UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2019

OR

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

For the transition period from _________ to _________

Commission File Number 1-12981

AMETEK, Inc.
(Exact name of registrant as specified in its charter)

Delaware **(State or other jurisdiction of incorporation or organization)**	**14-1682544** **(I.R.S. Employer Identification No.)**
1100 Cassatt Road **Berwyn, Pennsylvania** **(Address of principal executive offices)**	**19312-1177** **(Zip Code)**

Registrant's telephone number, including area code: (610) 647-2121

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

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock	AME	New York Stock Exchange

The number of shares of the registrant's common stock outstanding as of the latest practicable date was: Common Stock, $0.01 Par Value, outstanding at July 25, 2019 was 228,345,814 shares.

Table of Contents

AMETEK, Inc.
Form 10-Q
Table of Contents

Table of Contents

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

AMETEK, Inc.
Consolidated Statement of Income
(In thousands, except per share amounts)
(Unaudited)

	Three Months Ended June 30, 2019	Three Months Ended June 30, 2018	Six Months Ended June 30, 2019	Six Months Ended June 30, 2018
Net sales	**$ 1,289,412**	$ 1,208,935	**$ 2,577,103**	$ 2,381,582
Cost of sales	**838,153**	791,248	**1,689,460**	1,568,048
Selling, general and administrative	**155,849**	147,601	**308,974**	285,280
Total operating expenses	**994,002**	938,849	**1,998,434**	1,853,328
Operating income	**295,410**	270,086	**578,669**	528,254
Interest expense	**(21,475)**	(20,784)	**(44,128)**	(42,470)
Other expense, net	**(3,336)**	(1,081)	**(7,004)**	(1,739)
Income before income taxes	**270,599**	248,221	**527,537**	484,045
Provision for income taxes	**55,096**	54,361	**107,766**	108,845
Net income	**$ 215,503**	$ 193,860	**$ 419,771**	$ 375,200
Basic earnings per share	**$ 0.95**	$ 0.84	**$ 1.85**	$ 1.62
Diluted earnings per share	**$ 0.94**	$ 0.83	**$ 1.83**	$ 1.61
Weighted average common shares outstanding:				
Basic shares	**227,577**	231,252	**227,219**	231,090
Diluted shares	**229,328**	233,297	**229,007**	233,131
Dividends declared and paid per share	**$ 0.14**	$ 0.14	**$ 0.28**	$ 0.28

See accompanying notes.

Table of Contents

AMETEK, Inc.
Consolidated Statement of Comprehensive Income
(In thousands)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Total comprehensive income	**$219,752**	$154,538	**$435,033**	$350,296

See accompanying notes.

Table of Contents

AMETEK, Inc.
Consolidated Balance Sheet
(In thousands)

	June 30, 2019 (Unaudited)	December 31, 2018
ASSETS		
Current assets:		
Cash and cash equivalents	**$ 567,912**	$ 353,975
Receivables, net	**757,522**	732,839
Inventories, net	**634,138**	624,744
Other current assets	**167,581**	124,586
Total current assets	**2,127,153**	1,836,144
Property, plant and equipment, net	**538,256**	554,130
Right of use assets, net	**182,902**	—
Goodwill	**3,613,182**	3,612,033
Other intangibles, net	**2,338,511**	2,403,771
Investments and other assets	**269,598**	256,210
Total assets	**$ 9,069,602**	$ 8,662,288
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Short-term borrowings and current portion of long-term debt, net	**$ 98,356**	$ 358,876
Accounts payable	**390,443**	399,571
Customer advanced payments	**140,635**	137,229
Income taxes payable	**33,029**	48,597
Accrued liabilities and other	**316,095**	314,431
Total current liabilities	**978,558**	1,258,704
Long-term debt, net	**2,368,690**	2,273,837
Deferred income taxes	**544,218**	528,336
Other long-term liabilities	**511,355**	359,489
Total liabilities	**4,402,821**	4,420,366
Stockholders' equity:		
Common stock	**2,654**	2,640
Capital in excess of par value	**759,775**	706,743
Retained earnings	**6,009,968**	5,653,811
Accumulated other comprehensive loss	**(535,826)**	(551,088)
Treasury stock	**(1,569,790)**	(1,570,184)
Total stockholders' equity	**4,666,781**	4,241,922
Total liabilities and stockholders' equity	**$ 9,069,602**	$ 8,662,288

See accompanying notes.

Table of Contents

AMETEK, Inc.
Consolidated Statement of Stockholders' Equity

(In thousands)
(Unaudited)

	Three months ended June 30,		Six months ended June 30,	
	2019	**2018**	**2019**	**2018**
Capital stock				
Preferred stock, $0.01 par value	**$ —**	$ —	**$ —**	$ —
Common stock, $0.01 par value				
Balance at the beginning of the period	**2,647**	2,634	**2,640**	2,631
Shares issued	**7**	3	**14**	6
Balance at the end of the period	**2,654**	2,637	**2,654**	2,637
Capital in excess of par value				
Balance at the beginning of the period	**738,173**	673,516	**706,743**	660,894
Issuance of common stock under employee stock plans	**13,277**	(37)	**37,586**	7,014
Share-based compensation costs	**8,325**	7,384	**15,446**	12,955
Balance at the end of the period	**759,775**	680,863	**759,775**	680,863
Retained earnings				
Balance at the beginning of the period	**5,826,313**	5,153,722	**5,653,811**	5,002,419
Net income	**215,503**	193,860	**419,771**	375,200
Cash dividends paid	**(31,849)**	(32,351)	**(63,615)**	(64,653)
Other	**1**	1	**1**	2,266
Balance at the end of the period	**6,009,968**	5,315,232	**6,009,968**	5,315,232
Accumulated other comprehensive (loss) income				
Foreign currency translation:				
Balance at the beginning of the period	**(294,082)**	(239,620)	**(302,138)**	(251,909)
Translation adjustments	**(2,789)**	(70,213)	**6,175**	(40,532)
Change in long-term intercompany notes	**3,396**	(14,706)	**(1,020)**	(9,302)
Net investment hedge instruments gain (loss), net of tax of ($220) and ($13,967) for the quarter ended June 30, 2019 and 2018 and ($1,350) and ($6,625) for the six months ended June 30, 2019 and 2018, respectively	**685**	43,364	**4,193**	20,568
Balance at the end of the period	**(292,790)**	(281,175)	**(292,790)**	(281,175)
Defined benefit pension plans:				
Balance at the beginning of the period	**(245,993)**	(175,138)	**(248,950)**	(177,371)
Amortization of net actuarial loss (gain) and other, net of tax of ($873) and ($719) for the quarter ended June 30, 2019 and 2018, and ($1,746) and ($1,438) for the six months ended June 30, 2019 and 2018, respectively	**2,957**	2,233	**5,914**	4,466
Balance at the end of the period	**(243,036)**	(172,905)	**(243,036)**	(172,905)
Unrealized holding gain (loss) on available-for-sale securities:				
Balance at the beginning of the period	**—**	—	**—**	104
Increase (decrease) during the year, net of tax	**—**	—	**—**	(104)
Balance at the end of the period	**—**	—	**—**	—
Accumulated other comprehensive loss at the end of the period	**(535,826)**	(454,080)	**(535,826)**	(454,080)
Treasury stock				
Balance at the beginning of the period	**(1,570,437)**	(1,210,717)	**(1,570,184)**	(1,209,135)
Issuance of common stock under employee stock plans	**6,832**	8,050	**6,716**	6,586
Purchase of treasury stock	**(6,185)**	(3,889)	**(6,322)**	(4,007)
Balance at the end of the period	**(1,569,790)**	(1,206,556)	**(1,569,790)**	(1,206,556)
Total stockholders' equity	**$ 4,666,781**	$ 4,338,096	**$ 4,666,781**	$ 4,338,096

See accompanying notes.

Table of Contents

AMETEK, Inc.
Condensed Consolidated Statement of Cash Flows
(In thousands)
(Unaudited)

	Six Months Ended June 30,	
	2019	**2018**
Cash provided by (used for):		
Operating activities:		
Net income	**$ 419,771**	$ 375,200
Adjustments to reconcile net income to total operating activities:		
Depreciation and amortization	**114,673**	97,777
Deferred income taxes	**7,347**	(5,734)
Share-based compensation expense	**15,446**	12,955

Gain on sale of facilities	**(735)**	—
Net change in assets and liabilities, net of acquisitions	**(110,690)**	(99,526)
Pension contributions	**(1,534)**	(1,404)
Other, net	**(1,700)**	1,274
Total operating activities	**442,578**	380,542
Investing activities:		
Additions to property, plant and equipment	**(43,278)**	(28,565)
Purchases of businesses, net of cash acquired	**—**	(374,644)
Other, net	**3,667**	1,481
Total investing activities	**(39,611)**	(401,728)
Financing activities:		
Net change in short-term borrowings	**(260,802)**	(44)
Proceeds from long-term borrowings	**100,000**	—
Repurchases of common stock	**(6,322)**	(4,007)
Cash dividends paid	**(63,615)**	(64,653)
Proceeds from stock option exercises	**45,830**	18,264
Other, net	**(6,613)**	(5,108)
Total financing activities	**(191,522)**	(55,548)
Effect of exchange rate changes on cash and cash equivalents	**2,492**	(11,873)
Increase (decrease) in cash and cash equivalents	**213,937**	(88,607)
Cash and cash equivalents:		
Beginning of period	**353,975**	646,300
End of period	**$ 567,912**	$ 557,693

See accompanying notes.

