)	$ 630,780
Net income	—	—	13,300	—	13,300
Other comprehensive loss	—	—	—	(8,010)	(8,010)
Purchase of common stock	—	(2,070)	—	—	(2,070)
Shares surrendered upon exercise and vesting of equity awards to cover taxes	—	(100)	—	—	(100)
Non-cash compensation expense	—	2,380	—	—	2,380
Dividends declared	—	(1,710)	—	—	(1,710)
Balances, September 30, 2022	$ 420	$ 702,670	$ (54,970)	$ (13,550)	$ 634,570

The accompanying notes are an integral part of these consolidated financial statements.

1. Basis of Presentation

TriMas Corporation ("TriMas" or the "Company"), and its consolidated subsidiaries, designs, engineers and manufactures innovative products under leading brand names for customers primarily in the consumer products, aerospace & defense, and industrial markets.

The accompanying consolidated financial statements include the accounts of the Company and its subsidiaries and, in the opinion of management, contain all adjustments, including adjustments of a normal and recurring nature, necessary for a fair presentation of financial position and results of operations. The preparation of financial statements requires management of the Company to make estimates and assumptions that affect the reported amounts of assets and liabilities. Actual results may differ from such estimates and assumptions due to risks and uncertainties, including uncertainty and volatility in the current economic environment due to input cost inflation, supply chain disruptions, and shortages in global markets for commodities, logistics and labor. To the extent there are differences between these estimates and actual results, the Company's consolidated financial statements may be materially affected.

Results of operations for interim periods are not necessarily indicative of results for the full year. The accompanying consolidated financial statements and notes thereto should be read in conjunction with the Company's 2022 Annual Report on Form 10-K.

2. Revenue

The following table presents the Company’s disaggregated net sales by primary market served (dollars in thousands):

	Three months ended September 30,		Nine months ended September 30,	
Customer Markets	**2023**	**2022**	**2023**	**2022**
Consumer Products	$ 96,220	$ 105,030	$ 287,730	$ 332,420
Aerospace & Defense	67,580	45,420	177,370	137,330
Industrial	71,540	68,080	218,890	210,770
Total net sales	$ 235,340	$ 218,530	$ 683,990	$ 680,520

The Company’s Packaging segment earns revenues from the consumer products (comprised of the beauty and personal care, food and beverage, home care, pharmaceutical, nutraceutical and medical submarkets) and industrial markets. The Aerospace segment earns revenues from the aerospace & defense market (comprised of commercial, regional and business jet and military submarkets). The Specialty Products segment earns revenues from a variety of submarkets within the industrial market.

3. Realignment Actions

2023 Realignment Actions

During the nine months ended September 30, 2023, the Company incurred realignment charges in its Packaging segment, related to the closure and consolidation of two manufacturing facilities located in China into one new, larger facility in the Haining region, and for costs incurred to close and consolidate its Rohnert Park, California, manufacturing facility operations into other existing U.S. production locations. In connection with these actions, the Company recorded pre-tax realignment charges of $2.7 million and $6.4 million during the three and nine months ended September 30, 2023, respectively, of which $0.8 million and $2.1 million during the three and nine months ended September 30, 2023, respectively, were for employee-related costs, $0.8 million during the three and nine months ended September 30, 2023 was for inventory write-downs, $1.1 million and $1.3 million during the three and nine months ended September 30, 2023, respectively, were for other facility move and consolidation costs, and $2.2 million during the nine months ended September 30, 2023 was related to charges to accelerate the depreciation of certain fixed assets. For the three months ended September 30, 2023, $2.4 million and $0.3 million of these charges were included in cost of sales and selling, general and administrative expenses, respectively, in the accompanying consolidated statement of income. For the nine months ended September 30, 2023, $5.7 million and $0.7 million of these charges were included in cost of sales and selling, general and administrative expenses, respectively, in the accompanying consolidated statement of income.

2022 Realignment Actions

During the nine months ended September 30, 2022, the Company incurred realignment charges in its Packaging segment related to adjusting its labor force in facilities with lower demand, finalizing its Indianapolis, Indiana, facility consolidation, costs incurred to reorganize its benefit plans in the United Kingdom, and costs incurred as part of the Company's start-up and relocation to a new, larger facility in New Albany, Ohio. The Company also completed the Aerospace segment footprint realignment which began in 2021. In connection with these actions, the Company recorded pre-tax realignment charges of $0.6 million and $4.3 million during the three and nine months ended September 30, 2022, respectively, of which $0.4 million and $2.5 million, respectively, were related to facility move and consolidation costs and $0.2 million and $1.8 million, respectively, were for employee-related costs. For the three and nine months ended September 30, 2022, $0.4 million and $2.6 million, respectively, of these charges were included in cost of sales and $0.2 million and $1.7 million, respectively, of these charges were included in selling, general and administrative expenses in the accompanying consolidated statement of income.

4. Acquisitions

2023 Acquisitions

On April 21, 2023, the Company acquired the operating net assets of Weldmac Manufacturing Company (“Weldmac”) for a purchase price of $34.0 million, with additional contingent consideration ranging from zero to $10 million based on achievement of earnings targets, as defined in the purchase agreement. The fair value of assets acquired and liabilities assumed included $23.7 million of property and equipment, $20.3 million of net working capital and $10.0 million of contingent consideration liability, with such estimate representing the Company's best estimate of fair value of contingent consideration based on Level 3 inputs under the fair value hierarchy, as defined. Located in El Cajon, California, and reported in the Company's Aerospace segment, Weldmac is a designer and manufacturer of complex metal fabricated components and assemblies for the aerospace, defense and space launch end markets and historically generated $33 million in annual revenue. On July 10, 2023, the Company made a cash payment of $5.5 million as additional consideration for the purchase of Weldmac based on achievement of earnings targets, as defined in the purchase agreement. The remaining possible contingent consideration ranges from zero to $4.5 million, based on achievement of 2023 earnings targets, as defined in the purchase agreement. At September 30, 2023, the Company believes it is probable the maximum contingent consideration will be earned.

On February 1, 2023, the Company acquired Aarts Packaging B.V. ("Aarts"), a luxury packaging solutions provider for beauty and lifestyle brands, as well as for customers in the food and life sciences end markets, for a purchase price of $37.8 million, net of cash acquired. The fair value of assets acquired and liabilities assumed included $20.4 million of goodwill, $10.9 million of intangible assets, $8.5 million of property and equipment, $7.4 million of net working capital, $3.9 million of net deferred tax liabilities and $5.5 million of other liabilities. Aarts, which is reported in the Company's Packaging segment, is located in Waalwijk, The Netherlands, and historically generated €23 million in annual revenue.

2022 Acquisitions

On February 28, 2022, the Company acquired Intertech Plastics LLC and related companies (collectively, "Intertech") for a purchase price of $64.1 million, net of cash acquired. Intertech is a manufacturer of custom injection molded products used in medical applications, as well as products and assemblies for consumer and industrial applications. The fair value of assets acquired and liabilities assumed included $32.4 million of goodwill, $13.5 million of intangible assets, $12.2 million of property and equipment and $6.0 million of net working capital. Intertech, which is reported in the Company's Packaging segment, has two manufacturing facilities located in the Denver, Colorado, area and historically generated $32 million in annual revenue.

5. Goodwill and Other Intangible Assets

Goodwill

Changes in the carrying amount of goodwill for the nine months ended September 30, 2023 are summarized as follows (dollars in thousands):

	Packaging	Aerospace	Specialty Products	Total
Balance, December 31, 2022	$ 263,550	$ 69,700	$ 6,560	$ 339,810
Goodwill from acquisitions	20,420	—	—	20,420
Foreign currency translation and other	(1,440)	(10)	—	(1,450)
Balance, September 30, 2023	$ 282,530	$ 69,690	$ 6,560	$ 358,780

Other Intangible Assets

The Company amortizes its other intangible assets over periods ranging from one to 30 years. The gross carrying amounts and accumulated amortization of the Company's other intangibles are summarized below (dollars in thousands):

	As of September 30, 2023		As of December 31, 2022	
Intangible Category by Useful Life	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Finite-lived intangible assets:				
Customer relationships, 5 – 12 years	$ 139,730	$ (86,540)	$ 131,660	$ (80,000)
Customer relationships, 15 – 25 years	129,640	(79,030)	129,650	(74,380)
Total customer relationships	269,370	(165,570)	261,310	(154,380)
Technology and other, 1 – 15 years	56,830	(41,090)	56,860	(38,990)
Technology and other, 17 – 30 years	43,300	(40,630)	43,300	(40,330)
Total technology and other	100,130	(81,720)	100,160	(79,320)
Indefinite-lived intangible assets:				
Trademark/Trade names	62,300	—	60,340	—
Total other intangible assets	$ 431,800	$ (247,290)	$ 421,810	$ (233,700)

Amortization expense related to intangible assets as included in the accompanying consolidated statement of income is summarized as follows (dollars in thousands):

	Three months ended September 30,		Nine months ended September 30,	
	2023	2022	2023	2022
Technology and other, included in cost of sales	$ 800	$ 800	$ 2,410	$ 2,510
Customer relationships, included in selling, general and administrative expenses	3,810	3,760	11,400	12,090
Total amortization expense	$ 4,610	$ 4,560	$ 13,810	$ 14,600

6. Inventories

Inventories consist of the following components (dollars in thousands):

	September 30, 2023	December 31, 2022
Finished goods	$ 75,660	$ 74,280
Work in process	51,790	38,090
Raw materials	54,880	50,990
Total inventories	$ 182,330	$ 163,360

7. Property and Equipment, Net

Property and equipment consists of the following components (dollars in thousands):

	September 30, 2023	December 31, 2022
Land and land improvements	$ 32,620	$ 15,220
Buildings	98,760	90,910
Machinery and equipment	480,740	461,480
	612,120	567,610
Less: Accumulated depreciation	295,430	289,860
Property and equipment, net	$ 316,690	$ 277,750

Depreciation expense as included in the accompanying consolidated statement of income is as follows (dollars in thousands):

	Three months ended September 30,		Nine months ended September 30,	
	2023	2022	2023	2022
Depreciation expense, included in cost of sales	$ 9,080	$ 7,980	$ 29,150	$ 24,550
Depreciation expense, included in selling, general and administrative expenses	210	210	680	790
Total depreciation expense	$ 9,290	$ 8,190	$ 29,830	$ 25,340

8. Long-term Debt

The Company's long-term debt consists of the following (dollars in thousands):

	September 30, 2023	December 31, 2022
4.125% Senior Notes due April 2029	$ 400,000	$ 400,000
Debt issuance costs	(4,580)	(5,270)
Long-term debt, net	$ 395,420	$ 394,730

Senior Notes

In March 2021, the Company issued $400.0 million aggregate principal amount of 4.125% senior notes due April 15, 2029 ("Senior Notes") at par value in a private placement under Rule 144A of the Securities Act of 1933, as amended ("Securities Act"). The Senior Notes accrue interest at a rate of 4.125% per annum, payable semi-annually in arrears on April 15 and October 15. The payment of principal and interest is jointly and severally guaranteed, on a senior unsecured basis, by certain subsidiaries of the Company. The Senior Notes are *pari passu* in right of payment with all existing and future senior indebtedness and effectively subordinated to all existing and future secured indebtedness to the extent of the value of the assets securing such indebtedness.

Prior to April 15, 2024, the Company may redeem up to 40% of the principal amount of the Senior Notes at a redemption price of 104.125% of the principal amount, plus accrued and unpaid interest, if any, to the redemption date, with the net cash proceeds of one or more equity offerings provided that each such redemption occurs within 90 days of the date of closing of each such equity offering. In addition, prior to April 15, 2024, the Company may redeem all or part of the Senior Notes at a redemption price equal to 100% of the principal amount thereof, plus accrued and unpaid interest, if any, to the redemption date, plus a "make whole" premium. On or after April 15, 2024, the Company may redeem all or part of the Senior Notes at the redemption prices (expressed as percentages of principal amount) set forth below, plus accrued and unpaid interest, if any, to the redemption date, if redeemed during the twelve-month period beginning on April 15 of the years indicated below:

Year	**Percentage**
2024	102.063 %
2025	101.031 %
2026 and thereafter	100.000 %

Credit Agreement

The Company is a party to a credit agreement ("Credit Agreement") consisting of a $300.0 million senior secured revolving credit facility, which permits borrowings denominated in specific foreign currencies, subject to a $125.0 million sub limit, maturing on March 29, 2026. The Credit Agreement is subject to benchmark interest rates determined based on the currency denomination of borrowings, with British pound sterling borrowings subject to the Sterling Overnight Index Average ("SONIA") and Euro borrowings to the Euro InterBank Offered Rate (“EURIBOR”), both plus a spread of 1.75%, and U.S. dollar borrowings subject to the Secured Overnight Financing Rate ("SOFR") plus a spread of 1.85%. The interest rate spread is based upon the leverage ratio, as defined, as of the most recent determination date. The Company's revolving credit facility allows for the issuance of letters of credit, not to exceed $40.0 million in aggregate.

