
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 10-K

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

For the fiscal year ended December 31, 2017

Or

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

Commission file number 001-11499

WATTS WATER TECHNOLOGIES, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

04-2916536
(I.R.S. Employer
Identification No.)

815 Chestnut Street, North Andover, MA
(Address of Principal Executive Offices)

01845
(Zip Code)

Registrant's telephone number, including area code: **(978) 688-1811**

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

Title of Each Class	Name of Each Exchange on Which Registered
Class A common stock, par value \$0.10 per share	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ☐ No ☒

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See 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 ☐
(Do not check if a
smaller reporting company) Emerging growth company ☐

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

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

As of June 30, 2017, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was approximately \$1,745,662,494 based on the closing sale price as reported on the New York Stock Exchange.

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class	Outstanding at January 30, 2018
Class A common stock, \$0.10 par value per share	27,690,781 shares
Class B common stock, \$0.10 par value per share	6,379,290 shares

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Proxy Statement for its Annual Meeting of Stockholders to be held on May 16, 2018 are incorporated by reference into Part III of this Annual Report on Form 10-K.

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PART I

Item 1. BUSINESS.

This Annual Report on Form 10-K contains statements that are not historical facts and are considered forward-looking within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements contain projections of our future results of operations or our financial position or state other forward-looking information. In some cases you can identify these forward-looking statements by words such as “anticipate,” “believe,” “could,” “estimate,” “expect,” “intend,” “may,” “should,” and “would” or similar words. You should not rely on forward-looking statements because they involve known and unknown risks, uncertainties and other factors, some of which are beyond our control. These risks, uncertainties and other factors may cause our actual results, performance or achievements to differ materially from the anticipated future results, performance or achievements expressed or implied by the forward-looking statements. Some of the factors that might cause these differences are described under Item 1A—“Risk Factors.” You should carefully review all of these factors, and you should be aware that there may be other factors that could cause these differences. These forward-looking statements were based on information, plans and estimates at the date of this report, and, except as required by law, we undertake no obligation to update any forward-looking statements to reflect changes in underlying assumptions or factors, new information, future events or other changes.

In this Annual Report on Form 10-K, references to “the Company,” “Watts Water,” “we,” “us” or “our” refer to Watts Water Technologies, Inc. and its consolidated subsidiaries.

Overview

Watts Regulator Co. was founded by Joseph E. Watts in 1874 in Lawrence, Massachusetts. Watts Regulator Co. started as a small machine shop supplying parts to the New England textile mills of the 19th century and grew into a global manufacturer of products and systems focused on the control, conservation and quality of water and the comfort and safety of the people using it. Watts Water Technologies, Inc. was incorporated in Delaware in 1985 and became the parent company of Watts Regulator Co.

Our strategy is to be the preferred supplier of differentiated products and systems that manage and conserve the flow of fluids and energy into, through and out of buildings in the residential and commercial markets of the Americas, Europe, and Asia-Pacific, Middle East and Africa (“APMEA”). Within this framework, we focus upon three themes: safety & regulation, energy efficiency and water conservation. This strategy enables us to continue to increase our earnings via sales growth, both organic and inorganic, and the systematic reduction of manufacturing costs and operational expenses.

We intend to continue to expand organically by introducing new complementary products and solutions in existing markets, by enhancing our preferred brands, by promoting plumbing code development to drive the need for safety and water quality products and by continually improving merchandising in our wholesale distribution channels. We focus on selling solutions to our customers that integrate a variety of our product offerings. We target selected new product and geographic markets based on growth potential, including our ability to leverage our existing distribution channels. Additionally, we leverage our distribution channels through the introduction of new products, as well as the integration of products of our acquired companies.

We intend to continue to generate incremental growth by targeting selected acquisitions, both in our core markets as well as new complementary markets. We have completed 10 acquisitions in the last decade. Our acquisition strategy focuses on businesses that manufacture preferred brand name products that address our themes of safety & regulation, energy efficiency and water conservation in our primary or related complementary markets. We target businesses that will provide us with one or more of the following: an entry into new markets, an increase in shelf space with existing customers, strong brand names, a new or improved technology or an expansion of the breadth of our product and solution offerings.

We are committed to reducing our manufacturing and operating costs using Lean methodologies to drive improvement across all key processes, and consolidating our diverse manufacturing operations and distribution centers. We have a number of manufacturing facilities in lower-cost regions. In recent years, we have announced global restructuring plans which reduced our manufacturing and distribution footprint in order to reduce our costs and to realize additional operating efficiencies.

Additionally, a majority of our manufacturing facilities are ISO 9000, 9001 or 9002 certified by the International Organization for Standardization.

Much of our sales are for products that have been approved under regulatory standards incorporated into state and municipal plumbing, heating, building and fire protection codes in the Americas, Europe, and certain countries within APMEA. We have consistently advocated for the development and enforcement of plumbing codes and are committed to providing products to meet these standards.

Our business is reported in three geographic segments: Americas, Europe and APMEA. The contributions of each segment to net sales, operating income and the presentation of certain other financial information by segment are reported in Note 17 of the Notes to Consolidated Financial Statements and in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included elsewhere in this report.

Products

We have a broad range of products in terms of design distinction, size and configuration. We classify our many products into four global product lines. These product lines are:

- Residential & commercial flow control products—includes products typically sold into plumbing and hot water applications such as backflow preventers, water pressure regulators, temperature and pressure relief valves, and thermostatic mixing valves. Residential & commercial flow control products accounted for approximately 52%, 56%, and 57% of our total sales in 2017, 2016, and 2015, respectively.
- HVAC & gas products—includes commercial high-efficiency boilers, water heaters and heating solutions, hydronic and electric heating systems for under-floor radiant applications, custom heat and hot water solutions, hydronic pump groups for boiler manufacturers and alternative energy control packages, and flexible stainless steel connectors for natural and liquid propane gas in commercial food service and residential applications. HVAC & gas products accounted for approximately 32% of our total sales in 2017, and 29% of our total sales in 2016 and 2015. HVAC is an acronym for heating, ventilation and air conditioning.
- Drainage & water re-use products—includes drainage products and engineered rain water harvesting solutions for commercial, industrial, marine and residential applications. Drainage & water re-use products accounted for approximately 10% of our total sales in 2017, and 9% of our total sales in 2016 and 2015.
- Water quality products—includes point-of-use and point-of-entry water filtration, conditioning and scale prevention systems for both commercial and residential applications. Water quality products accounted for approximately 6% of our total sales in 2017 and 2016, and 5% of our total sales in 2015.

