UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON D.C. 20549

FORM 10-Q

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

For the Quarterly Period Ended September 30, 2019

Or

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

For the Transition Period from<u>to</u>

Commission file number 001-10716

TRIMAS CORPORATION

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) **38-2687639** (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)

Title of each class	<u>Trading symbol(s)</u>	Name of exchange on which registered
Common stock, \$0.01 par value	TRS	The NASDAQ Global 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 \boxtimes No \square .

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 \boxtimes No \square .

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	X	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 28, 2019, the number of outstanding shares of the Registrant's common stock, \$0.01 par value, was 45,052,041 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: our ability to successfully complete the sale of the Lamons business, including, without limitation, any material adverse changes in the Lamons business or the Lamons assets being sold and the ability to obtain any requisite approvals; general economic and currency conditions; material and energy costs; risks and uncertainties associated with intangible assets, including goodwill or other intangible asset impairment charges; competitive factors; future trends; 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; information technology and other cyber-related risks; the performance of our subcontractors and suppliers; supply constraints; market demand; intellectual property factors; litigation; government and regulatory actions, including, without limitation, the impact of tariffs, quotas and surcharges; our leverage; liabilities imposed by our debt instruments; labor disputes; changes to fiscal and tax policies; contingent liabilities relating to acquisition activities; the disruption of operations from catastrophic or extraordinary events, including natural disasters; the potential impact of Brexit; tax considerations relating to the Cequent spin-off; 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, 2018. 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.

PART I. FINANCIAL INFORMATION

Item 1. Consolidated Financial Statements

TriMas Corporation Consolidated Balance Sheet (Dollars in thousands)

		September 30, 2019		December 31, 2018
Assets		(unaudited)		
Current assets:				
Cash and cash equivalents	\$	57,940	\$	108,150
Receivables, net of reserves of approximately \$3.5 million and \$3.4 million as of September 30, 2019 and December 31, 2018, respectively		152,220		123,110
Inventories		176,300		173,120
Prepaid expenses and other current assets		8,150		7,430
Total current assets		394,610		411,810
Property and equipment, net		226,640		187,800
Operating lease right-of-use assets		36,750		—
Goodwill		332,670		316,650
Other intangibles, net		171,380		174,530
Deferred income taxes		1,100		1,080
Other assets		22,060		8,650
Total assets	\$	1,185,210	\$	1,100,520
Liabilities and Shareholders' Equity				
Current liabilities:				
Current maturities, long-term debt	\$	30	\$	—
Accounts payable		80,180		93,430
Accrued liabilities		46,560		48,300
Operating lease liabilities, current portion		8,500		
Total current liabilities		135,270		141,730
Long-term debt, net		294,410		293,560
Operating lease liabilities		28,640		—
Deferred income taxes		21,700		5,560
Other long-term liabilities		43,130		39,220
Total liabilities		523,150		480,070
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: 45,055,913 shares at September 30, 2019 and 45,527,993 shares at December 31, 2018		450		460
Paid-in capital		796,310		816,500
Accumulated deficit		(118,250)		(179,660)
Accumulated other comprehensive loss		(16,450)		(16,850)
Total shareholders' equity		662,060	_	620,450
Total liabilities and shareholders' equity	\$	1,185,210	\$	1,100,520
	_	,0	_	,,0

The accompanying notes are an integral part of these 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,			
	 2019		2018		2019		2018	
Net sales	\$ 236,830	\$	223,780	\$	697,490	\$	665,790	
Cost of sales	(175,590)		(162,060)		(511,080)		(478,910)	
Gross profit	 61,240		61,720		186,410		186,880	
Selling, general and administrative expenses	(32,550)		(31,840)		(100,760)		(90,270)	
Operating profit	 28,690		29,880		85,650		96,610	
Other expense, net:								
Interest expense	(3,520)		(3,480)		(10,450)		(10,660)	
Other income (expense), net	610		410		1,280		(2,330)	
Other expense, net	 (2,910)		(3,070)		(9,170)		(12,990)	
Income before income tax expense	25,780		26,810		76,480		83,620	
Income tax expense	(6,670)		(4,140)		(16,260)		(17,030)	
Net income	\$ 19,110	\$	22,670	\$	60,220	\$	66,590	
Basic earnings per share:								
Net income per share	\$ 0.42	\$	0.49	\$	1.33	\$	1.45	
Weighted average common shares—basic	 45,175,244		45,850,288		45,448,711		45,850,187	
Diluted earnings per share:		-		-		-		
Net income per share	\$ 0.42	\$	0.49	\$	1.32	\$	1.44	
Weighted average common shares—diluted	 45,415,767		46,166,558		45,745,421		46,198,884	

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

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

	Three months ended September 30,						
2019 2018		2019			2018		
\$	19,110	\$	22,670	\$	60,220	\$	66,590
	100		180		300		3,030
	(4,180)		(2,210)		(4,380)		(6,300)
	4,260		50		5,750		1,720
	180		(1,980)		1,670		(1,550)
\$	19,290	\$	20,690	\$	61,890	\$	65,040
	\$	Septem 2019 \$ 19,110 100 (4,180) 4,260 180	September 30 2019 \$ 19,110 \$ 19,110 100 (4,180) 4,260 180	September 30, 2019 2018 \$ 19,110 \$ 22,670 \$ 19,110 \$ 22,670 100 180 (2,210) 4,260 50 50 180 (1,980) 180	September 30, 2019 2018 \$ 19,110 \$ 22,670 \$ 100 180 (4,180) (2,210) 4,260 50 180 (1,980)	September 30, Septem 2019 2018 2019 \$ 19,110 \$ 22,670 \$ 60,220 \$ 19,110 \$ 22,670 \$ 60,220 \$ 100 180 300 (4,180) (2,210) (4,380) 4,260 50 5,750 180 (1,980) 1,670	September 30, September 30 2019 2018 2019 \$ 19,110 \$ 22,670 \$ 60,220 \$ 100 180 300

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

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

	Nine months ended September 30				
		2019		2018	
Cash Flows from Operating Activities:					
Net income	\$	60,220	\$	66,590	
Adjustments to reconcile net income to net cash provided by operating activities, net of acquisition impact:					
Loss on dispositions of assets		70		70	
Depreciation		19,950		18,630	
Amortization of intangible assets		14,920		14,600	
Amortization of debt issue costs		850		1,020	
Deferred income taxes		5,620		9,290	
Non-cash compensation expense		4,130		4,400	
Increase in receivables		(14,510)		(20,060)	
(Increase) decrease in inventories		2,330		(10,750)	
(Increase) decrease in prepaid expenses and other assets		(3,710)		7,180	
Decrease in accounts payable and accrued liabilities		(25,920)		(6,740)	
Other operating activities		150		(1,140)	
Net cash provided by operating activities, net of acquisition impact		64,100		83,090	
Cash Flows from Investing Activities:					
Capital expenditures		(23,370)		(15,890)	
Acquisition of businesses, net of cash acquired		(67,090)		—	
Net proceeds from disposition of property and equipment		30		250	
Net cash used for investing activities		(90,430)		(15,640)	
Cash Flows from Financing Activities:					
Proceeds from borrowings on revolving credit facilities		145,540		59,060	
Repayments of borrowings on revolving credit facilities		(145,090)		(68,490)	
Shares surrendered upon exercise and vesting of equity awards to cover taxes		(3,240)		(2,380)	
Payments to purchase common stock		(21,090)		(3,590)	
Net cash used for financing activities		(23,880)		(15,400)	
Cash and Cash Equivalents:					
Increase (decrease) for the period		(50,210)		52,050	
At beginning of period		108,150		27,580	
At end of period	\$	57,940	\$	79,630	
Supplemental disclosure of cash flow information:					
Cash paid for interest	\$	6,570	\$	7,840	
Cash paid for taxes	\$	18.810	\$	5,020	
Cashi patu 101 taxes	Ψ	10,010	Ψ	5,020	

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

TriMas Corporation Consolidated Statement of Shareholders' Equity Nine Months Ended September 30, 2019 and 2018 (Unaudited—dollars in thousands)

	Common Stock	Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total
Balances, December 31, 2018	\$ 460	\$ 816,500	\$ (179,660)	\$ (16,850)	\$ 620,450
Net income		_	19,090	—	19,090
Other comprehensive income			—	3,020	3,020
Purchase of common stock		(670)	—		(670)
Shares surrendered upon exercise and vesting of equity awards to cover taxes	_	(2,620)	_	_	(2,620)
Non-cash compensation expense	—	1,320	—		1,320
Impact of accounting standards adoption (Note 2)	_	_	1,190	(1,270)	(80)
Balances, March 31, 2019	\$ 460	\$ 814,530	\$ (159,380)	\$ (15,100)	\$ 640,510
Net income	—	—	22,020	_	22,020
Other comprehensive loss		—	—	(1,530)	(1,530)
Purchase of common stock	(10)	(14,740)	—	_	(14,750)
Shares surrendered upon exercise and vesting of equity awards to cover taxes	_	(610)	_	_	(610)
Non-cash compensation expense	 	 1,720	 —	 —	 1,720
Balances, June 30, 2019	\$ 450	\$ 800,900	\$ (137,360)	\$ (16,630)	\$ 647,360
Net income	—	—	19,110	—	19,110
Other comprehensive income	_	_	—	180	180
Purchase of common stock	—	(5,670)	—	—	(5,670)
Shares surrendered upon exercise and vesting of equity awards to cover taxes	_	(10)	_	_	(10)
Non-cash compensation expense	 	1,090	_		 1,090
Balances, September 30, 2019	\$ 450	\$ 796,310	\$ (118,250)	\$ (16,450)	\$ 662,060

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

TriMas Corporation Consolidated Statement of Shareholders' Equity (Continued) Nine Months Ended September 30, 2019 and 2018 (Unaudited—dollars in thousands)

	Common Stock	Paid-in Capital	L	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total
Balances, December 31, 2017	\$ 460	\$ 823,850	\$	(262,960)	\$ (17,330)	\$ 544,020
Net income	—	—		24,320	—	24,320
Other comprehensive loss	_	_		—	(1,480)	(1,480)
Shares surrendered upon exercise and vesting of equity awards to cover taxes	_	(2,300)			_	(2,300)
Non-cash compensation expense	_	1,220		—		1,220
Balances, March 31, 2018	\$ 460	\$ 822,770	\$	(238,640)	\$ (18,810)	\$ 565,780
Net income				19,600		19,600
Other comprehensive income	_	_		—	1,910	1,910
Purchase of common stock	_	(2,920)		—		(2,920)
Shares surrendered upon exercise and vesting of equity awards to cover taxes	_	(80)			_	(80)
Non-cash compensation expense	_	1,400		_	_	1,400
Balances, June 30, 2018	\$ 460	\$ 821,170	\$	(219,040)	\$ (16,900)	\$ 585,690
Net income	—	—		22,670		22,670
Other comprehensive loss	_	_		_	(1,980)	(1,980)
Purchase of common stock	_	(670)		—		(670)
Non-cash compensation expense	_	1,780		_		1,780
Balances, September 30, 2018	\$ 460	\$ 822,280	\$	(196,370)	\$ (18,880)	\$ 607,490

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

1. Basis of Presentation

TriMas Corporation ("TriMas" or the "Company"), and its consolidated subsidiaries, is a diversified industrial manufacturer of products for customers in the consumer products, aerospace, industrial, petrochemical, refinery and oil and gas end markets.