Table of Contents

AMETEK, Inc.
Notes to Consolidated Financial Statements
June 30, 2019
(Unaudited)

1. Basis of Presentation

The accompanying consolidated financial statements are unaudited. AMETEK, Inc. (the "Company") believes that all adjustments (which primarily consist of normal recurring accruals) necessary for a fair presentation of the consolidated financial position of the Company at June 30, 2019, the consolidated results of its operations for the three and six months ended June 30, 2019 and 2018 and its cash flows for the six months ended June 30, 2019 and 2018 have been included. Quarterly results of operations are not necessarily indicative of results for the full year. The accompanying consolidated financial statements should be read in conjunction with the audited consolidated financial statements and related notes presented in the Company's Annual Report on Form 10-K for the year ended December 31, 2018 as filed with the U.S. Securities and Exchange Commission.

As discussed below in Note 2, effective January 1, 2019, the Company adopted the requirements of Financial Accounting Standards Board ("FASB") Accounting Standards Update ("ASU") No. 2016-02 (Topic 842), *Leases* ("ASU 2016-02") using the effective date transition method. Amounts and disclosures set forth in this Form 10-Q reflect this change.

2. Recent Accounting Pronouncements

In February 2016, the FASB issued ASU No. 2016-02 Leases (ASC 842). In July 2018, the FASB issued ASU No. 2018-10, "Codification Improvements to Topic 842, Leases" (ASU 2018-10), which provides narrow amendments to clarify how to apply certain aspects of the new lease standard, and ASU No. 2018-11, "Leases (Topic 842) - Targeted Improvements" (ASU 2018-11), which addressed implementation issues related to the new lease standard. These and certain other lease-related ASUs have generally been codified in ASC 842. ASC 842 supersedes the lease accounting requirements in Accounting Standards Codification Topic 840, Leases (ASC 840). ASC 842 establishes a right-of-use model that requires a lessee to record a right-of-use ("ROU") asset and a lease liability on the balance sheet for all leases. Under ASC 842, leases are classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. The standard also requires disclosures to help investors and other financial statement users better understand the amount, timing and uncertainty of cash flows arising from leases. The Company adopted ASC 842 on January 1, 2019 using the effective date transition method. Prior period results continue to be presented under ASC 840 based on the accounting standards originally in effect for such periods.

The Company has elected certain practical expedients permitted under the transition guidance within ASC 842 to leases that commenced before January 1, 2019, including the package of practical expedients. The election of the package of practical expedients resulted in the Company not reassessing prior conclusions under ASC 840 related to lease identification, lease classification and initial direct costs for expired and existing leases prior to January 1, 2019. The Company did not elect the practical expedient to not record short-term leases on its consolidated balance sheet. The adoption of ASU 2016-02 did not have a significant impact on the Company's consolidated results of operations or cash flows. Upon adoption, the Company recognized a ROU asset and lease liability of $192.4 million and $198.6 million, respectively. See Note 8.

In February 2018, the FASB issued ASU No. 2018-02, *Income Statement – Reporting Comprehensive Income (Topic 220), Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income* ("ASU 2018-02"). ASU 2018-02 addresses a specific consequence of the Tax Act by allowing an election to reclassify from accumulated other comprehensive income (loss) to retained earnings for stranded tax effects resulting from the Tax Act's reduction of the U.S federal corporate income tax rate. ASU 2018-02 is effective for all entities for annual reporting periods beginning after December 15, 2018, with early adoption permitted, and is to be applied either in the period of adoption or retrospectively to each period in which the effect of the change in the U.S. federal income tax rate in the Tax Act is recognized. The Company adopted ASU 2018-02 on January 1, 2019, and upon adoption, the Company did not elect to reclassify the stranded income tax effects of the Tax Act from accumulated other comprehensive income to retained earnings.

In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement* ("ASU 2018-13"), which changes the fair value measurement disclosure requirements of ASC Topic 820, *Fair Value Measurement* ("ASC 820"), by eliminating, modifying and adding to those requirements. ASU 2018-13 also modifies the disclosure objective paragraphs of ASC 820 to

AMETEK, Inc.
Notes to Consolidated Financial Statements
June 30, 2019
(Unaudited)

eliminate (1) "at a minimum" from the phrase "an entity shall disclose at a minimum" and (2) other similar "open ended" disclosure requirements to promote the appropriate exercise of discretion by entities. ASU 2018-13 is effective for fiscal years beginning after December 15, 2019, including interim periods therein. Early adoption is permitted. The Company has not determined the impact ASU 2018-13 may have on the Company's consolidated financial statement disclosures.

In August 2018, the FASB issued ASU No. 2018-14, *Compensation – Retirement Benefits – Defined Benefit Plans – General* ("ASU 2018-14"), which changes the disclosure requirements of ASC Topic 715, *Compensation – Retirement Benefits*, by eliminating, modifying and adding to those requirements. ASU 2018-14 is effective for fiscal years beginning after December 15, 2020. Early adoption is permitted and the amendments in this ASU should be applied on a retrospective basis to all periods presented. The Company has not determined the impact ASU 2018-14 may have on the Company's consolidated financial statement disclosures.

In August 2018, the FASB issued ASU No. 2018-15, *Intangibles – Goodwill and Other – Internal-Use Software* ("ASU 2018-15"), that requires implementation costs incurred by customers in cloud computing arrangements to be deferred and recognized over the term of the arrangement, if those costs would be capitalized by the customer in a software licensing arrangement under the internal-use software guidance in ASC Topic 350, *Intangibles – Goodwill and Other*. ASU 2018-15 requires a customer to disclose the nature of its hosting arrangements that are service contracts and provide disclosures as if the deferred implementation costs were a separate, major depreciable asset class. ASU 2018-15 is effective for interim and annual periods beginning after December 15, 2019. Early adoption is permitted. The Company has not determined the impact ASU 2018-15 may have on the Company's consolidated results of operations, financial position, cash flows and financial statement disclosures.

3. Revenues

The Company adopted ASC 606 as of January 1, 2018 using the modified retrospective method. The cumulative adjustment made to the January 1, 2018 consolidated balance sheet for the adoption of ASC 606 was to increase Retained earnings by $4.2 million, increase Total assets by $7.9 million and increase Total liabilities by $3.7 million.

The outstanding contract asset and (liability) accounts were as follows:

	2019	2018
	(In thousands)	
Contract assets - January 1	$ 58,266	$ 32,658
Contract assets – June 30	**82,063**	41,722
Change in contract assets – increase	**23,797**	9,064
Contract liabilities – January 1	146,162	117,058
Contract liabilities – June 30	**151,447**	142,016
Change in contract liabilities – increase	**(5,285)**	(24,958)
Net change	**$ 18,512**	$ (15,894)

The net change was driven by higher contract assets and an increase in contract liabilities during the period. For the six months ended June 30, 2019 and 2018, the Company recognized revenue of $110.3 million and $89.1 million, respectively, that was previously included in the beginning balance of contract liabilities.

Contract assets are reported as a component of Other current assets in the consolidated balance sheet. At June 30, 2019 and December 31, 2018, $10.8 million and $8.9 million of Customer advanced payments (contract liabilities), respectively, were recorded in Other long-term liabilities in the consolidated balance sheets.

Applying the practical expedient available under ASC 606, the remaining performance obligations exceeding one year as of June 30, 2019 and December 31, 2018 were $164.4 million and $187.2 million, respectively. Remaining performance obligations represent the transaction price of firm, noncancelable orders, with expected delivery dates to customers greater than one year from the balance sheet date, for which the performance obligation is unsatisfied or partially unsatisfied. These performance obligations will be substantially satisfied within two to three years.

Geographic Areas

Information about the Company's operations in different geographic areas is shown below. Net sales were attributed to geographic areas based on the location of the customer.