Commercial and Operational Excellence

We strive to invest in product innovation that meets the wants and needs of our customers. Our focus is on differentiated products that will provide greater opportunity to distinguish and defend ourselves in the market place. Conversely, we want to migrate away from commoditized products where we cannot add value. Our goal is to be a solutions provider, not merely a components supplier. We refer to this customer-facing mindset as commercial excellence, and we are continually looking for strategic opportunities to invest or divest, where necessary, in order to meet those objectives. In conjunction with this customer-centric focus, we continually review our operations to ensure we can efficiently and effectively produce and deliver products to customers. We call this aspect of our business operational excellence.

In 2015, our Board of Directors approved a program relating to the transformation of our Americas and APMEA businesses, and in 2017 we successfully completed this program. The program involved the exit and discontinuation of low-margin, non-core product lines, enhancing our global sourcing capabilities and the reduction of the square footage of our Americas facilities. We eliminated approximately \$165 million of our combined Americas and APMEA net sales of products that primarily sold through our do-it-yourself (DIY) distribution channel. We discontinued selling our remaining non-core product lines as of the end of the first quarter of 2016. As part of the exit of non-core product lines, we entered into an agreement to sell an operating subsidiary in China that was dedicated exclusively to the

manufacturing of products being discontinued. We completed that sale in the second quarter of 2016. The program also involved decreasing the square footage of our Americas facilities and reducing the Americas net operating footprint by approximately 30%. The footprint reduction was designed to improve the utilization of our remaining facilities, better leverage our cost structure, reduce working capital, and improve execution of customer delivery requirements. Refer to “Management’s Discussion and Analysis of Financial Condition and Results of Operations” for further discussion.

Customers and Markets

We sell our products to plumbing, heating and mechanical wholesale distributors and dealers, original equipment manufacturers (OEMs), specialty product distributors, and major DIY chains. In September 2015, as part of the first phase of our transformation of our Americas and APMEA business, we divested a substantial portion of our DIY business in the Americas, which reduced the significance of DIY as a distribution channel for our products in 2017 and 2016.

Wholesalers. Approximately 63%, 57%, and 52% of our sales in 2017, 2016, and 2015, respectively, were to wholesale distributors for commercial and residential applications.

OEMs. Approximately 16%, 21%, and 20% of our sales in 2017, 2016, and 2015, respectively, were to OEMs. In the Americas, our typical OEM customers are water heater manufacturers and equipment and water systems manufacturers needing flow control devices and other products. Our sales to OEMs in Europe are primarily to boiler manufacturers and radiant system manufacturers. Our sales to OEMs in APMEA are primarily to boiler, water heater and bath manufacturers, including manufacturers of faucet and shower products.

Specialty. Approximately 17% of our sales in 2017 and 18% of our sales in 2016 and 2015 were through our specialty channel. The specialty channel primarily includes sales related to high-efficiency boilers and water heaters, water filtration and conditioning products, specialty floor and tile products, and food service products.

DIY Chains. Approximately 4% of our sales in 2017 and 2016, and 10% of our sales in 2015 were to DIY chains.

In 2017, 2016 and 2015, no customer accounted for more than 10% of our total net sales. Our top ten customers accounted for approximately \$300.6 million, or 21%, of our total net sales in 2017; \$275.2 million, or 20%, of our total net sales in 2016; and \$345.6 million, or 24%, of our total net sales in 2015. Thousands of other customers constituted the balance of our net sales in each of those years.

Marketing and Sales

For product sales in the Americas, we rely primarily on commissioned manufacturers’ representatives to market our product lines, some of which maintain a consigned inventory of our products. These representatives sell primarily to plumbing and heating wholesalers and contractors or supply DIY stores. Our specialty channel products in the Americas are sold through independent representatives, dealers and distributors. We also sell products directly to wholesalers, OEMs and private label accounts primarily in Europe and APMEA, and to a lesser extent in the Americas.

Manufacturing

We have integrated and automated manufacturing capabilities, including a state of the art lead-free foundry and a traditional brass and bronze foundry, machining, plastic extrusion and injection molding and assembly operations. Our foundry operations include metal pouring systems, automatic core making, and brass and bronze die-castings. Our machining operations feature computer-controlled machine tools, high-speed chucking machines with robotics and automatic screw machines for machining bronze, brass and steel components. We have invested in recent years to expand our manufacturing capabilities and to adopt the most efficient and productive equipment. We are committed to maintaining our manufacturing equipment at a level consistent with current technology in order to maintain high levels of quality and manufacturing efficiencies. In 2017, we continued to invest in our systems and in our manufacturing and training facilities.

Capital expenditures and depreciation for each of the last three years were as follows:

	Years Ended December 31,		
	2017	2016	2015
	(in millions)		
Capital expenditures	\$ 29.4	\$ 36.0	\$ 27.7
Depreciation	\$ 29.7	\$ 30.4	\$ 31.6

Raw Materials

We require substantial amounts of raw materials to produce our products, including bronze, brass, cast iron, stainless steel, steel, plastic, and other materials used in our products. Substantially all of the raw materials we require are purchased from outside sources. The commodity markets have experienced volatility over the past several years, particularly with respect to copper and stainless steel. Bronze and brass are copper-based alloys. The price of copper had steadily declined for a number of years until prices began to increase in the second half of 2016. Copper prices continued to increase in 2017, and we expect elevated commodity pricing will be maintained in 2018, particularly with respect to copper. Because we internationally source a significant amount of raw materials, several months of raw materials and work in process are moving through our supply chain at any point in time. We are not able to predict whether commodity costs, including copper and stainless steel, will significantly increase or decrease in the future. If commodity costs increase in the future and we are not able to reduce or eliminate the effect of the cost increases by reducing production costs or implementing price increases, our profit margins could decrease. If commodity costs were to decline, we may experience pressures from customers to reduce our selling prices. The timing of any price reductions and decreases in commodity costs may not align. As a result, our margins could be affected.

With limited exceptions, we have multiple suppliers for our commodities and other raw materials. We believe our relationships with our key suppliers are good and that an interruption in supply from any one supplier would not materially affect our ability to meet our immediate demands while another supplier is qualified. We regularly review our suppliers to evaluate their strengths. If a supplier is unable to meet our demands, we believe that in most cases our inventory of raw materials will allow for sufficient time to identify and obtain the necessary commodities and other raw materials from an alternate source. We believe that the nature of the commodities and other raw materials used in our business are such that multiple sources are generally available in the market.