In the first quarter of 2019, TriMas began reporting its machined components operations, located in Stanton, California and Tolleson, Arizona, in its Specialty Products reportable segment. This change was made in connection with the transition of leadership responsibilities out of Aerospace to Specialty Products, allowing the Company to better leverage the machining competencies and resources of these operations with the other businesses within the Specialty Products reportable segment, as well as provide the Company with the opportunity to expand sales of these products to customers outside of the aerospace market. In addition, this change enables the Company's Aerospace reportable segment to better focus on driving growth and innovation in its aerospace fastener and related product lines. See Note 13, "Segment Information," for further information on each of the Company's reportable segments.

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. Results of operations for interim periods are not necessarily indicative of results for the full year. Certain prior year amounts have been reclassified to conform with current year presentation. The accompanying consolidated financial statements and notes thereto should be read in conjunction with the Company's 2018 Annual Report on Form 10-K.

2. New Accounting Pronouncements

Recently Issued Accounting Pronouncements

In August 2018, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2018-14, "Compensation - Retirement Benefits - Defined Benefit Plans - General (Subtopic 715-20)" ("ASU 2018-14"), which modifies the disclosure requirements for employers who sponsor defined benefit pension or other postretirement plans. ASU 2018-14 is effective for fiscal years ending after December 15, 2020, with early adoption permitted. ASU 2018-14 is to be applied retrospectively to all periods presented. The Company is in the process of assessing the impact of adoption on its consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, "Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment" ("ASU 2017-04"), which simplifies the test for goodwill impairment by eliminating the requirement to perform a hypothetical purchase price allocation to measure the amount of goodwill impairment. ASU 2017-04 is effective for fiscal years, and interim periods within those years, beginning after December 15, 2019, with early adoption permitted. The Company is in the process of assessing the impact of adoption on its consolidated financial statements.

Recently Adopted Accounting Pronouncements

In February 2018, the FASB issued ASU 2018-02, "Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income" ("ASU 2018-02"), which provides for the option to reclassify stranded tax effects resulting from the Tax Cuts and Jobs Act ("Tax Reform Act") classified within accumulated other comprehensive income (loss) ("AOCI") to retained earnings. The Company adopted ASU 2018-02 on January 1, 2019, and elected to reclassify approximately \$1.3 million in stranded tax effects from accumulated other comprehensive loss to accumulated deficit on the accompanying consolidated balance sheet. The Company's accounting policy is to release the income tax effects from AOCI when a defined benefit plan or a derivative instrument is liquidated and/or settled.

In February 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)" ("ASU 2016-02") (the "New Lease Standard"), which requires lessees to recognize a lease liability and right-of-use (ROU) asset on its balance sheet for operating leases. Accounting for finance leases is substantially unchanged. The Company adopted the New Lease Standard on January 1, 2019 using a modified retrospective transition, with the cumulative-effect adjustment to the opening balance of accumulated deficit as of the effective date (the effective date method).

As a result of the adoption, the Company recognized approximately \$40 million of right-of-use assets and lease liabilities on its consolidated balance sheet. Additionally, the Company recognized an approximate \$0.1 million cumulative effect adjustment debit, net of tax, to accumulated deficit related to unamortized deferred losses for certain sale-leaseback transactions. The standard did not have an impact on the Company's consolidated statement of income.

3. Revenue

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

]	Three months end	ded Se	eptember 30,		Nine months ended September 30				
Customer End Markets		2019		2018	2019			2018		
Consumer	\$	83,610	\$	72,440	\$	232,400	\$	209,160		
Aerospace		50,560		49,070		145,650		140,500		
Industrial		48,700		51,880		157,810		162,200		
Oil and gas		53,960		50,390		161,630		153,930		
Total net sales	\$	236,830	\$	223,780	\$	697,490	\$	665,790		

The Company's Packaging reportable segment earns revenues from the consumer (comprised of the health, beauty and home care, as well as food and beverage markets) and industrial end markets. The Aerospace reportable segment earns revenues from the aerospace end market. The Specialty Products reportable segment earns revenues from the industrial, oil and gas and aerospace end markets.

4. Facility Closures

Bangalore, India facility

In May 2018, the Company exited its Bangalore, India facility within the Specialty Products reportable segment. In connection with this action, the Company recorded pre-tax charges of approximately \$0.7 million within selling, general and administrative expenses and approximately \$0.6 million within cost of sales related to severance benefits for employees involuntarily terminated, facility closure costs and costs related to the disposal of certain assets.

Reynosa, Mexico facility

In 2017, the Company ceased production at its Reynosa, Mexico facility within the Specialty Products reportable segment, and recorded a charge within cost of sales for estimated future unrecoverable lease obligations. During the second quarter of 2018, following entry into a sublease agreement for the facility, the Company re-evaluated its estimate of unrecoverable future obligations, and reduced its estimate by approximately \$1.1 million.

5. Acquisitions

In April 2019, the Company acquired Taplast S.p.A. ("Taplast"), a designer and manufacturer of dispensers, closures and containers for the beauty and personal care, household, and food and beverage packaging end markets, for an aggregate amount of approximately \$44.7 million, net of cash acquired. Located in both Italy and Slovakia, Taplast serves end markets in Europe and North America and historically generated approximately \$32 million in annual revenue. Taplast is included in the Company's Packaging reportable segment.

In January 2019, the Company acquired Plastic Srl, a manufacturer of single-bodied and assembled polymeric caps and closures for use in home care product applications, for an aggregate amount of approximately \$22.4 million, net of cash acquired. Located in Forli, Italy, Plastic Srl serves the home care market in Italy and other European countries and historically generated approximately \$12 million in annual revenue. Plastic Srl is included in the Company's Packaging reportable segment.

In connection with these acquisitions, the Company recorded approximately \$1.2 million of non-cash purchase accounting-related expenses during the nine months ended September 30, 2019, of which approximately \$0.9 million was recognized within selling, general and administrative expenses, primarily related to the write-off of the Plastic Srl trade name acquired that will not be used. In addition, approximately \$0.3 million was recognized during the nine months ended September 30, 2019, within cost of sales related to the step-up in value and subsequent sale of inventory.

(unaudited)

6. Goodwill and Other Intangible Assets

During the three months ended March 31, 2019, in an effort to better align the Company's machining competencies and resources, the Company began reporting its machined products operations within the Specialty Products reportable segment. These operations were previously reported in the Company's Aerospace reportable segment. As a result of the reporting structure change, the Company's previous Aerospace reporting unit was split into two new reporting units, Machined Products and Aerospace. The Company reallocated the goodwill attributed to the previous Aerospace reporting unit on a relative fair value basis between the Machined Products and the new Aerospace reporting units, resulting in an allocation of goodwill of \$12.7 million and \$133.7 million, respectively.

After the reallocation of goodwill, the Company performed a Step I quantitative assessment for both the Machined Products and the new Aerospace reporting units. As part of this assessment, the Company determined that the fair value of the Aerospace reporting unit exceeded its carrying value by more than 34% and the fair value of the Machined Products reporting unit exceeded its carrying value by more than 13%.

Changes in the carrying amount of goodwill for the nine months ended September 30, 2019 are summarized as follows (dollars in thousands):

	Packaging			Aerospace		Specialty Products		Total
Balance, December 31, 2018	\$	163,660	\$	146,430	\$	6,560	\$	316,650
Goodwill from acquisitions		18,400		—		—		18,400
Goodwill reassigned in segment realignment				(12,740)		12,740		—
Foreign currency translation and other		(2,380)						(2,380)
Balance, September 30, 2019	\$	179,680	\$	133,690	\$	19,300	\$	332,670

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 Septer	nber	30, 2019	As of December 31, 2018					
Intangible Category by Useful Life	ss Carrying Amount		Accumulated Amortization		Gross Carrying Amount		Accumulated Amortization		
Finite-lived intangible assets:									
Customer relationships, 5 – 12 years	\$ 80,780	\$	(54,490)	\$	73,450	\$	(48,410)		
Customer relationships, 15 – 25 years	132,230		(63,970)		132,230		(58,790)		
Total customer relationships	213,010		(118,460)		205,680		(107,200)		
Technology and other, $1 - 15$ years	57,020		(33,700)		57,020		(31,600)		
Technology and other, $17 - 30$ years	43,300		(37,110)		43,300		(35,600)		
Total technology and other	100,320		(70,810)		100,320		(67,200)		
Indefinite-lived intangible assets:									
Trademark/Trade names	47,320		—		42,930		—		
Total other intangible assets	\$ 360,650	\$	(189,270)	\$	348,930	\$	(174,400)		

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

	Th	ree months en	ded Se		ptember 30,			
	2019 2018					2019	2018	
Technology and other, included in cost of sales	\$	1,200	\$	1,230	\$	3,610	\$	3,680
Customer relationships, included in selling, general and administrative expenses		3,750		3,630		11,310		10,920
Total amortization expense	\$	4,950	\$	4,860	\$	14,920	\$	14,600

7. Inventories

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

	Ser	otember 30, 2019	De	ecember 31, 2018
Finished goods	\$	88,670	\$	91,780
Work in process		32,570		29,080
Raw materials		55,060		52,260
Total inventories	\$	176,300	\$	173,120

8. Property and Equipment, Net

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

	Sep	tember 30, 2019	D	ecember 31, 2018
Land and land improvements	\$	18,970	\$	15,580
Buildings		87,030		74,110
Machinery and equipment		350,400		318,860
		456,400		408,550
Less: Accumulated depreciation		229,760		220,750
Property and equipment, net	\$	226,640	\$	187,800

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

	Three months en	ded Se	ptember 30,		Nine months end	led September 30,			
	2019		2019		2018				
Depreciation expense, included in cost of sales	\$ 6,490	\$	5,490	\$	18,850	\$	17,330		
Depreciation expense, included in selling, general and administrative expenses	390		270		1,100		1,300		
Total depreciation expense	\$ 6,880	\$	5,760	\$	19,950	\$	18,630		

9. Long-term Debt

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

	Sep	tember 30, 2019]	December 31, 2018		
4.875% Senior Notes due October 2025	\$	300,000	\$	300,000		
Other debt		30		—		
Debt issuance costs		(5,590)		(6,440)		
		294,440		293,560		
Less: Current maturities, long-term debt		30		—		
Long-term debt, net	\$	294,410	\$	293,560		

Senior Notes

In September 2017, the Company issued \$300.0 million aggregate principal amount of 4.875% senior notes due October 15, 2025 ("Senior Notes") at par value in a private placement under Rule 144A of the Securities Act of 1933, as amended. The Senior Notes accrue interest at a rate of 4.875% per annum, payable semi-annually in arrears on April 15 and October 15, commencing on April 15, 2018. The payment of principal and interest is jointly and severally guaranteed, on a senior unsecured basis, by certain subsidiaries of the Company (each a "Guarantor" and collectively the "Guarantors"). The Senior Notes are *pari passu* in right of payment with all existing and future senior indebtedness and subordinated to all existing and future secured indebtedness.

Prior to October 15, 2020, the Company may redeem up to 35% of the principal amount of the Senior Notes at a redemption price of 104.875% 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, 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 October 15, 2020, 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 October 15 of the years indicated below:

Year	Percentage
2020	102.438%
2021	101.219%
2022 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, matures on September 20, 2022 and is subject to interest at London Interbank Offered Rate ("LIBOR") plus 1.50%. The interest rate spread is based upon the leverage ratio, as defined, as of the most recent determination date.

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.