	Three Months Ended June 30, 2019			Six Months Ended June 30, 2019		
	EIG	EMG	Total	EIG	EMG	Total
	(In thousands)					
United States	$425,543	$250,904	$ 676,447	$ 828,935	$511,658	$1,340,593
International (1):						
United Kingdom	12,920	32,450	45,370	28,347	66,338	94,685
European Union countries	100,835	103,362	204,198	203,620	209,781	413,401
Asia	185,287	48,577	233,863	379,134	95,688	474,821
Other foreign countries	95,662	33,872	129,534	187,122	66,480	253,603
Total international	394,704	218,261	612,965	798,223	438,287	1,236,510
Consolidated net sales	$820,247	$469,165	$1,289,412	$1,627,158	$949,945	$2,577,103

(1) Includes U.S. export sales of $322.1 million and $647.5 million for the three months ended and the six months ended, respectively.

Information about the Company's operations in different geographic areas is shown below. Net sales were attributed to geographic areas based on the location of the customer.

	Three Months Ended June 30, 2018			Six Months Ended June 30, 2018		
	EIG	EMG	Total	EIG	EMG	Total
	(In thousands)					
United States	$357,560	$241,935	$ 599,495	$ 686,636	$472,799	$1,159,435
International(1):						
United Kingdom	15,588	33,166	48,754	29,328	68,549	97,877
European Union countries	95,778	98,585	194,363	188,080	206,399	394,479
Asia	191,169	55,435	246,604	382,654	106,498	489,152
Other foreign countries	84,363	35,356	119,719	174,186	66,453	240,639
Total international	386,898	222,542	609,440	774,248	447,899	1,222,147
Consolidated net sales	$744,458	$464,477	$1,208,935	$1,460,884	$920,698	$2,381,582

(1) Includes U.S. export sales of $320.5 million and $635.6 million for the three months ended and the six months ended, respectively.

Table of Contents

Major Products and Services

The Company's major products and services in the reportable segments were as follows:

	Three Months Ended June 30, 2019			Six Months Ended June 30, 2019		
	EIG	EMG	Total	EIG	EMG	Total
	(In thousands)					
Process and analytical instrumentation	$583,938	$ —	$ 583,938	$1,161,278	$ —	$1,161,278
Aerospace and Power	236,309	120,392	356,701	465,880	239,270	705,150
Automation and engineered solutions	—	348,773	348,773	—	710,675	710,675
Consolidated net sales	$820,247	$469,165	$1,289,412	$1,627,158	$949,945	$2,577,103

	Three Months Ended June 30, 2018			Six Months Ended June 30, 2018		
	EIG	EMG	Total	EIG	EMG	Total
	(In thousands)					

Process and analytical instrumentation	$515,854	$ —	$ 515,854	$1,015,491	$ —	$1,015,491
Aerospace and Power	228,604	113,403	342,007	445,393	222,060	667,453
Automation and engineered solutions	—	351,074	351,074	—	698,638	698,638
Consolidated net sales	$744,458	$464,477	$1,208,935	$1,460,884	$920,698	$2,381,582

Timing of Revenue Recognition

The Company's timing of revenue recognition was as follows:

	Three Months Ended June 30, 2019			Six Months Ended June 30, 2019		
	EIG	EMG	Total	EIG	EMG	Total
	(In thousands)					
Products transferred at a point in time	$654,155	$434,175	$1,088,330	$1,331,988	$869,780	$2,201,768
Products and services transferred over time	166,092	34,990	201,082	295,170	80,165	375,335
Consolidated net sales	$820,247	$469,165	$1,289,412	$1,627,158	$949,945	$2,577,103

	Three Months Ended June 30, 2018			Six Months Ended June 30, 2018		
	EIG	EMG	Total	EIG	EMG	Total
	(In thousands)					
Products transferred at a point in time	$603,185	$437,630	$1,040,815	$1,228,607	$866,712	$2,095,319
Products and services transferred over time	141,273	26,847	168,120	232,277	53,986	286,263
Consolidated net sales	$744,458	$464,477	$1,208,935	$1,460,884	$920,698	$2,381,582

Product Warranties

The Company provides limited warranties in connection with the sale of its products. The warranty periods for products sold vary among the Company's operations, but the majority do not exceed one year. The Company calculates its warranty expense provision based on its historical warranty experience and adjustments are made periodically to reflect actual warranty expenses. Product warranty obligations are reported as a component of Accrued liabilities in the consolidated balance sheet.

Table of Contents

Changes in the accrued product warranty obligation were as follows:

	Six Months Ended June 30,	
	2019	2018
	(In thousands)	
Balance at the beginning of the period	$ 23,482	$ 22,872
Accruals for warranties issued during the period	8,196	5,904
Settlements made during the period	(9,275)	(7,068)
Warranty accruals related to acquired businesses and other during the period	(89)	796
Balance at the end of the period	$ 22,314	$ 22,504

4. Earnings Per Share

The calculation of basic earnings per share is based on the weighted average number of common shares considered outstanding during the periods. The calculation of diluted earnings per share reflects the effect of all potentially dilutive securities (principally outstanding stock options and restricted stock grants). Securities that are anti-dilutive have been excluded and are not significant. The number of weighted average shares used in the calculation of basic earnings per share and diluted earnings per share was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
	(In thousands)			
Weighted average shares:				
Basic shares	227,577	231,252	227,219	231,090
Equity-based compensation plans	1,751	2,045	1,788	2,041
Diluted shares	229,328	233,297	229,007	233,131

5. Fair Value Measurements

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date.

The Company utilizes a valuation hierarchy for disclosure of the inputs to the valuations used to measure fair value. This hierarchy prioritizes the inputs into three broad levels as follows. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities. Level 2 inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument. Level 3 inputs are unobservable inputs based on the Company's own assumptions used to measure assets and liabilities at fair value. A financial asset or liability's classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement.

Table of Contents

The following table provides the Company's assets that are measured at fair value on a recurring basis, consistent with the fair value hierarchy, at June 30, 2019 and December 31, 2018:

	June 30, 2019	December 31, 2018
	Fair Value	Fair Value
	(In thousands)	
Fixed-income investments	**$ 8,137**	$ 7,655

The fair value of fixed-income investments, which are valued as level 1 investments, was based on quoted market prices. The fixed-income investments are shown as a component of long-term assets on the consolidated balance sheet.

For the six months ended June 30, 2019 and 2018, gains and losses on the investments noted above were not significant. No transfers between level 1 and level 2 investments occurred during the six months ended June 30, 2019 and 2018.

Financial Instruments

Cash, cash equivalents and fixed-income investments are recorded at fair value at June 30, 2019 and December 31, 2018 in the accompanying consolidated balance sheet.

The following table provides the estimated fair values of the Company's financial instrument liabilities, for which fair value is measured for disclosure purposes only, compared to the recorded amounts at June 30, 2019 and December 31, 2018:

	June 30, 2019		December 31, 2018	
	Recorded Amount	Fair Value	Recorded Amount	Fair Value
	(In thousands)			
Long-term debt, net (including current portion)	**$(2,473,695)**	**$(2,611,123)**	$(2,378,809)	$(2,368,676)

The fair value of short-term borrowings, net approximates the carrying value. Short-term borrowings, net are valued as level 2 liabilities as they are corroborated by observable market data. The Company's long-term debt, net is all privately held with no public market for this debt, therefore, the fair value of long-term debt, net was computed based on comparable current market data for similar debt instruments and is considered to be a level 3 liability.

Foreign Currency

At June 30, 2019, the Company had no forward contracts outstanding. For the six months ended June 30, 2019, realized gains and losses on foreign currency forward contracts were not significant. The Company does not typically designate its foreign currency forward contracts as hedges.

6. Hedging Activities

The Company has designated certain foreign-currency-denominated long-term borrowings as hedges of the net investment in certain foreign operations. As of June 30, 2019, these net investment hedges included British-pound-and Euro-denominated long-term debt. These borrowings were designed to create net investment hedges in each of the designated foreign subsidiaries. The Company designated the British-pound- and Euro-denominated loans referred to above as hedging instruments to offset translation gains or losses on the net investment due to changes in the British pound and Euro exchange rates. These net investment hedges are evidenced by management's contemporaneous documentation supporting the hedge designation. Any gain or loss on the hedging instruments (the debt) following hedge designation is reported in accumulated other comprehensive income in the same manner as the translation adjustment on the hedged investment based on changes in the spot rate, which is used to measure hedge effectiveness.

Table of Contents

At June 30, 2019, the Company had $387.8 million of British-pound-denominated loans, which were designated as a hedge against the net investment in British pound functional currency foreign subsidiaries. At June 30, 2019, the Company had $654.5 million in Euro-denominated loans, which were designated as a hedge against the net investment in Euro functional currency foreign subsidiaries. As a result of the British-pound- and Euro-denominated loans being designated and 100% effective as net investment hedges, $5.5 million of pre-tax currency remeasurement gains have been included in the foreign currency translation component of other comprehensive income for the six months ended June 30, 2019.

