

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C.

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 28, 2019

Commission file number 1-6770



MUELLER INDUSTRIES INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

25-0790410

(I.R.S. Employer Identification No.)

150 Schilling Boulevard

Collierville

(Address of principal executive offices)

Suite 100

Tennessee

38017

(Zip Code)

(901) 753-3200

(Registrant's telephone number, including area code)

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

<u>Title of each class</u>	<u>Trading Symbol</u>	<u>Name of exchange on which registered</u>
Common Stock	MLI	NYSE

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the 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	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

The number of shares of the Registrant's common stock outstanding as of October 18, 2019 was 56,952,083.

MUELLER INDUSTRIES, INC.
FORM 10-Q
For the Quarterly Period Ended September 28, 2019

As used in this report, the terms "Company," "Mueller," and "Registrant" mean Mueller Industries, Inc. and its consolidated subsidiaries taken as a whole, unless the context indicates otherwise.

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

MUELLER INDUSTRIES, INC.
CONDENSED CONSOLIDATED STATEMENTS OF INCOME
(Unaudited)

<i>(In thousands, except per share data)</i>	For the Quarter Ended		For the Nine Months Ended	
	September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018
Net sales	\$ 608,602	\$ 645,958	\$ 1,886,777	\$ 1,948,791
Cost of goods sold	510,788	566,956	1,586,129	1,676,446
Depreciation and amortization	10,823	10,619	31,856	29,081
Selling, general, and administrative expense	40,739	38,889	121,838	112,077
Gain on sale of assets	—	(2,691)	—	(334)
Insurance recovery	—	(1,486)	—	(1,486)
Operating income	46,252	33,671	146,954	133,007
Interest expense	(6,148)	(6,746)	(20,135)	(18,728)
Other income, net	533	411	823	1,557
Income before income taxes	40,637	27,336	127,642	115,836
Income tax expense	(7,665)	(3,373)	(27,643)	(23,179)
Loss from unconsolidated affiliates, net of foreign tax	(2,528)	(3,100)	(23,740)	(13,568)
Consolidated net income	30,444	20,863	76,259	79,089
Net income attributable to noncontrolling interests	(1,351)	(571)	(3,457)	(1,487)
Net income attributable to Mueller Industries, Inc.	<u>\$ 29,093</u>	<u>\$ 20,292</u>	<u>\$ 72,802</u>	<u>\$ 77,602</u>
Weighted average shares for basic earnings per share	55,832	56,877	55,771	56,858
Effect of dilutive stock-based awards	482	540	523	524
Adjusted weighted average shares for diluted earnings per share	<u>56,314</u>	<u>57,417</u>	<u>56,294</u>	<u>57,382</u>
Basic earnings per share	<u>\$ 0.52</u>	<u>\$ 0.36</u>	<u>\$ 1.31</u>	<u>\$ 1.36</u>
Diluted earnings per share	<u>\$ 0.52</u>	<u>\$ 0.35</u>	<u>\$ 1.29</u>	<u>\$ 1.35</u>
Dividends per share	<u>\$ 0.10</u>	<u>\$ 0.10</u>	<u>\$ 0.30</u>	<u>\$ 0.30</u>

See accompanying notes to condensed consolidated financial statements.

MUELLER INDUSTRIES, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Unaudited)

<i>(In thousands)</i>	For the Quarter Ended		For the Nine Months Ended	
	September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018
Consolidated net income	\$ 30,444	\$ 20,863	\$ 76,259	\$ 79,089
Other comprehensive loss, net of tax:				
Foreign currency translation	(6,692)	1,111	(3,612)	(5,534)
Net change with respect to derivative instruments and hedging activities, net of tax of \$56, \$(33), \$(34), and \$243	(195)	131	133	(896)
Net change in pension and postretirement obligation adjustments, net of tax of \$(232), \$(79), \$(323), and \$(221)	777	270	1,207	769
Attributable to unconsolidated affiliates, net of tax of \$(159), \$2,005, \$(240), and \$2,086	547	(6,907)	828	(7,187)
Total other comprehensive loss, net	(5,563)	(5,395)	(1,444)	(12,848)
Consolidated comprehensive income	24,881	15,468	74,815	66,241
Comprehensive income attributable to noncontrolling interests	(857)	(34)	(2,044)	(1,097)
Comprehensive income attributable to Mueller Industries, Inc.	<u>\$ 24,024</u>	<u>\$ 15,434</u>	<u>\$ 72,771</u>	<u>\$ 65,144</u>

See accompanying notes to condensed consolidated financial statements.

MUELLER INDUSTRIES, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)

<i>(In thousands, except share data)</i>	September 28, 2019	December 29, 2018
Assets		
Current assets:		
Cash and cash equivalents	\$ 100,338	\$ 72,616
Accounts receivable, less allowance for doubtful accounts of \$757 in 2019 and \$836 in 2018	319,562	273,417
Inventories	277,567	329,795
Other current assets	33,242	26,790
Total current assets	730,709	702,618
Property, plant, and equipment, net	361,308	370,633
Operating lease right-of-use assets	25,855	—
Goodwill, net	152,445	150,335
Intangible assets, net	60,609	61,971
Investments in unconsolidated affiliates	46,369	58,042
Other assets	25,470	25,950
Total assets	\$ 1,402,765	\$ 1,369,549
Liabilities		
Current liabilities:		
Current portion of debt	\$ 7,387	\$ 7,101
Accounts payable	102,084	103,754
Accrued wages and other employee costs	38,282	38,549
Current portion of operating lease liabilities	3,832	—
Other current liabilities	95,184	83,397
Total current liabilities	246,769	232,801
Long-term debt, less current portion	434,082	489,597
Pension liabilities	12,783	14,237
Postretirement benefits other than pensions	14,616	14,818
Environmental reserves	19,774	20,009
Deferred income taxes	17,260	16,615
Noncurrent operating lease liabilities	22,712	—
Other noncurrent liabilities	10,173	18,212
Total liabilities	778,169	806,289
Equity		
Mueller Industries, Inc. stockholders' equity:		
Preferred stock - \$1.00 par value; shares authorized 5,000,000; none outstanding	—	—
Common stock - \$.01 par value; shares authorized 100,000,000; issued 80,183,004; outstanding 56,952,083 in 2019 and 56,702,997 in 2018	802	802
Additional paid-in capital	276,198	276,849
Retained earnings	880,537	824,737
Accumulated other comprehensive loss	(79,823)	(79,792)
Treasury common stock, at cost	(470,066)	(474,240)
Total Mueller Industries, Inc. stockholders' equity	607,648	548,356
Noncontrolling interests	16,948	14,904
Total equity	624,596	563,260
Commitments and contingencies	—	—
Total liabilities and equity	\$ 1,402,765	\$ 1,369,549

See accompanying notes to condensed consolidated financial statements.

MUELLER INDUSTRIES, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

<i>(In thousands)</i>	For the Nine Months Ended	
	September 28, 2019	September 29, 2018
Cash flows from operating activities		
Consolidated net income	\$ 76,259	\$ 79,089
Reconciliation of consolidated net income to net cash provided by operating activities:		
Depreciation and amortization	32,095	29,320
Stock-based compensation expense	6,355	5,953
Loss from unconsolidated affiliates	23,740	13,568
Gain on disposals of properties	(24)	(247)
Insurance recovery	—	(1,486)
Change in fair value of contingent consideration	4,500	—
Deferred income tax benefit	(1,593)	(1,502)
Changes in assets and liabilities, net of effects of business acquired:		
Receivables	(47,433)	(42,201)
Inventories	50,985	48,716
Other assets	(7,485)	11,250
Current liabilities	1,687	(7,947)
Other liabilities	(7,112)	(13,862)
Other, net	(47)	1,864
Net cash provided by operating activities	131,927	122,515
Cash flows from investing activities		
Capital expenditures	(20,162)	(16,685)
Acquisition of business, net of cash acquired	3,465	(167,677)
Investments in unconsolidated affiliates	(11,000)	(609)
Proceeds from sales of assets	385	18,693
Net cash used in investing activities	(27,312)	(166,278)
Cash flows from financing activities		
Dividends paid to stockholders of Mueller Industries, Inc.	(16,738)	(17,051)
Dividends paid to noncontrolling interests	—	(592)
Repurchase of common stock	(1,763)	(6,575)
Payment of contingent consideration	(3,170)	—
Issuance of long-term debt	100,658	194,131
Repayments of long-term debt	(151,305)	(139,518)
Repayment of debt by consolidated joint ventures, net	(4,352)	(2,978)
Net cash used to settle stock-based awards	(1,069)	(726)
Net cash (used in) provided by financing activities	(77,739)	26,691
Effect of exchange rate changes on cash	(1,511)	(442)
Increase (decrease) in cash, cash equivalents, and restricted cash	25,365	(17,514)
Cash, cash equivalents, and restricted cash at the beginning of the period	77,138	126,563
Cash, cash equivalents, and restricted cash at the end of the period	\$ 102,503	\$ 109,049

See accompanying notes to condensed consolidated financial statements.

MUELLER INDUSTRIES, INC.
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(Unaudited)

<i>(In thousands)</i>	For the Quarter Ended		For the Nine Months Ended	
	September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018
Common stock:				
Balance at beginning of period	\$ 802	\$ 802	\$ 802	\$ 802
Balance at end of period	<u>\$ 802</u>	<u>\$ 802</u>	<u>\$ 802</u>	<u>\$ 802</u>
Additional paid-in capital:				
Balance at beginning of period	\$ 280,626	\$ 277,987	\$ 276,849	\$ 274,585
Issuance of shares under incentive stock option plans	(341)	(20)	(624)	(279)
Stock-based compensation expense	2,053	2,047	6,355	5,953
Issuance of restricted stock	(6,140)	(5,247)	(6,382)	(5,492)
Balance at end of period	<u>\$ 276,198</u>	<u>\$ 274,767</u>	<u>\$ 276,198</u>	<u>\$ 274,767</u>
Retained earnings:				
Balance at beginning of period	\$ 857,121	\$ 788,753	\$ 824,737	\$ 743,503
Net income attributable to Mueller Industries, Inc.	29,093	20,292	72,802	77,602
Dividends paid or payable to stockholders of Mueller Industries, Inc.	(5,677)	(5,758)	(17,002)	(17,262)
Reclassification of stranded effects of the Act	—	—	—	(556)
Other adjustments	—	340	—	340
Balance at end of period	<u>\$ 880,537</u>	<u>\$ 803,627</u>	<u>\$ 880,537</u>	<u>\$ 803,627</u>
Accumulated other comprehensive loss:				
Balance at beginning of period	\$ (74,754)	\$ (58,101)	\$ (79,792)	\$ (51,056)
Total other comprehensive loss attributable to Mueller Industries, Inc.	(5,069)	(4,856)	(31)	(12,457)
Reclassification of stranded effects of the Act	—	—	—	556
Balance at end of period	<u>\$ (79,823)</u>	<u>\$ (62,957)</u>	<u>\$ (79,823)</u>	<u>\$ (62,957)</u>

MUELLER INDUSTRIES, INC.
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(Unaudited)

(In thousands)

	For the Quarter Ended		For the Nine Months Ended	
	September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018
Treasury stock:				
Balance at beginning of period	\$ (475,524)	\$ (451,740)	\$ (474,240)	\$ (445,723)
Issuance of shares under incentive stock option plans	(601)	565	(445)	1,136
Repurchase of common stock	—	(1,325)	(1,763)	(8,158)
Issuance of restricted stock	6,059	5,247	6,382	5,492
	\$ (470,066)	\$ (447,253)	\$ (470,066)	\$ (447,253)
Noncontrolling interests:				
Balance at beginning of period	\$ 16,091	\$ 14,388	\$ 14,904	\$ 13,917
Dividends paid to noncontrolling interests	—	—	—	(592)
Net income attributable to noncontrolling interests	1,351	571	3,457	1,487
Foreign currency translation	(494)	(537)	(1,413)	(390)
	\$ 16,948	\$ 14,422	\$ 16,948	\$ 14,422

See accompanying notes to condensed consolidated financial statements.

MUELLER INDUSTRIES, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

General

Certain information and footnote disclosures normally included in annual financial statements prepared in accordance with accounting principles generally accepted in the United States (U.S. GAAP) have been condensed or omitted. Results of operations for the interim periods presented are not necessarily indicative of results which may be expected for any other interim period or for the year as a whole. This Quarterly Report on Form 10-Q should be read in conjunction with the Company's Annual Report on Form 10-K, including the annual financial statements incorporated therein.

The accompanying unaudited interim financial statements include all normal recurring adjustments which are, in the opinion of management, necessary for a fair presentation of the results for the interim periods presented herein.