The Credit Agreement also provides incremental revolving credit facility commitments in an amount not to exceed the greater of $200.0 million and an amount such that, after giving effect to such incremental commitments and the incurrence of any other indebtedness substantially simultaneously with the making of such commitments, the senior secured net leverage ratio, as defined, is no greater than 3.00 to 1.00. The terms and conditions of any incremental revolving credit facility commitments must be no more favorable than the existing credit facility.

At September 30, 2023, the Company had no amounts outstanding under its revolving credit facility and had $293.7 million potentially available after giving effect to $6.3 million of letters of credit issued and outstanding. At December 31, 2022, the Company had no amounts outstanding under its revolving credit facility and had $293.9 million potentially available after giving effect to $6.1 million of letters of credit issued and outstanding. After consideration of leverage restrictions contained in the Credit Agreement, as of September 30, 2023, the Company had $277.7 million of borrowing capacity available for general corporate purposes. The Company's borrowing capacity was not reduced by leverage restrictions contained in the Credit Agreement as of December 31, 2022.

The debt under the Credit Agreement is an obligation of the Company and certain of its domestic subsidiaries and is secured by substantially all of the assets of such parties. Borrowings under the $125.0 million (equivalent) foreign currency sub limit of the $300.0 million senior secured revolving credit facility are secured by a cross-guarantee amongst, and a pledge of the assets of, the foreign subsidiary borrowers that are a party to the agreement. The Credit Agreement also contains various negative and affirmative covenants and other requirements affecting the Company and its subsidiaries, including the ability, subject to certain exceptions and limitations, to incur debt, liens, mergers, investments, loans, advances, guarantee obligations, acquisitions, assets dispositions, sale-leaseback transactions, hedging agreements, dividends and other restricted payments, transactions with affiliates, restrictive agreements and amendments to charters, bylaws, and other material documents. The terms of the Credit Agreement also require the Company and its restricted subsidiaries to meet certain restrictive financial covenants and ratios computed quarterly, including a maximum total net leverage ratio (total consolidated indebtedness plus outstanding amounts under the accounts receivable securitization facility, less the aggregate amount of certain unrestricted cash and unrestricted permitted investments, as defined, over consolidated EBITDA, as defined), a maximum senior secured net leverage ratio (total consolidated senior secured indebtedness, less the aggregate amount of certain unrestricted cash and unrestricted permitted investments, as defined, over consolidated EBITDA, as defined) and a minimum interest expense coverage ratio (consolidated EBITDA, as defined, over the sum of consolidated cash interest expense, as defined, and preferred dividends, as defined). At September 30, 2023, the Company was in compliance with its financial covenants contained in the Credit Agreement.

Other Revolving Loan Facility

In May 2021, the Company, through one of its non-U.S. subsidiaries, entered into a revolving loan facility with a borrowing capacity of $4 million. The facility is guaranteed by TriMas Corporation. There were no borrowings outstanding on this loan facility as of September 30, 2023 and December 31, 2022.

Fair Value of Debt

The valuations of the Senior Notes were determined based on Level 2 inputs under the fair value hierarchy, as defined. The carrying amounts and fair values were as follows (dollars in thousands):

	September 30, 2023		December 31, 2022	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
4.125% Senior Notes due April 2029	$ 400,000	$ 339,000	$ 400,000	$ 344,000

9. Derivative Instruments

Derivatives Designated as Hedging Instruments

In July 2022, the Company entered into cross-currency swap agreements to hedge its net investment in Euro-denominated assets against future volatility in the exchange rate between the U.S. dollar and the Euro. By doing so, the Company synthetically converts a portion of its U.S. dollar-based long-term debt into Euro-denominated long-term debt. The agreements have notional amounts totaling $150.0 million, which decline to $75.0 million over contract periods ending on October 15, 2023 and April 15, 2024. Under the terms of the agreements, the Company is to receive net interest payments at fixed rates of approximately 2.4% to 2.6% of the notional amounts. At inception, the cross-currency swaps were designated as net investment hedges.

In July 2022, immediately prior to entering into the new cross-currency swap agreements, the Company terminated its existing cross-currency swap agreements, de-designating the swaps as net investment hedges and receiving $26.2 million of cash. The cross-currency swap agreements had notional amounts totaling $250.0 million, which declined to $25.0 million over various contract periods ending between October 15, 2023 and October 15, 2027. Under the terms of the agreements, the Company was to receive net interest payments at fixed rates ranging from approximately 0.8% to 2.9% of the notional amounts.

As of September 30, 2023 and December 31, 2022, the fair value carrying amount of the Company's derivatives designated as hedging instruments are recorded as follows (dollars in thousands):

		Asset / (Liability) Derivatives	
Derivatives designated as hedging instruments	**Balance Sheet Caption**	**September 30, 2023**	**December 31, 2022**
Net Investment Hedges			
Cross-currency swaps	Accrued liabilities	$ (6,270)	$ —
Cross-currency swaps	Other long-term liabilities	—	(7,090)

The following table summarizes the income recognized in accumulated other comprehensive income (loss) ("AOCI") on derivative contracts designated as hedging instruments as of September 30, 2023 and December 31, 2022, and the amounts reclassified from AOCI into earnings for the three and nine months ended September 30, 2023 and 2022 (dollars in thousands):

	Amount of Income Recognized in AOCI on Derivatives (Effective Portion, net of tax)			Amount of Income (Loss) Reclassified from AOCI into Earnings			
				Three months ended September 30,		Nine months ended September 30,	
	As of September 30, 2023	**As of December 31, 2022**	**Location of Income Reclassified from AOCI into Earnings (Effective Portion)**	**2023**	**2022**	**2023**	**2022**
Net Investment Hedges							
Cross-currency swaps	$ 15,950	$ 15,320	Other income (expense), net	$ —	$ —	$ —	$ —

Over the next 12 months, the Company does not expect to reclassify any pre-tax deferred amounts from AOCI into earnings.

Derivatives Not Designated as Hedging Instruments

As of September 30, 2023, the Company was party to foreign currency exchange forward contracts to economically hedge changes in foreign currency rates with notional amounts of $183.3 million. The Company uses foreign exchange contracts to mitigate the risk associated with fluctuations in currency rates impacting cash flows related to certain of its receivables, payables and intercompany transactions denominated in foreign currencies. The foreign exchange contracts primarily mitigate currency exposures between the U.S. dollar and the Euro, Canadian dollar, Chinese yuan, and the Mexican peso, as well as between the Euro and British pound, and have various settlement dates through December 31, 2023. These contracts are not designated as hedge instruments; therefore, gains and losses on these contracts are recognized each period directly into the consolidated statement of income.

The following table summarizes the effects of derivatives not designated as hedging instruments on the Company's consolidated statement of income (dollars in thousands):

		Amount of Income Recognized in Earnings on Derivatives			
		Three months ended September 30,		Nine months ended September 30,	
	Location of Income Recognized in Earnings on Derivatives	**2023**	**2022**	**2023**	**2022**
Derivatives not designated as hedging instruments					
Foreign exchange contracts	Other income (expense), net	$ 940	$ 2,860	$ 130	$ 6,170

Fair Value of Derivatives

The fair value of the Company's derivatives are estimated using an income approach based on valuation techniques to convert future amounts to a single, discounted amount. Estimates of the fair value of the Company's cross-currency swaps and foreign exchange contracts use observable inputs such as interest rate yield curves and forward currency exchange rates. Fair value measurements and the fair value hierarchy level for the Company's assets and liabilities measured at fair value on a recurring basis as of September 30, 2023 and December 31, 2022 are shown below (dollars in thousands):

Description	Frequency	Asset / (Liability)	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
September 30, 2023					
Cross-currency swaps	Recurring	$ (6,270)	$ —	$ (6,270)	$ —
Foreign exchange contracts	Recurring	$ (1,460)	$ —	$ (1,460)	$ —
December 31, 2022					
Cross-currency swaps	Recurring	$ (7,090)	$ —	$ (7,090)	$ —
Foreign exchange contracts	Recurring	$ (1,790)	$ —	$ (1,790)	$ —

10. Leases

The majority of the Company's lease obligations are non-cancelable operating leases for certain equipment and facilities. The Company's finance leases are for certain equipment as part of the Company's acquisition of Aarts. Leases with an initial term of 12 months or less are not recorded on the balance sheet; expense related to these leases is recognized on a straight-line basis over the lease term.

Supplemental balance sheet information related to the Company's leases are shown below (dollars in thousands):

	Balance Sheet Location	September 30, 2023	December 31, 2022
Assets			
Operating leases	Operating lease right-of-use assets	$ 45,650	$ 47,280
Finance leases	Property and equipment, net [(a)]	2,430	—
Total lease assets		$ 48,080	$ 47,280
Liabilities			
Current:			
Operating leases	Lease liabilities, current portion	$ 8,310	$ 8,280
Finance leases	Lease liabilities, current portion	470	—
Long-term:			
Operating leases	Lease liabilities	39,400	41,010
Finance leases	Lease liabilities	1,750	—
Total lease liabilities		$ 49,930	$ 49,290

(a) Finance leases were recorded net of accumulated depreciation of $0.1 million as of September 30, 2023.

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The components of lease expense are as follows (dollars in thousands):

		Three months ended September 30,		Nine months ended September 30,	
	Statement of Income Location	**2023**	**2022**	**2023**	**2022**
Operating lease cost	Cost of sales and Selling, general and administrative expenses	$ 3,140	$ 2,590	$ 8,860	$ 7,920
Finance lease cost:					
Depreciation of lease assets	Cost of sales	50	—	150	—
Interest on lease liabilities	Interest expense	10	—	40	—
Short-term, variable and other lease costs	Cost of sales and Selling, general and administrative expenses	1,030	950	2,510	2,370
Total lease cost		$ 4,230	$ 3,540	$ 11,560	$ 10,290

Maturities of lease liabilities are as follows (dollars in thousands):

Year ended December 31,	**Operating Leases**[(a)]	**Finance Leases**[(a)]
2023 (excluding the nine months ended September 30, 2023)	$ 2,530	$ 140
2024	9,540	520
2025	8,120	510
2026	8,570	590
2027	7,500	680
Thereafter	18,390	—
Total lease payments	54,650	2,440
Less: Imputed interest	(6,940)	(220)
Present value of lease liabilities	$ 47,710	$ 2,220

(a) The maturity table excludes cash flows associated with exited lease facilities. Liabilities for exited lease facilities are included in accrued liabilities and other long-term liabilities in the accompanying consolidated balance sheet.

Other information related to the Company's leases are as follows (dollars in thousands):

	Three months ended September 30,		Nine months ended September 30,	
	2023	**2022**	**2023**	**2022**
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash flows from operating leases	$ 2,540	$ 2,540	$ 7,760	$ 7,360
Operating cash flows from finance leases	10	—	40	—
Financing cash flows from finance leases	120	—	320	—
Lease assets obtained in exchange for new lease liabilities:				
Operating leases	3,560	970	8,340	5,720
Finance leases	—	—	2,620	—

The weighted-average remaining lease term of the Company's operating leases and finance leases as of September 30, 2023 is 6.5 years and 3.75 years, respectively. The weighted-average discount rate for the operating leases and finance leases as of September 30, 2023 is 4.0% and 2.6%, respectively.

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11. Other long-term liabilities

Other long-term liabilities consist of the following components (dollars in thousands):

	September 30, 2023	December 31, 2022
Non-current asbestos-related liabilities	$ 24,560	$ 26,370
Other long-term liabilities	22,020	29,970
Total other long-term liabilities	$ 46,580	$ 56,340

12. Commitments and Contingencies

Asbestos

As of September 30, 2023, the Company was a party to 459 pending cases involving an aggregate of 4,860 claimants primarily alleging personal injury from exposure to asbestos containing materials formerly used in gaskets (both encapsulated and otherwise) manufactured or distributed by its former Lamons division and certain other related subsidiaries for use primarily in the petrochemical, refining and exploration industries. The following chart summarizes the number of claims, number of claims filed, number of claims dismissed, number of claims settled, the average settlement amount per claim and the total defense costs, at the applicable date and for the applicable periods:

	Claims pending at beginning of period	Claims filed during period	Claims dismissed during period	Claims settled during period	Claims pending at end of period	Average settlement amount per claim during period	Total defense costs during period
Nine Months Ended September 30, 2023	4,798	195	111	22	4,860	$ 19,727	$ 1,340,000
Fiscal Year Ended December 31, 2022	4,754	236	168	24	4,798	$ 79,869	$ 2,180,000

In addition, the Company acquired various companies to distribute its products that had distributed gaskets of other manufacturers prior to acquisition. The Company believes that many of its pending cases relate to locations at which none of its gaskets were distributed or used.