Code Compliance

Products representing a majority of our sales are subject to regulatory standards and code enforcement, which typically require that these products meet stringent performance criteria. Standards in the Americas are established by such industry test and certification organizations as the American Society of Mechanical Engineers (ASME), the America Water Works Association (AWWA), the Canadian Standards Association (CSA), the American Society of Sanitary Engineering (ASSE), the American National Standards Institute—Leadership in Energy & Environmental Design (LEED), the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research (USC FCCC & HR), FM Global (FM), NSF International (NSF) and Underwriters Laboratories (UL), the National Board (NB), the Environmental Protection Agency (EPA), and the Californian Energy Commission (CEC). International standards are established by such organizations as the International Code Council (ICC), the International Association of Plumbing and Mechanical Officials (IAPMO). Many of these standards are incorporated into state and municipal plumbing and heating, building and fire protection codes.

National regulatory standards in Europe vary by country. The major standards and/or guidelines that our products must meet are AFNOR (France), DVGW (Germany), UNI/ICIM (Italy), KIWA (Netherlands), SVGW (Switzerland), SITAC (Sweden), WRAS (United Kingdom) and CEN (Denmark). Further, there are local regulatory standards requiring compliance as well.

Together with our commissioned manufacturers' representatives, we have consistently advocated for the development and enforcement of plumbing codes. We maintain stringent quality control and testing procedures at each of our manufacturing facilities in order to manufacture products that comply with code requirements. We believe that product-testing capability and investment in plant and equipment are needed to manufacture products that comply with code requirements. Our product-testing capabilities and dedicated investments are areas of strength for the Company. Additionally, a majority of our manufacturing facilities are ISO 9000, 9001 or 9002 certified by the International Organization for Standardization.

New Product Development and Engineering

We retain our own product development staff, design teams, and testing laboratories in the Americas, Europe and APMEA that work to enhance our existing products and develop new products. We maintain sophisticated product development and testing laboratories and are committed to investing more in this area. In 2015, we re-engineered our new product development process and rolled out a uniform global program. In 2016 and 2017, we continued to drive innovation to our markets, including the successful roll out of IntelliStation™ and the AERCO Benchmark® Platinum boiler. We continued to focus on our global program to leverage our electronics capabilities to drive our “connected” products strategy. Research and development costs included in selling, general, and administrative expense amounted to \$29.0 million, \$26.5 million and \$23.5 million for the years ended December 31, 2017, 2016 and 2015, respectively.

Competition

The domestic and international markets for energy efficient products, water conservation devices, and products that address the safety & regulation for the flow of fluids, are intensely competitive and require us to compete against some companies possessing greater financial, marketing and other resources than ours. Due to the breadth of our product offerings, the number and identities of our competitors vary by product line and market. We consider quality, brand preference, delivery times, engineering specifications, plumbing code requirements, price, technological expertise, breadth of product offerings and integrated solutions offerings to be the primary competitive factors. We believe that new product development and product engineering are also important to success in the water industry and that our position in the industry is attributable in part to our ability to develop new and innovative products quickly and to adapt and enhance existing products. We continue to develop new and innovative products to enhance our market position and are continuing to implement manufacturing and design programs to reduce costs. We cannot be certain that our efforts to develop new products will be successful or that our customers will accept our new products. Although we own certain patents and trademarks that we consider to be of importance, we do not believe that our business and competitiveness as a whole are dependent on any one of our patents or trademarks or on patent or trademark protection generally.

Backlog

Backlog was approximately \$86.3 million at January 28, 2018 and approximately \$83.2 million at January 29, 2017. We do not believe that our backlog at any point in time is indicative of future operating results and we expect our entire current backlog to be converted to sales in 2018.

Employees

As of December 31, 2017, we employed approximately 4,800 people worldwide. With the exception of two subsidiaries, one in Canada and the other in New York, none of our employees in the Americas or APMEA are covered by collective bargaining agreements. In some European countries, our employees are subject to traditional national collective bargaining agreements. We believe that our employee relations are good.

Product Liability, Environmental and Other Litigation Matters

We are subject to a variety of potential liabilities connected with our business operations, including potential liabilities and expenses associated with possible product defects or failures and compliance with environmental laws. We maintain product liability and other insurance coverage, which we believe to be generally in accordance with industry practices. Nonetheless, such insurance coverage may not be adequate to protect us fully against substantial damage claims.

Contingencies

Connector Class Actions

In November and December 2014, Watts Water Technologies, Inc. and Watts Regulator Co. were named as defendants in three separate putative nationwide class action complaints (Meyers v. Watts Water Technologies, Inc., United States District Court for the Southern District of Ohio; Ponzo v. Watts Regulator Co., United States District Court for the District of Massachusetts; Sharp v. Watts Regulator Co., United States District Court for the District of Massachusetts) seeking to recover damages and other relief based on the alleged failure of water heater connectors. On June 26, 2015,

plaintiffs in the three actions filed a consolidated amended complaint, under the case captioned Ponzo v. Watts Regulator Co., in the United States District Court for the District of Massachusetts (hereinafter “Ponzo”). Watts Water Technologies was voluntarily dismissed from the Ponzo case. The complaint sought among other items, damages in an unspecified amount, replacement costs, injunctive relief, declaratory relief, and attorneys’ fees and costs. On August 7, 2015, the Company filed a motion to dismiss the complaint, which motion was mooted by the class settlements.

In February 2015, Watts Regulator Co. was named as a defendant in a putative nationwide class action complaint (Klug v. Watts Water Technologies, Inc., et al., United States District Court for the District of Nebraska) seeking to recover damages and other relief based on the alleged failure of the Company’s Floodsafe connectors (hereinafter “Klug”). On June 26, 2015, the Company filed a partial motion to dismiss the complaint. In response, on July 17, 2015, plaintiff filed an amended complaint which added additional named plaintiffs and sought to correct deficiencies in the original complaint, Klug v. Watts Regulator Co., United States District Court for the District of Nebraska. The complaint seeks among other items, damages in an unspecified amount, injunctive relief, declaratory relief, and attorneys’ fees and costs. On July 31, 2015, the Company filed a partial motion to dismiss the complaint which was granted in part and denied in part on December 29, 2015. The Company answered the amended complaint on February 2, 2016. No formal discovery was conducted.