Note 1 – Recent Accounting Standards

Adopted

In July 2018, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2018-11, *Leases (Topic 842): Targeted Improvements* and ASU No. 2018-10, *Codification Improvements to Topic 842, Leases*. The ASUs clarify how to apply certain aspects of the new leasing standard, ASC 842. ASC 842 requires an entity to recognize a right-of-use asset and lease liability for each lease with a term of more than 12 months. Recognition, measurement and presentation of expenses will depend on classification as a financing or operating lease. The guidance also requires certain quantitative and qualitative disclosures about leasing arrangements. The Company adopted the ASU during the first quarter of 2019 using a modified retrospective approach and applied the transition provisions at the beginning of the fiscal year. Financial results reported in periods prior to 2018 are unchanged. The Company elected a package of practical expedients, which, among other things, does not require the reassessment of lease classification. The Company does not separate lease and non-lease components of contracts. The Company implemented a system to identify its entire population of leases and tested the population for completeness. As of the effective date, the Company recognized noncurrent right-of-use assets of \$29.5 million and corresponding current and noncurrent lease liabilities of \$4.8 million and \$25.4 million, respectively.

Issued

In August 2018, the FASB issued ASU No. 2018-14, *Compensation - Retirement Benefits - Defined Benefit Plans - General (Subtopic 715-20): Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans*. For employers that sponsor defined benefit pension and/or other postretirement benefit plans, the ASU eliminates requirements for certain disclosures that are no longer considered cost beneficial, requires new disclosures related to the weighted-average interest crediting rate for cash balance plans and explanations for significant gains and losses related to changes in benefit obligations, and clarifies the requirements for entities that provide aggregate disclosures for two or more plans. The ASU will be effective for the annual period beginning in 2020. The updated guidance requires retrospective adoption, and early adoption is permitted. The Company does not expect the adoption of the ASU to have a material impact on its Condensed Consolidated Financial Statements.

In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement*. The ASU eliminates requirements to disclose the amount and reasons for transfers between level 1 and level 2 of the fair value hierarchy, but requires public companies to disclose changes in unrealized gains and losses for the period included in other comprehensive income (OCI) for recurring level 3 fair value measurements or instruments held at the end of the reporting period and the range and weighted average used to develop significant unobservable inputs for level 3 fair value measurements. The ASU will be effective for interim and annual periods beginning in 2020. An entity is permitted to early adopt either the entire standard or only the provisions that eliminate or modify requirements, and can elect to early adopt in interim periods. The guidance on changes in unrealized gains and losses for the period included in OCI for recurring level 3 measurements, the range and weighted average of significant unobservable inputs used to develop level 3 fair value measurements, and the narrative description of measurement uncertainty is applied prospectively. All other amendments should be applied retrospectively. The Company does not expect the adoption of the ASU to have a material impact on its Condensed Consolidated Financial Statements.

Note 2 – Earnings per Common Share

Basic per share amounts have been computed based on the average number of common shares outstanding. Diluted per share amounts reflect the increase in average common shares outstanding that would result from the assumed exercise of outstanding stock options and vesting of restricted stock awards, computed using the treasury stock method. Approximately 110 thousand and 79 thousand stock-based awards were excluded from the computation of diluted earnings per share for the quarters ended September 28, 2019 and September 29, 2018, respectively, because they were antidilutive.

Note 3 – Acquisitions

ATCO

On July 2, 2018, the Company entered into a stock purchase agreement pursuant to which the Company acquired all of the outstanding capital stock of ATCO Rubber Products, Inc. (ATCO) for approximately \$158.1 million, net of working capital adjustments. The total purchase price consisted of \$151.8 million in cash at closing and a contingent consideration arrangement which requires the Company to pay the former owner up to \$12.0 million based on EBITDA growth of the acquired business. ATCO is an industry leader in the manufacturing and distribution of insulated HVAC flexible duct systems and will support the Company's strategy to grow its Climate Products businesses to become a more valuable resource to its HVAC customers. The acquired business is reported in the Company's Climate segment.

The fair value of the assets acquired totaled \$137.9 million, consisting primarily of property, plant, and equipment of \$83.1 million, inventories of \$31.7 million, accounts receivable of \$21.8 million, other current assets of \$1.1 million, and other assets of \$0.2 million. The fair value of the liabilities assumed totaled \$20.4 million, consisting primarily of accounts payable of \$8.1 million, other current liabilities of \$10.2 million, and long-term debt of \$2.1 million. Of the remaining purchase price, \$17.2 million was allocated to tax-deductible goodwill and \$23.4 million was allocated to intangible assets, including technology, customer relationships, trade names, and supply contracts. The valuation of the business has been finalized. Changes to the purchase price allocation from the amounts presented in the Company's 2018 Annual Report on Form 10-K included the valuation of the contingent consideration, intangible assets, and working capital. These changes resulted in a net decrease to goodwill of \$0.5 million.

ATCO had net sales of approximately \$49.4 million and \$144.8 million, respectively, for the quarter and nine months ended September 28, 2019.

The following table presents condensed pro forma consolidated results of operations as if the ATCO acquisition had occurred at the beginning of 2018. The pro forma information does not purport to be indicative of the results that would have been obtained if the operations had actually been combined during the periods presented and is not necessarily indicative of operating results to be expected in future periods. The most significant pro forma adjustments to the historical results of operations relate to the application of purchase accounting and the financing structure.

	For the Nine Months Ended
	September 29, 2018
<i>(In thousands, except per share data)</i>	
Net sales	\$ 2,036,367
Net income	84,823
Basic earnings per share	\$ 1.49
Diluted earnings per share	1.48

Die-Mold

On March 31, 2018, the Company entered into a share purchase agreement pursuant to which the Company acquired all of the outstanding shares of Die-Mold Tool Limited (Die-Mold) for approximately \$13.6 million, net of working capital adjustments. The total purchase price consisted of \$12.4 million in cash at closing and a contingent consideration arrangement which requires the Company to pay the former owner up to \$2.3 million based on EBITDA growth of the acquired business. Die-Mold, based out of Ontario, Canada, is a manufacturer of plastic PEX and other plumbing-related fittings and an integrated designer and manufacturer of plastic injection tooling. The business complements the Company's existing businesses within the Piping Systems segment.

The fair value of the assets acquired totaled \$7.1 million, consisting primarily of property, plant, and equipment of \$3.3 million, inventories of \$1.8 million, accounts receivable of \$1.7 million, and other current assets of \$0.3 million. The fair value of the liabilities assumed totaled \$2.9 million, consisting primarily of accounts payable of \$0.7 million, other current liabilities of \$0.2 million, and deferred taxes of \$2.0 million. Of the remaining purchase price, \$9.4 million was allocated to non-deductible goodwill and intangible assets.

Note 4 – Segment Information

Each of the Company's reportable segments is composed of certain operating segments that are aggregated primarily by the nature of products offered as follows:

Piping Systems

Piping Systems is composed of the following operating segments: Domestic Piping Systems Group, Great Lakes Copper, Heatlink Group, Die-Mold, European Operations, Trading Group, and Jungwoo-Mueller (the Company's South Korean joint venture). The Domestic Piping Systems Group manufactures copper tube, fittings, and line sets. These products are manufactured in the U.S., sold in the U.S., and exported to markets worldwide. Outside the U.S., Great Lakes Copper manufactures copper tube and line sets in Canada and sells the products primarily in the U.S. and Canada. Heatlink Group produces a complete line of products for PEX plumbing and radiant systems in Canada and sells these products in Canada and the U.S. Die-Mold manufactures PEX and other plumbing-related fittings and plastic injection tooling in Canada and sells these products in Canada and the U.S. European Operations manufacture copper tube in the U.K. which is sold primarily in Europe. The Trading Group manufactures pipe nipples and resells brass and plastic plumbing valves, malleable iron fittings, faucets, and plumbing specialty products in the U.S. and Mexico. Jungwoo-Mueller manufactures copper-based joining products that are sold worldwide. The Piping Systems segment's products are sold primarily to plumbing, refrigeration, and air-conditioning wholesalers, hardware wholesalers and co-ops, building product retailers, and air-conditioning original equipment manufacturers (OEMs).

Industrial Metals

Industrial Metals is composed of the following operating segments: Brass Rod & Copper Bar Products, Impacts & Micro Gauge, and Brass Value-Added Products. These businesses manufacture brass rod, impact extrusions, and forgings, as well as a wide variety of end products including plumbing brass, automotive components, valves, fittings, and gas assemblies. These products are manufactured in the U.S. and sold primarily to OEMs in the U.S., many of which are in the industrial, transportation, construction, heating, ventilation, and air-conditioning, plumbing, refrigeration, and energy markets.

Climate

Climate is composed of the following operating segments: Refrigeration Products, Fabricated Tube Products, Westermeyer, Turbotec, and ATCO. These domestic businesses manufacture and fabricate valves, assemblies, high pressure components, coaxial heat exchangers, and insulated HVAC flexible duct systems primarily for the heating, ventilation, air-conditioning, and refrigeration markets in the U.S.

Summarized segment information is as follows:

For the Quarter Ended September 28, 2019					
<i>(In thousands)</i>	Piping Systems	Industrial Metals	Climate	Corporate and Eliminations	Total
Net sales	\$ 390,917	\$ 135,443	\$ 90,938	\$ (8,696)	\$ 608,602
Cost of goods sold	330,418	117,893	70,523	(8,046)	510,788
Depreciation and amortization	5,751	1,836	2,491	745	10,823
Selling, general, and administrative expense	18,738	3,115	9,961	8,925	40,739
Operating income	36,010	12,599	7,963	(10,320)	46,252
Interest expense					(6,148)
Other income, net					533
Income before income taxes					<u>\$ 40,637</u>

For the Quarter Ended September 29, 2018					
<i>(In thousands)</i>	Piping Systems	Industrial Metals	Climate	Corporate and Eliminations	Total
Net sales	\$ 410,525	\$ 158,709	\$ 81,619	\$ (4,895)	\$ 645,958
Cost of goods sold	363,174	141,435	66,832	(4,485)	566,956
Depreciation and amortization	5,946	1,864	2,123	686	10,619
Selling, general, and administrative expense	17,387	3,086	6,890	11,526	38,889
Gain on sale of assets	(1,390)	(1,301)	—	—	(2,691)
Insurance recovery	—	(1,486)	—	—	(1,486)
Operating income	25,408	15,111	5,774	(12,622)	33,671
Interest expense					(6,746)
Other income, net					411
Income before income taxes					<u>\$ 27,336</u>

Segment information (continued):

For the Nine Months Ended September 28, 2019					
<i>(In thousands)</i>	Piping Systems	Industrial Metals	Climate	Corporate and Eliminations	Total
Net sales	\$ 1,193,274	\$ 434,037	\$ 276,853	\$ (17,387)	\$ 1,886,777
Cost of goods sold	1,019,546	372,542	212,201	(18,160)	1,586,129
Depreciation and amortization	16,953	5,518	6,932	2,453	31,856
Selling, general, and administrative expense	56,620	9,280	24,336	31,602	121,838
Operating income	100,155	46,697	33,384	(33,282)	146,954
Interest expense					(20,135)
Other income, net					823
Income before income taxes					<u>\$ 127,642</u>

For the Nine Months Ended September 29, 2018					
<i>(In thousands)</i>	Piping Systems	Industrial Metals	Climate	Corporate and Eliminations	Total
Net sales	\$ 1,294,672	\$ 511,932	\$ 156,854	\$ (14,667)	\$ 1,948,791
Cost of goods sold	1,120,890	445,259	124,806	(14,509)	1,676,446
Depreciation and amortization	17,568	5,715	3,371	2,427	29,081
Selling, general, and administrative expense	57,931	9,908	12,009	32,229	112,077
(Gain) loss on sale of assets	(2,093)	(1,301)	—	3,060	(334)
Insurance recovery	—	(1,486)	—	—	(1,486)
Operating income	100,376	53,837	16,668	(37,874)	133,007
Interest expense					(18,728)
Other income, net					1,557
Income before income taxes					<u>\$ 115,836</u>

The following tables represent a disaggregation of revenue from contracts with customers, along with the reportable segment for each category:

<i>(In thousands)</i>	For the Quarter Ended September 28, 2019			
	Piping Systems	Industrial Metals	Climate	Total
Tube and fittings	\$ 320,789	\$ —	\$ —	\$ 320,789
Brass rod and forgings	—	103,616	—	103,616
OEM components, tube & assemblies	7,059	11,724	32,334	51,117
Valves and plumbing specialties	63,069	—	—	63,069
Other	—	20,103	58,604	78,707
	390,917	135,443	90,938	617,298
Intersegment sales				(8,696)
Net sales				\$ 608,602

<i>(In thousands)</i>	For the Quarter Ended September 29, 2018			
	Piping Systems	Industrial Metals	Climate	Total
Tube and fittings	\$ 340,269	\$ —	\$ —	\$ 340,269
Brass rod and forgings	—	122,411	—	122,411
OEM components, tube & assemblies	7,618	12,292	35,555	55,465
Valves and plumbing specialties	62,638	—	—	62,638
Other	—	24,006	46,064	70,070
	410,525	158,709	81,619	650,853
Intersegment sales				(4,895)
Net sales				\$ 645,958

Disaggregation of revenue from contracts with customers (continued):

<i>(In thousands)</i>	For the Nine Months Ended September 28, 2019			
	Piping Systems	Industrial Metals	Climate	Total
Tube and fittings	\$ 986,783	\$ —	\$ —	\$ 986,783
Brass rod and forgings	—	333,622	—	333,622
OEM components, tube & assemblies	21,786	37,613	106,542	165,941
Valves and plumbing specialties	184,705	—	—	184,705
Other	—	62,802	170,311	233,113
	1,193,274	434,037	276,853	1,904,164
Intersegment sales				(17,387)
Net sales				\$ 1,886,777

<i>(In thousands)</i>	For the Nine Months Ended September 29, 2018			
	Piping Systems	Industrial Metals	Climate	Total
Tube and fittings	\$ 1,077,525	\$ —	\$ —	\$ 1,077,525
Brass rod and forgings	—	394,880	—	394,880
OEM components, tube & assemblies	22,128	41,956	110,790	174,874
Valves and plumbing specialties	195,019	—	—	195,019
Other	—	75,096	46,064	121,160
	1,294,672	511,932	156,854	1,963,458
Intersegment sales				(14,667)
Net sales				\$ 1,948,791

Note 5 – Cash, Cash Equivalents, and Restricted Cash

<i>(In thousands)</i>	September 28, 2019	December 29, 2018
Cash & cash equivalents	\$ 100,338	\$ 72,616
Restricted cash included within other current assets	2,058	4,414
Restricted cash included within other assets	107	108
Total cash, cash equivalents, and restricted cash	\$ 102,503	\$ 77,138

Amounts included in restricted cash relate to required deposits in brokerage accounts that facilitate the Company's hedging activities as well as imprest funds for the Company's self-insured workers' compensation program.