The Company may be subjected to significant additional asbestos-related claims in the future, and will aggressively defend or reasonably resolve, as appropriate. The cost of settling cases in which product identification can be made may increase, and the Company may be subjected to further claims in respect of the former activities of its acquired gasket distributors. The cost of claims varies as claims may be initially made in some jurisdictions without specifying the amount sought or by simply stating the requisite or maximum permissible monetary relief, and may be amended to alter the amount sought. The large majority of claims do not specify the amount sought. Of the 4,860 claims pending at September 30, 2023, 42 set forth specific amounts of damages (other than those stating the statutory minimum or maximum). At September 30, 2023, of the 42 claims that set forth specific amounts, there were no claims seeking more than $5 million for punitive damages. Below is a breakdown of the compensatory damages sought for those claims seeking specific amounts:

	Compensatory		
Range of damages sought (dollars in millions)	$0.0 to $0.6	$0.6 to $5.0	$5.0+
Number of claims	—	4	38

Relatively few claims have reached the discovery stage and even fewer claims have gone past the discovery stage. Total settlement costs (exclusive of defense costs) for all such cases, some of which were filed over 30 years ago, have been $12.9 million. All relief sought in the asbestos cases is monetary in nature. Based on the settlements made to date and the number of claims dismissed or withdrawn for lack of product identification, the Company believes that the relief sought (when specified) does not bear a reasonable relationship to its potential liability.

The Company records a liability for asbestos-related claims, which includes both known and unknown claims, based on a study from the Company’s third-party actuary, the Company's review of the study, as well as the Company’s own review of asbestos claims and claim resolution activity.

In the fourth quarter of 2022, the Company commissioned its actuary to update the study, based on data as of September 30, 2022, which yielded a range of possible future liability of $29.6 million to $39.5 million. The Company did not believe any amount within the range of potential outcomes represented a better estimate than another given the many factors and assumptions inherent in the projections, and therefore recorded a non-cash, pre-tax charge of $5.6 million to increase the liability estimate to $29.6 million, at the low-end of the range. As of September 30, 2023, the Company’s total asbestos-related liability is $27.3 million, and is included in accrued liabilities and other long-term liabilities, respectively, in the accompanying consolidated balance sheet.

The Company’s primary insurance, which covered approximately 40% of historical costs related to settlement and defense of asbestos litigation, expired in November 2018, upon which the Company became solely responsible for defense costs and indemnity payments. The Company is party to a coverage-in-place agreement (entered into in 2006) with its first level excess carriers regarding the coverage to be provided to the Company for asbestos-related claims. The coverage-in-place agreement makes asbestos defense costs and indemnity insurance coverage available to the Company that might otherwise be disputed by the carriers and provides a methodology for the administration of such expenses. The Company will continue to be solely responsible for defense costs and indemnity payments prior to the commencement of coverage under this agreement, the duration of which would be subject to the scope of damage awards and settlements paid. Based upon the Company’s review of the actuarial study, the Company does not believe it is probable that it will reach the threshold of qualified future settlements required to commence excess carrier insurance coverage under the coverage-in-place agreement.

Based upon the Company's experience to date, including the trend in annual defense and settlement costs incurred to date, and other available information (including the availability of excess insurance), the Company does not believe these cases will have a material adverse effect on its financial position, results of operations, or cash flows.

Claims and Litigation

The Company is subject to other claims and litigation in the ordinary course of business, but does not believe that any such claim or litigation will have a material adverse effect on its financial position and results of operations or cash flows.

13. Segment Information

TriMas reports its operations in three segments: Packaging, Aerospace and Specialty Products. Each of these segments has discrete financial information that is regularly evaluated by TriMas' President and Chief Executive Officer (chief operating decision maker) in determining resource, personnel and capital allocation, as well as assessing strategy and performance. The Company utilizes its proprietary TriMas Business Model as its platform, which is based upon a standardized set of processes, to manage and drive results and strategy across its multi-industry businesses.

Within each of the Company's reportable segments, there are no individual products or product families for which reported net sales accounted for more than 10% of the Company's consolidated net sales. See below for more information regarding the types of products and services provided within each reportable segment:

Packaging – TriMas' Packaging segment consists primarily of the Rieke®, Affaba & Ferrari™, Taplast™, Rapak®, Plastic Srl, Aarts Packaging, Intertech and Omega brands. TriMas Packaging develops and manufactures a broad array of dispensing products (such as foaming pumps, lotion and hand soaps and sanitizer pumps, beverage dispensers, perfume sprayers, nasal sprayers and trigger sprayers), polymeric and steel caps and closures (such as food lids, flip-top closures, child resistance caps, beverage closures, fragrance and cosmetic caps, drum and pail closures, and flexible spouts), polymeric jar products, fully integrated dispensers for fill-ready bag-in-box applications, and consumable vascular delivery and diagnostic test components, all for a variety of consumer products submarkets including, but not limited to, beauty and personal care, food and beverage, home care, and life sciences, including but not limited to pharmaceutical, nutraceutical, and medical, as well as industrial markets (including agricultural).

Aerospace – TriMas' Aerospace segment, which includes the Monogram Aerospace Fasteners™, Allfast Fastening Systems®, Mac Fasteners™, TFI Aerospace, RSA Engineered Products, Martinic Engineering, and Weldmac Manufacturing brands, develops, qualifies and manufactures highly-engineered, precision fasteners, tubular products and assemblies for fluid conveyance, and machined products and assemblies to serve the aerospace and defense market.

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Specialty Products – TriMas' Specialty Products segment, which includes the Norris Cylinder™ and Arrow® Engine brands, designs, manufactures and distributes highly-engineered steel cylinders for use within industrial and aerospace markets, natural gas-fired engines for remote power generation applications and compression systems for use within the North American industrial oil and gas markets.

Segment activity is as follows (dollars in thousands):

	Three months ended September 30,		Nine months ended September 30,	
	2023	2022	2023	2022
Net Sales				
Packaging	$ 116,500	$ 129,700	$ 350,040	$ 416,540
Aerospace	67,580	45,420	177,370	137,330
Specialty Products	51,260	43,410	156,580	126,650
Total	$ 235,340	$ 218,530	$ 683,990	$ 680,520
Operating Profit (Loss)				
Packaging	$ 16,470	$ 17,590	$ 48,140	$ 66,720
Aerospace [(a)]	7,130	4,710	11,190	9,300
Specialty Products	10,510	6,760	32,360	20,770
Corporate	(10,350)	(8,080)	(37,880)	(24,010)
Total	$ 23,760	$ 20,980	$ 53,810	$ 72,780

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(a) In the three and nine months ended September 30, 2022, the Company recognized a $4.8 million pre-tax gain on the sale of vacant land adjacent to the Company's Tolleson, Arizona, manufacturing facility within the Aerospace segment.

14. Equity Awards

Restricted Stock Units

The Company awarded the following restricted stock units ("RSUs") during the nine months ended September 30, 2023:

- Granted 254,478 RSUs to certain employees, which are subject only to a service condition and vest ratably over three years so long as the employee remains with the Company;
- Granted 27,560 RSUs to its non-employee independent directors, which fully vest one year from date of grant so long as the director and/or Company does not terminate the director's service prior to the vesting date; and
- Granted 8,912 RSUs to certain employees, which are subject only to a service condition and fully vest at the end of three years so long as the employee remains with the Company;
- Issued 123 RSUs to certain employees related to dividend equivalent rights on existing equity awards; and
- Issued 2,129 RSUs related to director fee deferrals as certain of the Company's directors elected to defer all or a portion of their director fees and to receive the amount in Company common stock at a future date.

During 2023, the Company also awarded 95,017 performance-based RSUs to certain Company key employees which vest three years from the grant date as long as the employee remains with the Company. These awards are initially earned 50% based upon the Company's achievement of an earnings per share compound annual growth rate ("EPS CAGR") metric and 50% based upon the Company's cash return on net assets ("Cash RONA") metric over a period beginning January 1, 2023 and ending December 31, 2025. The total EPS CAGR and Cash RONA performance-based RSUs initially earned shall be subject to modification based on the Company's total shareholder return ("TSR") relative to the TSR of the common stock of a pre-defined industry peer-group, measured over the performance period. TSR is calculated as the Company's average closing stock price for the 20 trading days at the end of the performance period plus Company dividends, divided by the Company's average closing stock price for the 20 trading days prior to the start of the performance period. The Company estimates the grant-date fair value subject to a market condition using a Monte Carlo simulation model, using the following weighted average assumptions: risk-free rate of 4.36% and annualized volatility of 33.9%. Depending on the performance achieved for these two metrics, the amount of shares earned, if any, can vary for each metric from 0% of the target award to a maximum of 250% of the target.

During 2020, the Company awarded performance-based RSUs to certain Company key employees which were earned 50% based upon the Company's achievement of earnings per share compound annual growth rate metric over a period beginning January 1, 2020 and ending December 31, 2022. The remaining 50% of the awards were earned based on the Company's total shareholder return relative to the TSR of the common stock of a pre-defined industry peer-group, measured over the performance period. The Company attained 62.7% of the target on a weighted average basis, resulting in a decrease of 32,430 shares during the nine months ended September 30, 2023.

During 2020, the Company awarded performance-based RSUs to certain Company key employees which were earned based upon the Company's stock price performance over the period beginning January 1, 2020 and ending December 31, 2022. The stock price achievement was calculated based on the Company's average closing stock price for each quarter end for the 20 trading days up to and including March 31, June 30, September 30 and December 31, 2022, respectively. The Company did not meet the minimum performance threshold resulting in a decrease of 86,275 shares during the nine months ended September 30, 2023.

Information related to RSUs at September 30, 2023 is as follows:

	Number of Unvested RSUs	Weighted Average Grant Date Fair Value	Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Outstanding at January 1, 2023	719,449	$ 28.40		
Granted	388,219	29.54		
Vested	(252,054)	27.79		
Cancelled	(175,636)	21.05		
Outstanding at September 30, 2023	679,978	$ 31.18	1.3	$ 16,836,255

As of September 30, 2023, there was $5.9 million of unrecognized compensation cost related to unvested RSUs that is expected to be recorded over a weighted average period of 2.0 years.

The Company recognized stock-based compensation expense related to RSUs of $3.1 million and $2.4 million during the three months ended September 30, 2023 and 2022, respectively, and $9.3 million and $7.7 million during the nine months ended September 30, 2023 and 2022, respectively. The stock-based compensation expense is included in selling, general and administrative expenses in the accompanying consolidated statement of income.

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15. Earnings per Share

Net income is divided by the weighted average number of common shares outstanding during the period to calculate basic earnings per share. Diluted earnings per share is calculated to give effect to RSUs. The following table summarizes the dilutive effect of RSUs to purchase common stock for the three and nine months ended September 30, 2023 and 2022:

	Three months ended September 30,		Nine months ended September 30,	
	2023	2022	2023	2022
Weighted average common shares—basic	41,425,208	41,995,027	41,477,095	42,363,919
Dilutive effect of restricted stock units	248,173	186,413	229,772	226,858
Weighted average common shares—diluted	41,673,381	42,181,440	41,706,867	42,590,777

In March 2020, the Company announced its Board of Directors had authorized the Company to increase the purchase of its common stock up to $250 million in the aggregate. This announcement represented the most recent update from the initial authorization, approved in November 2015, of up to $50 million of purchases in the aggregate of its common stock. In the three and nine months ended September 30, 2023, the Company purchased 10,506 and 462,388 shares of its outstanding common stock for $0.3 million and $13.4 million, respectively. During the three and nine months ended September 30, 2022, the Company purchased 76,167 and 1,004,154 shares of its outstanding common stock for $2.1 million and $30.0 million, respectively. As of September 30, 2023, the Company had $92.3 million remaining under the repurchase authorization.

Holders of common stock are entitled to dividends at the discretion of the Company's Board of Directors. In 2021, the Company's Board of Directors declared the first dividend since the Company's initial public offering in 2007. During the three and nine months ended September 30, 2023, the Company's cash dividends declared were $0.04 per share of common stock and total dividends declared and paid on common shares were $1.7 million and $5.0 million, respectively. In the three and nine months ended September 30, 2022, the Company's cash dividends declared were $0.04 per share of common stock and total dividends declared and paid on common shares were $1.7 million and $5.2 million, respectively.

16. Defined Benefit Plans

Net periodic pension benefit costs for the Company's defined benefit pension plans cover certain foreign employees, union hourly employees and salaried employees. The components of net periodic pension cost (income) are as follows (dollars in thousands):

	Three months ended September 30,		Nine months ended September 30,	
	2023	2022	2023	2022
Service costs	$ 120	$ 170	$ 360	$ 530
Interest costs	320	230	950	690
Expected return on plan assets	(530)	(430)	(1,580)	(1,260)
Settlement and curtailment losses	—	—	1,020	150
Amortization of net loss	20	140	90	430
Net periodic benefit cost (income)	$ (70)	$ 110	$ 840	$ 540

The service cost component of net periodic benefit cost is recorded in cost of goods sold and selling, general and administrative expenses, while non-service cost components are recorded in other income (expense), net in the accompanying consolidated statement of income.