The Company's revolving credit facility allows for the issuance of letters of credit, not to exceed \$40.0 million in aggregate. At September 30, 2019, the Company had no amounts outstanding under its revolving credit facility and had approximately \$284.1 million potentially available after giving effect to approximately \$15.9 million of letters of credit issued and outstanding. At December 31, 2018, the Company had no amounts outstanding under its revolving credit facility available after giving effect to approximately \$15.1 million of letters of credit issued and outstanding. At December 31, 2018, the Company had no amounts outstanding under its revolving credit facility and had approximately \$15.1 million of letters of credit issued and outstanding. After consideration of leverage restrictions contained in the Credit Agreement, the Company had approximately \$284.1 million and \$284.9 million of borrowing capacity available for general corporate purposes at September 30, 2019 and December 31, 2018, respectively.

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 permitted investments, as defined, over consolidated EBITDA, as defined), a maximum senior secured net leverage ratio (total 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, 2019, the Company was in compliance with its financial covenants contained in the Credit Agreement.

Fair Value of Debt

The valuations of the Senior Notes and other debt 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, 2019					December 31, 2018						
	Car	rrying Amount		Fair Value		Carrying Amount	Fair Value					
Senior Notes	\$	300,000	\$	305,250	\$	300,000	\$	282,750				
Other debt		30		30		—		—				

10. Derivative Instruments

Derivatives Designated as Hedging Instruments

In October 2018, 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 converted a portion of its U.S. dollar-based long-term debt into Euro-denominated long-term debt. The agreements have a five year tenor at notional amounts declining from \$125.0 million to \$75.0 million over the contract period. Under the terms of the swap agreements, the Company is to receive net interest payments at a fixed rate of approximately 2.9% of the notional amount. At inception, the cross-currency swaps were designated as net investment hedges.

In October 2018, immediately prior to entering into these cross-currency swap agreements, the Company terminated its existing cross-currency swap agreements, de-designating the swaps as net investment hedges and receiving approximately \$1.1 million of cash. The cross-currency swap agreements were entered into in October 2017 and hedged the Company's net investment in Euro-denominated assets against future volatility in the exchange rate between the U.S. dollar and the Euro. The agreements had a five year tenor at notional amounts declining from \$150.0 million to \$75.0 million over the contract period. Under the terms of the swap agreements, the Company was to receive net interest payments at a fixed rate of approximately 2.1% of the notional amount.

As of September 30, 2019 and December 31, 2018, the fair value carrying amount of the Company's derivative instruments are recorded as follows (dollars in thousands):

			Asset / (Liabi	lity)	Derivatives
Derivatives designated as hedging instruments	Balance Sheet Caption	December 31, 2018			
Net Investment Hedges		_			
Cross-currency swaps	Other assets	\$	7,680	\$	130

The following table summarizes the income recognized in AOCI on derivative contracts designated as hedging instruments as of September 30, 2019 and December 31, 2018, and the amounts reclassified from AOCI into earnings for the three and nine months ended September 30, 2019 and 2018 (dollars in thousands):

		Amount of Inco	ome Rec	ognized		А		ome (Loss) Reclassified)CI into Earnings					
		in AOCI or (Effective Por				 Three m Septe			Nine mor Septen				
	S	As of eptember 30, 2019	Decen	As of nber 31, 2018	Location of Income (Loss) Reclassified from AOCI into Earnings (Effective Portion)	 2019	2018		2019		2018		
Net Investment Hedges													
Cross-currency swaps	\$	6,680	\$	940	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, 2019, the Company was party to foreign currency exchange forward contracts to economically hedge changes in foreign currency rates with notional amounts of approximately \$102.9 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, British pound and the Chinese yuan, and have various settlement dates through March 2020. 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 mo Septer		
	Location of Income Recognized in Earnings on Derivatives				2018		2019		2018
Derivatives not designated as hedging instruments									
Foreign exchange contracts	Other income (expense), net	\$	1,170	\$		\$	1,390	\$	

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, 2019 and December 31, 2018 are shown below (dollars in thousands):

Description	Frequency	Quoted Prices Active Mark for Identica Assets Asset / (Liability) (Level 1)				ts			Significant Unobservable Inputs (Level 3)		
September 30, 2019											
Cross-currency swaps	Recurring	\$	7,680	\$		\$	7,680	\$	—		
Foreign exchange contracts	Recurring	\$	1,300	\$		\$	1,300	\$	—		
December 31, 2018											
Cross-currency swaps	Recurring	\$	130	\$	—	\$	130	\$	—		

11. Leases

The Company leases certain equipment and facilities under non-cancelable operating leases. 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.

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

	Months Ended mber 30, 2019	Nine Months Ended September 30, 2019
Operating lease cost	\$ 2,611	\$ 7,731
Short-term, variable and other lease costs	517	1,707
Total lease cost	\$ 3,128	\$ 9,438

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

Year ended December 31,	Operating Leases ^(a)				
2019 (excluding the nine months ended September 30, 2019)	\$	2,589			
2020		9,768			
2021		8,246			
2022		5,600			
2023		4,450			
Thereafter		12,527			
Total lease payments		43,180			
Less: Imputed interest		(6,040)			
Present value of lease liabilities	\$	37,140			

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 (a) accompanying consolidated balance sheet.

The weighted-average remaining lease term of the Company's operating leases as of September 30, 2019 is approximately 6.0 years. The weighted-average discount rate as of September 30, 2019 is approximately 5.0%.

Cash paid for amounts included in the measurement of operating lease liabilities during the nine months ended September 30, 2019 was approximately \$7.8 million, and is included in cash flows provided by operating activities in the consolidated statement of cash flows.

Right-of-use assets obtained in exchange for lease liabilities during the nine months ended September 30, 2019 were approximately \$1.9 million.

12. Commitments and Contingencies

Asbestos

As of September 30, 2019, the Company was a party to 356 pending cases involving an aggregate of 4,778 claims primarily alleging personal injury from exposure to asbestos containing materials formerly used in gaskets (both encapsulated and otherwise) manufactured or distributed by certain of its 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, excluding amounts reimbursed under the Company's primary insurance, 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	â	Average settlement amount per laim during period	Total defense costs during period
Nine Months Ended September 30, 2019	4,820	100	127	15	4,778	\$	23,933	\$ 1,714,530
Fiscal Year Ended December 31, 2018	5,256	171	564	43	4,820	\$	7,191	\$ 2,260,000

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, 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 Company is unable to make a meaningful statement concerning the monetary claims made in the asbestos cases given that, among other things, 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 4,778 claims pending at September 30, 2019, 60 set forth specific amounts of damages (other than those stating the statutory minimum or maximum). At September 30, 2019, of the 60 claims that set forth specific amounts, there was one claim 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		9	51

In addition, relatively few of the 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 25 years ago, have been approximately \$9.2 million. All relief sought in the asbestos cases is monetary in nature. To date, approximately 40% of the Company's costs related to settlement and defense of asbestos litigation have been covered by its primary insurance. Effective February 14, 2006, the Company entered into a coverage-in-place agreement with its first level excess carriers regarding the coverage to be provided to the Company for asbestos-related claims when the primary insurance is exhausted. 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's primary insurance exhausted in November 2018, and the Company will 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 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. 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 and results of operations or cash flows.

Metaldyne Corporation

Prior to 2002, the Company was wholly-owned by Metaldyne Corporation ("Metaldyne"). In connection with the reorganization between TriMas and Metaldyne in 2002, TriMas assumed certain liabilities and obligations of Metaldyne, mainly comprised of contractual obligations to former TriMas employees, tax related matters, benefit plan liabilities and reimbursements to Metaldyne of normal course payments to be made on TriMas' behalf.

In 2007, Metaldyne merged into a subsidiary of Asahi Tec Corporation ("Asahi") whereby Metaldyne became a wholly-owned subsidiary of Asahi, and in 2009, Metaldyne and its U.S. subsidiaries filed voluntary petitions in the United States Bankruptcy Court under Chapter 11 of the U.S. Bankruptcy Code.

In January 2018, the U.S. Bankruptcy Court entered a final decree to close all remaining cases and finalize the Metaldyne bankruptcy distribution trust, effectively terminating any potential obligation by TriMas to Metaldyne. In consideration of the final decree, the Company removed the obligation from its balance sheet during the first quarter of 2018, resulting in an approximate \$8.2 million non-cash reduction in selling, general and administrative expenses in the accompanying consolidated statement of income.

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 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 a standardized set of processes to manage and drive results and strategy across its multi-industry businesses.

Within 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 – The Packaging segment, which consists primarily of the Rieke[®] brand, develops and manufactures specialty dispensing and closure products for the health, beauty and home care, food and beverage, and industrial markets.

Aerospace – The Aerospace segment, which includes the Monogram Aerospace Fasteners^M, Allfast Fastening Systems[®] and Mac Fasteners^M brands, develops, qualifies and manufactures highly-engineered, precision fasteners to serve the aerospace market.

Specialty Products – The Specialty Products segment, which includes the Norris CylinderTM, Lamons[®], Arrow[®] Engine and Martinic EngineeringTM brands, designs, manufactures and distributes highly-engineered steel cylinders, sealing and fastener products, wellhead engines and compression systems and machined products for use within the industrial, petrochemical, oil and gas exploration and refining and aerospace markets.

Segment activity is as follows (dollars in thousands):

	Three months ended September 30,					Nine months ended September 30,				
		2019		2018		2019		2018		
Net Sales										
Packaging	\$	105,480	\$	95,250	\$	298,310	\$	278,540		
Aerospace		43,140		40,890		123,710		117,780		
Specialty Products		88,210		87,640		275,470		269,470		
Total	\$	236,830	\$	223,780	\$	697,490	\$	665,790		
Operating Profit (Loss)										
Packaging	\$	19,740	\$	22,060	\$	60,020	\$	64,450		
Aerospace		8,230		7,680		20,980		18,720		
Specialty Products		8,400		8,330		29,430		28,570		
Corporate ^(a)		(7,680)		(8,190)		(24,780)		(15,130)		
Total	\$	28,690	\$	29,880	\$	85,650	\$	96,610		

(a) During the first quarter of 2018, the Company removed an obligation from its balance sheet, resulting in an approximate \$8.2 million non-cash reduction in selling, general and administrative expenses. See Note 12, "*Commitments and Contingencies*," for further details.

14. Equity Awards

Stock Options

The Company did not grant any stock option awards during the nine months ended September 30, 2019. Information related to stock options at September 30, 2019 is as follows:

	Number of Stock Options	v	Weighted Average Option Price	Average Remaining Contractual Life (Years)	Agg	regate Intrinsic Value
Outstanding at January 1, 2019	206,854	\$	13.19			
Granted	—		—			
Exercised	(56,854)		0.86			
Cancelled	—		—			
Expired	—		—			
Outstanding at September 30, 2019	150,000	\$	17.87	6.8	\$	1,917,000

As of September 30, 2019, 150,000 stock options outstanding were exercisable under the Company's long-term equity incentive plans. As of September 30, 2019, there was no unrecognized compensation cost related to stock options remaining.

The Company recognized a de minimis amount of stock-based compensation expense related to stock options during the three month periods ended September 30, 2019 and 2018, and recognized approximately \$0.1 million and \$0.2 million of stock-based compensation expense during the nine months ended September 30, 2019 and 2018, respectively. The stock-based compensation expense is included in selling, general and administrative expenses in the accompanying consolidated statement of income.

(unaudited)

Restricted Stock Units

The Company awarded the following restricted stock units ("RSUs") during the nine months ended September 30, 2019:

- granted 137,064 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; and
- granted 25,872 RSUs to its non-employee independent directors, which 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.