7. Inventories, net

	June 30, 2019	December 31, 2018
	(In thousands)	
Finished goods and parts	**$109,626**	$ 107,289
Work in process	**118,327**	117,899
Raw materials and purchased parts	**406,185**	399,556
Total inventories, net	**$634,138**	$ 624,744

8. Leases

The Company determines if an arrangement is a lease at inception. This determination generally depends on whether the arrangement conveys to the Company the right to control the use of an explicitly or implicitly identified fixed asset for a period of time in exchange for consideration. Control of an underlying asset is conveyed to the Company if the Company obtains the rights to direct the use of and to obtain substantially all of the economic benefits from using the underlying asset. The Company has lease agreements which include lease and non-lease components, which the Company has elected to account for as a single lease component for all classes of underlying assets. Lease expense for variable lease components are recognized when the obligation is probable.

Operating leases are included in ROU assets, accrued liabilities and other, and other long-term liabilities on our consolidated balance sheets. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. Operating lease payments are recognized as lease expense on a straight-line basis over the lease term. The Company has no material finance leases. The Company primarily leases buildings (real estate) and automobiles which are classified as operating leases. ASC 842 requires a lessee to discount its unpaid lease payments using the interest rate implicit in the lease or, if that rate cannot be readily determined, its incremental borrowing rate. As an implicit interest rate is not readily determinable in our leases, we use our incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments.

The lease term for all of the Company's leases includes the non-cancellable period of the lease plus any additional periods covered by either a Company option to extend (or not to terminate) the lease that the Company is reasonably certain to exercise, or an option to extend (or not to terminate) the lease controlled by the lessor. Options for lease renewals have been excluded from the lease term (and lease liability) for the majority of the Company's leases as the reasonably certain threshold is not met. In a small number of the Company's leases, the options for renewals have been included in the lease term as the reasonably certain threshold is met due to the Company having significant economic incentive for extending the lease.

Lease payments included in the measurement of the lease liability are comprised of fixed payments, variable payments that depend on an index or rate and amounts probable to be payable under the exercise of the Company option to purchase the underlying asset if reasonably certain.

Variable lease payments not dependent on a rate or index associated with the Company's leases are recognized when the events, activities, or circumstances in the lease agreement on which those payments are assessed are probable. Variable lease payments are presented as operating expense in the Company's income statement in the same line item as expense arising from fixed lease payments.

Table of Contents

The Company has commitments under operating leases for certain facilities, vehicles and equipment used in its operations. Our leases have initial lease terms ranging from one month to 14 years. Certain lease agreements contain provisions for future rent increases.

The components of lease expense were as follows:

	Three Months Ended June 30, 2019	Six Months Ended June 30, 2019
	(In thousands)	(In thousands)
Operating lease cost	**$ 10,038**	**$ 18,709**
Variable lease cost	**899**	**2,530**
Total lease cost	**$ 10,937**	**$ 21,239**

Supplemental balance sheet information related to leases was as follows:

	June 30, 2019 (In thousands)
Right of use assets, net	$ 182,902
Lease liabilities included in Accrued liabilities and other	41,751
Lease liabilities included in Other long-term liabilities	147,344
Total lease liabilities	$ 189,095

Supplemental cash flow information and other information related to leases was as follows:

	Six Months Ended June 30, 2019 (In thousands)
Cash used in operations for operating leases	$ 10,937
Right-of-use assets obtained in exchange for new operating liabilities	$ 8,634
Weighted-average remaining lease terms - operating leases (years)	6.06
Weighted-average discount rate - operating leases	3.80%

Maturities of lease liabilities as of June 30, 2019 were as follows:

Lease Liability Maturity Analysis	Operating Leases (In thousands)
Remaining 2019	$ 24,825
2020	44,598
2021	37,063
2022	29,621
2023	23,893
Thereafter	52,579
Total lease payments	212,579
Less: imputed interest	23,484
	$ 189,095

The Company does not have any leases that have not yet commenced which are significant.

Table of Contents

9. Goodwill

The changes in the carrying amounts of goodwill by segment were as follows:

	EIG	EMG (In millions)	Total
Balance at December 31, 2018	$2,452.0	$1,160.0	$3,612.0
Goodwill acquired	—	—	—
Purchase price allocation adjustments and other	1.8	(0.3)	1.5
Foreign currency translation adjustments	1.3	(1.6)	(0.3)
Balance at June 30, 2019	$2,455.1	$1,158.1	$3,613.2

The Company is in the process of finalizing the measurement of certain tangible and intangible assets and liabilities for its fourth quarter of 2018 acquisitions of Forza, Telular and Spectro Scientific including inventory, property, plant and equipment, goodwill, trade names, customer relationships and purchased technology and the accounting for income taxes.

10. Income Taxes

At June 30, 2019, the Company had gross unrecognized tax benefits of $128.6 million, of which $79.2 million, if recognized, would impact the effective tax rate.

The following is a reconciliation of the liability for uncertain tax positions (in millions):

Balance at December 31, 2018	$ 119.3
Additions for tax positions	9.3
Reductions for tax positions	—
Balance at June 30, 2019	$ 128.6

The Company recognizes interest and penalties accrued related to uncertain tax positions in income tax expense. The amounts recognized in income tax expense for interest and penalties during the three and six months ended June 30, 2019 and 2018 were not significant.

The effective tax rate for the three months ended June 30, 2019 was 20.4%, compared with 21.9% for the three months ended June 30, 2018. The effective tax rate for the six months ended June 30, 2019 was 20.4%, compared with 22.5% for the six months ended June 30, 2018. Both comparative quarters effective tax rates include the impact of the 2017 U.S. Tax Cuts and Jobs Act (the "Act") including the reduction of the U.S. corporate income tax rate and the current impact of the global intangible low-taxed income ("GILTI") and the foreign-derived intangible income ("FDII") provisions. The lower rates for 2019 reflects higher year over year tax benefits related to share-based payment transactions as well as a partial release of a state related valuation allowance for carryforward interest deductions.

11. Debt

In December 2018, the Company completed a private placement agreement to sell $575 million and 75 million Euros in senior notes to a group of institutional investors (the "2018 Private Placement"). There were two funding dates under the 2018 Private Placement. The first funding occurred in December 2018 for $475 million and 75 million Euros ($85.1 million). The second funding occurred in January 2019 for $100 million. The 2018 Private Placement senior notes carry a weighted average interest rate of 3.93% and are subject to certain customary covenants, including financial covenants that, among other things, require the Company to maintain certain debt-to-EBITDA (earnings before interest, income taxes, depreciation and amortization) and interest coverage ratios. The proceeds from the 2018 Private Placement were used to pay down domestic borrowings under the Company's revolving credit facility.

12. Share-Based Compensation

Under the terms of the Company's stockholder-approved share-based plans, performance restricted stock units ("PRSUs"), incentive and non-qualified stock options and restricted stock have been, and may be, issued to the Company's officers, management-level employees and members of its Board of Directors. Stock options granted prior to 2018 generally vest at a rate of one-fourth on each of the first four anniversaries of the grant date and have a maximum contractual term of seven years. Beginning in 2018, stock options granted generally vest at a rate of one-third on each of the first three anniversaries of the grant date and have a maximum contractual term of ten years. Restricted stock granted to employees prior to 2018 generally vests four years after the grant date (cliff vesting) and is subject to accelerated vesting due to certain events, including doubling of the grant price of the Company's common stock as of the close of business during any five consecutive trading days. Beginning in 2018, restricted stock granted to employees generally vests one-third on each of the first three anniversaries of the grant date. Restricted stock granted to non-employee directors generally vests two years after the grant date (cliff vesting) and is subject to accelerated vesting due to certain events, including doubling of the grant price of the Company's common stock as of the close of business during any five consecutive trading days.

In March 2019, the Company granted PRSUs to officers and certain key management-level employees an aggregate target award of approximately 102,000 shares of its common stock. The PRSUs vest three years from the grant date based on continuous service, with the number of shares earned (0% to 200% of the target award) depending upon the extent to which the Company achieves certain financial and market performance targets measured over the period from January 1, 2019 through December 31, 2021. Half of the PRSUs were valued in a manner similar to restricted stock as the financial targets are based on the Company's operating results, which represents a performance condition. The grant date fair value of these PRSUs are recognized as compensation expense over the vesting period based on the number of awards probable to vest at each reporting date. The other half of the PRSUs were valued using a Monte Carlo model as the performance target is related to the Company's total shareholder return compared to a group of peer companies, which represents a market condition. The Company recognizes the grant date fair value of these awards as compensation expense ratably over the vesting period.