Note 6 – Inventories

(In thousands)

	September 28, 2019	December 29, 2018
Raw materials and supplies	\$ 69,668	\$ 89,641
Work-in-process	64,392	58,643
Finished goods	149,949	188,506
Valuation reserves	(6,442)	(6,995)
Inventories	<u>\$ 277,567</u>	<u>\$ 329,795</u>

Note 7 – Financial Instruments

Derivative Instruments and Hedging Activities

The Company's earnings and cash flows are subject to fluctuations due to changes in commodity prices, foreign currency exchange rates, and interest rates. The Company uses derivative instruments such as commodity futures contracts, foreign currency forward contracts, and interest rate swaps to manage these exposures.

All derivatives are recognized in the Condensed Consolidated Balance Sheets at their fair value. On the date the derivative contract is entered into, it is either a) designated as a hedge of (i) a forecasted transaction or the variability of cash flow to be paid (cash flow hedge) or (ii) the fair value of a recognized asset or liability (fair value hedge), or b) not designated in a hedge accounting relationship, even though the derivative contract was executed to mitigate an economic exposure (economic hedge), as the Company does not enter into derivative contracts for trading purposes. Changes in the fair value of a derivative that is qualified, designated, and highly effective as a cash flow hedge are recorded in stockholders' equity within AOCI, to the extent effective, until they are reclassified to earnings in the same period or periods during which the hedged transaction affects earnings. Changes in the fair value of a derivative that is qualified, designated, and highly effective as a fair value hedge, along with the gain or loss on the hedged recognized asset or liability that is attributable to the hedged risk, are recorded in current earnings. Changes in the fair value of undesignated derivatives executed as economic hedges and the ineffective portion of designated derivatives are reported in current earnings.

The Company documents all relationships between derivative instruments and hedged items, as well as the risk-management objective and strategy for undertaking various hedge transactions. This process includes linking all derivative instruments that are designated as fair value hedges to specific assets and liabilities in the Condensed Consolidated Balance Sheets and linking cash flow hedges to specific forecasted transactions or variability of cash flow.

The Company also assesses, both at the hedge's inception and on an ongoing basis, whether the designated derivative instruments that are used in hedging transactions are highly effective in offsetting changes in cash flows or fair values of hedged items. When a derivative instrument is determined not to be highly effective as a hedge or the underlying hedged transaction is no longer probable of occurring, hedge accounting is discontinued prospectively in accordance with the derecognition criteria for hedge accounting.

Commodity Futures Contracts

Copper and brass represent the largest component of the Company's variable costs of production. The cost of these materials is subject to global market fluctuations caused by factors beyond the Company's control. The Company occasionally enters into forward fixed-price arrangements with certain customers; the risk of these arrangements is generally managed with commodity futures contracts. These futures contracts have been designated as cash flow hedges.

At September 28, 2019, the Company held open futures contracts to purchase approximately \$37.9 million of copper over the next eight months related to fixed price sales orders. The fair value of those futures contracts was a \$805 thousand net loss position, which was determined by obtaining quoted market prices (level 1 within the fair value hierarchy). In the next 12 months, the Company will reclassify into earnings realized gains or losses relating to cash flow hedges. At September 28, 2019, this amount was approximately \$243 thousand of deferred net losses, net of tax.

The Company may also enter into futures contracts to protect the value of inventory against market fluctuations. At September 28, 2019, the Company held open futures contracts to sell approximately \$188 thousand of copper over the next 10 months related to copper inventory. The fair value of those futures contracts was a \$2 thousand net loss position, which was determined by obtaining quoted market prices (level 1 within the fair value hierarchy).

The Company presents its derivative assets and liabilities in the Condensed Consolidated Balance Sheets on a net basis by counterparty. The following table summarizes the location and fair value of the derivative instruments and disaggregates the net derivative assets and liabilities into gross components on a contract-by-contract basis:

(In thousands)	Asset Derivatives			Liability Derivatives		
	Balance Sheet Location	Fair Value		Balance Sheet Location	Fair Value	
		September 28, 2019	December 29, 2018		September 28, 2019	December 29, 2018
Commodity contracts - gains	Other current assets	\$ 29	\$ 88	Other current liabilities	\$ 75	\$ 103
Commodity contracts - losses	Other current assets	(27)	(1)	Other current liabilities	(883)	(1,382)
Total derivatives ⁽¹⁾		\$ 2	\$ 87		\$ (808)	\$ (1,279)

⁽¹⁾ Does not include the impact of cash collateral provided to counterparties.

The following tables summarize the effects of derivative instruments on the Company's Condensed Consolidated Statements of Income:

(In thousands)	Location	For the Quarter Ended		For the Nine Months Ended	
		September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018
Fair value hedges:					
Gain on commodity contracts (qualifying)	Cost of goods sold	\$ —	\$ —	\$ —	\$ 391
Loss on hedged item - inventory	Cost of goods sold	—	—	—	(385)
Undesignated derivatives:					
(Loss) gain on commodity contracts (nonqualifying)	Cost of goods sold	(467)	(2,848)	1,425	5,579

The following tables summarize amounts recognized in and reclassified from AOCI during the period:

(In thousands)	For the Quarter Ended September 28, 2019			
	Gain Recognized in AOCI (Effective Portion), Net of Tax	Classification Gains (Losses)		Gain Reclassified from AOCI (Effective Portion), Net of Tax
Cash flow hedges:				
Commodity contracts	\$ 130	Cost of goods sold		\$ (332)
Other	8	Other		(1)
Total	\$ 138	Total		\$ (333)

Changes recognized in and reclassified from AOCI (continued):

<i>(In thousands)</i>	For the Quarter Ended September 29, 2018	
	Gain Recognized in AOCI (Effective Portion), Net of Tax	Classification Gains (Losses)
Cash flow hedges:		
Commodity contracts	\$ 305	Cost of goods sold
Other	6	Other
Total	<u>\$ 311</u>	Total
		Gain Reclassified from AOCI (Effective Portion), Net of Tax
		\$ (180)

<i>(In thousands)</i>	For the Nine Months Ended September 28, 2019	
	Gain Recognized in AOCI (Effective Portion), Net of Tax	Classification Gains (Losses)
Cash flow hedges:		
Commodity contracts	\$ 749	Cost of goods sold
Other	14	Other
Total	<u>\$ 763</u>	Total
		Gain Reclassified from AOCI (Effective Portion), Net of Tax
		\$ (629)
		(1)
		<u>\$ (630)</u>

<i>(In thousands)</i>	For the Nine Months Ended September 29, 2018	
	Loss Recognized in AOCI (Effective Portion), Net of Tax	Classification Gains (Losses)
Cash flow hedges:		
Commodity contracts	\$ (438)	Cost of goods sold
Other	(3)	Other
Total	<u>\$ (441)</u>	Total
		Gain Reclassified from AOCI (Effective Portion), Net of Tax
		\$ (455)

The Company enters into futures and forward contracts that closely match the terms of the underlying transactions. As a result, the ineffective portion of the qualifying open hedge contracts through September 28, 2019 was not material to the Condensed Consolidated Statements of Income.

The Company primarily enters into International Swaps and Derivatives Association master netting agreements with major financial institutions that permit the net settlement of amounts owed under their respective derivative contracts. Under these master netting agreements, net settlement generally permits the Company or the counterparty to determine the net amount payable for contracts due on the same date and in the same currency for similar types of derivative transactions. The master netting agreements generally also provide for net settlement of all outstanding contracts with a counterparty in the case of an event of default or a termination event. The Company does not offset fair value amounts for derivative instruments and fair value amounts recognized for the right to reclaim cash collateral. At September 28, 2019 and December 29, 2018, the Company had recorded restricted cash in other current assets of \$2.2 million and \$3.6 million, respectively, as collateral related to open derivative contracts under the master netting arrangements.

Long-Term Debt

The fair value of long-term debt at September 28, 2019 approximates the carrying value on that date. The estimated fair values were determined based on quoted market prices and the current rates offered for debt with similar terms and maturities. The fair value of long-term debt is classified as level 2 within the fair value hierarchy. This classification is defined as a fair value determined using market-based inputs other than quoted prices that are observable for the liability, either directly or indirectly.

Note 8 – Leases

The Company leases certain manufacturing facilities, distribution centers, office space, and equipment. Leases with an initial term of twelve months or less are not recorded on the balance sheet; expense for these leases is recognized on a straight line-basis over the term of the lease. Most of the Company's leases include one or more options to renew up to five years and have remaining terms of one to fifteen years. These options are not included in the Company's valuation of the right-of-use assets as the Company is not reasonably certain to exercise the options.

The Company has certain vehicle leases that are financing; however, these leases are deemed immaterial for disclosure.

The following table includes supplemental information with regards to the Company's operating leases:

<i>(In thousands, except lease term and discount rate)</i>	September 28, 2019
Operating lease right-of-use assets	\$ 25,855
Current portion of operating lease liabilities	3,832
Noncurrent operating lease liabilities	22,712
Total operating lease liabilities	\$ 26,544
Weighted average discount rate	5.83 %
Weighted average remaining lease term (in years)	8.62

As of the adoption date of ASC 842, discount rates for existing leases were based on an estimate of the Company's incremental borrowing rate, adjusted for the term of the lease.

Some of the Company's leases include variable lease costs such as taxes, insurance, etc. These costs are immaterial for disclosure. The following table presents certain information related to operating lease costs and cash paid during the period.

<i>(In thousands)</i>	For the Quarter Ended September 28, 2019	For the Nine Months Ended September 28, 2019
Operating lease costs	\$ 1,930	\$ 5,134
Short term lease costs	777	3,782
Total lease costs	\$ 2,707	\$ 8,916
Cash paid for amounts included in the measurement of lease liabilities	\$ 1,862	\$ 4,980

Maturities of the Company's operating leases are as follows:

<i>(In thousands)</i>	<u>September 28, 2019</u>
2019	\$ 1,575
2020	6,061
2021	5,085
2022	4,373
2023	2,876
2024 and thereafter	<u>15,688</u>
Total lease payments	35,658
Less imputed interest	<u>(9,114)</u>
Total lease obligations	26,544
Less current obligations	<u>(3,832)</u>
Noncurrent lease obligations	\$ <u>22,712</u>

Note 9 – Investments in Unconsolidated Affiliates

Tecumseh

The Company owns a 50 percent interest in an unconsolidated affiliate that acquired Tecumseh Products Company LLC (Tecumseh). The Company also owns a 50 percent interest in a second unconsolidated affiliate that provides financing to Tecumseh. These investments are recorded using the equity method of accounting, as the Company can exercise significant influence but does not own a majority equity interest or otherwise control the respective entities. Under the equity method of accounting, these investments are stated at initial cost and are adjusted for subsequent additional investments and the Company's proportionate share of earnings or losses and distributions.

The Company records its proportionate share of the investees' net income or loss, net of foreign taxes, one quarter in arrears as income (loss) from unconsolidated affiliates, net of foreign tax, in the Condensed Consolidated Statements of Income and its proportionate share of the investees' other comprehensive income (loss), net of income taxes, in the Condensed Consolidated Statements of Comprehensive Income and the Condensed Consolidated Statements of Changes in Equity. The U.S. tax effect of the Company's proportionate share of Tecumseh's income or loss is recorded in income tax expense in the Condensed Consolidated Statements of Income. In general, the equity investment in unconsolidated affiliates is equal to the current equity investment plus the investees' net accumulated losses.

The following tables present summarized financial information derived from the Company's equity method investees' combined consolidated financial statements, which are prepared in accordance with U.S. GAAP.