In addition, the Company issued 3,590 RSUs related to director fee deferrals during the nine months ended September 30, 2019. The Company allows for its non-employee independent directors to make an annual election to defer all or a portion of their directors fees and to receive the deferred amount in cash or equity. Certain of the Company's directors have elected to defer all or a portion of their directors fees and to receive the amount in Company common stock at a future date.

During 2019, the Company awarded 95,882 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 earned 50% based upon the Company's achievement of earnings per share compound annual growth rate ("EPS CAGR") metrics over a period beginning January 1, 2019 and ending December 31, 2021. The remaining 50% of the grants are earned based on the Company's total shareholder return ("TSR") relative to the TSR of the common stock of a pre-defined industry peer-group and 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 2.29% and annualized volatility of 26.7%. 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 200% of the target award.

During 2016, the Company awarded performance-based RSUs to certain Company key employees which were earned based upon the Company's TSR relative to the TSR of the common stock of a pre-defined industry peer-group and measured over a period beginning January 1, 2016 and ending on December 31, 2018. Depending on the performance achieved, the amount of shares earned could vary from 0% of the target award to a maximum of 200% of the target award. The Company attained 139.0% of the target on a weighted average basis, resulting in an increase of 38,315 shares during the nine months ended September 30, 2019.

Information related to RSUs at September 30, 2019 is as follows:

	Number of Unvested RSUs	Weighted Average Grant Date Fair Value	Average Remaining Contractual Life (Years)	Ag	gregate Intrinsic Value
Outstanding at January 1, 2019	663,128	\$ 26.67			
Granted	300,723	31.15			
Vested	(298,903)	22.26			
Cancelled	(24,787)	30.38			
Outstanding at September 30, 2019	640,161	\$ 30.69	1.2	\$	19,620,935

As of September 30, 2019, there was approximately \$10.1 million of unrecognized compensation cost related to unvested RSUs that is expected to be recorded over a weighted average period of 2.2 years.

The Company recognized stock-based compensation expense related to RSUs of approximately \$1.1 million and \$1.7 million during the three months ended September 30, 2019 and 2018, respectively and approximately \$4.1 million and \$4.2 million during the nine months ended September 30, 2019 and 2018, respectively. The stock-based compensation expense is included in selling, general and administrative expenses in the accompanying consolidated statement of income.

(unaudited)

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 stock options and RSUs. The following table summarizes the dilutive effect of RSUs and options to purchase common stock for the three and nine months ended September 30, 2019 and 2018:

	Three mont Septembe		Nine month Septembe	
	2019	2018	2019	2018
Weighted average common shares—basic	45,175,244	45,850,288	45,448,711	45,850,187
Dilutive effect of restricted stock units	179,418	203,800	229,003	246,347
Dilutive effect of stock options	61,105	112,470	67,707	102,350
Weighted average common shares—diluted	45,415,767	46,166,558	45,745,421	46,198,884

In February 2019, the Company announced its Board of Directors had authorized the Company to increase the purchase of its common stock up to \$75 million in the aggregate. The previous authorization, approved in November 2015, authorized up to \$50 million in share repurchases. In the three and nine months ended September 30, 2019, the Company purchased 196,128 and 723,528 shares of its outstanding common stock for approximately \$5.7 million and \$21.1 million, respectively. During the three and nine months ended September 30, 2018, the Company purchased 23,191 and 124,138 shares of its outstanding common stock for approximately \$0.7 million and \$3.6 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 are as follows (dollars in thousands):

				Pensio	n Pla	ns			
	Three months ended September 30,					Nine months ended September 30,			
		2019		2018		2019		2018	
Service costs	\$	270	\$	270	\$	790	\$	850	
Interest costs		260		260		800		850	
Expected return on plan assets		(350)		(340)		(1,050)		(1,190)	
Settlement/curtailment loss								2,500	
Amortization of net loss		140		180		430		670	
Net periodic benefit cost	\$	320	\$	370	\$	970	\$	3,680	

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 second quarter of 2018, the Company purchased an annuity contract to transfer certain retiree defined benefit obligations to an insurance company. The annuity contract was funded by plan assets. The Company recognized a one-time settlement charge of approximately \$2.5 million, which is included in other income (expense), net in the accompanying consolidated statement of income.

The Company contributed approximately \$0.6 million and \$1.6 million to its defined benefit pension plans during the three and nine months ended September 30, 2019, respectively. The Company expects to contribute approximately \$1.9 million to its defined benefit pension plans for the full year 2019.

17. Other Comprehensive Income (Loss)

Changes in AOCI by component for the nine months ended September 30, 2019 are summarized as follows, net of tax (dollars in thousands):

	Def	ined Benefit Plans	_	erivative struments	Foreign Currency ranslation	Total
Balance, December 31, 2018	\$	(7,200)	\$	940	\$ (10,590)	\$ (16,850)
Net unrealized gains (losses) arising during the period ^(a)				5,750	(4,380)	1,370
Less: Net realized losses reclassified to net income ^(b)		(300)		—	—	(300)
Net current-period other comprehensive income (loss)		300		5,750	(4,380)	 1,670
Reclassification of stranded tax effects		(1,260)		(10)		(1,270)
Balance, September 30, 2019	\$	(8,160)	\$	6,680	\$ (14,970)	\$ (16,450)

(a) Derivative instruments, net of income tax of approximately \$1.8 million. See Note 10, "Derivative Instruments," for further details.

(b) Defined benefit plans, net of income tax of approximately \$0.1 million. See Note 16, "Defined Benefit Plans," for further details.

Changes in AOCI by component for the nine months ended September 30, 2018 are summarized as follows, net of tax (dollars in thousands):

	Defi	ned Benefit Plans	 rivative ruments	C	Foreign Currency ranslation	Total
Balance, December 31, 2017	\$	(10,450)	\$ (3,170)	\$	(3,710)	\$ (17,330)
Net unrealized gains (losses) arising during the period ^(a)		—	1,720		(6,300)	(4,580)
Less: Net realized losses reclassified to net income ^(b)		(3,030)			—	(3,030)
Net current-period other comprehensive income (loss)		3,030	1,720		(6,300)	(1,550)
Balance, September 30, 2018	\$	(7,420)	\$ (1,450)	\$	(10,010)	\$ (18,880)

(a) Derivative instruments, net of income tax of approximately \$0.5 million. See Note 10, "Derivative Instruments," for further details.

(b) Defined benefit plans, net of income tax of approximately \$0.9 million. See Note 16, "Defined Benefit Plans," for further details.

18. Subsequent Events

In November 2019, the Company entered into a definitive agreement to sell its Lamons business to First Reserve, a private equity firm focused on energy investing, for approximately \$135 million in cash, subject to customary working capital and purchase price adjustments. Lamons, a leading provider of industrial sealing and fastener solutions in the petrochemical, petroleum refining, midstream energy transportation, upstream oil and gas, metropolitan water and wastewater management end markets, is currently part of the Company's Specialty Products reportable segment and generated approximately \$186 million in net sales for the twelve months ended September 30, 2019.

In November 2019, the Company announced that its Board of Directors increased the Company's common stock share repurchase authorization to \$150 million in the aggregate of the Company's common stock. The previous authorization, approved in February 2019, authorized up to \$75 million in share repurchases. The increased authorization includes the value of shares already purchased under the previous authorization.

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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, 2018.

Introduction

We are a diversified global manufacturer and provider of products for customers in the consumer products, aerospace, industrial, petrochemical, refinery, and oil and gas end markets. Our wide range of innovative product solutions are engineered and designed 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; customer approved processes and qualified products; 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 are principally engaged in three reportable segments: Packaging, Aerospace and Specialty Products.

In November 2019, we entered into a definitive agreement to sell our Lamons business to First Reserve, a private equity firm focused on energy investing, for approximately \$135 million in cash, subject to customary working capital and purchase price adjustments. Lamons is currently part of our Specialty Products reportable segment and generated approximately \$186 million in net sales for the twelve months ended September 30, 2019. This is an important strategic advancement for TriMas, as we simplify and streamline our portfolio of businesses, reduce our exposure to the energy-related end market and allow us to further focus on our Packaging and Aerospace reportable segments. We will report Lamons' results of operations as discontinued operations beginning in the fourth quarter of 2019. Consummation of the sale is subject to the satisfaction or waiver of customary closing conditions.

Key Factors Affecting Our Reported Results

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

While the net sales growth in the first half of 2019 versus 2018 was largely consistent with our expectations, sales growth in the third quarter of 2019 was less than expected, primarily in our Packaging and Specialty Products reportable segments. Each of our three reportable segments increased net sales in third quarter 2019 compared to third quarter 2018, with overall net sales increasing approximately \$13.1 million, or 5.8%. The increase was primarily driven by the Packaging acquisitions we completed in 2019. In addition, demand levels in certain end markets remained robust, especially for health, beauty and home care products, downstream petrochemical and refining sealing products, as well as commercial aircraft fastening products. However, demand levels in certain of our end markets declined in the third quarter from prior quarter and prior year levels, particularly for North America industrial applications and for upstream oil and gas products. While difficult to quantify, we believe demand levels in many of the end markets we serve are being affected by uncertainties related to the direct and indirect impact of current and proposed tariffs and other restrictions on trade.

The most significant drivers of change in the results of our operations in third quarter 2019 compared with third quarter 2018 were the impact of our two acquisitions in 2019, which drove the overall sales growth but at lower operating margins, an increase in our effective income tax rate in third quarter 2019 versus third quarter 2018, and higher freight and logistics costs.

We acquired Plastic Srl and Taplast S.p.A. ("Taplast") in January 2019 and April 2019, respectively. Plastic Srl is a manufacturer of single-bodied and assembled polymeric caps and closures for use in home care product applications. Taplast is a designer and manufacturer of dispensers, closures and containers for the beauty and personal care, household, and food and beverage packaging end markets. These acquisitions contributed \$11.5 million of sales during third quarter 2019 within our Packaging reportable segment, and provide opportunities for future growth, as well as additional manufacturing and engineering capacity, in the European market. The current profit margins of these acquired businesses are below those of our Packaging base product lines. While Plastic Srl and Taplast were accretive to third quarter 2019 operating profit dollars, their relative contribution at a lower margin reduced the overall Packaging reportable segment operating profit margin by more than 100 basis points. We expect, over time, to fully integrate these acquisitions utilizing the TriMas Business Model ("TBM"), achieving planned synergies and improving margins.

Our effective income tax rate for third quarter 2019 and 2018 was 25.9% and 15.4%, respectively. The increase in the rate was primarily a result of recognizing a net tax benefit of approximately \$2.7 million in the third quarter of 2018 related to provision to return adjustments for our U.S. Federal tax return, which included an approximate \$1.1 million benefit due to additional regulations that were issued in connection with the Tax Cuts and Jobs Act ("Tax Reform Act").

The third significant driver of third quarter 2019 results was an increase of approximately \$2.0 million in freight and logistics costs versus third quarter 2018 levels, primarily in our Packaging reportable segment. Approximately half of this increase related to expediting or splitting shipments in order to fulfill committed delivery dates, with the remainder attributable to higher overall freight costs per shipment as well as higher sales volumes.