Total share-based compensation expense was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	**2018**	**2019**	**2018**
	(In thousands)			
Stock option expense	**$ 3,608**	$ 3,115	**$ 6,380**	$ 5,543
Restricted stock expense	**3,399**	3,772	**7,117**	6,848
PRSU expense	**1,318**	497	**1,949**	564
Total pre-tax expense	**$ 8,325**	$ 7,384	**$15,446**	$12,955

Pre-tax share-based compensation expense is included in the consolidated statement of income in either Cost of sales or Selling, general and administrative expenses, depending on where the recipient's cash compensation is reported.

The fair value of each stock option grant is estimated on the grant date using a Black-Scholes-Merton option pricing model. The following weighted average assumptions were used in the Black-Scholes-Merton model to estimate the fair values of stock options granted during the periods indicated:

	Six Months Ended June 30, 2019	Year Ended December 31, 2018
Expected volatility	**19.1%**	17.3%
Expected term (years)	**5.0**	5.0
Risk-free interest rate	**2.25%**	2.81%
Expected dividend yield	**0.66%**	0.76%
Black-Scholes-Merton fair value per stock option granted	**$ 16.85**	$ 14.12

Expected volatility is based on the historical volatility of the Company's stock over the stock options' expected term. The Company used historical exercise data to estimate the stock options' expected term, which represents the period of time that the stock options granted are expected to be outstanding. Management anticipates that the future stock option holding periods will be similar to the historical stock option holding periods. The risk-free interest rate for periods within the expected term of the stock option is based on the U.S. Treasury yield curve at the time of grant. The expected dividend yield is calculated by dividing the Company's annual dividend, based on the most recent quarterly dividend rate, by the Company's closing common stock price on the grant date. Compensation expense recognized for all share-based awards is net of estimated forfeitures. The Company's estimated forfeiture rates are based on its historical experience.

The following is a summary of the Company's stock option activity and related information:

	Shares (In thousands)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value (In millions)
Outstanding at December 31, 2018	5,629	$ 53.46		
Granted	**826**	**85.43**		
Exercised	**(1,100)**	**41.90**		
Forfeited	**(143)**	**64.77**		
Outstanding at June 30, 2019	**5,212**	**$ 60.65**	**5.2**	**$ 157.3**
Exercisable at June 30, 2019	**3,064**	**$ 53.08**	**3.5**	**$ 115.7**

The aggregate intrinsic value of stock options exercised during the six months ended June 30, 2019 was $46.1 million. The total fair value of stock options vested during the six months ended June 30, 2019 was $11.7 million. As of June 30, 2019, there was approximately $25.7 million of expected future pre-tax compensation expense related to the 2.1 million nonvested stock options outstanding, which is expected to be recognized over a weighted average period of approximately two years.

The fair value of restricted shares under the Company's restricted stock arrangement is determined by the product of the number of shares granted and the Company's closing common stock price on the grant date. Upon the grant of restricted stock, the fair value of the restricted shares (unearned compensation) at the grant date is charged as a reduction of capital in excess of par value in the Company's consolidated balance sheet and is amortized to expense on a straight-line basis over the vesting period, which is the same as the calculated derived service period as determined on the grant date.

Table of Contents

The following is a summary of the Company's nonvested restricted stock activity and related information:

	Shares (In thousands)	Weighted Average Grant Date Fair Value
Nonvested restricted stock outstanding at December 31, 2018	891	$ 58.98
Granted	**199**	**85.22**
Vested	**(268)**	**58.04**
Forfeited	**(57)**	**63.26**
Nonvested restricted stock outstanding at June 30, 2019	**765**	**$ 65.80**

The total fair value of restricted stock vested during the six months ended June 30, 2019 was $15.5 million. As of June 30, 2019, there was approximately $33.8 million of expected future pre-tax compensation expense related to the 0.8 million nonvested restricted shares outstanding, which is expected to be recognized over a weighted average period of approximately two years.

13. Retirement and Pension Plans

The components of net periodic pension benefit expense (income) were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
	(In thousands)			
Defined benefit plans:				
Service cost	**$ 1,702**	$ 1,793	**$ 3,415**	$ 3,607
Interest cost	**6,740**	6,421	**13,502**	12,903
Expected return on plan assets	**(13,085)**	(14,884)	**(26,211)**	(29,847)
Amortization of net actuarial loss and other	**4,649**	2,952	**7,936**	5,904
Pension expense (income)	**6**	(3,718)	**(1,358)**	(7,433)
Other plans:				
Defined contribution plans	**8,154**	6,944	**17,262**	15,343
Foreign plans and other	**1,543**	1,587	**3,105**	3,183
Total other plans	**9,697**	8,531	**20,367**	18,526
Total net pension expense	**$ 9,703**	$ 4,813	**$ 19,009**	$ 11,093

For the six months ended June 30, 2019 and 2018, contributions to the Company's defined benefit pension plans were $1.5 million and $1.4 million, respectively. The Company's current estimate of 2019 contributions to its worldwide defined benefit pension plans is in line with the range disclosed in the Company's Annual Report on Form 10-K for the year ended December 31, 2018.

Table of Contents

14. Contingencies

Asbestos Litigation

The Company (including its subsidiaries) has been named as a defendant in a number of asbestos-related lawsuits. Certain of these lawsuits relate to a business which was acquired by the Company and do not involve products which were manufactured or sold by the Company. In connection with these lawsuits, the seller of such business has agreed to indemnify the Company against these claims (the "Indemnified Claims"). The Indemnified Claims have been tendered to, and are being defended by, such seller. The seller has met its obligations, in all respects, and the Company does not have any reason to believe such party would fail to fulfill its obligations in the future. To date, no judgments have been rendered against the Company as a result of any asbestos-related lawsuit. The Company believes that it has good and valid defenses to each of these claims and intends to defend them vigorously.

Environmental Matters

Certain historic processes in the manufacture of products have resulted in environmentally hazardous waste by-products as defined by federal and state laws and regulations. At June 30, 2019, the Company is named a Potentially Responsible Party ("PRP") at 13 non-AMETEK-owned former waste disposal or treatment sites (the "non-owned" sites). The Company is identified as a "de minimis" party in 12 of these sites based on the low volume of waste attributed to the Company relative to the amounts attributed to other named PRPs. In eight of these sites, the Company has reached a tentative agreement on the cost of the de minimis settlement to satisfy its obligation and is awaiting executed agreements. The tentatively agreed-to settlement amounts are fully reserved. In the other four sites, the Company is continuing to investigate the accuracy of the alleged volume attributed to the Company as estimated by the parties primarily responsible for remedial activity at the sites to establish an appropriate settlement amount. At the remaining site where the Company is a non-de minimis PRP, the Company is participating in the investigation and/or related required remediation as part of a PRP Group and reserves have been established sufficient to satisfy the Company's expected obligations. The Company historically has resolved these issues within established reserve levels and reasonably expects this result will continue. In addition to these non-owned sites, the Company has an ongoing practice of providing reserves for probable remediation activities at certain of its current or previously owned manufacturing locations (the "owned" sites). For claims and proceedings against the Company with respect to other environmental matters, reserves are established once the Company has determined that a loss is probable and estimable. This estimate is refined as the Company moves through the various stages of investigation, risk assessment, feasibility study and corrective action processes. In certain instances, the Company has developed a range of estimates for such costs and has recorded a liability based on the best estimate. It is reasonably possible that the actual cost of remediation of the individual sites could vary from the current estimates and the amounts accrued in the consolidated financial statements; however, the amounts of such variances are not expected to result in a material change to the consolidated financial statements. In estimating the Company's liability for remediation, the Company also considers the likely proportionate share of the anticipated remediation expense and the ability of the other PRPs to fulfill their obligations.

Total environmental reserves at June 30, 2019 and December 31, 2018 were $28.1 million and $27.8 million, respectively, for both non-owned and owned sites. For the six months ended June 30, 2019, the Company recorded $3.3 million in reserves. Additionally, the Company spent $3.0 million on environmental matters for the six months ended June 30, 2019. The Company's reserves for environmental liabilities at June 30, 2019 and December 31, 2018 included reserves of $9.3 million and $9.6 million, respectively, for an owned site acquired in connection with the 2005 acquisition of HCC Industries ("HCC"). The Company is the designated performing party for the performance of remedial activities for one of several operating units making up a Superfund site in the San Gabriel Valley of California. The Company has obtained indemnifications and other financial assurances from the former owners of HCC related to the costs of the required remedial activities. At June 30, 2019, the Company had $12.4 million in receivables related to HCC for probable recoveries from third-party escrow funds and other committed third-party funds to support the required remediation. Also, the Company is indemnified by HCC's former owners for approximately $19 million of additional costs.