<i>(In thousands)</i>	<u>September 28, 2019</u>	<u>December 29, 2018</u>
Current assets	\$ 222,036	\$ 228,214
Noncurrent assets	96,133	114,257
Current liabilities	171,642	175,371
Noncurrent liabilities	55,111	57,216

<i>(In thousands)</i>	For the Quarter Ended		For the Nine Months Ended	
	September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018
Net sales	\$ 129,589	\$ 131,827	\$ 362,978	\$ 382,132
Gross profit	17,006	18,140	40,339	41,989
Net loss	(3,952)	(5,007)	(43,671)	(22,867)

The Company's loss from unconsolidated affiliates, net of foreign tax, for the quarter and nine months ended September 28, 2019 included net losses of \$1.9 million and \$21.8 million, respectively, for Tecumseh.

The Company's loss from unconsolidated affiliates, net of foreign tax, for the quarter ended September 29, 2018 included net losses of \$2.5 million for Tecumseh.

The Company's loss from unconsolidated affiliates, net of foreign tax, for the nine months ended September 29, 2018 included net losses of \$15.4 million and charges of \$3.0 million related to certain labor claim contingencies, offset by a gain of \$7.0 million related to a settlement with the Brazilian Federal Revenue Agency for Tecumseh.

Mueller Middle East

On December 30, 2015, the Company entered into a joint venture agreement with Cayan Ventures and Bahrain Mumtalakat Holding Company to build a copper tube mill in Bahrain. The business operates and brands its products under the Mueller Industries family of brands. The Company has invested approximately \$5.0 million of cash to date and is the technical and marketing lead with a 40 percent ownership in the joint venture.

The Company's loss from unconsolidated affiliates, net of foreign tax, for the quarters ended September 28, 2019 and September 29, 2018 included net losses of \$0.5 million and \$0.5 million, respectively, for Mueller Middle East.

The Company's loss from unconsolidated affiliates, net of foreign tax, for the nine months ended September 28, 2019 and September 29, 2018 included net losses of \$1.9 million and \$2.1 million, respectively, for Mueller Middle East.

Note 10 – Benefit Plans

The Company sponsors several qualified and nonqualified pension plans and other postretirement benefit plans for certain of its employees. The components of net periodic benefit cost (income) are as follows:

<i>(In thousands)</i>	For the Quarter Ended		For the Nine Months Ended	
	September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018
Pension benefits:				
Service cost	\$ —	\$ 22	\$ —	\$ 66
Interest cost	1,455	1,478	4,365	4,436
Expected return on plan assets	(2,077)	(2,290)	(6,230)	(6,869)
Amortization of net loss	485	293	1,455	877
Net periodic benefit income	<u>\$ (137)</u>	<u>\$ (497)</u>	<u>\$ (410)</u>	<u>\$ (1,490)</u>
Other benefits:				
Service cost	\$ 64	\$ 59	\$ 191	\$ 175
Interest cost	153	147	459	441
Amortization of prior service credit	(226)	(226)	(677)	(677)
Amortization of net (gain) loss	(10)	14	(31)	43
Net periodic benefit income	<u>\$ (19)</u>	<u>\$ (6)</u>	<u>\$ (58)</u>	<u>\$ (18)</u>

The components of net periodic benefit cost (income) other than the service cost component are included in other (expense) income, net in the Condensed Consolidated Statements of Income.

Note 11 – Commitments and Contingencies

The Company is involved in certain litigation as a result of claims that arose in the ordinary course of business, which management believes will not have a material adverse effect on the Company's financial position, results of operations, or cash flows. The Company may also realize the benefit of certain legal claims and litigation in the future; these gain contingencies are not recognized in the Condensed Consolidated Financial Statements.

Environmental

Non-operating Properties

Southeast Kansas Sites

The Kansas Department of Health and Environment (KDHE) has contacted the Company regarding environmental contamination at three former smelter sites in Kansas (Altoona, East La Harpe, and Lanyon). The Company is not a successor to the companies that operated these smelter sites, but is exploring possible settlement with KDHE and other potentially responsible parties (PRP) in order to avoid litigation.

Altoona. Another PRP conducted a site investigation of the Altoona site under a consent decree with KDHE and submitted a removal site evaluation report recommending a remedy. The remedial design plan, which covers both on-site and certain off-site cleanup costs, was approved by the KDHE in 2016. Construction of the remedy was completed in 2018.

East La Harpe. At the East La Harpe site, the Company and two other PRPs conducted a site study evaluation under KDHE supervision and prepared a site cleanup plan approved by KDHE. In 2016, the corporate parent (Peabody Energy) of a third party that the Company understands may owe indemnification obligations to one of the other PRPs (Blue Tee) in connection with the East La Harpe site filed for protection under Chapter 11 of the U.S. Bankruptcy Code. KDHE has extended the deadline for the PRPs to develop a repository design plan to allow for wetlands permitting to take place. In December 2018, KDHE provided a

draft agreement which contemplates the use of funds KDHE obtained from two other parties (Peabody Energy and Blue Tee) to fund part of the remediation, and removes Blue Tee from the PRPs' agreement with KDHE. The Company is currently negotiating the terms of that draft agreement.

Lanyon. With respect to the Lanyon Site, in 2016, the Company received a general notice letter from the United States Environmental Protection Agency (EPA) asserting that the Company is a PRP, which the Company has denied. EPA issued an interim record of decision in 2017 and has been remediating properties at the site.

The Company's reserve for its proportionate share of the remediation costs associated with these three Southeast Kansas sites is \$5.6 million.

Shasta Area Mine Sites

Mining Remedial Recovery Company (MRRC), a wholly owned subsidiary, owns certain inactive mines in Shasta County, California. MRRC has continued a program, begun in the late 1980s, of implementing various remedial measures, including sealing mine portals with concrete plugs in portals that were discharging water. The sealing program achieved significant reductions in the metal load in discharges from these adits; however, additional reductions are required pursuant to an order issued by the California Regional Water Quality Control Board (QCB). In response to a 1996 QCB Order, MRRC completed a feasibility study in 1997 describing measures designed to mitigate the effects of acid rock drainage. In December 1998, the QCB modified the 1996 order extending MRRC's time to comply with water quality standards. In September 2002, the QCB adopted a new order requiring MRRC to adopt Best Management Practices (BMP) to control discharges of acid mine drainage, and again extended the time to comply with water quality standards until September 2007. During that time, implementation of BMP further reduced impacts of acid rock drainage; however, full compliance has not been achieved. The QCB is presently renewing MRRC's discharge permit and will concurrently issue a new order. It is expected that the new 10-year permit will include an order requiring continued implementation of BMP through 2029 to address residual discharges of acid rock drainage. The Company currently estimates that it will spend between approximately \$12.8 million and \$17.5 million for remediation at these sites over the next 30 years.

Lead Refinery Site

U.S.S. Lead Refinery, Inc. (Lead Refinery), a non-operating wholly owned subsidiary of MRRC, has conducted corrective action and interim remedial activities (collectively, Site Activities) at Lead Refinery's East Chicago, Indiana site pursuant to the Resource Conservation and Recovery Act since December 1996. Although the Site Activities have been substantially concluded, Lead Refinery is required to perform monitoring and maintenance-related activities pursuant to a post-closure permit issued by the Indiana Department of Environmental Management effective as of March 2, 2013. Approximate costs to comply with the post-closure permit, including associated general and administrative costs, are estimated at between \$1.7 million and \$2.1 million over the next 18 years.

On April 9, 2009, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the U.S. Environmental Protection Agency (EPA) added the Lead Refinery site and surrounding properties to the National Priorities List (NPL). On July 17, 2009, Lead Refinery received a written notice from the EPA indicating that it may be a PRP under CERCLA due to the release or threat of release of hazardous substances including lead into properties surrounding the Lead Refinery NPL site. The EPA identified two other PRPs in connection with that matter. In November 2012, the EPA adopted a remedy for the surrounding properties and in September 2014, the EPA announced that it had entered into a settlement with the two other PRPs whereby they will pay approximately \$26.0 million to fund the cleanup of approximately 300 properties surrounding the Lead Refinery NPL site (zones 1 and 3 of operable unit 1) and perform certain remedial action tasks.

On November 8, 2016, the Company, its subsidiary Arava Natural Resources Company, Inc. (Arava), and Arava's subsidiary MRRC each received general notice letters from the EPA asserting that they may be PRPs in connection with the Lead Refinery NPL site. The Company, Arava, and MRRC have denied liability for any remedial action and response costs associated with the Lead Refinery NPL site. In June 2017, the EPA requested that Lead Refinery conduct, and the Company fund, a remedial investigation and feasibility study of operable unit 2 of the Lead Refinery NPL site pursuant to a proposed administrative settlement agreement and order on consent. The Company and Lead Refinery entered into that agreement in September 2017. The Company has made a capital contribution to Lead Refinery to conduct the remedial investigation and feasibility study with respect to operable unit 2 and has provided financial assurance in the amount of \$1.0 million. The EPA has also asserted its position that Mueller is a responsible party for the Lead Refinery NPL site, and accordingly is responsible for a share of remedial action and response costs at the site and in the adjacent residential area.

In January 2018, the EPA issued two unilateral administrative orders (UAOs) directing the Company, Lead Refinery, and four other PRPs to conduct soil and interior remediation of certain residences at the Lead Refinery NPL site (zones 2 and 3 of operable

unit 1). The Company and Lead Refinery have reached agreement with the four other PRPs to implement these two UAOs, with the Company agreeing to pay, on an interim basis, (i) an estimated \$4.5 million (subject to potential change through a future reallocation process) of the approximately \$25.0 million the PRPs currently estimate it will cost to implement the UAOs, which estimate is subject to change, and (ii) \$2.0 million relating to past costs incurred by other PRPs for work conducted at the site, as well as the possibility of up to \$0.7 million in further payments for ongoing work by those PRPs, \$0.4 million of which has been incurred by those PRPs and paid for by the Company to date. As of September 28, 2019, the Company has made payments of approximately \$7.0 million related to the aforementioned agreement with the other PRPs. The Company disputes that it was properly named in the UAOs, and has reserved its rights to petition the EPA for reimbursement of any costs incurred to comply with the UAOs upon the completion of the work required therein. In October 2017, a group of private plaintiffs sued the Company, Arava, MRRC, and Lead Refinery, along with other defendants, in a private tort action relating to the site; the Company, Arava, and MRRC were voluntarily dismissed from that litigation without prejudice in March 2018. A second civil action asserting similar claims was filed against the Company, Arava, MRRC, and Lead Refinery in September 2018. At this juncture, the Company is unable to determine the likelihood of a material adverse outcome or the amount or range of a potential loss in excess of the current reserve with respect to any remedial action or litigation relating to the Lead Refinery NPL site, either at Lead Refinery's former operating site (operable unit 2) or the adjacent residential area (operable unit 1), including, but not limited to, EPA oversight costs for which EPA may attempt to seek reimbursement from the Company, and past costs for which other PRPs may attempt to seek contribution from the Company.

Bonita Peak Mining District

Following an August 2015 spill from the Gold King Mine into the Animas River near Silverton, Colorado, the EPA listed the Bonita Peak Mining District on the NPL. Said listing was finalized in September 2016. The Bonita Peak Mining District encompasses 48 mining sites within the Animas River watershed, including the Sunnyside Mine, the American Tunnel, and the Sunbank Group. On or about July 25, 2017, Washington Mining Company (Washington Mining) (a wholly-owned subsidiary of the Company's wholly-owned subsidiary, Arava), received a general notice letter from the EPA stating that Washington Mining may be a PRP under CERCLA in connection with the Bonita Peak Mining District site and therefore responsible for the remediation of certain portions of the site, along with related costs incurred by the EPA. Shortly thereafter, the Company received a substantively identical letter asserting that it may be a PRP at the site and similarly responsible for the cleanup of certain portions of the site. The general notice letters identify one other PRP at the site, and do not require specific action by Washington Mining or the Company at this time. At this juncture, the Company is unable to determine the likelihood of a materially adverse outcome or the amount or range of a potential loss with respect to any remedial action related to the Bonita Peak Mining District NPL site.

Operating Properties

Mueller Copper Tube Products, Inc.

In 1999, Mueller Copper Tube Products, Inc. (MCTP), a wholly owned subsidiary, commenced a cleanup and remediation of soil and groundwater at its Wynne, Arkansas plant to remove trichloroethylene, a cleaning solvent formerly used by MCTP. On August 30, 2000, MCTP received approval of its Final Comprehensive Investigation Report and Storm Water Drainage Investigation Report addressing the treatment of soils and groundwater from the Arkansas Department of Environmental Quality (ADEQ). The Company established a reserve for this project in connection with the acquisition of MCTP in 1998. Effective November 17, 2008, MCTP entered into a Settlement Agreement and Administrative Order by Consent to submit a Supplemental Investigation Work Plan (SIWP) and subsequent Final Remediation Work Plan (RWP) for the site. By letter dated January 20, 2010, ADEQ approved the SIWP as submitted, with changes acceptable to the Company. On December 16, 2011, MCTP entered into an amended Administrative Order by Consent to prepare and implement a revised RWP regarding final remediation for the Site. The remediation system was activated in February 2014. Costs to implement the work plans, including associated general and administrative costs, are estimated to approximate \$0.7 million to \$1.1 million over the next seven years.