During the nine months ended September 30, 2023, the Company recognized a one-time, pre-tax settlement charge of $1.0 million related to the purchase of an annuity contract to transfer the Company's Canadian defined benefit obligations to an insurance company.

During the nine months ended September 30, 2022, the Company recorded a non-cash curtailment expense of $0.2 million, as it transitioned certain active employees previously participating in a defined benefit plan in the United Kingdom to a defined contribution plan, thereby eliminating future service cost accruals for all employees under this defined benefit plan.

The Company contributed $0.3 million and $1.0 million to its defined benefit pension plans during the three and nine months ended September 30, 2023, respectively. The Company expects to contribute $1.2 million to its defined benefit pension plans for the full year 2023.

17. Other Comprehensive Income (Loss)

Changes in AOCI by component for the nine months ended September 30, 2023 are summarized as follows, net of tax (dollars in thousands):

	Defined Benefit Plans	Derivative Instruments	Foreign Currency Translation	Total
Balance, December 31, 2022	$ (5,380)	$ 15,320	$ (18,560)	$ (8,620)
Net unrealized gains arising during the period [a]	—	630	1,060	1,690
Less: Net realized losses reclassified to net income [b]	(780)	—	—	(780)
Net current-period other comprehensive income	780	630	1,060	2,470
Balance, September 30, 2023	$ (4,600)	$ 15,950	$ (17,500)	$ (6,150)

[a] Derivative instruments, net of income tax of $0.2 million. See Note 9, "*Derivative Instruments*," for further details.

[b] Defined benefit plans, net of income tax of $0.3 million. See Note 16, "*Defined Benefit Plans*," for further details.

Changes in AOCI by component for the nine months ended September 30, 2022 are summarized as follows, net of tax (dollars in thousands):

	Defined Benefit Plans	Derivative Instruments	Foreign Currency Translation	Total
Balance, December 31, 2021	$ (4,830)	$ 5,910	$ (850)	$ 230
Net unrealized gains (losses) arising during the period [a]	—	18,740	(32,950)	(14,210)
Less: Net realized losses reclassified to net income [b]	(430)	—	—	(430)
Net current-period other comprehensive income (loss)	430	18,740	(32,950)	(13,780)
Balance, September 30, 2022	$ (4,400)	$ 24,650	$ (33,800)	$ (13,550)

[a] Derivative instruments, net of income tax of $6.3 million. See Note 9, "*Derivative Instruments*," for further details.

[b] Defined benefit plans, net of income tax of $0.1 million. See Note 16, "*Defined Benefit Plans*," for further details.

18. Income Taxes

The effective income tax rate for the three months ended September 30, 2023 and 2022 was 16.3% and 27.1%, respectively. We recorded income tax expense of $3.2 million and $4.9 million for the three months ended September 30, 2023 and 2022, respectively. The effective tax rate for the three months ended September 30, 2023 is lower than in the prior year primarily due to the Company recognizing $2.4 million of tax benefit related to foreign tax loss carryforwards.

The effective income tax rate for the nine months ended September 30, 2023 and 2022 was 23.1% and 25.0%, respectively. We recorded tax expense of $9.7 million for the nine months ended September 30, 2023 as compared to $15.8 million for the nine months ended September 30, 2022. The effect tax rate for the nine months ended September 30, 2023 is lower than in the prior year primarily due to the Company recognizing $2.4 million of tax benefit related to foreign tax loss carryforwards.

19. Subsequent Events

On October 19, 2023, the Company announced that its Board of Directors had declared a cash dividend of $0.04 per share of TriMas Corporation common stock, which will be payable on November 9, 2023 to shareholders of record as of the close of business on November 2, 2023.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of our financial condition contains forward-looking statements regarding industry outlook and our expectations regarding the performance of our business. These forward-looking statements are subject to numerous risks and uncertainties, including, but not limited to, the risks and uncertainties described under the heading "Forward-Looking Statements," at the beginning of this report. Our actual results may differ materially from those contained in or implied by any forward-looking statements. You should read the following discussion together with the Company's reports on file with the Securities and Exchange Commission, including its Annual Report on Form 10-K for the year ended December 31, 2022.

Introduction

TriMas designs, develops and manufactures a diverse set of products primarily for the consumer products, aerospace & defense and industrial markets through its TriMas Packaging, TriMas Aerospace and Specialty Products groups. Our wide range of innovative products are designed and engineered to solve application-specific challenges that our customers face. We believe our businesses share important and distinguishing characteristics, including: well-recognized and leading brand names in the focused markets we serve; innovative product technologies and features; a high-degree of customer approved processes and qualifications; established distribution networks; relatively low ongoing capital investment requirements; strong cash flow conversion and long-term growth opportunities. While the majority of our revenue is in the United States, we manufacture and supply products globally to a wide range of companies. We report our business activity in three segments: Packaging, Aerospace and Specialty Products.

Key Factors Affecting Our Reported Results

Our businesses and results of operations depend upon general economic conditions. We serve customers in industries that are highly competitive, cyclical and that may be significantly impacted by changes in economic or geopolitical conditions.

Our results of operations have been materially impacted over the past few years by macro-economic factors, first by the onset and proliferation of the coronavirus ("COVID-19") pandemic, then further from increased energy costs and supply chain disruptions from the Russia-Ukraine conflict, and more recently by cost inflation (raw materials, wage rates and freight) and a lack of material availability. These factors significantly affected each of our businesses and how we operate, albeit in different ways and magnitudes. Sales in our Packaging segment for dispensing and closure products used in applications to help fight the spread of germs have experienced extreme volatility in demand, with demand spiking to record highs after the onset of the pandemic, demand abating as expected from those high levels, and for the last several quarters demand abruptly falling as a result of some of our larger customers' choices to rebalance on-hand inventory levels and caution in current purchasing behaviors given the current inflationary macro-economic environment. Sales of certain of our industrial and aerospace-related products were significantly depressed from historical levels following the onset of the pandemic, but demand has significantly increased in recent quarters, to where the industrial demand in our Specialty Products segment has rebounded to pre-pandemic levels, while demand in our Aerospace segment continues to increase (and more quickly than expected) as air travel has picked-up and new aircraft build rates improve. Altogether, this significant level of volatility in demand levels, input and transportation costs, and material and labor availability have pressured our ability to operate efficiently and at historical margin levels in our Packaging and Aerospace segments.

Overall, our third quarter 2023 net sales increased $16.8 million, or 7.7%, compared to third quarter 2022. We experienced sales growth from acquisitions in our Packaging and Aerospace segments, as well as organic sales increases within our Aerospace and Specialty Products segments as a result of increased demand levels in North America. These increases were partially offset by reduced demand for dispensers and closures used in consumer products and industrial applications within our Packaging segment, which we believe declined due to lower customer order activity given continuing uncertainty around consumer sentiment as a result of the inflationary environment.

The most significant drivers affecting our financial results in third quarter 2023 compared with third quarter 2022, other than as directly impacted by sales changes, were the impact of our recent acquisitions, improved manufacturing throughput in our Aerospace segment, lower material and other input costs in our Packaging segment, realignment actions in our Packaging segment, the year-over-year impact of the sale of vacant land and corresponding pre-tax gain in our Aerospace segment in third quarter 2022, the year-over-year impact of the termination of our existing cross-currency swap agreements in third quarter 2022, and a decrease in our effective tax rate.

In February 2023, we acquired Aarts Packaging B.V. ("Aarts"), a luxury packaging solutions provider for beauty and lifestyle brands, as well as for customers in the food and life sciences end markets, for a purchase price of $37.8 million, net of cash acquired. Aarts, which is reported in our Packaging segment, is located in Waalwijk, The Netherlands. Aarts contributed $6.1 million of net sales during third quarter 2023.

In April 2023, we acquired the operating net assets of Weldmac Manufacturing Company ("Weldmac"), a designer and manufacturer of complex metal fabricated components and assemblies for the aerospace, defense and space launch end markets for a purchase price of $34.0 million, with additional contingent consideration ranging from zero to $10 million based on achievement of earnings targets. Weldmac, which is reported in our Aerospace segment, is located in El Cajon, California. Weldmac contributed $9.7 million of net sales during third quarter 2023. We recognized a $1.2 million purchase accounting non-cash charge related to the step-up of Weldmac's inventory to fair value and subsequent amortization during third quarter 2023. On July 10, 2023, we made a cash payment of $5.5 million as additional consideration for the purchase of Weldmac based on achievement of earnings targets. The remaining possible contingent consideration ranges from zero to $4.5 million, based on achievement of 2023 earnings targets, as defined in the purchase agreement.

Over the past few years, we have been executing certain realignment actions in response to current and expected future end market demand and rising input costs. We recorded pre-tax realignment charges of $2.7 million in third quarter 2023, primarily related to our actions to close and consolidate two production facilities in China into one new, larger facility in Haining, China, and to close and consolidate our Rohnert Park, California manufacturing facility operations into other existing U.S. production locations. These charges consisted of $0.8 million employee-related costs, $0.8 million for the write down of inventory to fair value, and $1.1 million related to other facility move and consolidation costs. We recorded pre-tax realignment charges of $0.6 million in the third quarter 2022, of which $0.4 million related to facility move and consolidation costs and $0.2 million were for employee related costs.

In third quarter 2022, we completed the sale of vacant land adjacent to our Tolleson, Arizona manufacturing facility and recognized a pre-tax gain of $4.8 million within our Aerospace segment. We received pre-tax net cash proceeds of $5.0 million in October 2022.

In third quarter 2022, we terminated our existing cross-currency swap agreements, de-designating the swaps as net investment hedges and received $26.2 million of cash. The cross-currency swap agreements had notional amounts totaling $250.0 million, which declined to $25.0 million over various contract periods ending between October 15, 2023 and October 15, 2027.

The effective income tax rate for third quarter 2023 was 16.3% as compared to 27.1% for third quarter 2022. The effective tax rate for third quarter 2023 is lower than in the prior year primarily due to the recognition of $2.4 million of tax benefit related to foreign tax loss carryforwards.

Additional Key Risks that May Affect Our Reported Results

We have executed significant realignment actions over the past few years, primarily in our Aerospace and Specialty Products segments, and also in certain Packaging product areas where demand has fallen. We will continue to assess further actions if required. However, as a result of the current period of macroeconomic inflation and uncertainty, the impact of the COVID-19 pandemic, and the potential impact of such factors to our future results of operations, as well as if there is an impact to TriMas' market capitalization, we may record additional cash and non-cash charges related to incremental realignment actions, asset impairments, including impairments to our goodwill and intangible assets, as well as for uncollectible customer account balances, excess inventory and idle production equipment.

Despite the potential for declines in future demand levels and results of operations, at present, we believe our capital structure is in a strong position. We have sufficient cash and available liquidity under our revolving credit facility to meet our debt service obligations, capital expenditure requirements and other short-term and long-term obligations for the foreseeable future.

Critical factors affecting our ability to succeed include: our ability to create organic growth through product development, cross-selling and extending product-line offerings, and our ability to quickly and cost-effectively introduce and successfully launch new products; our ability to acquire and integrate companies or products that supplement existing product lines, add new distribution channels or customers, expand our geographic coverage or enable better absorption of overhead costs; our ability to manage our cost structure more efficiently via supply chain management, internal sourcing and/or purchasing of materials, selective outsourcing and/or purchasing of support functions, working capital management, and greater leverage of our administrative functions; and our ability to absorb, or recover via commercial actions, inflationary or other cost increases.

Our overall business does not experience significant seasonal fluctuation, other than our fourth quarter, which has tended to be the lowest net sales quarter of the year due to holiday shutdowns at certain customers or other customers deferring capital spending to the following year. Given the short-cycle nature of most of our businesses, we do not consider sales order backlog to be a material factor. A growing amount of our sales is derived from international sources, which exposes us to certain risks, including currency risks.

We are sensitive to price movements and availability of our raw materials supply. Our largest raw material purchases are for resins (such as polypropylene and polyethylene), steel, aluminum, superalloys (such as titanium, A286 stainless steel and Inconel) and other oil and metal-based purchased components, the costs for each of which have experienced recent volatility. There has also been some volatility over the past two years as a direct and indirect result of foreign trade policy, where tariffs on certain of our commodity-based products sourced from Asia have been instituted, the conflict in Eastern Europe, creating certain input material shortages, and labor shortages at certain of our raw material suppliers. We will continue to take actions to mitigate such increases, including implementing commercial pricing adjustments, holding extra inventories and resourcing to alternate suppliers and insourcing of previously sourced products. Although we believe we are generally able to mitigate the impact of higher commodity costs over time, we may experience additional material costs and disruptions in supply in the future and may not be able to pass along higher costs to our customers in the form of price increases or otherwise mitigate the impacts to our operating results.

Although we have escalator/de-escalator clauses in commercial contracts with certain of our customers, or can modify prices based on market conditions to recover higher costs, our price increases generally lag the underlying material cost increase, and we cannot be assured of full cost recovery in the open market. If input costs increase at rapid rates, our ability to recover cost increases on a timely basis is made more difficult by the lag nature of these contracts.