One additional factor significantly impacting the nine months ended September 30, 2019 versus the nine months ended September 30, 2018 results of operations relates to the first quarter 2018 termination of a legacy liability of approximately \$8.2 million, which resulted in a non-cash reduction to corporate office selling, general and administrative expenses. Prior to 2002, we were wholly-owned by Metaldyne Corporation ("Metaldyne"). In connection with the reorganization between TriMas and Metaldyne in June 2002, we assumed certain liabilities and obligations of Metaldyne, mainly comprised of contractual obligations to former TriMas employees, tax-related matters, benefit plan liabilities and reimbursements to Metaldyne of normal course payments to be made on TriMas' behalf. Metaldyne and its U.S. subsidiaries filed voluntary petitions in the United States Bankruptcy Court under Chapter 11 of the U.S. Bankruptcy Code in 2009. In January 2018, the U.S. Bankruptcy Court entered a final decree to close all remaining cases and finalize the Metaldyne bankruptcy distribution trust, effectively terminating any potential obligation by TriMas to Metaldyne.

Another factor impacting the nine months ended September 30, 2019 versus the nine months ended September 30, 2018 results of operations was our settlement of defined benefit obligations in second quarter 2018. During the second quarter of 2018, we purchased an annuity contract to transfer certain retiree defined benefit obligations to an insurance company. The annuity contract was funded by plan assets. We recognized a one-time settlement charge of approximately \$2.5 million, which is included in other income (expense), net in the accompanying consolidated statement of income.

Additional Key Risks that May Affect Our Reported Results

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 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 base 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.

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 purchases 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 in our raw materials supply base. Our largest material purchases are for resins (such as polypropylene and polyethylene), steel, aluminum and other oil and metal-based purchased components. In mid 2018, material costs began to rise, increasing through the remainder of 2018, primarily as a direct and indirect result of foreign trade policy changes. These cost increases primarily related to oil and metal-based commodities. We took swift actions, and continue to take actions, to mitigate such cost increases, including implementing commercial pricing adjustments, resourcing to alternate suppliers and insourcing of previously sourced products to better leverage our global manufacturing footprint. As a result of these actions, as well as softening of certain underlying commodity costs, we have largely mitigated the impact such that material costs were not a significant driver of year-over-year profit change. Although we believe we are generally able to mitigate the impact of higher commodity costs, 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.

Certain of our businesses in our Specialty Products reportable segment are sensitive to the demand for natural gas and crude oil in North America. For example, demand for our Arrow Engine business' engine, pump jack and compressor products are impacted by active oil and gas rig counts and wellhead investment activities. In addition, a small portion of our Lamons business serves upstream customers at oil well sites that are impacted by fluctuating oil prices. The majority of the Lamons business provides sealing and fastening products to petrochemical plants and oil refineries, which may or may not decide to incur capital expenditures for their preventive maintenance or capacity expansion activities during times of fluctuating oil prices. Separately, oil-based commodity costs are a significant driver of raw materials and purchased components used within our Packaging reportable segment.

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, we cannot be assured of full cost recovery in the open market.

Each year, as a core tenet of the TBM, our businesses target cost savings from Kaizen and continuous improvement initiatives in an effort to reduce input and conversion costs and/or increase throughput and yield rates with a goal of at least covering inflationary and market cost increases. In addition, we continuously review our 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 February 2019, we announced our Board of Directors had authorized the Company to increase the purchase of its common stock up to \$75 million in the aggregate. The previous authorization, approved in November 2015, authorized up to \$50 million in share repurchases. In the three and nine months ended September 30, 2019, we purchased 196,128 and 723,528 shares of our outstanding common stock for approximately \$5.7 million and \$21.1 million, respectively. The total 2019 share repurchases represent nearly 1.6% of our outstanding common shares as of December 31, 2018. During the three and nine months ended September 30, 2018, we purchased 23,191 and 124,138 shares of our outstanding common stock for approximately \$0.7 million and \$3.6 million, respectively.

In November 2019, we announced the Board of Directors increased the Company's common stock share repurchase authorization to \$150 million in the aggregate. The increased authorization includes the value of shares already purchased under the previous authorization. We will continue to evaluate opportunities to return capital to shareholders through the purchase of our common stock, 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, 2019 and 2018 (dollars in thousands):

	Three months ended September 30,				
	 2019	As a Percentage of Net Sales		2018	As a Percentage of Net Sales
Net Sales					
Packaging	\$ 105,480	44.5%	\$	95,250	42.6%
Aerospace	43,140	18.3%		40,890	18.3%
Specialty Products	88,210	37.2%		87,640	39.2%
Total	\$ 236,830	100.0%	\$	223,780	100.0%
Gross Profit					
Packaging	\$ 29,580	28.0%	\$	30,690	32.2%
Aerospace	13,540	31.4%		12,680	31.0%
Specialty Products	18,120	20.5%		18,350	20.9%
Total	\$ 61,240	25.9%	\$	61,720	27.6%
Selling, General and Administrative Expenses					
Packaging	\$ 9,840	9.3%	\$	8,630	9.1%
Aerospace	5,310	12.3%		5,000	12.2%
Specialty Products	9,720	11.0%		10,020	11.4%
Corporate	7,680	N/A		8,190	N/A
Total	\$ 32,550	13.7%	\$	31,840	14.2%
Operating Profit (Loss)					
Packaging	\$ 19,740	18.7%	\$	22,060	23.2%
Aerospace	8,230	19.1%		7,680	18.8%
Specialty Products	8,400	9.5%		8,330	9.5%
Corporate	(7,680)	N/A		(8,190)	N/A
Total	\$ 28,690	12.1%	\$	29,880	13.4%
Depreciation	 				
Packaging	\$ 3,980	3.8%	\$	2,950	3.1%
Aerospace	1,370	3.2%		1,410	3.4%
Specialty Products	1,460	1.7%		1,340	1.5%
Corporate	70	N/A		60	N/A
Total	\$ 6,880	2.9%	\$	5,760	2.6%
Amortization					
Packaging	\$ 2,390	2.3%	\$	2,270	2.4%
Aerospace	2,010	4.7%		2,040	5.0%
Specialty Products	550	0.6%		550	0.6%
Corporate		N/A			N/A
Total	\$ 4,950	2.1%	\$	4,860	2.2%

The following table summarizes financial information for our reportable segments for the nine months ended September 30, 2019 and 2018 (dollars in thousands):

	Nine months ended September 30,				
	 2019	As a Percentage of Net Sales		2018	As a Percentage of Net Sales
Net Sales	 				
Packaging	\$ 298,310	42.8%	\$	278,540	41.8%
Aerospace	123,710	17.7%		117,780	17.7%
Specialty Products	275,470	39.5%		269,470	40.5%
Total	\$ 697,490	100.0%	\$	665,790	100.0%
Gross Profit					
Packaging	\$ 90,290	30.3%	\$	91,550	32.9%
Aerospace	36,680	29.6%		34,160	29.0%
Specialty Products	59,440	21.6%		61,170	22.7%
Total	\$ 186,410	26.7%	\$	186,880	28.1%
Selling, General and Administrative Expenses					
Packaging	\$ 30,270	10.1%	\$	27,100	9.7%
Aerospace	15,700	12.7%		15,440	13.1%
Specialty Products	30,010	10.9%		32,600	12.1%
Corporate	24,780	N/A		15,130	N/A
Total	\$ 100,760	14.4%	\$	90,270	13.6%
Operating Profit (Loss)					
Packaging	\$ 60,020	20.1%	\$	64,450	23.1%
Aerospace	20,980	17.0%		18,720	15.9%
Specialty Products	29,430	10.7%		28,570	10.6%
Corporate	(24,780)	N/A		(15,130)	N/A
Total	\$ 85,650	12.3%	\$	96,610	14.5%
Depreciation					
Packaging	\$ 11,040	3.7%	\$	9,510	3.4%
Aerospace	4,320	3.5%		4,360	3.7%
Specialty Products	4,380	1.6%		4,560	1.7%
Corporate	210	N/A		200	N/A
Total	\$ 19,950	2.9%	\$	18,630	2.8%
Amortization					
Packaging	\$ 7,240	2.4%	\$	6,840	2.5%
Aerospace	6,020	4.9%		6,100	5.2%
Specialty Products	1,660	0.6%		1,660	0.6%
Corporate		N/A			N/A
Total	\$ 14,920	2.1%	\$	14,600	2.2%

Results of Operations

The principle factors impacting us during the three months ended September 30, 2019, compared with the three months ended September 30, 2018, were:

- the impact of the Plastic Srl and Taplast acquisitions in 2019 within our Packaging reportable segment;
- the sales and operating profit margin mix impact of sales changes in our various end markets served;
- higher freight and logistics costs, primarily in our Packaging reportable segment; and
- a higher effective tax rate in third quarter 2019 compared with third quarter 2018.

Three Months Ended September 30, 2019 Compared with Three Months Ended September 30, 2018

Overall, net sales increased approximately \$13.1 million, or 5.8%, to \$236.8 million for the three months ended September 30, 2019, as compared with \$223.8 million in the three months ended September 30, 2018. The acquisitions of Taplast, in April 2019, and Plastic Srl, in January 2019, contributed approximately \$11.5 million of sales in our Packaging reportable segment. Organic sales, excluding the impact of currency exchange, increased approximately \$3.0 million. Of this amount, sales increased by approximately \$4.0 million related to health, beauty and home care products in our Packaging reportable segment, by \$3.6 million related to oil and gas related products in our Specialty Products reportable segment, and by \$2.3 million related to fastener product sales in our Aerospace reportable segment. These increases were partially offset by organic sales decreases of approximately \$3.1 million related to lower sales of food and beverage products, by \$2.2 million related to industrial cylinder products, by \$0.8 million related to machined product sales and \$0.7 million of industrial closure products. In general, we believe the North American industrial markets are most impacted by uncertainties related to the direct and indirect impact of current and proposed tariffs and other restrictions on trade. In addition, sales were lower by approximately \$1.4 million due to net unfavorable currency exchange, as our reported results in U.S. dollars were negatively impacted as a result of the stronger U.S. dollar relative to foreign currencies.

Gross profit margin (gross profit as a percentage of sales) approximated 25.9% and 27.6% for the three months ended September 30, 2019 and 2018, respectively. While gross profit dollars were relatively flat, gross profit margin decreased, as the margin impact of higher sales levels was more than offset by a less favorable product sales mix, resulting from higher levels of growth in our lower gross margin reportable segments, as well as due to the recent acquisitions yielding lower gross profit margins. Gross profit margin further declined as a result of approximately \$2.0 million of higher freight and logistics costs, and by approximately \$0.5 million as a result of unfavorable currency exchange.

Operating profit margin (operating profit as a percentage of sales) approximated 12.1% and 13.4% for the three months ended September 30, 2019 and 2018, respectively. Operating profit decreased approximately \$1.2 million, or 4.0%, to \$28.7 million for the three months ended September 30, 2019, from \$29.9 million for the three months ended September 30, 2018. Operating profit and related margin declined, as the impact of higher sales levels was more than offset by a less favorable product sales mix, higher freight and logistics costs, and as a result of unfavorable currency exchange.

Interest expense remained flat at approximately \$3.5 million for the three months ended September 30, 2019 and 2018, as there was no significant change in our debt structure, and the majority of the borrowings are at a fixed rate.

Other income (expense), net increased approximately \$0.2 million, to \$0.6 million of other income, net for the three months ended September 30, 2019, as compared to \$0.4 million of other income, net for the three months ended September 30, 2018, primarily due to an increase in gains on transactions denominated in foreign currencies.

The effective income tax rate for the three months ended September 30, 2019 and 2018 was 25.9% and 15.4%, respectively. The increase in the rate was primarily a result of us recognizing a net tax benefit of approximately \$2.7 million in the three months ended September 30, 2018 related to provision to return adjustments for our U.S. Federal tax return, which included an approximate \$1.1 million benefit due to additional regulations that were issued during the three months ended September 30, 2018 in connection with the Tax Reform Act.