United States Department of Commerce Antidumping Review

On December 24, 2008, the Department of Commerce (DOC) initiated an antidumping administrative review of the antidumping duty order covering circular welded non-alloy steel pipe and tube from Mexico for the November 1, 2007 through October 31, 2008 period of review. The DOC selected Mueller Comercial as a respondent in the review. On April 19, 2010, the DOC published the final results of the review and assigned Mueller Comercial an antidumping duty rate of 48.33 percent. On May 25, 2010, the Company appealed the final results to the U.S. Court of International Trade (CIT). On December 16, 2011, the CIT issued a decision remanding the Department's final results. While the matter was still pending, the Company and the United States reached an agreement to settle the appeal. Subject to the conditions of the agreement, the Company anticipated that certain of its subsidiaries would incur antidumping duties on subject imports made during the period of review and, as such, established a reserve for this matter. After the lapse of the statutory period of time during which U.S. Customs and Border Protection (CBP) was required, but

failed, to liquidate the entries at the settled rate, the Company released the reserve. Between October 30, 2015 and November 27, 2015, CBP sent a series of invoices to Southland Pipe Nipples Co., Inc. (Southland), requesting payment of approximately \$3.0 million in duties and interest in connection with 795 import entries made during the November 1, 2007 through October 31, 2008 period. On January 26, 2016 and January 27, 2016, Southland filed protests with CBP in connection with these invoices, noting that CBP's asserted claims were not made in accordance with applicable law, including statutory provisions governing deemed liquidation. The Company believes in the merits of the legal objections raised in Southland's protests, and CBP's response to Southland's protests is currently pending. Given the procedural posture and issues raised by this legal dispute, the Company cannot estimate the amount of potential duty liability, if any, that may result from CBP's asserted claims.

Equal Employment Opportunity Commission Matter

On October 5, 2016, the Company received a demand letter from the Los Angeles District Office of the United States Equal Employment Opportunity Commission (EEOC). The EEOC alleged that between May 2011 and April 2015, various Company employees were terminated in violation of the Americans with Disabilities Act (ADA), and that certain of the Company's employee leave and attendance policies were discriminatory in nature. Thereafter, the Company, in consultation with its liability insurers, entered into conciliation and mediation efforts with the EEOC for purposes of resolving the claims. At the conclusion of those efforts, the Company and the EEOC reached agreement on a consensual resolution of the EEOC's claims, which includes both monetary and equitable relief.

On June 28, 2018, the EEOC filed a complaint against the Company on behalf of a group of unidentified claimants in the United States District Court for the Central District of California alleging that the Company engaged in unlawful employment practices in violation of the ADA. On July 13, 2018, the District Court approved a Consent Decree between the Company and the EEOC to resolve the EEOC's claims. The Consent Decree, the term of which shall be two and a half years, provides that the Company shall pay up to \$1.0 million in monetary relief to fund individual claims for discrimination under the ADA as approved by the EEOC. That amount is fully within the limits of the Company's applicable insurance coverage. Pursuant to the Consent Decree, the Company shall also take a series of proactive measures to cultivate a work environment free from unlawful discrimination. Those measures include, among others, assistance with the identification of potential claimants, employee, supervisory and managerial training regarding employee rights under the ADA, revised practices and procedures concerning reasonable workplace accommodations as required by the ADA, and related reporting and recordkeeping.

Deepwater Horizon Economic and Property Damage Claim

In November 2018, an Appeal Panel of the Deepwater Horizon Economic and Property Damage Settlement Program approved an award to Mueller Copper Tube Company, Inc., a wholly owned subsidiary of the Company, of \$27.4 million. In January 2019, the United States District Court for the Eastern District of Louisiana denied discretionary review of the award, and an appeal of the award is currently pending before the United States Court of Appeals for the Fifth Circuit. The award, if upheld, is subject to the Company's payment of contingency-based legal and advisory fees of approximately 20 percent of the total award amount. Any recovery following the payment of such fees and any applicable taxes will be recognized as income when settled. There can be no assurance that the Company will receive such award, and it is possible such award will be materially reduced or reversed in its entirety upon appeal.

Guarantees

Guarantees, in the form of letters of credit, are issued by the Company generally to assure the payment of insurance deductibles, certain retiree health benefits, and debt at certain unconsolidated affiliates. The terms of the guarantees are generally one year but are renewable annually as required. These letters are primarily backed by the Company's revolving credit facility. The maximum payments that the Company could be required to make under its guarantees at September 28, 2019 were \$11.9 million.

Note 12 – Income Taxes

The Company's effective tax rate for the third quarter of 2019 was 19 percent compared with 12 percent for the same period last year. The items impacting the effective tax rate for the third quarter of 2019 were primarily attributable to benefits of \$1.0 million related to the one-time transition tax on the accumulated earnings of certain foreign subsidiaries and \$0.8 million related to other items. These were partially offset by the provision for state income taxes, net of the federal benefit, of \$1.0 million.

The Company's effective tax rate for the third quarter of 2018 was 12 percent. The items impacting the effective tax rate for the third quarter of 2018 were primarily attributable to a reduction of \$4.3 million, or seven cents per diluted share, related to the provisional transition tax calculation and the reduction for the impact of tax benefits from losses on investments in unconsolidated

affiliates of \$0.7 million. These were partially offset by the provision for state income taxes, net of the federal benefit, of \$0.7 million, an increase in valuation allowance of \$1.5 million, or three cents per diluted share, and \$0.5 million of other items.

The Company's effective tax rate for the first nine months of 2019 was 22 percent compared with 20 percent for the same period last year. The items impacting the effective tax rate for the first nine months of 2019 were primarily attributable to the provision for state income taxes, net of the federal benefit, of \$3.3 million, which was partially offset by the recognition of a \$1.6 million benefit related to an increased tax loss on the sale of a foreign subsidiary in a prior period, a reduction of \$0.6 million related to the one-time transition tax on the accumulated earnings of certain foreign subsidiaries, and \$0.3 million of other items.

The Company's effective tax rate for the first nine months of 2018 was 20 percent. The items impacting the effective tax rate for the first nine months of 2018 were primarily attributable to a reduction of \$4.3 million, or seven cents per diluted share, related to the provisional transition tax calculation and a reduction for the impact of tax benefits from losses on investments in unconsolidated affiliates of \$4.4 million. These were partially offset by the provision for state income taxes, net of the federal benefit, of \$3.3 million, an increase in valuation allowance of \$1.5 million, or three cents per diluted share, the effect of foreign tax rates lower than statutory tax rates of \$0.8 million, the inclusion for global intangible low-taxed income of \$0.8 million, and \$1.2 million of other items.

The Company files a consolidated U.S. federal income tax return and numerous consolidated and separate-company income tax returns in many state, local, and foreign jurisdictions. The statute of limitations is open for the Company's federal tax return and most state income tax returns for 2015 and all subsequent years and is open for certain state and foreign returns for earlier tax years due to ongoing audits and differing statute periods. The Internal Revenue Service is currently auditing the Company's 2015 and 2017 federal consolidated returns. While the Company believes that it is adequately reserved for possible future audit adjustments, the final resolution of these examinations cannot be determined with certainty and could result in final settlements that differ from current estimates.

Note 13 – Accumulated Other Comprehensive Income (Loss)

AOCI includes certain foreign currency translation adjustments from those subsidiaries not using the U.S. dollar as their functional currency, net deferred gains and losses on certain derivative instruments accounted for as cash flow hedges, adjustments to pension and OPEB liabilities, and other comprehensive income attributable to unconsolidated affiliates.

The following tables provide changes in AOCI by component, net of taxes and noncontrolling interests (amounts in parentheses indicate debits to AOCI):

<i>(In thousands)</i>	For the Nine Months Ended September 28, 2019				
	Cumulative Translation Adjustment	Unrealized (Loss) Gain on Derivatives	Pension/OPEB Liability Adjustment	Attributable to Unconsol. Affiliates	Total
Balance as of December 29, 2018	\$ (54,257)	\$ (214)	\$ (24,967)	\$ (354)	\$ (79,792)
Other comprehensive (loss) income before reclassifications	(2,199)	763	587	828	(21)
Amounts reclassified from AOCI	—	(630)	620	—	(10)
Net current-period other comprehensive (loss) income	(2,199)	133	1,207	828	(31)
Balance as of September 28, 2019	\$ (56,456)	\$ (81)	\$ (23,760)	\$ 474	\$ (79,823)

For the Nine Months Ended September 29, 2018

<i>(In thousands)</i>	Cumulative Translation Adjustment	Unrealized Gain (Loss) on Derivatives	Pension/OPEB Liability Adjustment	Attributable to Unconsol. Affiliates	Total
Balance as of December 30, 2017	\$ (38,163)	\$ 847	\$ (20,610)	\$ 6,870	\$ (51,056)
Other comprehensive (loss) income before reclassifications	(5,143)	(441)	551	(7,187)	(12,220)
Amounts reclassified from AOCI	—	(455)	218	—	(237)
Net current-period other comprehensive (loss) income	(5,143)	(896)	769	(7,187)	(12,457)
Reclassification of stranded effects of the Act	—	112	(1,018)	1,462	556
Balance as of September 29, 2018	<u>\$ (43,306)</u>	<u>\$ 63</u>	<u>\$ (20,859)</u>	<u>\$ 1,145</u>	<u>\$ (62,957)</u>

Reclassification adjustments out of AOCI were as follows:

<i>(In thousands)</i>	Amount reclassified from AOCI				Affected line item
	For the Quarter Ended		For the Nine Months Ended		
	September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018	
Unrealized gains on derivative commodity contracts	\$ (394)	\$ (204)	\$ (764)	\$ (550)	Cost of goods sold
	61	24	134	95	Income tax expense
	<u>\$ (333)</u>	<u>\$ (180)</u>	<u>\$ (630)</u>	<u>\$ (455)</u>	Net of tax and noncontrolling interests
Amortization of net loss and prior service cost on employee benefit plans	\$ 249	\$ 81	\$ 747	\$ 243	Other income, net
	(42)	(9)	(127)	(25)	Income tax benefit
	<u>\$ 207</u>	<u>\$ 72</u>	<u>\$ 620</u>	<u>\$ 218</u>	Net of tax and noncontrolling interests

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

General Overview

We are a leading manufacturer of copper, brass, aluminum, and plastic products. The range of products we manufacture is broad: copper tube and fittings; line sets; brass and copper alloy rod, bar, and shapes; aluminum and brass forgings; aluminum impact extrusions; PEX plastic tube and fittings; refrigeration valves and fittings; compressed gas valves; fabricated tubular products; pressure vessels; steel nipples; and insulated flexible duct systems. We also resell brass and plastic plumbing valves, plastic fittings, malleable iron fittings, faucets, and plumbing specialty products. Our operations are located throughout the United States and in Canada, Mexico, Great Britain, South Korea, the Middle East, and China.

Each of our reportable segments is composed of certain operating segments that are aggregated primarily by the nature of products offered as follows:

- **Piping Systems:** The Piping Systems segment is composed of Domestic Piping Systems Group, Great Lakes Copper, Heatlink Group, Die-Mold, European Operations, Trading Group, and Jungwoo-Mueller (our South Korean joint venture). The Domestic Piping Systems Group manufactures copper tube, fittings, and line sets. These products are manufactured in the U.S., sold in the U.S., and exported to markets worldwide. Great Lakes Copper manufactures copper tube and line sets in Canada and sells the products primarily in the U.S. and Canada. Heatlink Group manufactures a complete line of products for PEX plumbing and radiant systems in Canada and sells these products in Canada and the U.S. Die-Mold manufactures PEX and other plumbing-related fittings and plastic injection tooling in Canada and sells these products in Canada and the U.S. European Operations manufacture copper tube in the United Kingdom, which is sold throughout Europe. The Trading Group manufactures pipe nipples and sources products for import distribution in North America. Jungwoo-Mueller manufactures copper-based joining products that are sold worldwide. The Piping Systems segment sells products to wholesalers in the plumbing and refrigeration markets, distributors to the manufactured housing and recreational vehicle industries, building material retailers, and air-conditioning original equipment manufacturers (OEMs).
- **Industrial Metals:** The Industrial Metals segment is composed of Brass Rod & Copper Bar Products, Impacts & Micro Gauge, and Brass Value-Added Products. The segment manufactures and sells brass and copper alloy rod, bar, and shapes; aluminum and brass forgings; aluminum impact extrusions; and gas valves and assemblies. The segment manufactures and sells its products primarily to domestic OEMs in the industrial, transportation, construction, heating, ventilation, and air-conditioning, plumbing, refrigeration, and energy markets.
- **Climate:** The Climate segment is composed of Refrigeration Products, Fabricated Tube Products, Westermeyer, Turbotec, and ATCO. The segment manufactures and sells refrigeration valves and fittings, fabricated tubular products, high pressure components, coaxial heat exchangers, and insulated HVAC flexible duct systems. The segment sells its products primarily to the heating, ventilation, air-conditioning, and refrigeration markets in the U.S.