Oil-based commodity costs are a significant driver of raw materials and purchased components used within our Packaging segment. As such, an increase in crude oil often is a precursor to rising input polymeric raw material costs, for which we may experience a contractual commercial recover lag. Separately, our Arrow Engine business in our Specialty Products segment is sensitive to the demand for natural gas and crude oil in North America. For example, demand for engine, pump jack and compressor products are impacted by active oil and gas rig counts and wellhead investment activities.

Each year, as a core tenet of the TriMas Business Model, our businesses target cost savings from Kaizen and continuous improvement initiatives in an effort to reduce, or otherwise offset, the impact of increased input and conversion costs through increased throughput and yield rates, with a goal of at least covering inflationary and market cost increases. In addition, we continuously review our operating cost structures to ensure alignment with current market demand.

We continue to evaluate alternatives to redeploy the cash generated by our businesses, one of which includes returning capital to our shareholders. In 2020, our Board of Directors increased the authorization of share repurchases to a cumulative amount of $250 million. During third quarter 2023, we purchased 10,506 shares of our outstanding common stock for an aggregate purchase price of $0.3 million. As of September 30, 2023, we had $92.3 million remaining under the repurchase authorization.

In addition, in third quarter 2023, we declared dividends of $0.04 per share of common stock and paid dividends of $1.7 million. We will continue to evaluate opportunities to return capital to shareholders through the purchase of our common stock, as well as dividends, depending on market conditions and other factors.

Segment Information and Supplemental Analysis

The following table summarizes financial information for our reportable segments for the three months ended September 30, 2023 and 2022 (dollars in thousands):

	Three months ended September 30,			
	2023	As a Percentage of Net Sales	2022	As a Percentage of Net Sales
Net Sales				
Packaging	$ 116,500	49.5 %	$ 129,700	59.3 %
Aerospace	67,580	28.7 %	45,420	20.8 %
Specialty Products	51,260	21.8 %	43,410	19.9 %
Total	$ 235,340	100.0 %	$ 218,530	100.0 %
Gross Profit				
Packaging	$ 28,330	24.3 %	$ 31,210	24.1 %
Aerospace	14,980	22.2 %	8,110	17.9 %
Specialty Products	12,620	24.6 %	9,010	20.8 %
Total	$ 55,930	23.8 %	$ 48,330	22.1 %
Selling, General and Administrative Expenses				
Packaging	$ 11,980	10.3 %	$ 13,570	10.5 %
Aerospace	7,850	11.6 %	8,220	18.1 %
Specialty Products	2,110	4.1 %	2,240	5.2 %
Corporate	10,350	N/A	8,080	N/A
Total	$ 32,290	13.7 %	$ 32,110	14.7 %
Operating Profit (Loss)				
Packaging	$ 16,470	14.1 %	$ 17,590	13.6 %
Aerospace	7,130	10.6 %	4,710	10.4 %
Specialty Products	10,510	20.5 %	6,760	15.6 %
Corporate	(10,350)	N/A	(8,080)	N/A
Total	$ 23,760	10.1 %	$ 20,980	9.6 %
Depreciation				
Packaging	$ 6,530	5.6 %	$ 5,490	4.2 %
Aerospace	1,820	2.7 %	1,820	4.0 %
Specialty Products	900	1.8 %	850	2.0 %
Corporate	40	N/A	30	N/A
Total	$ 9,290	3.9 %	$ 8,190	3.7 %
Amortization				
Packaging	$ 1,630	1.4 %	$ 1,440	1.1 %
Aerospace	2,870	4.2 %	3,010	6.6 %
Specialty Products	110	0.2 %	110	0.3 %
Corporate	—	N/A	—	N/A
Total	$ 4,610	2.0 %	$ 4,560	2.1 %

The following table summarizes financial information for our reportable segments for the nine months ended September 30, 2023 and 2022 (dollars in thousands):

	Nine months ended September 30,			
	2023	As a Percentage of Net Sales	2022	As a Percentage of Net Sales
Net Sales				
Packaging	$ 350,040	51.2 %	$ 416,540	61.2 %
Aerospace	177,370	25.9 %	137,330	20.2 %
Specialty Products	156,580	22.9 %	126,650	18.6 %
Total	$ 683,990	100.0 %	$ 680,520	100.0 %
Gross Profit				
Packaging	$ 84,690	24.2 %	$ 109,350	26.3 %
Aerospace	34,480	19.4 %	25,760	18.8 %
Specialty Products	38,980	24.9 %	27,610	21.8 %
Total	$ 158,150	23.1 %	$ 162,720	23.9 %
Selling, General and Administrative Expenses				
Packaging	$ 36,640	10.5 %	$ 42,400	10.2 %
Aerospace	23,290	13.1 %	21,270	15.5 %
Specialty Products	6,600	4.2 %	6,800	5.4 %
Corporate	37,880	N/A	24,010	N/A
Total	$ 104,410	15.3 %	$ 94,480	13.9 %
Operating Profit (Loss)				
Packaging	$ 48,140	13.8 %	$ 66,720	16.0 %
Aerospace	11,190	6.3 %	9,300	6.8 %
Specialty Products	32,360	20.7 %	20,770	16.4 %
Corporate	(37,880)	N/A	(24,010)	N/A
Total	$ 53,810	7.9 %	$ 72,780	10.7 %
Depreciation				
Packaging	$ 21,190	6.1 %	$ 16,690	4.0 %
Aerospace	5,770	3.3 %	5,730	4.2 %
Specialty Products	2,770	1.8 %	2,820	2.2 %
Corporate	100	N/A	100	N/A
Total	$ 29,830	4.4 %	$ 25,340	3.7 %
Amortization				
Packaging	$ 4,810	1.4 %	$ 5,230	1.3 %
Aerospace	8,660	4.9 %	9,030	6.6 %
Specialty Products	340	0.2 %	340	0.3 %
Corporate	—	N/A	—	N/A
Total	$ 13,810	2.0 %	$ 14,600	2.1 %

Results of Operations

The principal factors impacting us during the three months ended September 30, 2023, compared with the three months ended September 30, 2022, were:

- Reductions in demand for products in certain end markets within our Packaging segment;
- The impact of recent acquisitions, primarily Aarts and Weldmac;
- Significant demand increases in our Aerospace and Specialty Products segments;
- Improved manufacturing throughput in our Aerospace segment;
- Decreased material and other input costs in our Packaging segment;
- Realignment expenses in response to changes in end market demand;
- The third quarter 2022 sale of vacant land in Tolleson, Arizona, and the related pre-tax gain recognized in our Aerospace segment;

- The third quarter 2022 termination of our existing cross-currency swaps; and
- A decrease in our effective tax rate in third quarter 2023 compared with third quarter 2022.

Three Months Ended September 30, 2023 Compared with Three Months Ended September 30, 2022

Overall, net sales increased $16.8 million, or 7.7%, to $235.3 million for the three months ended September 30, 2023, as compared with $218.5 million in the three months ended September 30, 2022. Acquisition-related sales growth was $15.8 million, comprised of $6.1 million from our February 2023 acquisition of Aarts and $9.7 million from our April 2023 acquisition of Weldmac. Organic sales, excluding a $2.2 million favorable currency exchange impact and acquisitions, decreased $1.2 million, as sales increases in our Specialty Products and Aerospace segments driven by end market demand improvements were more than offset by decreases in the Packaging segment due to lower market demand, as we believe our customers continue to closely manage their order activity given continuing uncertainty around consumer sentiment as a result of the inflationary environment.

Gross profit margin (gross profit as a percentage of sales) approximated 23.8% and 22.1% for the three months ended September 30, 2023 and 2022, respectively. Gross profit margin increased primarily due to higher sales and improved throughput and fixed cost absorption in our Aerospace segment, improved fixed cost absorption in our Specialty Products segment, as well as lower material and other input costs in our Packaging segment. These increases were partially offset by lower fixed cost absorption resulting from lower sales levels and increased realignment costs associated with our actions to close and consolidate two production facilities in China into a new, larger facility in Haining, China, and to close and consolidate our Rohnert Park, California, manufacturing facility operations into other existing U.S. production locations within our Packaging segment. Gross profit and related margin also decreased due to a non-cash charge related to the step-up of Weldmac's inventory to fair value and subsequent amortization.

Operating profit margin (operating profit as a percentage of sales) approximated 10.1% and 9.6% for the three months ended September 30, 2023 and 2022, respectively. Operating profit increased $2.8 million to $23.8 million in the three months ended September 30, 2023, from $21.0 million for the three months ended September 30, 2022, primarily due to higher sales, improved throughput and fixed cost absorption within our Aerospace segment, improved fixed cost absorption in our Specialty Products segment, and lower material and other input costs in our Packaging segment. These increases were partially offset by lower absorption of fixed costs and higher realignment costs within our Packaging segment, the recognition of a non-cash charge related to Weldmac purchase accounting, and the year-over-year impact of the $4.8 million pre-tax gain on the sale of vacant land adjacent to our Tolleson, Arizona, manufacturing facility recorded in third quarter 2022.

Interest expense increased $0.4 million, to $4.0 million for the three months ended September 30, 2023, compared to $3.6 million for the three months ended September 30, 2022, primarily due to an increase in our weighted average borrowings.

Other income (expense) decreased $1.0 million to $0.1 million of expense for the three months ended September 30, 2023, as compared to $0.9 million of income for the three months ended September 30, 2022, primarily due to decreases in foreign currency transaction gains for the three months ended September 30, 2023 as compared to the three months ended September 30, 2022.

The effective income tax rate for the three months ended September 30, 2023 and 2022 was 16.3% and 27.1%, respectively. We recorded income tax expense of $3.2 million and $4.9 million for the three months ended September 30, 2023 and 2022, respectively. The effective tax rate for the three months ended September 30, 2023 is lower than in the prior year primarily due to the recognition of approximately $2.4 million of tax benefit related to foreign tax loss carryforwards.

Net income increased $3.2 million, to $16.5 million for the three months ended September 30, 2023, as compared to $13.3 million for the three months ended September 30, 2022. The increase was primarily the result of a increase in operating profit of $2.8 million and a decrease in income tax expense of $1.7 million, partially offset by an increase in interest expense of $0.4 million, and an increase in other expense of $1.0 million.

See below for a discussion of operating results by segment.

Packaging. Net sales decreased $13.2 million, or 10.2%, to $116.5 million in the three months ended September 30, 2023, as compared to $129.7 million in the three months ended September 30, 2022. Acquisition-related sales growth from our February 2023 acquisition of Aarts was $6.1 million. Sales of dispensing products used in beauty and personal care, as well as home care, applications decreased by $3.8 million. Sales of products used in food and beverage markets decreased by $12.7 million, primarily due to lower demand for closures. Sales of products used in industrial markets decreased by $5.0 million, primarily as a result of lower demand for drum closure products. We believe that the decrease in sales in each of these categories reflects ongoing actions by many of our customers to closely manage their order activity given continuing uncertainty around consumer sentiment as a result of the inflationary environment. These decreases were partially offset by an increase in net sales of $2.2 million due to currency exchange, as our reported results in U.S. dollars were favorably impacted as a result of the weakening of the U.S. dollar relative to foreign currencies, as compared to third quarter 2022.

Gross profit decreased $2.9 million to $28.3 million, or 24.3% of sales, in the three months ended September 30, 2023, as compared to $31.2 million, or 24.1% of sales, in the three months ended September 30, 2022. Gross profit dollars decreased primarily due to lower sales and $2.1 million of higher realignment costs associated with our actions to close and consolidate two production facilities in China into a new, larger facility in Haining, China, and to close and consolidate our Rohnert Park, California, manufacturing facility operations into other existing U.S. production locations. While gross profit dollars decreased, gross profit as a percentage of sales increased as a result of lower material, energy and other input costs, partially offset by lower fixed cost absorption.

Selling, general and administrative expenses decreased $1.6 million to $12.0 million, or 10.3% of sales, in the three months ended September 30, 2023, as compared to $13.6 million, or 10.5% of sales, in the three months ended September 30, 2022, primarily due to lower employee-related costs and overall spending levels in third quarter 2023, consistent with current lower demand levels. These decreases were partially offset by higher ongoing selling, general and administrative costs associated with our acquisition of Aarts.

Operating profit decreased $1.1 million to $16.5 million, or 14.1% of sales, in the three months ended September 30, 2023, as compared to $17.6 million, or 13.6% of sales, in the three months ended September 30, 2022. Operating profit decreased primarily as a result of lower sales levels and increased realignment costs, while operating profit as a percentage of sales increased as a result of lower material, energy and other input costs and lower spending levels within selling, general and administrative expenses.

Aerospace. Net sales for the three months ended September 30, 2023 increased $22.2 million, or 48.8%, to $67.6 million, as compared to $45.4 million in the three months ended September 30, 2022. Acquisition-related sales growth from our April 2023 acquisition of Weldmac was $9.7 million. Sales of our fasteners products increased by $9.3 million due to increased demand for fasteners used in new aircraft builds, in addition to market share gains. Sales of our engineered components products increased by $3.2 million due to higher end market demand.