Net income decreased approximately \$3.6 million, to \$19.1 million for the three months ended September 30, 2019, as compared to \$22.7 million for the three months ended September 30, 2018. The decrease in net income was the result of a decrease in operating profit of approximately \$1.2 million and an increase in income tax expense of approximately \$2.5 million.

See below for a discussion of operating results by segment.

Packaging. Net sales increased approximately \$10.2 million, or 10.7%, to \$105.5 million in the three months ended September 30, 2019, as compared to \$95.3 million in the three months ended September 30, 2018. The acquisitions of Taplast, in April 2019, and Plastic Srl, in January 2019, contributed approximately \$11.5 million of sales. Sales of our health, beauty and home care products increased approximately \$4.0 million, primarily due to higher demand in North America and Europe. These increases were partially offset by decreases in sales of our food and beverage products of approximately \$3.1 million and of our industrial products by approximately \$0.7 million, primarily due to lower overall end market demand in North America. Additionally, net sales were lower by approximately \$1.4 million due to unfavorable currency exchange, as our reported results in U.S. dollars were negatively impacted as a result of the stronger U.S. dollar relative to foreign currencies.

Packaging's gross profit decreased approximately \$1.1 million to \$29.6 million, or 28.0% of sales, in the three months ended September 30, 2019, as compared to \$30.7 million, or 32.2% of sales, in the three months ended September 30, 2018. Although net sales increased, gross profit declined by approximately \$1.7 million due to higher freight and logistics costs and by approximately \$0.5 million due to unfavorable currency exchange, as our reported results in U.S. dollars were negatively impacted as a result of the stronger U.S. dollar relative to foreign currencies. Gross profit margin further declined due to a less favorable product sales mix, as our acquired companies have lower margins than the Packaging base business. In addition, our health, beauty and home care end market products comprised a larger percentage of net sales in third quarter 2019, and yield a lower gross profit margin than the remainder of this segment.

Packaging's selling, general and administrative expenses increased approximately \$1.2 million to \$9.8 million, or 9.3% of sales, in the three months ended September 30, 2019, as compared to \$8.6 million, or 9.1% of sales, in the three months ended September 30, 2018, primarily due to higher ongoing selling, general and administrative costs associated with our 2019 acquisitions.

Packaging's operating profit decreased approximately \$2.4 million to \$19.7 million, or 18.7% of sales, in the three months ended September 30, 2019, as compared to \$22.1 million, or 23.2% of sales, in the three months ended September 30, 2018, as the impact of increased freight and logistics costs, a less favorable product sales mix and unfavorable foreign currency exchange more than offset the impact of higher sales levels.

Aerospace. Net sales for the three months ended September 30, 2019 increased approximately \$2.2 million, or 5.5%, to \$43.1 million, as compared to \$40.9 million in the three months ended September 30, 2018, due to steady demand levels for fastener products combined with improved production throughput at our Commerce, California and Ottawa, Kansas manufacturing facilities.

Gross profit within Aerospace increased approximately \$0.8 million to \$13.5 million, or 31.4% of sales, in the three months ended September 30, 2019, from \$12.7 million, or 31.0% of sales, in the three months ended September 30, 2018, primarily due to the higher sales levels as well as the impact of incremental costs and temporary inefficiencies related to finalizing the collective bargaining agreement in our Commerce, California facility during the three months ended September 30, 2019.

Selling, general and administrative expenses increased approximately \$0.3 million to approximately \$5.3 million, or 12.3% of sales, in the three months ended September 30, 2019, as compared to \$5.0 million, or 12.2% of sales, in the three months ended September 30, 2018, primarily due to higher employee-related costs to support our sales growth initiatives.

Operating profit within Aerospace increased approximately \$0.5 million to \$8.2 million, or 19.1% of sales, in the three months ended September 30, 2019, as compared to \$7.7 million, or 18.8% of sales in the three months ended September 30, 2018, primarily due to higher sales levels and the impact of incremental costs and inefficiencies related to finalizing the collective bargaining agreement in our Commerce, California facility during the three months ended September 30, 2019.

Specialty Products. Net sales for the three months ended September 30, 2019 increased approximately \$0.6 million, or 0.7%, to \$88.2 million, as compared to \$87.6 million in the three months ended September 30, 2018. Sales of our oil and gas related products increased by approximately \$3.6 million, primarily as a result of increased petrochemical and refining-customer demand in North America, which more than offset lower sales of engines, compressors and related parts used in upstream applications due to lower oil and gas drilling investment activity in the U.S. and Canada. This increase was partially offset by approximately \$2.2 million lower sales of our industrial cylinder products due to decreased demand for both high pressure and acetylene steel cylinders as a result of customer consolidation and asset cylinder inventory level rebalancing, and approximately \$0.8 million lower sales of machined components products.

Gross profit within Specialty Products decreased approximately \$0.3 million to \$18.1 million, or 20.5% of sales, in the three months ended September 30, 2019, as compared to \$18.4 million, or 20.9% of sales, in the three months ended September 30, 2018. Gross profit from the increased sales of our oil and gas related products was more than offset by the impact of lower sales of our industrial and machined components products as well as higher freight and product conversion costs.

Selling, general and administrative expenses within Specialty Products decreased approximately \$0.3 million to \$9.7 million, or 11.0% of sales, in the three months ended September 30, 2019, as compared to \$10.0 million, or 11.4% of sales, in the three months ended September 30, 2018, primarily due to lower personnel costs in third quarter 2019 as compared to third quarter 2018.

Operating profit within Specialty Products increased approximately \$0.1 million to \$8.4 million, or 9.5% of sales, in the three months ended September 30, 2019, as compared to \$8.3 million, or 9.5% of sales, in the three months ended September 30, 2018. Operating profit and related margin was essentially flat, as the impact of higher sales levels in our oil and gas related products and decrease in selling, general and administrative expenses were offset by the impact of decreased sales of our industrial cylinder and machined component products, as well as higher freight and conversion costs in third quarter 2019.

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

	Three months ended September 30,				
		2019		2018	
Corporate operating expenses	\$	5.8	\$	5.7	
Non-cash stock compensation		1.1		1.8	
Legacy expenses		0.8		0.7	
Corporate expenses	\$	7.7	\$	8.2	

Corporate expenses decreased approximately \$0.5 million to \$7.7 million for the three months ended September 30, 2019, from \$8.2 million for the three months ended September 30, 2018, primarily due to a decrease in expense related to the timing and estimated attainment of our long-term equity incentive plans in 2019 compared with 2018.

Nine Months Ended September 30, 2019 Compared with Nine Months Ended September 30, 2018

Overall, net sales increased approximately \$31.7 million, or 4.8%, to \$697.5 million for the nine months ended September 30, 2019, as compared with \$665.8 million in the nine months ended September 30, 2018. The acquisitions of Taplast, in April 2019, and Plastic Srl, in January 2019, contributed approximately \$23.9 million of sales in our Packaging reportable segment. Organic sales, excluding the impact of currency exchange, increased by approximately \$13.4 million. The primary drivers of this increase were approximately \$13.1 million higher sales of our Packaging reportable segment's health, beauty and home care products, \$8.1 million higher sales in our oil and gas related products within our Specialty Products reportable segment, and \$5.9 million higher sales within our Aerospace reportable segment. These increases were partially offset by approximately \$9.4 million lower sales of our food and beverage products and \$2.6 million lower sales of our industrial products within our Packaging reportable segment, and \$1.7 million lower sales of industrial products and our machined components products within our Specialty Products reportable segment. Additionally, net sales were lower by approximately \$5.6 million due to unfavorable currency exchange, as our reported results in U.S. dollars were negatively impacted as a result of the stronger U.S. dollar relative to foreign currencies.

Gross profit margin (gross profit as a percentage of sales) approximated 26.7% and 28.1% for the nine months ended September 30, 2019 and 2018, respectively. Gross profit margin decreased, as the impact of higher sales levels was more than offset by a less favorable product sales mix, resulting from higher levels of growth in our lower gross margin reportable segments, as well as due to the recent acquisitions yielding lower gross profit margins. Gross profit margin further declined due to a \$1.1 million reduction in expense in the first nine months of 2018 related to a change in our estimate of future unrecoverable lease obligations for our former Reynosa, Mexico facility that did not repeat in the first nine months of 2019, higher freight and conversion costs in 2019, and as a result of unfavorable currency exchange.

Operating profit margin (operating profit as a percentage of sales) approximated 12.3% and 14.5% for the nine months ended September 30, 2019 and 2018, respectively. Operating profit decreased approximately \$11.0 million, or 11.3%, to \$85.7 million for the nine months ended September 30, 2019, compared to \$96.6 million for the nine months ended September 30, 2018. The primary driver of this year-over-year decrease in operating profit and related margin was an approximately \$8.2 million non-cash reduction of our recorded liability to Metaldyne in the first quarter of 2018 following the U.S. Bankruptcy Court's final decree to close all remaining cases and terminate the Metaldyne bankruptcy distribution trust that did not repeat in 2019. Operating profit and related margin further declined as the impact of higher sales levels was more than offset by a less favorable product sales mix, increases in purchase accounting expenses and professional fees supporting corporate development activities, higher freight and conversion costs, and as a result of unfavorable currency exchange.

Interest expense decreased approximately \$0.2 million, to \$10.5 million, for the nine months ended September 30, 2019, as compared to \$10.7 million for the nine months ended September 30, 2018, as a result of a decrease in our variable interest rates and weighted average levels, both related to intra-period revolving credit borrowings.

Other income (expense), net decreased approximately \$3.6 million, to \$1.3 million of other income, net for the nine months ended September 30, 2019, from \$2.3 million of other expense, net for the nine months ended September 30, 2018, primarily due to a one-time charge of \$2.5 million related to the settlement of defined benefit obligations in second quarter 2018 that did not repeat in the nine months ended September 30, 2019, and an increase in gains on transactions denominated in foreign currencies.

The effective income tax rate for the nine months ended September 30, 2019 and 2018 was 21.3% and 20.4%, respectively. We recognized a net tax benefit of approximately \$2.7 million in the nine months ended September 30, 2018 related to provision to return adjustments for our U.S. Federal tax return, which included an approximate \$1.1 million benefit due to additional regulations that were issued during the third quarter of 2018 in connection with the Tax Reform Act. In the nine months ended September 30, 2019, our effective income tax rate reflected certain favorable discrete items that occurred during the first quarter of 2019, including the reversal of uncertain tax benefits for which the statute of limitations expired, excess tax benefits related to share based compensation that vested in first quarter 2019, and a reduction in deferred tax liabilities resulting from the implementation of state tax planning initiatives.

Net income decreased by approximately \$6.4 million, to \$60.2 million for the nine months ended September 30, 2019, compared to \$66.6 million for the nine months ended September 30, 2018. The decrease was primarily the result of a decrease in operating profit of approximately \$11.0 million, partially offset by a decrease in other income (expense), net of approximately \$3.6 million, a decrease in income tax expense of approximately \$0.8 million, and a decrease in interest expense of approximately \$0.2 million.

See below for a discussion of operating results by segment.