New housing starts and commercial construction are important determinants of our sales to the heating, ventilation, and air-conditioning, refrigeration, and plumbing markets because the principal end use of a significant portion of our products is in the construction of single and multi-family housing and commercial buildings. Repairs and remodeling projects are also important drivers of underlying demand for these products. In addition, our products are used in various transportation, automotive, and industrial applications.

Residential construction activity has shown improvement in recent years, but remains at levels below long-term historical averages. Per the U.S. Census Bureau, the September 2019 seasonally adjusted annual rate of new housing starts was 1.3 million, which was slightly higher than the September 2018 rate of 1.2 million. Mortgage rates remain at historically low levels, as the average 30-year fixed mortgage rate was 4.01 percent for the first nine months of 2019 and 4.54 percent for the twelve months ended December 2018. The private non-residential construction sector, which includes offices, industrial, health care, and retail projects, has shown improvement in recent years. Per the U.S. Census Bureau, the seasonally adjusted annual value of private nonresidential construction put in place was \$447.9 billion in August 2019 compared to the August 2018 rate of \$460.7 billion.

Profitability of certain of our product lines depends upon the “spreads” between the cost of raw material and the selling prices of our products. The open market prices for copper cathode and copper and brass scrap, for example, influence the selling price of copper tube and brass rod, two principal products manufactured by the Company. We attempt to minimize the effects on profitability from fluctuations in material costs by passing through these costs to our customers. Our earnings and cash flow are dependent upon these spreads that fluctuate based upon market conditions.

Earnings and profitability are also impacted by unit volumes that are subject to market trends, such as substitute products, imports, technologies, and market share. In core product lines, we intensively manage our pricing structure while attempting to maximize profitability. From time-to-time, this practice results in lost sales opportunities and lower volume. For plumbing systems, plastics are the primary substitute product; these products represent an increasing share of consumption. For certain air-conditioning and refrigeration applications, aluminum-based systems are the primary substitution threat. We cannot predict the acceptance or the rate of switching that may occur. U.S. consumption of copper tube and brass rod is still predominantly supplied by U.S. manufacturers. In recent years, brass rod consumption in the U.S. has declined due to the outsourcing of many manufactured products to offshore regions.

Results of Operations

Consolidated Results

The following table compares summary operating results for the first nine months of 2019 and 2018:

<i>(In thousands)</i>	For the Quarter Ended		Percent Change	For the Nine Months Ended		Percent Change
	September 28, 2019	September 29, 2018	2019 vs. 2018	September 28, 2019	September 29, 2018	2019 vs. 2018
Net sales	\$ 608,602	\$ 645,958	(5.8)%	\$ 1,886,777	\$ 1,948,791	(3.2)%
Operating income	46,252	33,671	37.4	146,954	133,007	10.5
Net income	29,093	20,292	43.4	72,802	77,602	(6.2)

The following are components of changes in net sales compared to the prior year:

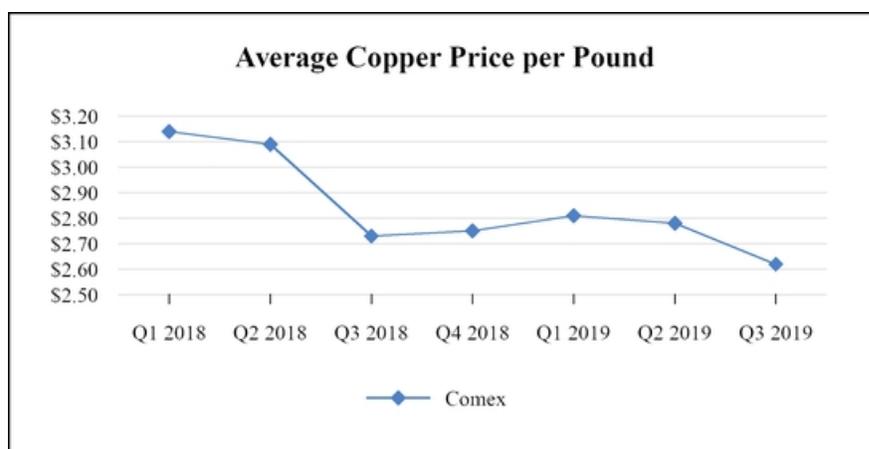
	Quarter-to-Date	Year-to-Date
Net selling price in core product lines	(2.3)%	(4.1)%
Unit sales volume in core product lines	(5.4)	(5.0)
Acquisitions	—	5.2
Other	1.9	0.7
	<u>(5.8)%</u>	<u>(3.2)%</u>

The decrease in net sales during the third quarter of 2019 was primarily due to (i) lower unit sales volume of \$34.6 million in our core product lines, primarily copper tube and brass rod, and (ii) lower net selling prices of \$14.9 million in our core product lines.

These decreases were offset by an increase in sales in our non-core product lines of \$12.2 million.

The decrease in net sales during the first nine months of 2019 was primarily due to (i) lower unit sales volume of \$96.6 million and (ii) lower net selling prices of \$80.1 million in our core product lines. These decreases were offset by (i) incremental sales of \$98.7 million recorded by ATCO, acquired in July 2018, and (ii) an increase in sales in our non-core product lines of \$15.9 million.

Net selling prices generally fluctuate with changes in raw material costs. Changes in raw material costs are generally passed through to customers by adjustments to selling prices. The following graph shows the Comex average copper price per pound by quarter for the current and prior fiscal years:



The following tables compare cost of goods sold and operating expenses as dollar amounts and as a percent of net sales for the first nine months of 2019 and 2018:

<i>(In thousands)</i>	For the Quarter Ended		For the Nine Months Ended	
	September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018
Cost of goods sold	\$ 510,788	\$ 566,956	\$ 1,586,129	\$ 1,676,446
Depreciation and amortization	10,823	10,619	31,856	29,081
Selling, general, and administrative expense	40,739	38,889	121,838	112,077
Gain on sale of assets	—	(2,691)	—	(334)
Insurance recovery	—	(1,486)	—	(1,486)
Operating expenses	\$ 562,350	\$ 612,287	\$ 1,739,823	\$ 1,815,784

	For the Quarter Ended		For the Nine Months Ended	
	September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018
Cost of goods sold	83.9%	87.8 %	84.1%	86.0 %
Depreciation and amortization	1.8	1.6	1.7	1.5
Selling, general, and administrative expense	6.7	6.0	6.4	5.8
Gain on sale of assets	—	(0.4)	—	—
Insurance recovery	—	(0.2)	—	(0.1)
Operating expenses	92.4%	94.8 %	92.2%	93.2 %

Q3 2019 compared to Q3 2018

Cost of goods sold decreased in the third quarter of 2019 primarily due to factors noted above regarding the change in net sales. Depreciation and amortization increased slightly in the third quarter of 2019 primarily as a result of depreciation and amortization of the long-lived assets of businesses acquired. Selling, general, and administrative expense increased in the third quarter of 2019 primarily as a result of (i) expense recognized for contingent consideration arrangements associated with businesses acquired of \$3.1 million and (ii) a reduction of \$1.5 million in fees received for services provided under certain third-party sales and distribution arrangements. These increases were offset by (i) a decrease in employment costs of \$1.5 million, (ii) a decrease in legal and professional fees of \$0.8 million, and (iii) a decrease in supplies and utilities of \$0.7 million. In addition, during the third quarter of 2018 we recognized a gain of \$2.7 million on the sale of real property and a gain of \$1.5 million for a payment receivable on the property damage portion of our insurance claim related to the September 2017 fire at our brass rod mill in Port Huron, Michigan.

Interest expense decreased for the third quarter of 2019 primarily as a result of decreased borrowing costs associated with our unsecured \$350.0 million revolving credit facility. Other income, net, for the third quarter of 2019 was consistent with the prior period.

Our effective tax rate for the third quarter of 2019 was 19 percent compared with 12 percent for the same period last year. The items impacting the effective tax rate for the third quarter of 2019 were primarily attributable to benefits of \$1.0 million related to the one-time transition tax on the accumulated earnings of certain foreign subsidiaries and \$0.8 million related to other items. These were partially offset by the provision for state income taxes, net of the federal benefit, of \$1.0 million.

For the third quarter of 2018, the difference between the effective tax rate and the amount computed using the U.S. federal statutory rate was primarily attributable to a reduction of \$4.3 million related to the provisional transition tax calculation and a reduction for the impact of tax benefits from losses on investments in unconsolidated affiliates of \$0.7 million. These were partially offset by the provision for state income taxes, net of the federal benefit, of \$0.7 million an increase in valuation allowance of \$1.5 million, and \$0.5 million of other items.

During the third quarter of 2019 and the third quarter of 2018, we recognized losses of \$2.5 million and \$3.1 million, respectively, on our investments in unconsolidated affiliates.

YTD 2019 compared to YTD 2018

Cost of goods sold decreased in the first nine months of 2019 primarily due to factors noted above regarding the change in net sales. Depreciation and amortization increased in the first nine months of 2019 as a result of depreciation and amortization of the long-lived assets of businesses acquired. Selling, general, and administrative expense increased for the first nine months of 2019 primarily as a result of (i) expense recognized for contingent consideration arrangements associated with businesses acquired of \$5.7 million, (ii) incremental expenses associated with ATCO and Die-Mold of \$4.1 million, (iii) an increase in employment costs, including employee healthcare, of \$2.3 million, (iv) a reduction of \$1.5 million in fees received for services provided under certain third-party sales and distribution arrangements, and (v) an increase in product liability expense of \$1.3 million. These increases were partially offset by (i) a decrease in legal and professional fees of \$2.0 million, and (ii) income of \$1.2 million recognized as a result of the reduction of a contingent consideration arrangement associated with a business acquired, (iii) higher foreign currency transaction gains of \$0.9 million, (iv), a decrease in supplies and utilities of \$0.6 million, and (v) an increase of \$0.3 million in fees received for services provided under certain equipment transfer and licensing agreements. In addition, during the first nine months of 2018, we recognized a gain of \$2.7 million on the sale of real property and a gain of \$0.7 million on the sale of manufacturing equipment, which were offset by a loss of \$3.1 million on the sale of a corporate aircraft. We also recognized a gain of \$1.5 million for a payment receivable on the property damage portion of our insurance claim related to the September 2017 fire at our brass rod mill in Port Huron, Michigan during the first nine months of 2018.

Interest expense increased in the first nine months of 2019 primarily as a result of increased borrowing costs associated with our unsecured \$350.0 million revolving credit facility. Other income, net, for the first nine months of 2019 decreased primarily as a result of lower net periodic benefit income for our benefit plans and higher environmental remediation costs.

Our effective tax rate for the first nine months of 2019 was 22 percent compared with 20 percent for the same period last year. The items impacting the effective tax rate for the first nine months of 2019 were primarily attributable to the provision for state income taxes, net of the federal benefit, of \$3.3 million, which was partially offset by the recognition of a \$1.6 million benefit related to an increased tax loss on the sale of a foreign subsidiary in a prior period, a reduction of \$0.6 million related to the one-time transition tax on the accumulated earnings of certain foreign subsidiaries, and \$0.3 million of other items.

For the first nine months of 2018, the difference between the effective tax rate and the amount computed using the U.S. federal statutory rate was primarily related to a reduction of \$4.3 million related to the provisional transition tax calculation and a reduction for the impact of tax benefits from losses on investments in unconsolidated affiliates of \$4.4 million. These were partially offset by the provision for state income taxes, net of the federal benefit, of \$3.3 million, an increase in valuation allowance of \$1.5 million, or three cents per diluted share, the effect of foreign tax rates lower than statutory tax rates of \$0.8 million, and the inclusion for global intangible low-taxed income of \$0.8 million, and \$1.2 million of other items.

During the first nine months of 2019, we recognized losses of \$23.7 million on our investments in unconsolidated affiliates. During the first nine months of 2018, we recognized losses of \$13.6 million on these investments.

Piping Systems Segment

The following table compares summary operating results for the first nine months of 2019 and 2018 for the businesses comprising our Piping Systems segment:

<i>(In thousands)</i>	For the Quarter Ended		Percent Change	For the Nine Months Ended		Percent Change
	September 28, 2019	September 29, 2018	2019 vs. 2018	September 28, 2019	September 29, 2018	2019 vs. 2018
Net sales	\$ 390,917	\$ 410,525	(4.8)%	\$ 1,193,274	\$ 1,294,672	(7.8)%
Operating income	36,010	25,408	41.7	100,155	100,376	(0.2)

The following are components of changes in net sales compared to the prior year:

	Quarter-to-Date	Year-to-Date
Net selling price in core product lines	(3.1)%	(4.6)%
Unit sales volume in core product lines	(3.5)	(3.5)
Acquisitions	—	0.3
Other	1.8	—
	<u>(4.8)%</u>	<u>(7.8)%</u>

The decrease in net sales during the third quarter of 2019 was primarily attributable to (i) lower unit sales volume of \$14.0 million in the segment's core product lines, primarily copper tube, and (ii) lower net selling prices in the segment's core product lines of \$12.6 million. These decreases were offset by an increase in sales in the segment's non-core product lines of \$10.9 million.