Gross profit increased $6.9 million to $15.0 million, or 22.2% of sales, in the three months ended September 30, 2023, from $8.1 million, or 17.9% of sales, in the three months ended September 30, 2022. Gross profit increased primarily due to higher sales levels, partially offset by a $1.2 million purchase accounting non-cash charge related to the step-up of Weldmac's inventory to fair value and subsequent amortization. Gross profit as a percentage of sales increased primarily due to improved throughput and fixed cost absorption.

Selling, general and administrative expenses decreased $0.4 million to $7.9 million, or 11.6% of sales, in the three months ended September 30, 2023, as compared to $8.2 million, or 18.1% of sales, in the three months ended September 30, 2022, primarily due to lower employee-related costs, partially offset by higher ongoing selling, general and administrative costs associated with our acquisition of Weldmac.

Operating profit increased $2.4 million to $7.1 million, or 10.6% of sales, in the three months ended September 30, 2023, as compared to $4.7 million, or 10.4% of sales, in the three months ended September 30, 2022, primarily due to the impact of higher sales, improved throughput and fixed cost absorption and lower employee-related costs, partially offset by the recognition of the purchase accounting adjustment related to Weldmac's inventory step-up to fair value and subsequent amortization, and the year-over-year impact of the $4.8 million pre-tax gain on the sale of vacant land adjacent to our Tolleson, Arizona, manufacturing facility recorded in third quarter 2022.

Specialty Products. Net sales for the three months ended September 30, 2023 increased $7.9 million, or 18.1%, to $51.3 million, as compared to $43.4 million in the three months ended September 30, 2022. Sales of our cylinder products increased $5.8 million due to higher demand for steel cylinders for packaged gas applications in North America. Sales of engines, compressors and related parts used in stationary power generation and assistance applications for natural gas and crude oil extraction increased by $2.1 million, primarily as a result of higher compression package sales.

Gross profit increased $3.6 million to $12.6 million, or 24.6% of sales, in the three months ended September 30, 2023, as compared to $9.0 million, or 20.8% of sales, in the three months ended September 30, 2022. Gross profit increased in the third quarter of 2023 primarily as a result of higher sales levels, while margin also improved due to leveraging the higher sales levels with the existing cost footprint.

Selling, general and administrative expenses decreased $0.1 million to $2.1 million, or 4.1% of sales, in the three months ended September 30, 2023, as compared to $2.2 million, or 5.2% of sales, in the three months ended September 30, 2022, as the business leveraged the higher sales levels without need for incremental spending.

Operating profit increased $3.8 million to $10.5 million, or 20.5% of sales, in the three months ended September 30, 2023, as compared to $6.8 million, or 15.6% of sales, in the three months ended September 30, 2022, primarily due to higher sales levels.

Corporate. Corporate expenses consist of the following (dollars in millions):

	Three months ended September 30,	
	2023	2022
Corporate operating expenses	$ 7.2	$ 5.5
Non-cash stock compensation	3.1	2.4
Legacy expenses	0.1	0.2
Corporate expenses	$ 10.4	$ 8.1

Corporate expenses increased $2.3 million to $10.4 million for the three months ended September 30, 2023, from $8.1 million for the three months ended September 30, 2022, primarily due to $0.7 million increase in non-cash stock compensation due to timing and estimated attainment of existing awards, and the addition of $1.7 million of costs now reported as corporate operating expenses related to centralizing certain of our information technology costs in 2023 as we prepare to upgrade certain of our information technologies systems.

Nine Months Ended September 30, 2023 Compared with Nine Months Ended September 30, 2022

Overall, net sales increased $3.5 million, or 0.5%, to $684.0 million for the nine months ended September 30, 2023, as compared with $680.5 million in the nine months ended September 30, 2022. Acquisition-related sales growth was $40.1 million, comprised of $5.3 million resulting from the January through February 2023 sales of our February 2022 acquisition of Intertech Plastics LLC and related companies (collectively, "Intertech"), $17.8 million from our February 2023 acquisition of Aarts, and $17.0 million from our April 2023 acquisition of Weldmac. Organic sales, excluding the impact of currency exchange and acquisitions, decreased $36.2 million, as sales increases in our Specialty Products and Aerospace segments driven by end market demand improvements and market share gains were more than offset by a decrease in the Packaging segment due to lower market demand, primarily as a result of ongoing actions by many of our customers to rebalance their inventory levels and closely manage their order activity given continuing uncertainty around consumer sentiment as a result of the inflationary environment.

Gross profit margin (gross profit as a percentage of sales) approximated 23.1% and 23.9% for the nine months ended September 30, 2023 and 2022, respectively. Gross profit margin decreased primarily due to lower sales levels and lower absorption of fixed costs as well as increased realignment costs associated with our actions to close and consolidate two production facilities in China into a new, larger facility in Haining, China, and to close and consolidate our Rohnert Park, California, manufacturing facility operations into other existing U.S. production locations within our Packaging segment. Gross profit also decreased due to a $2.0 million purchase accounting non-cash charge related to the step-up of Weldmac's inventory to fair value and subsequent amortization in our Aerospace segment. These decreases were partially offset by higher sales and improved throughput and fixed cost absorption within our Aerospace segment, improved fixed cost absorption in our Specialty Products segment, and lower material and other input costs, including $4.6 million of lower energy costs, in our Packaging segment.

Operating profit margin (operating profit as a percentage of sales) approximated 7.9% and 10.7% for the nine months ended September 30, 2023 and 2022, respectively. Operating profit decreased $19.0 million, to $53.8 million, for the nine months ended September 30, 2023, compared to $72.8 million for the nine months ended September 30, 2022, primarily due to lower sales levels and lower absorption of fixed costs as well as higher realignment costs within our Packaging segment, and an increase in professional fees. Additionally, operating profit decreased due to the impact of a non-cash charge related to Weldmac purchase accounting and the year-over-year impact of the $4.8 million pre-tax gain on the sale of vacant land adjacent to our Tolleson, Arizona, manufacturing facility recorded in third quarter 2022. These decreases were partially offset by the impact of higher sales levels and related improved fixed cost absorption within our Aerospace and Specialty Products segments, and lower material and other input costs in our Packaging segment.

Interest expense increased $1.1 million, to $11.6 million, for the nine months ended September 30, 2023, as compared to $10.5 million for the nine months ended September 30, 2022, due to an increase in our weighted average borrowings and a higher effective interest rate as a result of lower notional amounts of cross-currency swaps.

Other income (expense) decreased $0.9 million to a de minimis amount of expense for the nine months ended September 30, 2023, as compared to $0.9 million of income for the nine months ended September 30, 2022, primarily due a non-cash settlement charge for our Canadian defined benefit obligations during the nine months ended September 30, 2023 as well as decreases in foreign currency transaction gains for the nine months ended September 30, 2023.

The effective income tax rate for the nine months ended September 30, 2023 and 2022 was 23.1% and 25.0%, respectively. We recorded tax expense of $9.7 million for the nine months ended September 30, 2023 as compared to $15.8 million for the nine months ended September 30, 2022. The effective tax rate for the nine months ended September 30, 2023 was lower than in the prior year primarily due to the recognition of approximately $2.4 million of tax benefit related to foreign tax loss carryforwards.

Net income decreased by $14.9 million, to $32.4 million for the nine months ended September 30, 2023, compared to $47.3 million for the nine months ended September 30, 2022. The decrease was primarily the result of a decrease in operating profit of $19.0 million, an increase in interest expense of $1.1 million, and a decrease in other income of $0.9 million, partially offset by a decrease in income tax expense of $6.1 million.

See below for a discussion of operating results by segment.

Packaging. Net sales decreased $66.5 million, or 16.0%, to $350.0 million in the nine months ended September 30, 2023, as compared to $416.5 million in the nine months ended September 30, 2022. Acquisition-related sales growth was $23.1 million, comprised of $5.3 million resulting from the January through February 2023 sales of our February 2022 acquisition of Intertech and $17.8 million from our February 2023 acquisition of Aarts. Sales of dispensing products used primarily in personal care, as well as home care, applications decreased by $30.2 million. Sales of products used in food and beverage markets decreased by $34.0 million, primarily due to lower demand for closures. Sales of products used in industrial markets decreased by $22.5 million, primarily as a result of lower demand for drum closure products. We believe that the decrease in sales in each of these categories reflects ongoing actions by many of our customers to work-down elevated inventory positions and closely manage their order activity given continuing uncertainty around consumer sentiment as a result of the inflationary environment.

Packaging's gross profit decreased $24.7 million to $84.7 million, or 24.2% of sales, in the nine months ended September 30, 2023, as compared to $109.4 million, or 26.3% of sales, in the nine months ended September 30, 2022, primarily due to lower sales and resulting lower absorption of fixed costs. Gross profit further declined in 2023 due to $3.9 million of higher realignment costs, primarily associated with our actions to close and consolidate two production facilities in China into a new, larger facility in Haining, China, and to close and consolidate our Rohnert Park, California, manufacturing facility operations into other existing U.S. production locations. The decrease in gross profit was partially offset by lower material and other input costs, including $4.6 million of lower energy costs, as compared with the spike in costs in 2022, primarily in our Europe-based operations.

Packaging's selling, general and administrative expenses decreased $5.8 million to $36.6 million, or 10.5% of sales, in the nine months ended September 30, 2023, as compared to $42.4 million, or 10.2% of sales, in the nine months ended September 30, 2022, primarily due to lower overall spending levels in 2023, consistent with current lower demand levels, as well as $0.9 million of lower costs associated with realignment actions. In addition, we incurred lower intangible asset amortization expense due to certain assets becoming fully amortized. These decreases more than offset higher ongoing selling, general and administrative costs associated with our acquisitions.

Packaging's operating profit decreased $18.6 million to $48.1 million, or 13.8% of sales, in the nine months ended September 30, 2023, as compared to $66.7 million, or 16.0% of sales, in the nine months ended September 30, 2022, as the impact of lower selling, general and administrative expenses and energy costs was more than offset by lower sales levels, lower absorption of fixed costs, and higher realignment costs.

Aerospace. Net sales for the nine months ended September 30, 2023 increased $40.0 million, or 29.2%, to $177.4 million, as compared to $137.3 million in the nine months ended September 30, 2022. Acquisition-related sales growth from our April 2023 acquisition of Weldmac was $17.0 million. Sales of our fasteners products increased by $15.4 million due to increases in demand for fasteners used in new aircraft builds plus market share gains. Sales of our engineered components products increased by $7.6 million due to higher end market demand.

Gross profit within Aerospace increased $8.7 million to $34.5 million, or 19.4% of sales, in the nine months ended September 30, 2023, from $25.8 million, or 18.8% of sales, in the nine months ended September 30, 2022. Gross profit increased primarily due to higher sales levels and improved manufacturing throughput and fixed cost absorption, partially offset by increased materials costs and a $2.0 million purchase accounting non-cash charge related to the step-up of Weldmac's inventory to fair value and subsequent amortization.

Selling, general and administrative expenses increased $2.0 million to $23.3 million, or 13.1% of sales, in the nine months ended September 30, 2023, as compared to $21.3 million, or 15.5% of sales, in the nine months ended September 30, 2022, primarily due to higher ongoing selling, general and administrative costs associated with our acquisition of Weldmac and higher legal costs, partially offset by lower employee-related costs.

Operating profit within Aerospace increased $1.9 million to $11.2 million, or 6.3% of sales, in the nine months ended September 30, 2023, as compared to $9.3 million, or 6.8% of sales, in the nine months ended September 30, 2022, primarily due to the impact of higher sales levels and lower employee-related costs, partially offset by the recognition of the purchase accounting adjustment related to Weldmac's inventory step-up to fair value and subsequent amortization, and the year-over-year impact of the $4.8 million pre-tax gain on the sale of vacant land adjacent to our Tolleson, Arizona, manufacturing facility recorded in third quarter 2022.

Specialty Products. Net sales for the nine months ended September 30, 2023 increased $29.9 million, or 23.6%, to $156.6 million, as compared to $126.7 million in the nine months ended September 30, 2022. Sales of our cylinder products increased $18.0 million due to higher demand for steel cylinders for packaged gas applications in North America as industrial activity continues to increase from depressed levels as a result of the COVID-19 pandemic. Sales of natural gas fired engines, compressors and related parts used in remote power generation and assistance applications for natural gas and crude oil extraction increased by $11.9 million.

Gross profit within Specialty Products increased $11.4 million to $39.0 million, or 24.9% of sales, in the nine months ended September 30, 2023, as compared to $27.6 million, or 21.8% of sales, in the nine months ended September 30, 2022. Gross profit and margin increased due to higher sales leveraged across our existing cost footprint.

Selling, general and administrative expenses within Specialty Products decreased $0.2 million to $6.6 million, or 4.2% of sales, in the nine months ended September 30, 2023, as compared to $6.8 million, or 5.4% of sales, in the nine months ended September 30, 2022, as we leveraged the higher sales levels without need for incremental spending.