Table of Contents

The Company has agreements with other former owners of certain of its acquired businesses, as well as new owners of previously owned businesses. Under certain of the agreements, the former or new owners retained, or assumed and agreed to indemnify the Company against, certain environmental and other liabilities under certain circumstances. The Company and some of these other parties also carry insurance coverage for some environmental matters. To date, these parties have met their obligations in all material respects.

The Company believes it has established reserves for the environmental matters described above, which are sufficient to perform all known responsibilities under existing claims and consent orders. The Company has no reason to believe that other third parties would fail to perform their obligations in the future. In the opinion of management, based on presently available information and the Company's historical experience related to such matters, an adequate provision for probable costs has been made and the ultimate cost resulting from these actions is not expected to materially affect the consolidated results of operations, financial position or cash flows of the Company.

The Company has been remediating groundwater contamination for several contaminants, including trichloroethylene ("TCE"), at a formerly owned site in El Cajon, California. Several lawsuits have been filed against the Company alleging damages resulting from the groundwater contamination, including property damages and personal injury, and seeking compensatory and punitive damages. The Company believes that it has good and valid defenses to each of these claims and intends to defend them vigorously. The Company believes it has established reserves for these lawsuits that are sufficient to satisfy its expected exposure. The Company does not expect the outcome of these matters, either individually or in the aggregate, to materially affect the consolidated results of operations, financial position or cash flows of the Company.

Table of Contents

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

Results of Operations

The following table sets forth net sales and income by reportable segment and on a consolidated basis:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	**2018**	**2019**	**2018**
	(In thousands)			
Net sales:				
Electronic Instruments	**$ 820,247**	$ 744,458	**$1,627,158**	$1,460,884
Electromechanical	**469,165**	464,477	**949,945**	920,698
Consolidated net sales	**$1,289,412**	$1,208,935	**$2,577,103**	$2,381,582
Operating income and income before income taxes:				
Segment operating income:				
Electronic Instruments	**$ 212,913**	$ 193,831	**$ 415,997**	$ 377,190
Electromechanical	**101,065**	94,250	**199,878**	185,252
Total segment operating income	**313,978**	288,081	**615,875**	562,442
Corporate administrative expenses	**(18,568)**	(17,995)	**(37,206)**	(34,188)
Consolidated operating income	**295,410**	270,086	**578,669**	528,254
Interest expense	**(21,475)**	(20,784)	**(44,128)**	(42,470)
Other expense, net	**(3,337)**	(1,081)	**(7,004)**	(1,739)
Consolidated income before income taxes	**$ 270,599**	$ 248,221	**$ 527,537**	$ 484,045

For the quarter ended June 30, 2019, the Company posted record sales and operating income, as well as strong orders, backlog, operating income margins, net income, diluted earnings per share and operating cash flow. The Company achieved these results from organic sales growth in both EIG and EMG, contributions from the 2018 acquisitions of Spectro Scientific Corporation in November 2018, Forza Silicon Corporation ("Forza) and Telular Corporation in October 2018 and Motec in June 2018, as well as our Operational Excellence initiatives.

For 2019, the Company's strong backlog, the full year impact of the 2018 acquisitions and continued focus on and implementation of Operational Excellence initiatives are expected to have a positive impact on the remainder of the Company's 2019 results.

Results of operations for the second quarter of 2019 compared with the second quarter of 2018

Net sales for the second quarter of 2019 were $1,289.4 million, an increase of $80.5 million or 6.7%, compared with net sales of $1,208.9 million for the second quarter of 2018. The increase in net sales for the second quarter of 2019 was due to 3% organic sales growth, a 5% increase from acquisitions and an unfavorable 1% effect of foreign currency translation.

Total international sales for the second quarter of 2019 were $613.0 million or 47.5% of net sales, an increase of $3.6 million or .6%, compared with international sales of $609.4 million or 50.4% of net sales for the second quarter of 2018. The $3.6 million increase in international sales was primarily driven from recent acquisitions. Both reportable segments of the Company maintain strong international sales presences in Europe and Asia.

Orders for the second quarter of 2019 were $1,278.1 million, an increase of $47.3 million or 3.8%, compared with $1,230.8 million for the second quarter of 2018. The increase in orders for the second quarter of 2019 was due to 3% increase from acquisitions and a favorable 1% effect of foreign currency translation.

Segment operating income for the second quarter of 2019 was $314.0 million, an increase of $25.9 million or 9.0%, compared with segment operating income of $288.1 million for the second quarter of 2018. Segment operating income, as a percentage of net sales, increased to 24.4% for the second quarter of 2019, compared with 23.8% for the second quarter of 2018. The increase in segment operating income and segment operating margins for the second quarter of 2019 resulted primarily from the increase in net sales noted above, as well as the benefits of the Company's Operational Excellence initiatives.

Cost of sales for the second quarter of 2019 was $838.2 million or 65.0% of net sales, an increase of $47.0 million or 5.9%, compared with $791.2 million or 65.4% of net sales for the second quarter of 2018. Cost of sales increased primarily due to the increase in net sales noted above.

Selling, general and administrative expenses for the second quarter of 2019 were $155.8 million or 12.1% of net sales, an increase of $8.2 million or 5.6%, compared with $147.6 million or 12.2% of net sales for the second quarter of 2018. Selling, general and administrative expenses increased primarily due to the increase in net sales noted above.

Consolidated operating income was $295.4 million or 22.9% of net sales for the second quarter of 2019, an increase of $25.3 million or 9.4%, compared with $270.1 million or 22.3% of net sales for the second quarter of 2018.

Interest expense was $21.5 million for the second quarter of 2019, an increase of $0.7 million or 3.4%, compared with $20.8 million for the second quarter of 2018. The change in interest expense is largely driven by the 2018 private placement senior notes issued in December 2018 ($475 million and 75 million Euros) and January 2019 ($100 million), partially offset by a decrease related to the repayment in full, at maturity, of $80 million in aggregate principal amount of 6.35% private placement senior notes and $160 million in aggregate principal amount of 7.08% private placement senior notes in the third quarter of 2018, and $65 million in aggregate principal amount of 7.18% private placement senior notes in the fourth quarter of 2018.

The effective tax rate for the second quarter of 2019 was 20.4%, compared with 21.9% for the second quarter of 2018. The lower rate for 2019 mainly reflects higher year over year tax benefits related to share-based payment transactions as well as a partial release of a state related valuation allowance. See Note 10 to the Consolidated Financial Statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Net income for the second quarter of 2019 was $215.5 million, an increase of $21.6 million or 11.1%, compared with $193.9 million for the second quarter of 2018.

Diluted earnings per share for the second quarter of 2019 were $0.94, an increase of $0.11 or 13.3%, compared with $0.83 per diluted share for the second quarter of 2018.

Segment Results

EIG's net sales totaled $820.2 million for the second quarter of 2019, an increase of $75.7 million or 10.2%, compared with $744.5 million for the second quarter of 2018. The net sales increase was due to an 8% increase from acquisitions and 3% organic sales growth, partially offset by an unfavorable 1% effect of foreign currency translation.

EIG's operating income was $212.9 million for the second quarter of 2019, an increase of $19.1 million or 9.9%, compared with $193.8 million for the second quarter of 2018. The increase in EIG's operating income for the second quarter of 2019 was primarily due to the increase in net sales noted above. EIG's operating margins were 26.0% of net sales for the second quarter of 2019, flat with the second quarter of 2018. EIG's operating margins for the second quarter of 2019 were flat primarily from the impact of lower margins on recent acquisitions, which had a 0.9% negative impact, offset by the benefits of the Group's Operational Excellence initiatives.

EMG's net sales totaled $469.2 million for the second quarter of 2019, an increase of $4.7 million or 1.0%, compared with $464.5 million for the second quarter of 2018. The net sales increase was due to 3% organic sales growth, partially offset by an unfavorable 2% effect of foreign currency translation.

EMG's operating income was a record at $101.1 million for the second quarter of 2019, an increase of $6.8 million or 7.2%, compared with $94.3 million for the second quarter of 2018. EMG's operating margins were 21.5% of net sales for the second quarter of 2019, compared with 20.3% for the second quarter of 2018. The increase in EMG's operating income and operating margins for the first quarter of 2019 were primarily due to the increase in net sales noted above, as well as the benefits of the Group's Operational Excellence initiatives.

Results of operations for the first six months of 2019 compared with the first six months of 2018

Net sales for the first six months of 2019 were $2,577.1 million, an increase of $195.5 million or 8.2%, compared with net sales of $2,381.6 million for the first six months of 2018. The increase in net sales for the first six months of 2019 was due to 4% organic sales growth and a 6% increase from acquisitions and an unfavorable 2% effect of foreign currency translation.