Net sales during the first nine months of 2019 decreased primarily as a result of (i) lower net selling prices in the segment's core product lines of \$58.9 million and (ii) lower unit sales volume of \$44.1 million in the segment's core product lines. These decreases were offset by an increase in sales in the segment's non-core product lines of \$20.7 million.

The following tables compare cost of goods sold and operating expenses as dollar amounts and as a percent of net sales for the first nine months of 2019 and 2018:

<i>(In thousands)</i>	For the Quarter Ended		For the Nine Months Ended	
	September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018
Cost of goods sold	\$ 330,418	\$ 363,174	\$ 1,019,546	\$ 1,120,890
Depreciation and amortization	5,751	5,946	16,953	17,568
Selling, general, and administrative expense	18,738	17,387	56,620	57,931
Gain on sale of assets	—	(1,390)	—	(2,093)
Operating expenses	<u>\$ 354,907</u>	<u>\$ 385,117</u>	<u>\$ 1,093,119</u>	<u>\$ 1,194,296</u>

	For the Quarter Ended		For the Nine Months Ended	
	September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018
Cost of goods sold	84.5%	88.5%	85.4%	86.6%
Depreciation and amortization	1.5	1.4	1.4	1.4
Selling, general, and administrative expense	4.8	4.2	4.8	4.4
Gain on sale of assets	—	(0.3)	—	(0.2)
Operating expenses	<u>90.8%</u>	<u>93.8%</u>	<u>91.6%</u>	<u>92.2%</u>

The decrease in cost of goods sold during the third quarter of 2019 was primarily due to the decrease in the average cost of copper, our principal raw material, and the decrease in sales volume in the segment's core product lines. Depreciation and amortization was consistent with the third quarter of 2018. Selling, general, and administrative expense increased for the third quarter of 2019 primarily as a result of (i) a reduction of \$1.5 million in fees received for services provided under certain third-party sales and distribution arrangements and (ii) lower foreign currency transaction gains of \$0.4 million. These increases were offset by (i) lower employment costs of \$0.3 million and (ii) a decrease in supplies and utilities of \$0.2 million. In addition, we recognized a gain of \$1.4 million on the sale of real property during the third quarter of 2018.

The decrease in cost of goods sold during the first nine months of 2019 was primarily due to the decrease in the average cost of copper and the decrease in sales volume in the segment's core product lines. Depreciation and amortization decreased as a result of several long-lived assets becoming fully depreciated, offset by depreciation and amortization of the long-lived assets acquired at Die-Mold. Selling, general, and administrative expenses decreased for the first nine months of 2019, primarily due to (i) income of \$1.2 million recognized as a result of the reduction of a contingent consideration arrangement associated with a business acquired, (ii) higher foreign currency transaction gains of \$0.9 million, (iii) a decrease in supplies and utilities of \$0.6 million, and (iv) lower employment costs of \$0.4 million. These decreases were partially offset by (i) a reduction of \$1.5 million in fees received for services provided under certain third-party sales and distribution arrangements and (ii) incremental expenses associated with Die-Mold of \$0.4 million. In addition, during the first nine months of 2018 we recognized a gain of \$1.4 million on the sale of real property and a gain of \$0.7 million on the sale of manufacturing equipment.

Industrial Metals Segment

The following table compares summary operating results for the first nine months of 2019 and 2018 for the businesses comprising our Industrial Metals segment:

<i>(In thousands)</i>	For the Quarter Ended		Percent Change 2019 vs. 2018	For the Nine Months Ended		Percent Change 2019 vs. 2018
	September 28, 2019	September 29, 2018		September 28, 2019	September 29, 2018	
Net sales	\$ 135,443	\$ 158,709	(14.7)%	\$ 434,037	\$ 511,932	(15.2)%
Operating income	12,599	15,111	(16.6)	46,697	53,837	(13.3)

The following are components of changes in net sales compared to the prior year:

	Quarter-to- Date	Year-to- Date
Net selling price in core product lines	(1.5)%	(4.2)%
Unit sales volume in core product lines	(13.2)	(10.4)
Other	—	(0.6)
	<u>(14.7)%</u>	<u>(15.2)%</u>

The decrease in net sales during the third quarter of 2019 was primarily due to (i) lower unit sales volume of \$20.6 million and (ii) lower net selling prices of \$2.3 million in the segment's core product lines, primarily brass rod.

The decrease in net sales during the first nine months of 2019 was primarily due to (i) lower unit sales volume of \$52.5 million in the segment's core product lines and (ii) lower net selling prices of \$21.1 million in the segment's core product lines.

The following tables compare cost of goods sold and operating expenses as dollar amounts and as a percent of net sales for the first nine months of 2019 and 2018:

<i>(In thousands)</i>	For the Quarter Ended		For the Nine Months Ended	
	September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018
Cost of goods sold	\$ 117,893	\$ 141,435	\$ 372,542	\$ 445,259
Depreciation and amortization	1,836	1,864	5,518	5,715
Selling, general, and administrative expense	3,115	3,086	9,280	9,908
Gain on sale of assets	—	(1,301)	—	(1,301)
Insurance recovery	—	(1,486)	—	(1,486)
Operating expenses	<u>\$ 122,844</u>	<u>\$ 143,598</u>	<u>\$ 387,340</u>	<u>\$ 458,095</u>

	For the Quarter Ended		For the Nine Months Ended	
	September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018
Cost of goods sold	87.0%	89.1 %	85.8%	87.0 %
Depreciation and amortization	1.4	1.2	1.3	1.1
Selling, general, and administrative expense	2.3	1.9	2.1	2.0
Gain on sale of assets	—	(0.8)	—	(0.3)
Insurance recovery	—	(0.9)	—	(0.3)
Operating expenses	90.7%	90.5 %	89.2%	89.5 %

The decrease in cost of goods sold during the third quarter of 2019 was primarily due to the decrease in sales volume and the decrease in the average cost of copper in the segment's core product lines. Depreciation and amortization and selling, general, and administrative expense were consistent with the third quarter of 2018. In addition, during the third quarter of 2018 we recognized a gain of \$1.3 million on the sale of real property and a gain of \$1.5 million for a payment receivable on the property damage portion of our insurance claim related to the September 2017 fire at our brass rod mill in Port Huron, Michigan.

The decrease in cost of goods sold during the first nine months of 2019 was primarily due to the decrease in sales volume and the decrease in the average cost of copper in the segment's core product lines. Depreciation and amortization for the first nine months of 2019 was consistent with what was recorded in the first nine months of 2018. Selling, general, and administrative expense decreased for the first nine months of 2019 primarily due to (i) lower professional fees of \$1.1 million, (ii) lower employment costs of \$0.4 million, and (iii) a decrease in supplies and utilities of \$0.2 million. These decreases were offset by an increase in distribution costs of \$1.2 million. In addition, during the first nine months of 2018 we recognized a gain of \$1.3 million on the sale of real property and a gain of \$1.5 million for a payment receivable on the property damage portion of our insurance claim related to the September 2017 fire at our brass rod mill in Port Huron, Michigan.

Climate Segment

The following table compares summary operating results for the first nine months of 2019 and 2018 for the businesses comprising our Climate segment:

<i>(In thousands)</i>	For the Quarter Ended		Percent Change 2019 vs. 2018	For the Nine Months Ended		Percent Change 2019 vs. 2018
	September 28, 2019	September 29, 2018		September 28, 2019	September 29, 2018	
Net sales	\$ 90,938	\$ 81,619	11.4%	\$ 276,853	\$ 156,854	76.5%
Operating income	7,963	5,774	37.9	33,384	16,668	100.3

Sales for the third quarter of 2019 increased primarily as a result of (i) an increase in volume and (ii) change in product mix.

Sales for the first nine months of 2019 increased primarily as a result of (i) incremental sales of \$98.7 million recorded by ATCO, (ii) an increase in volume, and (iii) change in product mix.

The following tables compare cost of goods sold and operating expenses as dollar amounts and as a percent of net sales for the first nine months of 2019 and 2018:

<i>(In thousands)</i>	For the Quarter Ended		For the Nine Months Ended	
	September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018
Cost of goods sold	\$ 70,523	\$ 66,832	\$ 212,201	\$ 124,806
Depreciation and amortization	2,491	2,123	6,932	3,371
Selling, general and administrative expense	9,961	6,890	24,336	12,009
Operating expenses	\$ 82,975	\$ 75,845	\$ 243,469	\$ 140,186

	For the Quarter Ended		For the Nine Months Ended	
	September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018
Cost of goods sold	77.6%	81.9%	76.6%	79.6%
Depreciation and amortization	2.7	2.6	2.5	2.1
Selling, general and administrative expense	10.9	8.4	8.8	7.7
Operating expenses	91.2%	92.9%	87.9%	89.4%

Cost of goods sold increased during the third quarter of 2019 primarily due to the increase in volume and change in product mix within the segment. Depreciation and amortization increased slightly during the third quarter of 2019 primarily as a result of depreciation and amortization of the long-lived assets acquired at ATCO. Selling, general, and administrative expenses for the third quarter of 2019 increased as a result of expense recognized for a contingent consideration arrangement associated with an acquired business of \$3.9 million. This increase was partially offset by (i) lower employment costs of \$0.6 million and (ii) a decrease in supplies and utilities of \$0.3 million.

Cost of goods sold increased during the first nine months of 2019 primarily due to the increase in volume and change in product mix within the segment primarily resulting from the ATCO acquisition. Depreciation and amortization increased in the first nine months of 2019 primarily as a result of depreciation and amortization of the long-lived assets acquired at ATCO. Selling, general, and administrative expenses for the first nine months of 2019 increased as a result of (i) incremental expenses of \$8.6 million associated with ATCO and (ii) expense recognized for a contingent consideration arrangement associated with an acquired business of \$5.7 million. These increases were offset by (i) lower employment costs of \$1.9 million and (ii) a decrease in supplies and utilities of \$0.3 million.

Liquidity and Capital Resources

The following table presents selected financial information for the first nine months of 2019 and 2018:

<i>(In thousands)</i>	2019	2018
Increase (decrease) in:		
Cash, cash equivalents, and restricted cash	\$ 25,365	\$ (17,514)
Property, plant, and equipment, net	(9,325)	56,334
Total debt	(55,229)	54,214
Working capital, net of cash and current debt	(13,313)	28,366
Net cash provided by operating activities	131,927	122,515
Net cash used in investing activities	(27,312)	(166,278)
Net cash (used in) provided by financing activities	(77,739)	26,691

Cash Flows from Operating Activities

During the nine months ended September 28, 2019, net cash provided by operating activities was primarily attributable to (i) consolidated net income of \$76.3 million, (ii) depreciation and amortization of \$32.1 million, (iii) losses from unconsolidated affiliates of \$23.7 million, and (iv) a decrease in inventories of \$51.0 million. These increases were partially offset by (i) an increase in accounts receivable of \$47.4 million, (ii) an increase in other assets of \$7.5 million, and (iii) a decrease in other liabilities of \$7.1 million. The fluctuations in accounts receivable and inventories were primarily due to increased sales volume in certain businesses and additional working capital needs during the first nine months of 2019.

During the nine months ended September 29, 2018, net cash provided by operating activities was primarily attributable to (i) consolidated net income of \$79.1 million, (ii) a decrease in inventories of \$48.7 million, (iii) depreciation and amortization of \$29.3 million, (iv) losses from unconsolidated affiliates of \$13.6 million, and (v) a decrease in other assets of \$11.3 million. This cash increase was offset by (i) an increase in accounts receivable of \$42.2 million, (ii) a decrease in other liabilities of \$13.9 million, and (iii) a decrease in current liabilities of \$7.9 million. The decrease in inventories was primarily driven by the use of excess inventory built at the end of 2017 due to a casting outage in our brass rod mill that impaired our ability to melt scrap returns. The fluctuations in accounts receivable and current liabilities were primarily due to increased selling prices and sales volume in certain businesses and additional working capital needs in the first nine months of 2018. The changes in other assets and liabilities are primarily attributable to the change in estimate of the one-time transition tax liability on accumulated foreign earnings under the Tax Cuts and Jobs Act.

Cash Flows from Investing Activities

The major components of net cash used in investing activities during the nine months ended September 28, 2019 included (i) capital expenditures of \$20.2 million and (ii) investments in our unconsolidated affiliates related to Tecumseh and Mueller Middle East of \$11.0 million. These uses of cash were offset by the \$3.5 million working capital settlement received from the previous owners for the ATCO acquisition. Subsequent to quarter-end, the Company made an additional investment in Tecumseh of \$5.0 million.

The major components of net cash used in investing activities during the nine months ended September 29, 2018 included (i) \$167.7 million for the purchases of ATCO and Die-Mold, net of cash acquired, and (ii) capital expenditures of \$16.7 million. These uses of cash were offset by proceeds on the sale of properties of \$18.7 million.