Packaging. Net sales increased approximately \$19.8 million, or 7.1%, to \$298.3 million in the nine months ended September 30, 2019, as compared to \$278.5 million in the nine months ended September 30, 2018. The Taplast and Plastic Srl acquisitions contributed approximately \$23.9 million in the first nine months of 2019. Sales of our health, beauty and home care products increased approximately \$13.1 million, primarily due to higher demand in North America and Europe as well as continued sales growth in Asia. These increases were partially offset by a decrease in sales of our food and beverage products by approximately \$9.4 million, primarily due to lower sales of pumps as well as softer overall end market demand in North America. Sales of our industrial products declined by approximately \$2.6 million due to lower end market demand in North America. Additionally, net sales were lower by approximately \$5.2 million due to unfavorable currency exchange, as our reported results in U.S. dollars were negatively impacted as a result of the stronger U.S. dollar relative to foreign currencies.

Packaging's gross profit decreased approximately \$1.3 million to \$90.3 million, or 30.3% of sales, in the nine months ended September 30, 2019, as compared to \$91.6 million, or 32.9% of sales, in the nine months ended September 30, 2018. Gross profit decreased by approximately \$2.2 million related to higher freight costs and by approximately \$1.9 million due to unfavorable currency exchange, as our reported results in U.S. dollars were negatively impacted as a result of the stronger U.S. dollar relative to foreign currencies. Gross profit margin declined due to a less favorable product sales mix, as the acquired businesses have lower margins than the Packaging base business, impacting gross margin by nearly 100 basis points. In addition, our health, beauty and home care end market products comprised a larger percentage of net sales in the first nine months of 2019 compared to the first nine months of 2018, and yield a lower gross profit margin than sales to our other end markets.

Packaging's selling, general and administrative expenses increased approximately \$3.2 million to \$30.3 million, or 10.1% of sales, in the nine months ended September 30, 2019, as compared to \$27.1 million, or 9.7% of sales, in the nine months ended September 30, 2018, primarily due to higher ongoing selling, general and administrative costs associated with the acquisitions completed in 2019 as well as non-cash purchase accounting-related expenses of approximately \$0.8 million related to the write-off of the trade name acquired in the Plastic Srl acquisition that will not be used.

Packaging's operating profit decreased approximately \$4.5 million to \$60.0 million, or 20.1% of sales, in the nine months ended September 30, 2019, as compared to \$64.5 million, or 23.1% of sales, in the nine months ended September 30, 2018, as the impact of a less favorable product sales mix, increased freight costs, higher selling, general and administrative expenses and unfavorable foreign currency exchange more than offset the impact of higher sales levels.

Aerospace. Net sales for the nine months ended September 30, 2019 increased approximately \$5.9 million, or 5.0%, to \$123.7 million, as compared to \$117.8 million in the nine months ended September 30, 2018, due to steady demand levels for fastener products combined with improved production throughput in the second and third quarters of 2019 at our Commerce, California and Ottawa, Kansas manufacturing facilities.

Gross profit within Aerospace increased approximately \$2.5 million to \$36.7 million, or 29.6% of sales, in the nine months ended September 30, 2019, from \$34.2 million, or 29.0% of sales, in the nine months ended September 30, 2018, primarily due to the higher sales levels and improved production efficiencies. In addition, gross profit improved due to the impact of incremental costs and temporary inefficiencies related to finalizing the collective bargaining agreement in our Commerce, California facility during the nine months ended September 30, 2018 that did not repeat in the nine months ended September 30, 2019.

Selling, general and administrative expenses increased approximately \$0.3 million to \$15.7 million, or 12.7% of sales, in the nine months ended September 30, 2019, as compared to \$15.4 million, or 13.1% of sales, in the nine months ended September 30, 2018, primarily due to approximately \$0.4 million of professional fees incurred in the first quarter of 2019 to analyze our standard fastener product line and recommend opportunities to improve.

Operating profit within Aerospace increased approximately \$2.3 million to \$21.0 million, or 17.0% of sales, in the nine months ended September 30, 2019, as compared to \$18.7 million, or 15.9% of sales, in the nine months ended September 30, 2018, primarily due to higher sales levels and improved production efficiencies.

Specialty Products. Net sales for the nine months ended September 30, 2019 increased approximately \$6.0 million, or 2.2%, to \$275.5 million, as compared to \$269.5 million in the nine months ended September 30, 2018. Sales of our oil and gas related products increased by approximately \$8.1 million, primarily as a result of increased petrochemical and refining-customer demand in North America, which more than offset lower sales of engines, compressors and related parts used in upstream applications due to lower drilling investment activity in the U.S. and Canada. Sales of our industrial products decreased by approximately \$0.9 million, primarily due to decreased demand for both high pressure and acetylene steel cylinders as a result of customer consolidation and inventory rebalancing, which more than offset increased demand for specialty steel cylinders. In addition, net sales decreased by approximately \$0.8 million due to decreased demand of our machined components products and \$0.4 million due to net unfavorable currency exchange, as our reported results in U.S. dollars were negatively impacted as a result of the stronger U.S. dollar relative to foreign currencies.

Gross profit within Specialty Products decreased approximately \$1.7 million to \$59.4 million, or 21.6% of sales, in the nine months ended September 30, 2019, as compared to \$61.2 million, or 22.7% of sales, in the nine months ended September 30, 2018. In second quarter 2018, we reduced our estimate of future unrecoverable lease obligations related to the closure of our former Reynosa, Mexico facility by \$1.1 million. This reduction did not repeat in 2019. In addition, gross profit from the increased sales of our oil and gas related products was more than offset by the impact of lower sales of our industrial products and our machined components products as well as higher freight and conversion costs.

Selling, general and administrative expenses within Specialty Products decreased approximately \$2.6 million to \$30.0 million, or 10.9% of sales, in the nine months ended September 30, 2019, as compared to \$32.6 million, or 12.1% of sales, in the nine months ended September 30, 2018, as we have continued to lower spending levels related to upstream oil and gas products as well as industrial cylinders consistent with current lower demand levels. In addition, we incurred approximately \$0.7 million of severance and restructuring costs associated with the exit of our Bangalore, India facility in the nine months ended September 30, 2018 that did not repeat in the nine months ended September 30, 2019.

Operating profit within Specialty Products increased approximately \$0.9 million to \$29.4 million, or 10.7% of sales, in the nine months ended September 30, 2019, as compared to \$28.6 million, or 10.6% of sales, in the nine months ended September 30, 2018, primarily due to lower selling, general and administrative spending in the nine months ended September 30, 2019, which was partially offset by higher freight and conversion costs in the nine months ended September 30, 2019 and a reduction in a lease obligation in 2018 that did not repeat in 2019.

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

	Nine months ended September 30,				
	 2019	2018			
Corporate operating expenses	\$ 17.6	\$	16.9		
Non-cash stock compensation	4.1		4.4		
Legacy (income) expenses, net	3.1		(6.2)		
Corporate expenses, net	\$ 24.8	\$	15.1		

Corporate expenses, net increased approximately \$9.7 million to \$24.8 million for the nine months ended September 30, 2019, from \$15.1 million for the nine months ended September 30, 2018. Legacy (income) expenses, net increased approximately \$9.3 million, primarily due to the termination of the liability to Metaldyne in first quarter 2018, which resulted in an approximate \$8.2 million non-cash reduction in legacy (income) expenses, net. Corporate operating expenses increased approximately \$0.7 million, primarily due to an increase in professional fees related to corporate development activities. Non-cash stock compensation decreased approximately \$0.3 million, primarily due to a decrease in expense related to the timing and estimated attainment of our long-term equity incentive plans in 2019 compared with 2018.

Liquidity and Capital Resources

Cash Flows

Cash flows provided by operating activities were approximately \$64.1 million for the nine months ended September 30, 2019, as compared to approximately \$83.1 million for the nine months ended September 30, 2018. 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, 2019, the Company generated approximately \$105.9 million of cash, based on the reported net income of approximately \$60.2 million and after considering the effects of non-cash items related to depreciation, amortization, loss on dispositions of assets, changes in deferred income taxes, stock-based compensation and other operating activities. For the nine months ended September 30, 2018, the Company generated approximately \$113.5 million in cash flows based on the reported net income of approximately \$66.6 million and after considering the effects of similar non-cash items.
- Increases in accounts receivable resulted in a use of cash of approximately \$14.5 million and \$20.1 million for the nine months ended September 30, 2019 and 2018, 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 approximately four days compared to third quarter 2018.
- We decreased our investment in inventory by approximately \$2.3 million for the nine months ended September 30, 2019, while we increased our investment in inventory by approximately \$10.8 million for the nine months ended September 30, 2018. In 2018, we increased our inventory investment to buy-ahead on many China-sourced products that were to be subject to tariffs to ensure we had sufficient inventory supply given the sales strength. In 2019, we have been able to remain flat to down in inventory levels, moderating them from higher levels in 2018 even with our sales growth.
- Increases in prepaid expenses and other assets resulted in a use of cash of approximately \$3.7 million for the nine months ended September 30, 2019, while decreases in prepaid expenses and other assets resulted in a source of cash of approximately \$7.2 million for the nine months ended September 30, 2018. These changes were primarily as 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 approximately \$25.9 million and \$6.7 million for the nine months ended September 30, 2019 and 2018, respectively, primarily as a result of the timing of payments made to suppliers and the mix of vendors and related terms. The decrease in accounts payable and accrued liabilities for the nine months ended September 30, 2018 was further impacted by an approximate \$8.2 million non-cash reduction in an obligation.

Net cash used for investing activities for the nine months ended September 30, 2019 and 2018 was approximately \$90.4 million and \$15.6 million, respectively. During the first nine months of 2019, we paid approximately \$67.1 million, net of cash acquired, to acquire Plastic Srl and Taplast. We also incurred approximately \$23.4 million in capital expenditures, as we continued our investment in growth, capacity and productivity-related capital projects. During the first nine months of 2018, we incurred approximately \$15.9 million in capital expenditures and received cash from the disposition of property and equipment of approximately \$0.3 million.

Net cash used for financing activities for the nine months ended September 30, 2019 and 2018 was approximately \$23.9 million and \$15.4 million, respectively. During the first nine months of 2019, we received proceeds from borrowings, net of repayments, of approximately \$0.5 million on our revolving credit facilities. We also purchased approximately \$21.1 million of outstanding common stock and used a net cash amount of approximately \$3.2 million on our revolving credit facilities. We also purchased approximately \$3.6 million of outstanding common stock and used a net cash amount of approximately \$9.4 million on our revolving credit facilities. We also purchased approximately \$3.6 million of outstanding common stock and used a net cash amount of approximately \$2.4 million related to our stock compensation arrangements.

Our Debt and Other Commitments

The \$300.0 million aggregate principal amount of senior notes accrue interest at a rate of 4.875% per annum, payable semi-annually in arrears on April 15 and October 15, commencing on April 15, 2018 ("Senior Notes"). The payment of principal and interest is jointly and severally guaranteed, on a senior unsecured basis by certain named subsidiaries of the Company (each a "Guarantor" and collectively the "Guarantors"). The Senior Notes are *pari passu* in right of payment with all existing and future senior indebtedness and subordinated to all existing and future secured indebtedness to the extent of the value of the assets securing such indebtedness. For the nine months ended September 30, 2019, our consolidated subsidiaries that do not guarantee the Senior Notes represented approximately 16% 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 approximately 31% and 13% of the total guarantor and non-guarantor assets and liabilities, respectively, as of September 30, 2019, treating the guarantor and non-guarantor subsidiaries each as a consolidated group and excluding intercompany transactions between such groups.

Prior to October 15, 2020, we may redeem up to 35% of the principal amount of the Senior Notes at a redemption price of 104.875% 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, 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.