Operating profit within Specialty Products increased $11.6 million to $32.4 million, or 20.7% of sales, in the nine months ended September 30, 2023, as compared to $20.8 million, or 16.4% of sales, in the nine months ended September 30, 2022, primarily due to increased sales levels.

Corporate. Corporate expenses, net consist of the following (dollars in millions):

	Nine months ended September 30,	
	2023	**2022**
Corporate operating expenses	$ 28.5	$ 15.9
Non-cash stock compensation	9.3	7.7
Legacy expenses	0.1	0.4
Corporate expenses	$ 37.9	$ 24.0

Corporate expenses increased $13.9 million to $37.9 million for the nine months ended September 30, 2023, from $24.0 million for the nine months ended September 30, 2022, primarily due to $4.6 million of higher professional fees primarily for business diligence and strategic consulting, the addition of $5.0 million of costs now reported as corporate operating expenses related to centralizing certain of our information technology costs in 2023 as we prepare for upgrades in certain of our information technologies applications, a $1.6 million increase in non-cash stock compensation due to timing and estimated attainment of existing awards, and higher employee-related costs.

Liquidity and Capital Resources

Cash Flows

Cash flows provided by operating activities were $57.6 million for the nine months ended September 30, 2023, as compared to $46.6 million for the nine months ended September 30, 2022. Significant changes in cash flows provided by operating activities and the reasons for such changes were as follows:

- For the nine months ended September 30, 2023, the Company generated $89.4 million in cash flows, based on the reported net income of $32.4 million and after considering the effects of non-cash items related to depreciation, amortization, gain on dispositions of assets, changes in deferred income taxes, stock-based compensation and other operating activities. For the nine months ended September 30, 2022, the Company generated $88.5 million in cash flows based on the reported net income of $47.3 million and after considering the effects of similar non-cash items.

- Increases in accounts receivable resulted in a use of cash of $22.6 million and $14.8 million for the nine months ended September 30, 2023 and 2022, respectively. The increased use of cash for each of the nine month periods is due primarily to the timing of sales and collection of cash related thereto within the periods. Days sales outstanding of receivables increased by five days through the nine months ended September 30, 2023 and increased by four days through the nine months ended September 30, 2022.

- We decreased our investment in inventory by $1.8 million for the nine months ended September 30, 2023, while we increased our investment in inventory by $19.0 million for the nine months ended September 30, 2022. Our days sales in inventory decreased by two days through the nine months ended September 30, 2023, as we continued to moderate inventory levels in line with sales levels. Our days sales in inventory increased by six days through the nine months ended September 30, 2022, primarily a result of proactively investing in certain raw materials and purchased components to protect against supply chain disruptions and potential cost increases.

- Increases in prepaid expenses and other assets resulted in a use of cash of $0.7 million and $1.2 million for the nine months ended September 30, 2023 and 2022, respectively. These changes were primarily a result of the timing of payments made for income taxes and certain operating expenses.

- Decreases in accounts payable and accrued liabilities resulted in a use of cash of $10.4 million and $6.9 million for the nine months ended September 30, 2023 and 2022, respectively. Days accounts payable on hand decreased by eight days through the nine months ended September 30, 2023, while remaining consistent through the nine months ended September 30, 2022. Our days accounts payable on hand fluctuate primarily as a result of the timing of payments made to suppliers and the mix of vendors and related terms.

Net cash used for investing activities for the nine months ended September 30, 2023 and 2022 was $111.8 million and $69.5 million, respectively. During the first nine months of 2023, we invested $34.9 million in capital expenditures, as we continued our investment in growth, capacity and productivity-related capital projects, and paid $77.3 million, net of cash acquired, to acquire Aarts and Weldmac, which includes a cash payment of $5.5 million during third quarter 2023 as additional consideration for the purchase of Weldmac based on achievement of earnings targets, as defined in the purchase agreement. During the first nine months of 2022, we invested $31.8 million in capital expenditures, paid $64.1 million, net of cash acquired, to acquire Intertech, and received proceeds of $26.2 million from the termination of our cross-currency swap agreements. While we sold the land adjacent to our Tolleson, Arizona manufacturing facility during third quarter 2022, we did not receive the cash proceeds until October 2022.

Net cash used for financing activities for the nine months ended September 30, 2023 and 2022 was $23.2 million and $37.5 million, respectively. During the nine months ended September 30, 2023, we received net proceeds of $1.1 million from borrowings on our revolving credit facilities, purchased $13.4 million of outstanding common stock, used a net cash amount of $2.7 million related to our stock compensation arrangements, paid dividends of $5.0 million and paid $3.2 million related to liabilities assumed in our acquisition of Aarts. Our reported net proceeds from borrowings on our revolving credit facilities considers the impact of foreign currency translation. During the nine months ended September 30, 2022, we purchased $30.0 million of outstanding common stock, used a net cash amount of $2.4 million related to our stock compensation arrangements, and paid dividends of $5.2 million.

Our Debt and Other Commitments

In March 2021, we issued $400.0 million aggregate principal amount of 4.125% senior notes due April 15, 2029 ("Senior Notes") at par value in a private placement under Rule 144A of the Securities Act of 1933, as amended ("Securities Act"). The Senior Notes accrues interest at a rate of 4.125% per annum, payable semi-annually in arrears on April 15 and October 15. The payment of principal and interest is jointly and severally guaranteed, on a senior unsecured basis, by certain subsidiaries of the Company. The Senior Notes are *pari passu* in right of payment with all existing and future senior indebtedness and effectively subordinated to all existing and future secured indebtedness to the extent of the value of the assets securing such indebtedness.

Prior to April 15, 2024, we may redeem up to 40% of the principal amount of the Senior Notes at a redemption price of 104.125% of the principal amount, plus accrued and unpaid interest, if any, to the redemption date, with the net cash proceeds of one or more equity offerings provided that each such redemption occurs within 90 days of the date of closing of each such equity offering. In addition, prior to April 15, 2024, we may redeem all or part of the Senior Notes at a redemption price equal to 100% of the principal amount thereof, plus accrued and unpaid interest, if any, to the redemption date, plus a "make whole" premium.

For the nine months ended September 30, 2023, our consolidated subsidiaries that do not guarantee the Senior Notes represented 28% of the total of guarantor and non-guarantor net sales, treating each as a consolidated group and excluding intercompany transactions between guarantor and non-guarantor subsidiaries. In addition, our non-guarantor subsidiaries represented 37% and 13% of the total guarantor and non-guarantor assets and liabilities, respectively, as of September 30, 2023, treating the guarantor and non-guarantor subsidiaries each as a consolidated group.

We are party to a credit agreement ("Credit Agreement") consisting of a $300.0 million senior secured revolving credit facility, which permits borrowings denominated in specific foreign currencies, subject to a $125.0 million sub limit, maturing on March 29, 2026. The Credit Agreement is subject to benchmark interest rates determined based on the currency denomination of borrowings, with British pound sterling borrowings subject to the Sterling Overnight Index Average ("SONIA") and Euro borrowings to the Euro InterBank Offered Rate (“EURIBOR”), both plus a spread of 1.75%, and U.S. dollar borrowings subject to the Secured Overnight Financing Rate ("SOFR") plus a spread of 1.85%. The interest rate spread is based upon the leverage ratio, as defined, as of the most recent determination date. Our revolving credit facility allows for the issuance of letters of credit, not to exceed $40.0 million in aggregate.

The Credit Agreement provides for incremental revolving credit commitments in an amount not to exceed the greater of $200.0 million and an amount such that, after giving effect to such incremental commitments and the incurrence of any other indebtedness substantially simultaneously with the making of such commitments, the senior secured net leverage ratio, as defined in the Credit Agreement, is no greater than 3.00 to 1.00. The terms and conditions of any incremental revolving credit facility commitments must be no more favorable than the existing credit facility.

Amounts drawn under our revolving credit facility fluctuate daily based upon our working capital and other ordinary course needs. Availability under our revolving credit facility depends upon, among other things, compliance with our Credit Agreement's financial covenants. Our Credit Agreement contains various negative and affirmative covenants and other requirements affecting us and our subsidiaries, including the ability to, subject to certain exceptions and limitations, incur debt, liens, mergers, investments, loans, advances, guarantee obligations, acquisitions, asset dispositions, sale-leaseback transactions, hedging agreements, dividends and other restricted payments, transactions with affiliates, restrictive agreements and amendments to charters, bylaws, and other material documents. The terms of our Credit Agreement require us and our subsidiaries to meet certain restrictive financial covenants and ratios computed quarterly, including a maximum total net leverage ratio (total consolidated indebtedness plus outstanding amounts under the accounts receivable securitization facility, less the aggregate amount of certain unrestricted cash and unrestricted permitted investments, as defined, over consolidated EBITDA, as defined) and a minimum interest expense coverage ratio (consolidated EBITDA, as defined, over the sum of consolidated cash interest expense, as defined, and preferred dividends, as defined). Our permitted total net leverage ratio under the Credit Agreement is 4.00 to 1.00 as of September 30, 2023. If we were to complete an acquisition which qualifies for a Covenant Holiday Period, as defined in our Credit Agreement, then our permitted total net leverage ratio cannot exceed 4.50 to 1.00 during that period. Our actual total net leverage ratio was 2.32 to 1.00 at September 30, 2023. Our permitted interest expense coverage ratio under the Credit Agreement is 3.00 to 1.00 as of September 30, 2023. Our actual interest expense coverage ratio was 12.29 to 1.00 at September 30, 2023. At September 30, 2023, we were in compliance with our financial covenants.

The following is a reconciliation of net income, as reported, which is a GAAP measure of our operating results, to Consolidated Bank EBITDA, as defined in our Credit Agreement, for the twelve months ended September 30, 2023 (dollars in thousands). We present Consolidated Bank EBITDA to show our performance under our financial covenants.

	Twelve Months Ended September 30, 2023
Net income	$ 51,260
Bank stipulated adjustments:	
Interest expense	15,220
Income tax expense	15,450
Depreciation and amortization	56,920
Non-cash compensation expense[1]	11,480
Other non-cash expenses or losses	870
Non-recurring expenses or costs[2]	15,970
Extraordinary, non-recurring or unusual gains or losses	5,590
Effects of purchase accounting adjustments	2,790
Business and asset dispositions	(17,260)
Permitted acquisitions	6,390
Currency gains and losses	510
Consolidated Bank EBITDA, as defined	$ 165,190

	September 30, 2023
Total Indebtedness, as defined[3]	$ 383,060
Consolidated Bank EBITDA, as defined	165,190
Total net leverage ratio	2.32 x
Covenant requirement	4.00 x

	Twelve Months Ended September 30, 2023
Interest expense	$ 15,220
Bank stipulated adjustments:	
Interest income	(850)
Non-cash amounts attributable to amortization of financing costs	(930)
Total Consolidated Cash Interest Expense, as defined	$ 13,440

	September 30, 2023
Consolidated Bank EBITDA, as defined	$ 165,190
Total Consolidated Cash Interest Expense, as defined	13,440
Actual interest expense coverage ratio	12.29 x
Covenant requirement	3.00 x

(1) Non-cash compensation expenses resulting from the grant of equity awards.

(2) Non-recurring costs and expenses relating to diligence and transaction costs, purchase accounting costs, severance, relocation, restructuring and curtailment expenses.

(3) Includes $4.5 million of acquisition-related contingent consideration, $1.0 million of derivative liabilities and $2.2 million of finance leases as of September 30, 2023.

At September 30, 2023, we had no amounts outstanding under our revolving credit facility and had $293.7 million potentially available after giving effect to $6.3 million of letters of credit issued and outstanding. At December 31, 2022, we had no amounts outstanding under our revolving credit facility and had $293.9 million potentially available after giving effect to $6.1 million of letters of credit issued and outstanding. Our letters of credit are used for a variety of purposes, including support of certain operating lease agreements, vendor payment terms and other subsidiary operating activities, and to meet various states' requirements to self-insure workers' compensation claims, including incurred but not reported claims. After consideration of leverage restrictions contained in the Credit Agreement, as of September 30, 2023, we had $277.7 million of borrowing capacity available for general corporate purposes. Our borrowing capacity was not reduced by leverage restrictions contained in the Credit Agreement as of December 31, 2022.

We rely upon our cash flow from operations and available liquidity under our revolving credit facility to fund our debt service obligations and other contractual commitments, working capital and capital expenditure requirements. At the end of each quarter, we have historically used cash on hand from our domestic and foreign subsidiaries to pay down amounts outstanding under our revolving credit facility, as applicable.

Our weighted average borrowings during the first nine months of 2023 approximated $420.5 million, compared to $400.1 million during the first nine months of 2022, primarily due to borrowings made on our revolving credit facility.

In May 2021, we, through one of our non-U.S. subsidiaries, entered into a revolving loan facility with a borrowing capacity of $4.0 million. The facility is guaranteed by TriMas Corporation. There were no borrowings on this loan facility as of September 30, 2023.