Total international sales for the first six months of 2019 were $1,236.5 million or 48.0% of net sales, an increase of $14.4 million or 1.2%, compared with international sales of $1,222.1 million or 51.3% of net sales for the first six months of 2018. The increase in international sales was primarily driven from recent acquisitions. Both reportable segments of the Company maintain strong international sales presences in Europe and Asia.

Orders for the first six months of 2019 were $2,656.3 million, an increase of $80.6 million or 3.1%, compared with $2,575.7 million for the first six months of 2018. The increase in orders for the first six months of 2019 was due to 2% organic order growth and a 2% increase from acquisitions, partially offset by an unfavorable 1% effect of foreign currency translation. As a result, the Company's backlog of unfilled orders at June 30, 2019 was $1,681.2 million, an increase of $79.1 million or 4.9%, compared with $1,602.1 million at December 31, 2018.

Segment operating income for the first six months of 2019 was $615.9 million, an increase of $53.5 million or 9.5%, compared with segment operating income of $562.4 million for the first six months of 2018. Segment operating income, as a percentage of net sales, increased to 23.9% for the first six months of 2019, compared with 23.6% for the first six months of 2018. The increase in segment operating income and segment operating margins for the first six months of 2019 resulted primarily from the increase in net sales noted above, as well as the benefits of the Company's Operational Excellence initiatives.

Cost of sales for the first six months of 2019 was $1,689.5 million or 65.6% of net sales, an increase of $121.5 million or 7.7%, compared with $1,568.0 million or 65.8% of net sales for the first six months of 2018. Cost of sales increased primarily due to the increase in net sales noted above.

Selling, general and administrative expenses for the first six months of 2019 were $309.0 million or 12.0% of net sales, an increase of $23.7 million or 8.3%, compared with $285.3 million or 12.0% of net sales for the first six months of 2018. Selling, general and administrative expenses increased primarily due to the increase in net sales noted above.

Consolidated operating income was $578.7 million or 22.5% of net sales for the first six months of 2019, an increase of $50.4 million or 9.5%, compared with $528.3 million or 22.2% of net sales for the first six months of 2018.

Interest expense was $44.1 million for the first six months of 2019, a increase of $1.6 million or 3.8%, compared with $42.5 million for the first six months of 2018. The change in interest expense is largely driven by the 2018 private placement senior notes issued in December 2018 ($475 million and 75 million Euros) and January 2019 ($100 million), partially offset by a decrease related to the repayment in full, at maturity, of $80 million in aggregate principal amount of 6.35% private placement senior notes and $160 million in aggregate principal amount of 7.08% private placement senior notes in the third quarter of 2018, and $65 million in aggregate principal amount of 7.18% private placement senior notes in the fourth quarter of 2018.

The effective tax rate for the first six months of 2019 was 20.4%, compared with 22.5% for the first six months of 2018. The lower rate for 2019 mainly reflects higher year over year tax benefits related to share-based payment transactions as well as a partial release of a state related valuation allowance for carryforward interest deductions. See Note 10 to the Consolidated Financial Statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Net income for the first six months of 2019 was $419.8 million, an increase of $44.6 million or 11.9%, compared with $375.2 million for the first six months of 2018.

Diluted earnings per share for the first six months of 2019 were $1.83, an increase of $0.22 or 13.7%, compared with $1.61 per diluted share for the first six months of 2018.

Segment Results

EIG's net sales totaled $1,627.2 million for the first six months of 2019, an increase of $166.3 million or 11.4%, compared with $1,460.9 million for the first six months of 2018. The net sales increase was due to 4% organic sales growth, a 9% increase from the 2018 acquisitions of Motec, Spectro Scientific Corporation, Forza and Telular Corporation, partially offset by an unfavorable 1% effect of foreign currency translation.

EIG's operating income was $416.0 million for the first six months of 2019, an increase of $38.8 million or 10.3%, compared with $377.2 million for the first six months of 2018. The increase in EIG's operating income for the first six months of 2019 was primarily due to the increase in net sales noted above. EIG's operating margins were 25.6% of net sales for the first six months of 2019, compared with 25.8% of net sales for the first six months of 2018. EIG's operating margins for the first six months of 2019 declined primarily from the impact of lower margins on recent acquisitions, which had a 1.0% negative impact, partially offset by the benefits of the Group's Operational Excellence initiatives.

EMG's net sales totaled $949.9 million for the first six months of 2019, an increase of $29.2 million or 3.2%, compared with $920.7 million for the first six months of 2018. The net sales increase was due to 5% organic sales growth and an unfavorable 2% effect of foreign currency translation.

EMG's operating income was $199.9 million for the first six months of 2019, an increase of $14.6 million or 7.9%, compared with $185.3 million for the first six months of 2018. EMG's operating margins were 21.0% of net sales for the first six months of 2019, compared with 20.1% of net sales for the first six months of 2018. The increase in EMG's operating income and operating margins for the first six months of 2019 was primarily due to the increase in net sales noted above, as well as the benefits of the Group's Operational Excellence initiatives.

Financial Condition

Liquidity and Capital Resources

Cash provided by operating activities totaled $442.6 million for the first six months of 2019, an increase of $62.1 million or 16.3%, compared with $380.5 million for the first six months of 2018. The increase in cash provided by operating activities for the first six months of 2019 was primarily due to higher net income.

Cash used for investing activities totaled $39.6 million for the first six months of 2019, compared with $401.7 million for the first six months of 2018. Additions to property, plant and equipment totaled $43.3 million for the first six months of 2019, compared with $28.6 million for the first six months of 2018. For the first six months of 2018, the Company paid $374.6 million, net of cash acquired, to acquire Motec in June 2018, SoundCom in April 2018 and FMH in January 2018.

Cash used for financing activities totaled $191.5 million for the first six months of 2019, compared with $55.5 million for the first six months of 2018. At June 30, 2019, total debt, net was $2,467.0 million, compared with $2,632.7 million at December 31, 2018. For the first six months of 2019, short term borrowings decreased by $260.8 million, compared with no change in short-term borrowings for the first six months of 2018. At June 30, 2019, the Company had available borrowing capacity of $1,965.3 million under its revolving credit facility, including the $500 million accordion feature.

In December 2018, the Company completed the 2018 private placement agreement to sell $575 million and 75 million Euros in senior notes to a group of institutional investors utilizing two funding dates. The first funding occurred in December 2018 for $475 million and 75 million Euros ($85.1 million). The second funding occurred in January 2019 for $100 million. The 2018 Private Placement senior notes carry a weighted average interest rate of 3.93% and are subject to certain customary covenants, including financial covenants that, among other things, require the Company to maintain certain debt-to-EBITDA (earnings before interest, income taxes, depreciation and amortization) and interest coverage ratios.

The proceeds from the fundings from the 2018 Private Placement were used to pay down domestic borrowings under the Company's revolving credit facility.

In the third quarter of 2018, $80 million of 6.35% senior notes and $160 million of 7.08% senior notes matured and were paid. In the fourth quarter of 2018, $65 million of 7.18% senior notes matured and were paid. The debt-to-capital ratio was 34.6% at June 30, 2019, compared with 38.3% at December 31, 2018. The net debt-to-capital ratio (total debt, net less cash and cash equivalents divided by the sum of net debt and stockholders' equity) was 28.9% at June 30, 2019, compared with 34.9% at December 31, 2018. The net debt-to-capital ratio is presented because the Company is aware that this measure is used by third parties in evaluating the Company.

Additional financing activities for the first six months of 2019 included cash dividends paid of $63.6 million, compared with $64.7 million for the first six months of 2018. Effective February 12, 2019, the Company's Board of Directors approved an increase of $500 million in the authorization for the repurchase of the Company's common stock. Proceeds from stock option exercises were $45.8 million for the first six months of 2019, compared with $18.3 million for the first six months of 2018.

As a result of all of the Company's cash flow activities for the first six months of 2019, cash and cash equivalents at June 30, 2019 totaled $567.9 million, compared with $354.0 million at December 31, 2018. At June 30, 2019, the Company had $320.0 million in cash outside the United States, compared with $311.2 million at December 31, 2018. The Company utilizes this cash to fund its international operations, as well as to acquire international businesses. The Company is in compliance with all covenants, including financial covenants, for all of its debt agreements. The Company believes it has sufficient cash-generating capabilities from domestic and unrestricted foreign sources, available credit facilities and access to long-term capital funds to enable it to meet its operating needs and contractual obligations in the foreseeable future.