The Company participated in mediation sessions of the Ponzo and Klug cases in December 2015 and January 2016. On February 16, 2016, the Company reached an agreement in principle to settle all claims. The proposed total settlement amount is \$14 million, of which the Company is expected to pay approximately \$4.1 million after insurance proceeds of up to \$9.9 million. The parties executed final written settlement agreements in April 2016. Motions for preliminary approval of the settlements were submitted on May 4, 2016 before the District of Nebraska Federal Court. On December 7, 2016, the Court issued an order preliminarily approving the settlements. After a fairness hearing held on April 12, 2017, the Court entered Final Orders and Judgments approving the settlements on April 13, 2017. No appeals were filed and the settlements became final on May 15, 2017.

Environmental Remediation

We have been named as a potentially responsible party with respect to a limited number of identified contaminated sites. The levels of contamination vary significantly from site to site as do the related levels of remediation efforts. Environmental liabilities are recorded based on the most probable cost, if known, or on the estimated minimum cost of remediation. Accruals are not discounted to their present value, unless the amount and timing of expenditures are fixed and reliably determinable. We accrue estimated environmental liabilities based on assumptions, which are subject to a number of factors and uncertainties. Circumstances that can affect the reliability and precision of these estimates include identification of additional sites, environmental regulations, level of clean-up required, technologies available, number and financial condition of other contributors to remediation and the time period over which remediation may occur. We recognize changes in estimates as new remediation requirements are defined or as new information becomes available.

Asbestos Litigation

We are defending approximately 355 lawsuits in different jurisdictions, alleging injury or death as a result of exposure to asbestos. The complaints in these cases typically name a large number of defendants and do not identify any of our particular products as a source of asbestos exposure. To date, discovery has failed to yield evidence of substantial exposure to any of our products and no judgments have been entered against us.

Other Litigation

Other lawsuits and proceedings or claims, arising from the ordinary course of operations, are also pending or threatened against us.

Available Information

We maintain a website with the address www.wattswater.com. The information contained on our website is not included as a part of, or incorporated by reference into, this Annual Report on Form 10-K. Other than an investor’s own internet access charges, we make available free of charge through our website our Annual Report on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, and amendments to these reports, as soon as reasonably

practicable after we have electronically filed such material with, or furnished such material to, the Securities and Exchange Commission (SEC).

Executive Officers and Directors

Set forth below are the names of our executive officers and directors, their respective ages and positions with our Company and a brief summary of their business experience for at least the past five years:

Executive Officers	Age	Position
Robert J. Pagano, Jr.	55	Chief Executive Officer, President and Director
Todd A. Trapp	47	Chief Financial Officer
Jennifer L. Congdon	48	Chief Human Resources Officer
Kenneth R. Lepage	47	General Counsel, Executive Vice President & Secretary
Elie A. Melhem	54	President, Asia-Pacific, the Middle East & Africa
Munish Nanda	53	President, Americas & Europe
Non-Employee Directors		
Robert L. Ayers(2)(3)	72	Director
Christopher L. Conway(2)(3)	62	Director
David A. Dunbar(1)(3)	56	Director
Jes Munk Hansen(2)(3)	50	Director
W. Craig Kissel(3)	67	Chairman of the Board and Director
Joseph T. Noonan	36	Director
Merilee Raines(1)(3)	62	Director
Joseph W. Reitmeier(1)(3)	53	Director

- (1) Member of the Audit Committee
- (2) Member of the Compensation Committee
- (3) Member of the Nominating and Corporate Governance Committee

Robert J. Pagano, Jr. has served as Chief Executive Officer, President and a director of our Company since May 2014. He also served as interim Chief Financial Officer from October 2014 to April 2015. Mr. Pagano previously served as Senior Vice President of ITT Corporation and President, ITT Industrial Process from April 2009 to May 2014. Mr. Pagano originally joined ITT in 1997 and served in several additional management roles during his career at ITT, including as Vice President Finance, Corporate Controller, and President of Industrial Products. ITT Corporation is a diversified manufacturer of highly engineered critical components and customized technology solutions for the energy, transportation and industrial markets. Prior to joining ITT, Mr. Pagano worked at KPMG LLP. Mr. Pagano is a Certified Public Accountant. Mr. Pagano has also served as a member of the Board of Directors of Applied Industrial Technologies, Inc. since August 2017. Applied Industrial Technologies is a distributor of bearings, power transmission products, fluid power components and other industrial supplies and provides engineering, design and systems integration for industrial and fluid power applications, as well as customized mechanical, fabricated rubber and fluid power shop services.

Todd A. Trapp has served as Chief Financial Officer since April 2015. Mr. Trapp previously served as Vice President of Financial Planning & Analysis of Honeywell International Inc. from August 2013 to April 2015. Mr. Trapp originally joined Honeywell in 2002 and served in several senior financial roles, including as Chief Financial Officer of the Airlines Business Unit from November 2010 to August 2013, Vice President of Business Analysis & Planning for Honeywell's Aerospace Division from 2008 to November 2010, Director of Finance for the Transportation Systems Division from 2006 to 2008, Director of Business Analysis & Planning from 2005 to 2006, Investor Relations Manager from 2003 to 2005 and Senior Financial Analyst from 2002 to 2003. Honeywell is a Fortune 100 diversified technology and manufacturing leader, serving customers worldwide with aerospace products and services; control technologies for buildings, homes and industry; turbochargers; and performance materials. Prior to joining Honeywell, Mr. Trapp worked

as Assistant Treasurer at United Business Media Inc. and Manager of Treasury Services and Special Projects at Pearson Inc.

Jennifer L. Congdon has served as Chief Human Resources Officer since December 2016. Ms. Congdon previously served as Vice President, Human Resources, Applied Water Systems and Business Transformation and Continuous Improvement with Xylem Inc. from August 2012 to December 2016. Xylem is a global designer, manufacturer and equipment and service provider for water and wastewater applications. From 2010 to August 2012, Ms. Congdon served as Vice President, Human Resources, Power Transmission for Rexnord Corporation. Rexnord Corporation is a multi-industry manufacturer and marketer of highly engineered mechanical power transmission components and water management products. From 2004 to 2010, Ms. Congdon held several human resources management positions of increasing responsibility with Honeywell International Inc. Prior to joining Honeywell, Ms. Congdon was a Human Resources Manager with Cisco Systems, Inc. and worked as a human resources consultant.