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. The Credit Agreement matures on September 20, 2022 and is subject to interest at London Interbank Offered Rate ("LIBOR") plus 1.50%. The interest rate spread is based upon the leverage ratio, as defined, as of the most recent determination date. The Credit Agreement allows issuance of letters of credit, not to exceed \$40.0 million in aggregate, against revolving credit facility commitments.

The Credit Agreement also 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), 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). Our permitted total net leverage ratio under the Credit Agreement is 4.00 to 1.00 as of September 30, 2019. 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 1.48 to 1.00 at September 30, 2019. Our permitted senior secured net leverage ratio under the Credit Agreement is 3.50 to 1.00 as of September 30, 2019. If we were to complete an acquisition which qualifies for a Covenant Holiday Period, as defined in our Credit Agreement, then our permitted senior secured net leverage ratio cannot exceed 4.00 to 1.00 during that period. Our actual senior secured net leverage ratio was not meaningful at September 30, 2019. Our permitted interest expense coverage ratio under the Credit Agreement is 3.00 to 1.00 as of September 30, 2019. Our actual interest expense coverage ratio was 15.45 to 1.00 at September 30, 2019. At September 30, 2019, 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, 2019 (dollars in thousands). We present Consolidated Bank EBITDA to show our performance under our financial covenants.

	==	elve Months September 30, 2019
Net income	\$	76,930
Bank stipulated adjustments:		
Interest expense		13,700
Income tax expense		22,150
Depreciation and amortization		45,660
Non-cash compensation expense ⁽¹⁾		6,900
Other non-cash expenses or losses		4,700
Non-recurring expenses or costs ⁽²⁾		4,190
Extraordinary, non-recurring or unusual gains or losses		3,010
Business and asset dispositions		220
Permitted acquisitions		2,800
Casualty or business interruption expenses covered and reimbursed by insurance		460
Consolidated Bank EBITDA, as defined	\$	180,720

	Septe	September 30, 2019	
Total Indebtedness, as defined ⁽³⁾	\$	266,740	
Consolidated Bank EBITDA, as defined		180,720	
Total net leverage ratio		1.48 x	
Covenant requirement		4.00 x	

	September 30, 2019
Total Senior Secured Indebtedness ⁽⁴⁾	\$ (37,210)
Consolidated Bank EBITDA, as defined	180,720
Senior secured net leverage ratio	n/m x
Covenant requirement	3.50 x

	velve Months d September 30, 2019
Interest expense	\$ 13,700
Bank stipulated adjustments:	
Interest income	(880)
Non-cash amounts attributable to amortization of financing costs	(1,120)
Total Consolidated Cash Interest Expense, as defined	\$ 11,700

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	September 30, 2019	
Consolidated Bank EBITDA, as defined	\$	180,720
Total Consolidated Cash Interest Expense, as defined		11,700
Actual interest expense coverage ratio		15.45 x
Covenant requirement		3.00 x

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

(4) Senior secured indebtedness is negative at September 30, 2019 due to the deduction of certain unrestricted cash and unrestricted permitted investments as allowed under the Credit Agreement.

During the three months ended March 31, 2018, we terminated our \$75.0 million accounts receivable facility, under which we had the ability to sell eligible accounts receivable to a third-party multi-seller receivables funding company.

At September 30, 2019, we had no amounts outstanding under our revolving credit facility and had approximately \$284.1 million potentially available after giving effect to approximately \$15.9 million of letters of credit issued and outstanding. At December 31, 2018, we had no amounts outstanding under our revolving credit facility and had approximately \$284.9 million potentially available after giving effect to approximately \$15.1 million of letters of credit issued and outstanding 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, 2019 and December 31, 2018, we had approximately \$284.9 million, respectively, of borrowing capacity available for general corporate purposes.

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 use 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 2019 approximated \$335.3 million, compared to approximately \$320.2 million during the first nine months of 2018, as we effectively redeployed the cash generated by our operations over this time period into two bolt-on acquisitions, capital investments in our business and repurchases of our common stock.

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, 2019 is located in jurisdictions outside the U.S., given available funding under our revolving credit facility of \$284.1 million at September 30, 2019 (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.

We are subject to variable interest rates on our revolving credit facility. At September 30, 2019, 1-Month LIBOR approximated 2.02%. At September 30, 2019, 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. We account for these lease transactions as operating leases, and annual rent expense for continuing operations related thereto approximated \$12.3 million in 2018. We expect leasing will continue to be an available financing option to fund future capital expenditure requirements.

In February 2019, we announced our Board of Directors had authorized us to increase the purchase of our common stock up to \$75 million in the aggregate. The previous authorization, approved in November 2015, authorized up to \$50 million in share repurchases. In the three and nine months ended September 30, 2019, we purchased 196,128 and 723,528 shares of our outstanding common stock for an aggregate purchase price of approximately \$5.7 million and \$21.1 million, respectively.

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

⁽³⁾ Includes \$4.0 million of acquisition deferred purchase price.

In November 2019, we announced the Board of Directors increased the Company's common stock share repurchase authorization to \$150 million in the aggregate. The increased authorization includes the value of shares already purchased under the previous authorization. We will continue to evaluate opportunities to return capital to shareholders through the purchase of our common stock, depending on market conditions 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, 2019, we were party to foreign exchange forward and swap contracts to hedge changes in foreign currency exchange rates with notional amounts of approximately \$102.9 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 10, "*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. We have historically used interest rate swap agreements to fix the variable portion of our debt to manage this risk. See Note 9, "*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 MarketSM. 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 June 7, 2019, Moody's affirmed a Ba3 rating to our Senior Notes, as presented in Note 9, "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 January 30, 2019, Standard & Poor's affirmed a BB- rating to our senior unsecured debt, 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

While third quarter macroeconomic and end market conditions were challenging, particularly in the North American industrial and oil and gas end markets we serve, we believe we were able to mitigate much of the impact by continuing to operate under the TriMas Business Model, which provides the standardized set of processes that we follow to drive results across our multi-industry set of businesses. Despite these challenging conditions, we experienced year-over-year third quarter increases in sales in each of our three reportable segments, driven by the results of both of our 2019 Packaging acquisitions and strong demand in our TriMas Aerospace and Lamons businesses.

We believe we remain positioned to capitalize on available market growth opportunities, as well as have instilled a culture of Kaizen and continuous improvement to generate additional production efficiencies and cost savings. We are not anticipating improvements in our end markets, particularly given economic uncertainty around direct and indirect impacts of foreign trade policies. We will continue our efforts to mitigate the impact of external factors, while focusing on the aspects of our business that we can control.

We will continue to prioritize and pursue growth programs, particularly in our Packaging and Aerospace reportable segments, where we have many initiatives underway that we expect will benefit us in the future. We will also continue to ensure our cost structures remain aligned with customer demand in the end markets we serve, most notably in our Specialty Products reportable segment, where end market conditions in the third quarter of 2019 were increasingly challenging. We expect to leverage the tenets of the TriMas Business Model to achieve our growth plans, execute continuous improvement initiatives to offset inflationary pressures, and seek lower-cost sources for input costs, all while continuously assessing our manufacturing footprint, productivity and fixed-cost structure.

Impact of New Accounting Standards

See Note 2, "New Accounting Pronouncements," included in Part 1, Item 1, "Notes to Unaudited Consolidated Financial Statements," within this quarterly report on Form 10-Q.

Critical Accounting Policies

Certain of our accounting policies require the application of significant judgment by management in selecting the appropriate assumptions for 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, 2019, 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, 2018.

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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 9, "*Long-term Debt*," and Note 10, "*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, 2019, 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, 2019, 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, 2019 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 Annual Report on Form 10-K for the year ended December 31, 2018, 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 2018 Form 10-K except for the following:

Portfolio strategy execution - Our success depends on achieving our strategic and financial objectives, including the sale of our Lamons business

As previously announced, we entered into a definitive agreement to sell our Lamons business to First Reserve, a private equity firm focused on energy investing, for approximately \$135 million in cash, subject to customary working capital and purchase price adjustments. Lamons, a leading provider of industrial sealing and fastener solutions in the petrochemical, petroleum refining, midstream energy transportation, upstream oil and gas, metropolitan water and wastewater management end markets, is currently part of our Specialty Products reportable segment and generated approximately \$186 million in net sales for the twelve months ended September 30, 2019. We will report Lamons' results of operations as discontinued operations beginning in the fourth quarter of 2019.

Consummation of the sale is subject to the satisfaction or waiver of customary closing conditions. Net proceeds that we expect to receive from the sale of our Lamons business are an important source of cash flow for us as part of our strategic and financial planning. As we seek to sell or separate certain assets, equity interests or businesses, we may encounter difficulty in finding buyers, managing interdependencies across multiple transactions and other Company initiatives, implementing separation plans or executing alternative exit strategies on acceptable terms, which could delay or prevent the accomplishment of our strategic and financial objectives.

We may dispose of assets or businesses at a price or on terms that are less favorable than we had anticipated, or with the exclusion of assets that must be divested or run off separately. We may also face limitations in the form of regulatory or governmental approvals that prevent certain prospective purchasers from completing transactions with us or delay us from executing transactions on our preferred timeline, or arising from our debt or other contractual obligations that limit our ability to complete certain asset or business dispositions. Moreover, the effect of planned transactions over time will reduce our cash flow and earnings capacity and result in a less diversified portfolio of businesses, and we will have a greater dependency on remaining businesses for our financial results. Executing on these transactions can divert senior management time and resources from other pursuits. Dispositions or other business separations may also involve continued financial involvement in the divested business, such as through continuing equity ownership, transition service agreements, guarantees, indemnities or other current or contingent financial obligations or liabilities. Under these arrangements, performance by the divested businesses or other conditions outside our control could materially affect our future financial results.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

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, 2019.

Period	Total Number of Shares Purchased	Ave	rage Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs ⁽¹⁾	Va	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program ⁽¹⁾	
July 1, 2019 to July 31, 2019		\$	_	_	\$	47,433,785	
August 1, 2019 to August 31, 2019	173,342	\$	28.89	173,342	\$	42,425,947	
September 1, 2019 to September 30, 2019	22,786	\$	28.98	22,786	\$	41,765,550	
Total	196,128	\$	28.90	196,128	\$	41,765,550	

⁽¹⁾ In February 2019, the Company announced its Board of Directors had authorized the Company to increase the purchase of its common stock up to \$75 million in the aggregate from its previous authorization of \$50 million. Pursuant to this share repurchase program, during the three months ended September 30, 2019, the Company repurchased 196,128 shares of its common stock at a cost of approximately \$5.7 million. In November 2019, the Company announced its Board of Directors increased the Company's common stock share repurchase authorization to \$150 million in the aggregate. The increased authorization includes the value of shares already purchased under the previous authorization. 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

Not applicable.



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, 2019, 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)

Date: November 4, 2019

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/ ROBERT J. ZALUPSKI

By:

Robert J. Zalupski Chief Financial Officer

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: November 4, 2019

/s/ THOMAS A. AMATO

Thomas A. Amato *Chief Executive Officer*

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, Robert J. Zalupski, 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: November 4, 2019

/s/ ROBERT J. ZALUPSKI

Robert J. Zalupski Chief Financial Officer

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, 2019 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: November 4, 2019

/s/ THOMAS A. AMATO

Thomas A. Amato Chief Executive Officer

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, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Robert J. Zalupski, 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: November 4, 2019

/s/ ROBERT J. ZALUPSKI

Robert J. Zalupski Chief Financial Officer