Cash management related to our revolving credit facility is centralized. We monitor our cash position and available liquidity on a daily basis and forecast our cash needs on a weekly basis within the current quarter and on a monthly basis outside the current quarter over the remainder of the year. Our business and related cash forecasts are updated monthly.

While the majority of our cash on hand as of September 30, 2023 is located outside of the U.S., given available funding under our revolving credit facility of $277.7 million at September 30, 2023 (after consideration of the aforementioned leverage restrictions) and based on forecasted cash sources and requirements inherent in our business plans, we believe that our liquidity and capital resources, including anticipated cash flows from operations, will be sufficient to meet our debt service, capital expenditure and other short-term and long-term obligations for the foreseeable future, as well as dividends and share repurchases.

We are subject to variable interest rates on our revolving credit facility, which is subject to a benchmark interest rate determined based on the currency denomination of borrowings. At September 30, 2023, we had no amounts outstanding on our revolving credit facility and, therefore, no variable rate-based borrowings outstanding.

In addition to our long-term debt, we have other cash commitments related to leases. The majority of our lease transactions are accounted for as operating leases, and annual rent expense for continuing operations related thereto approximated $13.9 million in 2022. We expect leasing will continue to be an available financing option to fund future capital expenditure requirements.

As part of our first quarter 2023 acquisition of Aarts, we assumed a $2.9 million liability to a bank related to the advance funding of certain accounts receivable invoices. We terminated this arrangement, and repaid the outstanding balance, in March 2023.

In March 2020, we announced our Board of Directors had authorized us to increase the purchase of our common stock up to $250 million in the aggregate, an increase of $100 million from the prior authorization. In the three and nine months ended September 30, 2023, we purchased 10,506 and 462,388 shares of our outstanding common stock for an aggregate purchase price of $0.3 million and $13.4 million, respectively. Since the initial authorization through September 30, 2023, we have purchased 5,577,291 shares of our outstanding common stock for an aggregate purchase price of $157.7 million. We will continue to evaluate opportunities to return capital to shareholders through the purchase of our common stock and the payment of dividends, depending on market conditions, including the potential impact of the COVID-19 pandemic, and other factors.

Market Risk

We conduct business in various locations throughout the world and are subject to market risk due to changes in the value of foreign currencies. The functional currencies of our foreign subsidiaries are primarily the local currency in the country of domicile. We manage these operating activities at the local level and revenues and costs are generally denominated in local currencies; however, results of operations and assets and liabilities reported in U.S. dollars will fluctuate with changes in exchange rates between such local currencies and the U.S. dollar.

We use derivative financial instruments to manage currency risks associated with our procurement activities denominated in currencies other than the functional currency of our subsidiaries and the impact of currency rate volatility on our earnings. As of September 30, 2023, we were party to foreign exchange forward and swap contracts to hedge changes in foreign currency exchange rates with notional amounts of $183.3 million. We also use cross-currency swap agreements to mitigate currency risks associated with the net investment in certain of our foreign subsidiaries. See Note 9, "*Derivative Instruments*," included in Part 1, Item 1, "*Notes to Unaudited Consolidated Financial Statements*," within this quarterly report on Form 10-Q for additional information.

We are also subject to interest risk as it relates to our long-term debt. See Note 8, "*Long-term Debt*," included in Part 1, Item 1, "*Notes to Unaudited Consolidated Financial Statements*," within this quarterly report on Form 10-Q for additional information.

Common Stock

TriMas is listed in the NASDAQ Global Select Market. Our stock trades under the symbol "TRS."

Credit Rating

We and certain of our outstanding debt obligations are rated by Standard & Poor's and Moody's. On March 31, 2023, Moody's affirmed a Ba3 rating to our Senior Notes. See Note 8, *"Long-term Debt"* included in Part I, Item 1, *"Notes to Unaudited Consolidated Financial Statements"* within this quarterly report on Form 10-Q. Moody's also affirmed a Ba2 Corporate Family Rating and maintained its outlook as stable. On May 22, 2023, Standard & Poor's affirmed a BB- rating to our Senior Notes. Standard & Poor's also affirmed a BB corporate credit rating and maintained its outlook as stable. If our credit ratings were to decline, our ability to access certain financial markets may become limited, our cost of borrowings may increase, the perception of us in the view of our customers, suppliers and security holders may worsen and as a result, we may be adversely affected.

Outlook

We expect the current macro-economic and global market uncertainties will persist through the remainder of 2023 and into 2024, making it a challenging environment to effectively and efficiently transact business in the end markets we serve. We continue to experience volatility in our customers' order patterns, inflationary pressures for certain input costs (raw materials and wage rates in particular), with supply chain disruptions limiting material availability for certain products, and with labor availability remaining at lower levels than prior to the pandemic.

As our Aerospace segment continues to experience strong order intake, we will continue to increase capacity and address challenges to manufacturing throughput in order to support market demand. The macro-economic impacts are more challenging in our Packaging segment, as we now expect a longer and more gradual recovery due to continued uncertainty regarding future consumer sentiment in the current inflationary environment, which has reduced customer demand levels. While our Specialty Products segment has continued to operate at a high sales level through third quarter 2023, we expect a more moderated customer sales level given the macro-economic and global market uncertainties. No matter the outcome of these factors, we expect to continue to mitigate, as much as practical, the impact of these challenges, executing on streamlining actions and taking other steps as necessary, to maintain our strong balance sheet and generate cash in support of our capital allocation strategy.

We believe our capital structure remains strong and that we have sufficient headroom under our financial covenants, and ample cash and available liquidity under our revolving credit facility, to meet our debt service, capital expenditure and other short-term and long-term obligations for the next 12 months and for the foreseeable future, as well as fund dividends, share repurchases and bolt-on acquisitions consistent with our capital allocation strategy.

We expect to continue to leverage the tenets of our TriMas Business Model to manage our multi-industry businesses on a longer-term basis, achieve our growth plans, execute continuous improvement initiatives to offset inflationary pressures, and seek lower-cost sources for input costs, all while continuously assessing the appropriateness of our manufacturing footprint and fixed-cost structure.

Impact of New Accounting Standards

There were no new accounting pronouncements issued or effective as of September 30, 2023 that are expected to have a material impact on our consolidated financial statements.

Critical Accounting Policies

Certain of our accounting policies require the application of significant judgment by management in selecting the appropriate assumptions used in calculating financial estimates. By their nature, these judgments are subject to an inherent degree of uncertainty. These judgments are based on our historical experience, our evaluation of business and macroeconomic trends, and information from other outside sources, as appropriate.

During the quarter ended September 30, 2023, there were no material changes to the items that we disclosed as our critical accounting policies in Part II, Item 7, "*Management's Discussion and Analysis of Financial Condition and Results of Operations*," in the Annual Report on Form 10-K for the year ended December 31, 2022.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

In the normal course of business, we are exposed to market risk associated with fluctuations in foreign currency exchange rates. We are also subject to interest risk as it relates to long-term debt. See Part I, Item 2, "*Management's Discussion and Analysis of Financial Condition and Results of Operations*," for details about our primary market risks, and the objectives and strategies used to manage these risks. Also see Note 8, "*Long-term Debt*," and Note 9, "*Derivative Instruments*," in Part I, Item 1, "*Notes to Unaudited Consolidated Financial Statements*," included within this quarterly report on Form 10-Q for additional information.

Item 4. Controls and Procedures

The Company maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed in the reports that the Company files or submits under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to the Company's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures.

Evaluation of disclosure controls and procedures

As of September 30, 2023, an evaluation was carried out by management, with the participation of the Chief Executive Officer and Chief Financial Officer, of the effectiveness of the Company's disclosure controls and procedures (as such term is defined in Rule 13a-15(e) and Rule 15d-15(e) of the Exchange Act) pursuant to Rule 13a-15 of the Exchange Act. The Company's disclosure controls and procedures are designed only to provide reasonable assurance that they will meet their objectives. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that as of September 30, 2023, the Company's disclosure controls and procedures are effective to provide reasonable assurance that they would meet their objectives.

Changes in internal control over financial reporting

There have been no changes in the Company's internal control over financial reporting during the quarter ended September 30, 2023 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II. OTHER INFORMATION

TRIMAS CORPORATION

Item 1. Legal Proceedings

See Note 12, "*Commitments and Contingencies,*" included in Part I, Item 1, "*Notes to Unaudited Consolidated Financial Statements,*" within this quarterly report on Form 10-Q.

Item 1A. Risk Factors

In addition to the other information set forth in this report, you should carefully consider the factors discussed in Part 1, Item 1A., "*Risk Factors,*" in our 2022 Annual Report on Form 10-K, which could materially affect our business, financial condition or future results. There have been no significant changes in our risk factors as disclosed in our 2022 Annual Report on Form 10-K.

Item 2. Unregistered Sales of Equity Securities, Use of Proceeds, and Issuer Purchases of Equity Securities

The following table provides information about purchases made by the Company, or on behalf of the Company by an affiliated purchaser, of shares of the Company's common stock during the three months ended September 30, 2023.

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs [1]	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program [1] (in millions)
July 1, 2023 to July 31, 2023	—	$ —	—	$ 92.6
August 1, 2023 to August 31, 2023	—	$ —	—	$ 92.6
September 1, 2023 to September 30, 2023	10,506	$ 24.41	10,506	$ 92.3
Total	10,506	$ 24.41	10,506	$ 92.3

(1) In March 2020, the Company announced its Board of Directors had authorized the Company to increase the purchase of its common stock up to $250 million in the aggregate from its previous authorization of $150 million. The increased authorization includes the value of shares already purchased under the previous authorization. Pursuant to this share repurchase program, during the three months ended September 30, 2023, the Company repurchased 10,506 shares of its common stock at a cost of $0.3 million. The share repurchase program is effective and has no expiration date.

Item 3. Defaults Upon Senior Securities

Not applicable.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

During the quarter ended September 30, 2023, no director or officer (as defined in Rule 16a-1(f) promulgated under the Exchange Act) of the Company adopted or terminated a “Rule 10b5-1 trading arrangement” or “non-Rule 10b5-1 trading arrangement” (as each term is defined in Item 408 of Regulation S-K).

Item 6. Exhibits

Exhibits Index:

3.1	Fourth Amended and Restated Certificate of Incorporation of TriMas Corporation (Incorporated by reference to the Exhibits filed with TriMas Corporation's Quarterly Report on Form 10-Q filed on August 3, 2007 (File No. 001-10716)).
3.2	Third Amended and Restated By-laws of TriMas Corporation (Incorporated by reference to the Exhibits filed with TriMas Corporation's Current Report on Form 8-K filed on December 18, 2015 (File No. 001-10716)).
31.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	The following materials from TriMas Corporation's Quarterly Report on Form 10-Q for the quarter ended September 30, 2023, formatted in Inline XBRL (eXtensible Business Reporting Language): (i) the Consolidated Balance Sheet, (ii) the Consolidated Statement of Income, (iii) the Consolidated Statement of Comprehensive Income, (iv) the Consolidated Statement of Cash Flows, (v) the Consolidated Statement of Shareholders' Equity, (vi) Notes to Consolidated Financial Statements, and (vii) document and entity information.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

Signatures

Pursuant 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.

TRIMAS CORPORATION (Registrant)

			/s/ SCOTT A. MELL
Date:	October 26, 2023	By:	Scott A. Mell *Chief Financial Officer*

Exhibit 31.1

Certification
Pursuant to Section 302 of The Sarbanes-Oxley Act of 2002
(Chapter 63, Title 18 U.S.C. Section 1350(A) and (B))

I, Thomas A. Amato, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of TriMas Corporation;

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 registrant's other certifying officer(s) 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 registrant'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 registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant'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 registrant'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 registrant's internal control over financial reporting.

Date: October 26, 2023

/s/ THOMAS A. AMATO

Thomas A. Amato
Chief Executive Officer

Exhibit 31.2

Certification
Pursuant to Section 302 of The Sarbanes-Oxley Act of 2002
(Chapter 63, Title 18 U.S.C. Section 1350(A) and (B))

I, Scott A. Mell, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of TriMas Corporation;

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 registrant's other certifying officer(s) 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 registrant'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 registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant'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 registrant'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 registrant's internal control over financial reporting.

Date: October 26, 2023

/s/ SCOTT A. MELL

Scott A. Mell
Chief Financial Officer

Exhibit 32.1

Certification Pursuant to
18 U.S.C. Section 1350,
As Adopted Pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Quarterly Report of TriMas Corporation (the “Company”) on Form 10-Q for the period ended September 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Thomas A. Amato, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

1. The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: October 26, 2023

/s/ THOMAS A. AMATO
Thomas A. Amato
Chief Executive Officer

Exhibit 32.2

Certification Pursuant to
18 U.S.C. Section 1350,
As Adopted Pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Quarterly Report of TriMas Corporation (the “Company”) on Form 10-Q for the period ended September 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Scott A. Mell, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

1. The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: October 26, 2023

/s/ SCOTT A. MELL

Scott A. Mell
Chief Financial Officer