Kenneth R. Lepage has served as General Counsel, Executive Vice President and Secretary of the Company since August 2008. He also served as Executive Vice President of Human Resources from December 2009 to October 2015. Mr. Lepage originally joined our Company in September 2003 as Assistant General Counsel and Assistant Secretary. Prior to joining our Company, he was a junior partner at the law firm of Hale and Dorr LLP (now Wilmer Cutler Pickering Hale and Dorr LLP).

Elie A. Melhem has served as President, Asia-Pacific, Middle East & Africa since February 2016. Mr. Melhem originally joined our Company in July 2011 as President, Asia-Pacific. Mr. Melhem was previously the Managing Director of China for Ariston Thermo Group, a global manufacturer of heating and hot water products, from 2008 to July 2011. Prior to joining Ariston, Mr. Melhem spent eleven years with ITT Industries in China where he held several management positions, including serving as President of ITT's Residential and Commercial Water Group in China and President of ITT's Water Technology Group in Asia.

Munish Nanda has served as President, Americas & Europe since February 2016. Mr. Nanda originally joined our Company in April 2015 as President, Americas. Mr. Nanda previously served as President of Control Technologies for ITT Corporation from April 2011 to March 2015. Mr. Nanda also served as Group Vice President of ITT Corporation's Fluid and Motion Control Group from April 2008 to April 2011. ITT Corporation is a diversified manufacturer of highly engineered critical components and customized technology solutions for the energy, transportation and industrial markets. Prior to joining ITT Corporation, Mr. Nanda held several operating leadership and general management positions with Thermo Fisher Scientific Corporation and Honeywell International Inc.

Robert L. Ayers has served as a director of our Company since October 2006. He was Senior Vice President of ITT Industries and President of ITT Industries' Fluid Technology from October 1999 until September 2005. Mr. Ayers continued to be employed by ITT Industries from September 2005 until his retirement in September 2006, during which time he focused on special projects for the company. Mr. Ayers joined ITT Industries in 1998 as President of ITT Industries' Industrial Pump Group. Before joining ITT Industries, he was President of Sulzer Industrial USA and Chief Executive Officer of Sulzer Bingham, a pump manufacturer. Mr. Ayers served as a director of T-3 Energy Services, Inc. from August 2007 to January 2011.

Christopher L. Conway has served as a director of our Company since June 2015. Mr. Conway was President, Chief Executive Officer and Chairman of the Board of CLARCOR Inc. from December 2011 until it was acquired in February 2017. Mr. Conway is now retired. Mr. Conway originally joined CLARCOR in 2006 and served in several senior management roles prior to becoming President and Chief Executive Officer, including Chief Operating Officer, President of CLARCOR's PECOFacet division, President of Facet USA, Inc., an affiliate of CLARCOR, and Vice President of Manufacturing of Baldwin Filters, Inc., another affiliate of CLARCOR. CLARCOR was a diversified marketer and manufacturer of mobile, industrial and environmental filtration products sold in domestic and international markets. Prior to joining CLARCOR, Mr. Conway served for two years as the Chief Operating Officer of Cortron Corporation, Inc., a manufacturing start-up based in Minneapolis, Minnesota. Mr. Conway also served for seven years in various management positions at Pentair, Inc., an international provider of products, services, and solutions for its customers' diverse needs in water and other fluids, thermal management, and equipment protection.

David A. Dunbar has served as a director of our Company since February 2017. Mr. Dunbar has served as President, and Chief Executive Officer and a member of the Board of Directors of Standex International Corporation since January 2014, and as Chairman since October 2016. Standex is a global, multi-industry manufacturer in five broad business

segments: Food Service Equipment Group, Engineering Technologies Group, Engraving Group, Electronics Group, and Hydraulics Group. Mr. Dunbar previously served as President of the valves and controls global business unit of Pentair Ltd. from October 2009 to December 2013. The unit was initially owned by Tyco Flow Control and Tyco Flow Control and Pentair merged in 2012. Pentair is a global provider of products and services relating to energy, water, thermal management and equipment protection. Prior to his tenure at Pentair, Mr. Dunbar held a number of senior positions at Emerson Electric Co., including President of each of the following: Emerson Process Management Europe; Machinery Health Management; and Emerson Climate Technologies Refrigeration.

Jes Munk Hansen has served as a director of our Company since February 2017. Mr. Hansen was Chief Executive Officer of LEDVANCE GmbH from July 2015 to December 2017. LEDVANCE is the general lighting lamps business unit of OSRAM GmbH. Mr. Hansen previously served as Chief Executive Officer of the classical lamps and ballast business unit of OSRAM from January 2015 to July 2015 and as Chief Executive Officer of OSRAM Americas and President of OSRAM Sylvania from October 2013 to January 2015. OSRAM is a leading global lighting manufacturer. Prior to his tenure at OSRAM, Mr. Hansen served in several senior management roles with Grundfos from 2000 to October 2013, including as Chief Executive Officer and President of Grundfos North America from 2007 to October 2013. Grundfos is a leading global manufacturer of pumps as well as motors and electronics for monitoring and controlling pumps.

W. Craig Kissel has served as a director of our Company since November 2011. Mr. Kissel previously was employed by American Standard Companies Inc. from 1980 until his retirement in September, 2008. American Standard was a leading worldwide supplier of air conditioning and heating systems, vehicle control systems, and bathroom china and faucet-ware. During his time at American Standard, Mr. Kissel served as President of Trane Commercial Systems from 2004 to June, 2008, President of WABCO Vehicle Control Systems from 1998 to 2003, President of the Trane North American Unitary Products Group from 1994 to 1997, Vice President of Trane Marketing of the North American Unitary Products Group from 1992 to 1994 and he held various other management positions at Trane from 1980 to 1991. From 2001 to 2008, Mr. Kissel served as Chairman of American Standard's Corporate Ethics and Integrity Council, which was responsible for developing the company's ethical business standards. Mr. Kissel also served in the U.S. Navy from 1973 to 1978. Mr. Kissel has served as a director of Chicago Bridge & Iron Company since May 2009. Chicago Bridge & Iron Company engineers and constructs some of the world's largest energy infrastructure projects.