Cash Flows from Financing Activities

For the nine months ended September 28, 2019, net cash used in financing activities consisted primarily of (i) \$150.0 million used to reduce the debt outstanding under our Credit Agreement, (ii) \$16.7 million used for the payment of regular quarterly dividends to stockholders of the Company, (iii) \$4.4 million used for repayment of debt by Jungwoo-Mueller, (iv) \$3.2 million used for payment of contingent consideration related to ATCO, and (v) \$1.8 million used to repurchase common stock. These uses were offset by the issuance of debt under our Credit Agreement of \$100.0 million.

For the nine months ended September 29, 2018, net cash provided by financing activities consisted primarily of the issuance of debt under our Credit Agreement of \$190.0 million. This was offset by (i) \$135.0 million used to reduce the debt outstanding under our Credit Agreement, (ii) \$17.1 million used for the payment of regular quarterly dividends to stockholders of the Company, (iii) \$6.6 million used to repurchase common stock, and (iv) \$3.0 million used for repayment of debt by Jungwoo-Mueller.

Liquidity and Outlook

We believe that cash provided by operations, funds available under the Credit Agreement, and cash on hand will be adequate to meet our liquidity needs, including working capital, capital expenditures, and debt payment obligations. As of September 28, 2019 our current ratio was 3.0 to 1.

We have significant environmental remediation obligations which we expect to pay over future years. Cash used for environmental remediation activities was approximately \$3.9 million during the first nine months of 2019. We expect to spend approximately \$0.4 million for the remainder of 2019 for ongoing environmental remediation activities.

The Company declared and paid a quarterly cash dividend of 10.0 cents per common share during the first, second, and third quarters of 2019 and 2018. Payment of dividends in the future is dependent upon our financial condition, cash flows, capital requirements, earnings, and other factors.

Long-Term Debt

As of September 28, 2019, the Company's total debt was \$441.5 million or 41.4 percent of its total capitalization.

The Debentures distributed as part of our special dividend are subordinated to all other funded debt of the Company and are callable, in whole or in part, at any time at the option of the Company, subject to declining call premiums during the first five years. The Debentures also grant each holder the right to require the Company to repurchase such holder's Debentures in the event of a change in control at declining repurchase premiums during the first five years. Interest is payable semiannually on September 1 and March 1. Total Debentures outstanding as of September 28, 2019 were \$284.5 million.

The Company's Credit Agreement provides for an unsecured \$350.0 million revolving credit facility which matures on December 6, 2021. Total borrowings under the Credit Agreement were \$145.0 million as of September 28, 2019. The Credit Agreement backed approximately \$11.9 million in letters of credit at the end of the third quarter of 2019.

Covenants contained in the Company's financing obligations require, among other things, the maintenance of minimum levels of tangible net worth and the satisfaction of certain minimum financial ratios. As of September 28, 2019, the Company was in compliance with all of its debt covenants.

Share Repurchase Program

The Board of Directors has extended, until August 2020, the authorization to repurchase up to 20 million shares of the Company's common stock through open market transactions or through privately negotiated transactions. We may cancel, suspend, or extend the time period for the repurchase of shares at any time. Any repurchases will be funded primarily through existing cash and cash from operations. We may hold any shares repurchased in treasury or use a portion of the repurchased shares for our stock-based compensation plans, as well as for other corporate purposes. From its initial authorization in 1999 through September 28, 2019, the Company has repurchased approximately 6.2 million shares under this authorization.

Contractual Cash Obligations

There have been no significant changes in our contractual cash obligations reported at December 29, 2018.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

The Company is exposed to market risk from changes in raw material and energy costs, interest rates, and foreign currency exchange rates. To reduce such risks, we may periodically use financial instruments. Hedging transactions are authorized and executed pursuant to policies and procedures. Further, we do not buy or sell financial instruments for trading purposes.

Cost and Availability of Raw Materials and Energy

Raw materials, primarily copper and brass, represent the largest component of the Company's variable costs of production. The cost of these materials is subject to global market fluctuations caused by factors beyond our control. Significant increases in the cost of metal, to the extent not reflected in prices for our finished products, or the lack of availability could materially and adversely affect our business, results of operations, and financial condition.

The Company occasionally enters into future fixed-price arrangements with certain customers. We may utilize futures contracts to hedge risks associated with these forward fixed-price arrangements. We may also utilize futures contracts to manage price risk associated with inventory. Depending on the nature of the hedge, changes in the fair value of the futures contracts will either be offset against the change in fair value of the inventory through earnings or recognized as a component of accumulated other comprehensive income (AOCI) in equity and reflected in earnings upon the sale of inventory. Periodic value fluctuations of the contracts generally offset the value fluctuations of the underlying fixed-price transactions or inventory. At September 28, 2019, we held open futures contracts to purchase approximately \$7.9 million of copper over the next eight months related to fixed-price sales orders and to sell approximately \$0.2 million of copper over the next 10 months related to copper inventory.

We may enter into futures contracts or forward fixed-price arrangements with certain vendors to manage price risk associated with natural gas purchases. The effective portion of gains and losses with respect to these positions are deferred in equity as a component of AOCI and reflected in earnings upon consumption of natural gas. Periodic value fluctuations of the futures contracts generally offset the value fluctuations of the underlying natural gas prices. As of September 28, 2019, we held no open futures contracts to purchase natural gas.

Interest Rates

At September 28, 2019, we had variable-rate debt outstanding of \$149.2 million. At this borrowing level, a hypothetical 10 percent increase in interest rates would have had an insignificant unfavorable impact on our pretax earnings and cash flows. The primary interest rate exposure on variable-rate debt is based on LIBOR.

Foreign Currency Exchange Rates

Foreign currency exposures arising from transactions include firm commitments and anticipated transactions denominated in a currency other than an entity's functional currency. The Company and its subsidiaries generally enter into transactions denominated in their respective functional currencies. We may utilize certain futures or forward contracts with financial institutions to hedge foreign currency transactional exposures. Gains and losses with respect to these positions are deferred in equity as a component of AOCI and reflected in earnings upon collection of receivables or payment of commitments. At September 28, 2019, we had open forward contracts with a financial institution to sell approximately 2.8 million euros, 19.2 million Swedish kronor, and 5.3 million Norwegian kroner through January 2020.

The Company's primary foreign currency exposure arises from foreign-denominated revenues and profits and their translation into U.S. dollars. The primary currencies to which we are exposed include the Canadian dollar, the British pound sterling, the Mexican peso, and the South Korean won. The Company generally views its investments in foreign subsidiaries with a functional currency other than the U.S. dollar as long-term. As a result, we generally do not hedge these net investments.

Cautionary Statement Regarding Forward Looking Information

This Quarterly Report contains various forward-looking statements and includes assumptions concerning the Company's operations, future results, and prospects. These forward-looking statements are based on current expectations and are subject to risk and uncertainties, and may be influenced by factors that could cause actual outcomes and results to be materially different from those predicted. The forward-looking statements reflect knowledge and information available as of the date of preparation of the Quarterly Report, and the Company undertakes no obligation to update these forward-looking statements. We identify the forward-looking statements by using the words "anticipates," "believes," "expects," "intends" or similar expressions in such statements.

In connection with the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, the Company provides the following cautionary statement identifying important economic, political, and technological factors, among others, which could cause actual results or events to differ materially from those set forth in or implied by the forward-looking statements and related assumptions. In addition to those factors discussed under "Risk Factors" in the Annual Report on Form 10-K for the year ended December 29, 2018, such factors include: (i) the current and projected future business environment, including interest rates and capital and consumer spending; (ii) the domestic housing and commercial construction industry environment; (iii) availability and price fluctuations in commodities (including copper, natural gas, and other raw materials, including crude oil that indirectly affects plastic resins); (iv) competitive factors and competitor responses to the Company's initiatives; (v) stability of government laws and regulations, including taxes; (vi) availability of financing; and (vii) continuation of the environment to make acquisitions, domestic and foreign, including regulatory requirements and market values of candidates.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

The Company maintains disclosure controls and procedures designed to ensure information required to be disclosed in Company reports filed 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. Disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed in Company reports filed under the Exchange Act is accumulated and communicated to management, including the Company's Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

The Company's management, with the participation of the Company's Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the Company's disclosure controls and procedures pursuant to Rule 13a-15(e) of the Exchange Act as of September 28, 2019. Based on that evaluation, the Company's Chief Executive Officer and Chief Financial Officer have concluded that the Company's disclosure controls and procedures are effective as of September 28, 2019 to ensure that information required to be disclosed in Company reports filed under the Exchange Act is (i) recorded, processed, summarized and reported

within the time periods specified in the SEC rules and forms and (ii) accumulated and communicated to management, including the Company's principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There were no changes in the Company's internal control over financial reporting during the Company's fiscal quarter ending September 28, 2019, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

General

The Company is involved in certain litigation as a result of claims that arose in the ordinary course of business. Additionally, the Company may realize the benefit of certain legal claims and litigation in the future; these gain contingencies are not recognized in the Condensed Consolidated Financial Statements. For a description of material pending legal proceedings, see "[Note 11 - Commitments and Contingencies](#)" in the Notes to the Condensed Consolidated Financial Statements, which is incorporated herein by reference.

Item 1A. Risk Factors

The Company is exposed to risk as it operates its businesses. To provide a framework to understand the operating environment of the Company, we have provided a brief explanation of the more significant risks associated with our businesses in our 2018 Annual Report on Form 10-K. There have been no material changes in risk factors that were previously disclosed in our 2018 Annual Report on Form 10-K. Additionally, the operating results of the Company's unconsolidated affiliates may be adversely affected by unfavorable economic and market conditions.

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

Issuer Purchases of Equity Securities

The Company's Board of Directors has extended, until August 2020, the authorization to repurchase up to 20 million shares of the Company's common stock through open market transactions or through privately negotiated transactions. The Company may cancel, suspend, or extend the time period for the repurchase of shares at any time. Any repurchases will be funded primarily through existing cash and cash from operations. The Company may hold any shares repurchased in treasury or use a portion of the repurchased shares for its stock-based compensation plans, as well as for other corporate purposes. From its initial authorization in 1999 through September 28, 2019, the Company had repurchased approximately 6.2 million shares under this authorization. Below is a summary of the Company's stock repurchases for the period ended September 28, 2019.

	(a) Total Number of Shares Purchased ⁽¹⁾	(b) Average Price Paid per Share	(c) Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Number of Shares That May Yet Be Purchased Under the Plans or Programs ⁽²⁾
June 30, 2019 - July 27, 2019	13,407	\$ 29.30	—	13,822,579
July 28, 2019 - August 24, 2019	35,580	\$ 30.12	—	13,822,579
August 25, 2019 - September 28, 2019	12	\$ 25.00	12	13,822,567
Total	48,999		12	

⁽¹⁾ Includes shares tendered to the Company by holders of stock-based awards in payment of the purchase price and/or withholding taxes upon exercise and/or vesting. Also includes shares resulting from restricted stock forfeitures at the average cost of treasury stock.

⁽²⁾ Shares available to be purchased under the Company's 20 million share repurchase authorization until August 2020. The extension of the authorization was announced on October 23, 2019.

Item 6. Exhibits

31.1	<u>Certification of Chief Executive Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.</u>
31.2	<u>Certification of Chief Financial Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.</u>
32.1	<u>Certification of Chief Executive Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
32.2	<u>Certification of Chief Financial Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase
101.INS	Inline XBRL Instance Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase
101.PRE	Inline XBRL Presentation Linkbase Document
101.SCH	Inline XBRL Taxonomy Extension Schema
104	Cover Page Interactive Data File (embedded within the Inline XBRL document and included in exhibit 101)

Items 3, 4, and 5 are not applicable and have been omitted.

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.

MUELLER INDUSTRIES, INC.

/s/ Jeffrey A. Martin

Jeffrey A. Martin

Chief Financial Officer and Treasurer

(Principal Financial and Accounting Officer)

October 23, 2019

Date

/s/ Anthony J. Steinriede

Anthony J. Steinriede

Vice President – Corporate Controller

October 23, 2019

Date

CERTIFICATION

I, Gregory L. Christopher, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Mueller Industries, Inc.;
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 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 and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 23, 2019

/s/ Gregory L. Christopher
Gregory L. Christopher
Chief Executive Officer

CERTIFICATION

I, Jeffrey A. Martin, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Mueller Industries, Inc.;
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 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 and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 23, 2019

/s/ Jeffrey A. Martin
Jeffrey A. Martin
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 Mueller Industries, Inc. (the "Company") on Form 10-Q for the period ending September 28, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Gregory L. Christopher, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (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.

/s/ GREGORY L. CHRISTOPHER
Gregory L. Christopher
Chief Executive Officer
October 23, 2019

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 Mueller Industries, Inc. (the "Company") on Form 10-Q for the period ending September 28, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jeffrey A. Martin, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (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.

/s/ JEFFREY A. MARTIN

Jeffrey A. Martin
Chief Financial Officer
October 23, 2019