Critical Accounting Policies

The Company's critical accounting policies are detailed in Part II, Item 7 Management's Discussion and Analysis of Financial Condition of its Annual Report on Form 10-K for the year ended December 31, 2018. Primary disclosure of the Company's significant accounting policies is also included in Note 1 to the Consolidated Financial Statements included in Part II, Item 8 of its Annual Report on Form 10-K.

Revenue Recognition. The majority of the Company's revenues on product sales are recognized at a point in time when the customer obtains control of the product. The transfer in control of the product to the customer is typically evidenced by one or more of the following: the customer having legal title to the product, the Company's present right to payment, the customer's physical possession of the product, the customer accepting the product, or the customer has the benefits of ownership or risk of loss. Legal title transfers to the customer in accordance with the delivery terms of the order, usually upon shipment, which is the point that control transfers. For a small percentage of sales where title and risk of loss transfers at the point of delivery, the Company recognizes revenue upon delivery to the customer, which is the point that control transfers, assuming all other criteria for revenue recognition are met.

Under ASC 606, the Company determined that revenues from certain of its customer contracts met the criteria of satisfying its performance obligations over time, primarily in the areas of the manufacture of custom-made equipment and for service repairs of customer-owned equipment. Prior to the adoption of the new standard, these revenues were recorded upon shipment or, in the case of those sales where title and risk of loss passes at the point of delivery, the Company recognized revenue upon delivery to the customer. Recognizing revenue over time for custom-manufactured equipment is based on the Company's judgment that, in certain contracts, the product does not have an alternative use and the Company has an enforceable right to payment for performance completed to date. This change in revenue recognition accelerated the revenue recognition and costs on the impacted contracts.

Applying the practical expedient available under ASC 606, the Company recognizes incremental cost of obtaining contracts as an expense when incurred if the amortization period of the assets that the Company would have otherwise recognized is one year or less. These costs are included in Selling, general and administrative expenses in the consolidated statement of income.

Revenues associated with repairs of customer-owned assets were previously recorded upon completion and shipment of the repaired equipment to the customer. Under ASC 606, if the Company's performance enhances an asset that the customer controls as the asset is enhanced, revenue must be recognized over time. The revenue associated with the repair of a customer-owned asset meets this criterion.

Table of Contents

The determination of the revenue to be recognized in a given period for performance obligations satisfied over time is based on the input method. The Company recognizes revenue over time as it performs on these contracts because the transfer of control to the customer occurs over time, revenue is recognized based on the extent of progress towards completion of the performance obligation. The Company generally uses the total cost-to-cost input method of progress because it best depicts the transfer of control to the customer that occurs as costs are incurred. Under the cost-to-cost method, the extent of progress towards completion is measured based on the proportion of costs incurred to date to the total estimated costs at completion of the performance obligation. On certain contracts, labor hours is used as the measure of progress when it is determined to be a better depiction of the transfer of control to the customer due to the timing and pattern of labor hours incurred.

Performance obligations also include post-delivery service, installation and training. Post-delivery service revenues are recognized over the contract term. Installation and training revenues are recognized over the period the service is provided. Warranty terms in customer contracts can also be considered separate performance obligations if the warranty provides services beyond assurance that a product complies with agreed-upon specification or if a warranty can be purchased separately. The Company does not incur significant obligations for customer returns and refunds.

Payment terms generally begin upon shipment of the product. The Company does have contracts with multiple billing terms that are all due within one year from when the product is delivered. No significant financing component exists. Payment terms are generally 30-60 days from the time of shipment or customer acceptance, but terms can be shorter or longer. For customer contracts that have revenue recognized over time, revenue is generally recognized prior to a payment being due from the customer. In such cases, the Company recognizes a contract asset at the time the revenue is recognized. When payment becomes due based on the contract terms, the Company reduces the contract asset and records a receivable. In contracts with billing milestones or in other instances with a long production cycle or concerns about credit, customer advance payments are received. The Company may receive a payment in excess of revenue recognized to that date. In these circumstances, a contract liability is recorded.

The Company has certain contracts with variable consideration in the form of volume discounts, rebates and early payment options, which may affect the transaction price used as the basis for revenue recognition. In these contracts, the amount of the variable consideration is not considered constrained and is allocated among the various performance obligations in the customer contract based on the relative standalone selling price of each performance obligation to the total standalone value of all the performance obligations.

Forward-Looking Information

Information contained in this discussion, other than historical information, is considered "forward-looking statements" and is subject to various factors and uncertainties that may cause actual results to differ significantly from expectations. These factors and uncertainties include general economic conditions affecting the industries the Company serves; changes in the competitive environment or the effects of competition in the Company's markets; risks associated with international sales and operations; the Company's ability to consummate and successfully integrate future acquisitions; the Company's ability to successfully develop new products, open new facilities or transfer product lines; the price and availability of raw materials; compliance with government regulations, including environmental regulations; and the ability to maintain adequate liquidity and financing sources. A detailed discussion of these and other factors that may affect the Company's future results is contained in AMETEK's filings with the U.S. Securities and Exchange Commission, including its most recent reports on Form 10-K,10-Q and 8-K. AMETEK disclaims any intention or obligation to update or revise any forward-looking statements, unless required by the securities laws to do so.

Table of Contents

Item 4. Controls and Procedures

The Company maintains a system of disclosure controls and procedures that is designed to provide reasonable assurance that information, which is required to be disclosed, is accumulated and communicated to management in a timely manner. Under the supervision and with the participation of our management, including the Company's principal executive officer and principal financial officer, we have evaluated the effectiveness of our system of disclosure controls and procedures as required by Exchange Act Rule 13a-15(b) as of June 30, 2019. Based on that evaluation, the Company's principal executive officer and principal financial officer concluded that the Company's disclosure controls and procedures are effective at the reasonable assurance level.

Such evaluation did not identify any change in the Company's internal control over financial reporting during the quarter ended June 30, 2019 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

Table of Contents

PART II. OTHER INFORMATION

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

(c) Purchase of equity securities by the issuer and affiliated purchasers.

The following table reflects purchases of AMETEK, Inc. common stock by the Company during the three months ended June 30, 2019:

Period	Total Number of Shares Purchased (1)(2)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plan (2)	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plan
April 1, 2019 to April 30, 2019	—	$ —	—	$ 500,912,305
May 1, 2019 to May 31, 2019	72,045	85.50	72,045	494,752,129
June 1, 2019 to June 30, 2019	283	86.48	283	494,727,655
Total	72,328	85.51	72,328	

(1) Represents shares surrendered to the Company to satisfy tax withholding obligations in connection with employees' share-based compensation awards.

(2) Consists of the number of shares purchased pursuant to the Company's Board of Directors $500 million authorization for the repurchase of its common stock announced in February 2019. Such purchases may be effected from time to time in the open market or in private transactions, subject to market conditions and at management's discretion.

Table of Contents

Item 6. Exhibits

Exhibit Number	Description
31.1*	Certification of Chief Executive Officer, Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Chief Financial Officer, Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*	Certification of Chief Executive Officer, Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification of Chief Financial Officer, Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	XBRL Instance Document. The instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH*	XBRL Taxonomy Extension Schema Document.
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document.

* Filed electronically herewith.

Table of Contents

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.

AMETEK, Inc.
(Registrant)

By: /s/ Thomas M. Montgomery
Thomas M. Montgomery
Senior Vice President – Comptroller
(Principal Accounting Officer)

August 2, 2019

Exhibit 31.1

CERTIFICATIONS

I, David A. Zapico, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of AMETEK, Inc. (the “registrant”);
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 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: August 2, 2019

/S/ DAVID A. ZAPICO

David A. Zapico

Chairman of the Board and Chief Executive Officer

Exhibit 31.2

CERTIFICATIONS

I, William J. Burke, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of AMETEK, Inc. (the “registrant”);

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 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: August 2, 2019

/S/ WILLIAM J. BURKE
William J. Burke
Executive Vice President – Chief Financial Officer

Exhibit 32.1

AMETEK, Inc.

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 AMETEK, Inc. (the “Company”) on Form 10-Q for the quarter ended June 30, 2019 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, David A. Zapico, Chairman of the Board and 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:

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

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

/S/ DAVID A. ZAPICO
David A. Zapico
Chairman of the Board and Chief Executive Officer

Date: August 2, 2019

A signed original of this written statement required by Section 906 has been provided to AMETEK, Inc. and will be retained by AMETEK, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

AMETEK, Inc.

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 AMETEK, Inc. (the "Company") on Form 10-Q for the quarter ended June 30, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, William J. Burke, Executive Vice President – 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:

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

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

/S/ WILLIAM J. BURKE
William J. Burke
Executive Vice President – Chief Financial Officer

Date: August 2, 2019

A signed original of this written statement required by Section 906 has been provided to AMETEK, Inc. and will be retained by AMETEK, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.