Joseph T. Noonan has served as a director of our Company since May 2013. Mr. Noonan has served as Chief Executive Officer of Homespun Design, Inc. since November 2013. Homespun Design is a start-up phase online retailer of American-made furniture and design founded by Mr. Noonan. Mr. Noonan previously worked as an independent digital strategy consultant from November 2012 to November 2013. Mr. Noonan was employed by Wayfair LLC from April 2008 to November 2012. During his time at Wayfair, Mr. Noonan served as Senior Director of Wayfair International from June 2011 to November 2012, Director of Category Management and Merchandising from February 2009 to June 2011 and Manager of Wayfair's Business-to-Business Division from April 2008 to February 2009. Wayfair is an online retailer of home furnishings, décor and home improvement products. Prior to joining Wayfair, Mr. Noonan worked as a venture capitalist at Polaris Partners and as an investment banker at Cowen & Company.

Merilee Raines has served as a director of our Company since February 2011. Ms. Raines served as Chief Financial Officer of IDEXX Laboratories, Inc. from October 2003 until her retirement in May 2013. Prior to becoming Chief Financial Officer, Ms. Raines held several management positions with IDEXX Laboratories, including Corporate Vice President of Finance, Vice President and Treasurer of Finance, Director of Finance, and Controller. IDEXX Laboratories develops, manufactures and distributes diagnostic and information technology-based products and services for companion animals, livestock, poultry, water quality and food safety, and human point-of-care diagnostics. Ms. Raines served as a member of the Board of Directors of Affymetrix, Inc., a provider of life science and molecular diagnostic products that enable analysis of biological systems at the gene, protein and cell level, from January 2015 until it was acquired in March 2016. Ms. Raines is currently a member of the Board of Directors of Aratana Therapeutics, Inc., a pet therapeutics company focused on licensing, developing and commercializing biopharmaceutical products for companion animals.

Joseph W. Reitmeier has served as a director of our Company since February 2016. Mr. Reitmeier has served as Executive Vice President & Chief Financial Officer of Lennox International Inc. since July 2012. Mr. Reitmeier had served as Vice President of Finance for the LII Commercial business segment of Lennox International from 2007 to July 2012 and as Director of Internal Audit from 2005 to 2007. Lennox International is a leading global provider of climate control solutions and designs, manufactures and markets a broad range of products for the heating, ventilation, air

conditioning and refrigeration markets. Before joining Lennox International, Mr. Reitmeier held financial leadership roles at Cummins Inc. and PolyOne Corporation.

Item 1A. RISK FACTORS.

Economic cycles, particularly those involving reduced levels of commercial and residential starts and remodeling, may have adverse effects on our revenues and operating results.

We have experienced and expect to continue to experience fluctuations in revenues and operating results due to economic and business cycles. The businesses of most of our customers, particularly plumbing and heating wholesalers and OEM manufacturers, are cyclical. Therefore, the level of our business activity has been cyclical, fluctuating with economic cycles. An economic downturn may also affect the financial stability of our customers, which could affect their ability to pay amounts owed to their vendors, including us. We also believe our level of business activity is influenced by commercial and residential starts and renovation and remodeling, which are, in turn, heavily influenced by interest rates, consumer debt levels, changes in disposable income, employment growth and consumer confidence. Credit market conditions may prevent commercial and residential builders or developers from obtaining the necessary capital to continue existing projects or to start new projects. This may result in the delay or cancellation of orders from our customers or potential customers and may adversely affect our revenues and our ability to manage inventory levels, collect customer receivables and maintain profitability. If economic conditions worsen in the future or if economic recovery were to dissipate, our revenues and profits could decrease or trigger additional goodwill, indefinite-lived intangible assets, or long-lived asset impairments and could have a material effect on our financial condition and results of operations.

We face intense competition and, if we are not able to respond to competition in our markets, our revenues and profits may decrease.

Competitive pressures in our markets could adversely affect our competitive position, leading to a possible loss of market share or a decrease in prices, either of which could result in decreased revenues and profits. We encounter intense competition in all areas of our business. Additionally, we believe our customers are attempting to reduce the number of vendors from which they purchase in order to reduce the size and diversity of their inventories and their transaction costs. To remain competitive, we will need to invest continually in manufacturing, product development, marketing, customer service and support and our distribution networks. We may not have sufficient resources to continue to make such investments and we may be unable to maintain our competitive position. In addition, we may have to reduce the prices of some of our products to stay competitive, potentially resulting in a reduction in the profit margin for, and inventory valuation of, these products. Some of our competitors are based in foreign countries and have cost structures and prices in foreign currencies. Accordingly, currency fluctuations could cause our U.S. dollar costed products to be less competitive than our competitors' products costed in other currencies.

Changes in the costs of raw materials could reduce our profit margins. Reductions or interruptions in the supply of components or finished goods from international sources could adversely affect our ability to meet our customer delivery commitments.

We require substantial amounts of raw materials, including bronze, brass, cast iron, stainless steel and plastic, and substantially all of the raw materials we require are purchased from outside sources. The costs of raw materials may be subject to change due to, among other things, interruptions in production by suppliers and changes in exchange rates and worldwide price and demand levels. We typically do not enter into long-term supply agreements. Our inability to obtain supplies of raw materials for our products at favorable costs could have a material adverse effect on our business, financial condition or results of operations by decreasing our profit margins. The commodity markets have experienced tremendous volatility over the past several years, particularly copper. Should commodity costs increase substantially, we may not be able to recover such costs, through selling price increases to our customers or other product cost reductions, which would have a negative effect on our financial results. If commodity costs decline, we may experience pressure from customers to reduce our selling prices. Additionally, we continue to purchase increased levels of components and finished goods from international sources. In limited cases, these components or finished goods are single-sourced. The availability of components and finished goods from international sources could be adversely impacted by, among other things, interruptions in production by suppliers, suppliers' allocations to other purchasers and new laws, tariffs, or regulations.

We are subject to risks associated with changing technology, manufacturing techniques, distribution channels and business continuity, which could place us at a competitive disadvantage.

The successful implementation of our business strategy requires us to continually evolve our existing products and introduce new products to meet customers' needs in the industries we serve. Our products are characterized by stringent performance and specification requirements that mandate a high degree of manufacturing and engineering expertise. If we fail to meet these requirements, our business could be at risk. We believe that our customers rigorously evaluate their suppliers on the basis of a number of factors, including product quality, price competitiveness, technical and manufacturing expertise, development and product design capability, new product innovation, reliability and timeliness of delivery, operational flexibility, customer service and overall management. Our success will depend on our ability to continue to meet customers' changing specifications with respect to these criteria. We cannot ensure that we will be able to address technological advances or introduce new products that may be necessary to remain competitive within our business. We cannot ensure that we can adequately protect any of our technological developments to produce a sustainable competitive advantage. Furthermore, we may be subject to business continuity risk in the event of an unexpected loss of a material facility or operation. We cannot ensure that we adequately protect against such loss.

Changes in regulations or standards could adversely affect our business.

Our products and business are subject to a wide variety of statutory, regulatory and industry standards and requirements. A significant change to regulatory requirements, whether federal, foreign, state or local, or to industry standards, could substantially increase manufacturing costs, impact the size and timing of demand for our products, or put us at a competitive disadvantage, any of which could harm our business and have a material adverse effect on our financial condition, results of operations and cash flow.

Implementation of our acquisition strategy may not be successful, which could affect our ability to increase our revenues or our profitability.

One of our strategies is to increase our revenues and profitability and expand our business through acquisitions that will provide us with complementary products and increase market share for our existing product lines. We cannot be certain that we will be able to identify, acquire or profitably manage additional companies or successfully integrate such additional companies without substantial costs, delays or other problems. Also, companies acquired recently and in the future may not achieve anticipated revenues, cost synergies, profitability or cash flows that justify our investment in them. We have faced increasing competition for acquisition candidates, which has resulted in significant increases in the purchase prices of many acquisition candidates. This competition, and the resulting purchase price increases, may limit the number of acquisition opportunities available to us, possibly leading to a decrease in the rate of growth of our revenues and profitability. In addition, acquisitions may involve a number of risks, including, but not limited to:

- inadequate internal controls over financial reporting and our ability to bring such controls into compliance with the requirements of Section 404 of the Sarbanes-Oxley Act of 2002 in a timely manner;
- adverse short-term effects on our reported operating results;
- diversion of management's attention;
- investigations of, or challenges to, acquisitions by competition authorities;
- loss of key personnel at acquired companies;
- unanticipated management or operational problems or legal liabilities; and
- potential goodwill, indefinite-lived intangible assets, or long-lived asset impairment charges.

We are subject to risks related to product defects, which could result in product recalls and could subject us to warranty claims in excess of our warranty provisions or which are greater than anticipated due to the unenforceability of liability limitations.

We cannot be certain that our quality controls and procedures, including the testing of raw materials and safety testing of selected finished products, will reveal latent defects in our products or the materials from which they are made, which may not become apparent until after the products have been sold into the market. We also cannot be certain that our suppliers will always eliminate latent defects in products we purchase from them. Accordingly, there is a risk that product defects will occur, which could require a product recall. Product recalls can be expensive to implement and, if a product recall occurs during the product's warranty period, we may be required to replace the defective product. In addition, a product recall may damage our relationship with our customers and we may lose market share with our customers. Our insurance policies may not cover the costs of a product recall.

Our standard warranties contain limits on damages and exclusions of liability for consequential damages and for misuse, improper installation, alteration, accident or mishandling while in the possession of someone other than us. We may incur additional operating expenses if our warranty provision does not reflect the actual cost of resolving issues related to defects in our products. If these additional expenses are significant, it could adversely affect our business, financial condition and results of operations.

We face risks from product liability and other lawsuits, which may adversely affect our business.

We have been and expect to continue to be subject to various product liability claims or other lawsuits, including, among others, that our products include inadequate or improper instructions for use or installation, inadequate warnings concerning the effects of the failure of our products, alleged manufacturing or design defects, or allegations that our products contained asbestos. If we do not have adequate insurance or contractual indemnification, damages from these claims would have to be paid from our assets and could have a material adverse effect on our results of operations, liquidity and financial condition. Like other manufacturers and distributors of products designed to control and regulate fluids and gases, we face an inherent risk of exposure to product liability claims and other lawsuits in the event that the use of our products results in personal injury, property damage or business interruption to our customers. We cannot be certain that our products will be completely free from defect. In addition, in certain cases, we rely on third-party manufacturers for our products or components of our products. We cannot be certain that our insurance coverage will continue to be available to us at a reasonable cost, or, if available, will be adequate to cover any such liabilities. For more information, see "Item 1. Business—Product Liability, Environmental and Other Litigation Matters."

Economic and other risks associated with international sales and operations could adversely affect our business and future operating results.

Since we sell and manufacture our products worldwide, our business is subject to risks associated with doing business internationally. Our business and future operating results could be harmed by a variety of factors, including:

- unexpected geo-political events in foreign countries in which we operate, which could adversely affect manufacturing and our ability to fulfill customer orders;
- our failure to comply with anti-corruption laws and regulations of the U.S. government and various international jurisdictions, such as the U.S. Foreign Corrupt Practices Act and the United Kingdom's Bribery Act of 2010;
- trade protection measures and import or export duties or licensing requirements, which could increase our costs of doing business internationally;
- potentially negative consequences from changes in tax laws, including the Tax Cuts and Jobs Act of 2017, which could have an adverse impact on our profits;
- difficulty in staffing and managing widespread operations, which could reduce our productivity;
- costs of compliance with differing labor regulations, especially in connection with restructuring our overseas operations;

- laws of some foreign countries, which may not protect our intellectual property rights to the same extent as the laws of the U.S.;
- unexpected changes in regulatory requirements, which may be costly and require time to implement; and
- foreign exchange rate fluctuations, which could also materially affect our reported results. A portion of our sales and certain portions of our costs, assets and liabilities are denominated in currencies other than U.S. dollars. Approximately 39% of our sales during the year ended December 31, 2017 were from sales outside of the U.S. compared to 40% and 38% for the years ended December 31, 2016 and 2015, respectively. We cannot predict whether currencies such as the euro, Canadian dollar, Chinese yuan, or other currencies in which we transact will appreciate or depreciate against the U.S. dollar in future periods or whether future foreign exchange rate fluctuations will have a positive or negative impact on our reported results.

Our ability to achieve savings through our restructuring and business transformation activities may be adversely affected by management's ability to fully execute the plans as a result of local regulations, geo-political risk or other factors within or beyond the control of management.

We have implemented a number of restructuring and business transformation activities, which include steps that we believe are necessary to enhance the value and performance of the Company, including reducing operating costs and increasing efficiencies throughout our manufacturing, sales and distribution footprint. Factors within or beyond the control of management may change the total estimated costs or the timing of when the savings will be achieved under the plans. Further, if we are not successful in completing the restructuring or business transformation activities timely or if additional or unanticipated issues such as labor disruptions, inability to retain key personnel during and after the transformation or higher exit costs arise, our expected cost savings may not be met and our operating results could be negatively affected. In addition, our restructuring and transformation activities may place substantial demands on our management, which could lead to diversion of management's attention from other business priorities and result in a reduced customer focus.

Our operating results could be negatively affected by changes in tax rates, the adoption of new tax legislation, or exposure to additional tax liabilities.

As a global company, we are subject to taxation in numerous countries, states and other jurisdictions. As a result, our effective rate is derived from a combination of applicable tax rates in the various places that we operate. Our future taxes could be affected by numerous factors including changes in the mix of our profitability from country to country, the results of examinations and audits of our tax filings, adjustments to our uncertain tax positions, changes in accounting for income taxes and changes in tax laws.

In the ordinary course of our business, there are many transactions and calculations where the ultimate tax determination is uncertain. Significant judgment is required in determining our global provision for income taxes, deferred tax assets or liabilities, and in evaluating our tax positions. Although we believe our estimates are reasonable, our tax filings are regularly under audit by tax authorities and the ultimate tax outcome may differ from the amounts recorded and may materially affect our financial results in the period or periods for which such determination is made.

The U.S. federal government enacted the Tax Cuts and Jobs Act ("2017 Tax Act") on December 22, 2017. The 2017 Tax Act has resulted in significant changes to the U.S. corporate income tax system. These changes include lowering the corporate tax rate, implementing a territorial tax system, and imposing a one-time deemed repatriation toll tax on cumulative undistributed foreign earnings.

Due to the timing of the enactment and the complexity involved applying the provisions of the 2017 Tax Act, we made reasonable estimates of the effects and recorded provisional amounts in our financial statements as of December 31, 2017. As additional regulatory guidance is issued by the applicable taxing authorities, as accounting treatment is clarified, as we perform additional analysis on the application of the law, and as we refine estimates in calculating the effect, our final analysis, which will be recorded in the period completed, may be different from our current provisional amounts, which could materially affect our tax obligations and effective tax rate in the period or periods in which the adjustments are made.

We are currently a decentralized company, which presents certain risks.

We are currently a decentralized company, which sometimes places significant control and decision-making powers in the hands of local management. This presents various risks such as the risk of being slower to identify or react to problems affecting a key business. Additionally, we are implementing in a phased approach a company-wide initiative to standardize and upgrade our enterprise resource planning (ERP) systems. This initiative could be more challenging and costly to implement because divergent legacy systems currently exist. Further, if the ERP updates are not successful, we could incur substantial business interruption, including our ability to perform routine business transactions, which could have a material adverse effect on our financial results.

Our business and financial performance may be adversely affected by information technology and other business disruptions.

Our business may be impacted by disruptions, including information technology attacks or failures, threats to physical security, as well as damaging weather or other acts of nature, pandemics or other public health crises. Cyber security attacks, in particular, are evolving and include, but are not limited to, malicious software, attempts to gain unauthorized access to data, and other electronic security breaches that could lead to disruptions in systems, unauthorized release of confidential or otherwise protected information and corruption of data. Cyber security may also be breached due to employee error, malfeasance, system errors or vulnerabilities, including vulnerabilities of our vendors, suppliers, and their products. We have experienced cyber security attacks and may continue to experience them going forward, potentially with more frequency. Given the unpredictability of the timing, nature and scope of such disruptions, we could potentially be subject to production downtimes, operational delays, other detrimental impacts on our operations or ability to provide products to our customers, the compromising of confidential or otherwise protected information, misappropriation, destruction or corruption of data, security breaches, other manipulation or improper use of our systems or networks, financial losses from remedial actions, loss of business or potential liability, and/or damage to our reputation, any of which could have a material adverse effect on our competitive position, results of operations, cash flows or financial condition.

The requirements to evaluate goodwill, indefinite-lived intangible assets and long-lived assets for impairment may result in a write-off of all or a portion of our recorded amounts, which would negatively affect our operating results and financial condition.

As of December 31, 2017, our balance sheet included goodwill, indefinite-lived intangible assets, amortizable intangible assets and property, plant and equipment of \$550.5 million, \$37.3 million, \$147.9 million and \$198.5 million, respectively. In lieu of amortization, we are required to perform an annual impairment review of both goodwill and indefinite-lived intangible assets. In 2017 and 2016, none of our goodwill reporting units were impaired. In 2015, we recognized a pre-tax non-cash goodwill impairment charge of \$129.7 million. The \$129.7 million charge in 2015 related to an impairment within the Europe reporting unit and represented approximately 74% of the reporting unit's goodwill balance. In 2017, none of our indefinite-lived tradenames were impaired. In performing our annual reviews in 2016 and 2015, we recognized pre-tax non-cash indefinite-lived intangible asset impairment charges of approximately \$0.4 million and \$0.6 million, respectively. We are also required to perform an impairment review of our long-lived assets if indicators of impairment exist. In 2017, 2016, and 2015, we recognized pre-tax non-cash charges of \$1.0 million, \$0.1 million, and \$0.3 million, respectively.

There can be no assurances that future goodwill, indefinite-lived intangible assets or other long-lived asset impairments will not occur. We perform our annual test for indications of goodwill and indefinite-lived intangible assets impairment in the fourth quarter of our fiscal year or sooner if indicators of impairment exist.

The loss or financial instability of major customers could have an adverse effect on our results of operations.

In 2017, our top ten customers accounted for approximately 21% of our total net sales with no one customer accounting for more than 10% of our total net sales. Our customers generally are not obligated to purchase any minimum volume of products from us and are able to terminate their relationships with us at any time. In addition, increases in the prices of our products could result in a reduction in orders from our customers. A significant reduction in orders from, or change in terms of contracts with, any significant customers could have a material adverse effect on our future results of operations.

Certain indebtedness may limit our ability to pay dividends, incur additional debt and make acquisitions and other investments.

Our revolving credit facility and other senior indebtedness contain operational and financial covenants that restrict our ability to make distributions to stockholders, incur additional debt and make acquisitions and other investments unless we satisfy certain financial tests and comply with various financial ratios. If we do not maintain compliance with these covenants, our creditors could declare a default under our revolving credit facility or senior notes and our indebtedness could be declared immediately due and payable. Our ability to comply with the provisions of our indebtedness may be affected by changes in economic or business conditions beyond our control. Further, one of our strategies is to increase our revenues and profitability and expand our business through acquisitions. We may require capital in excess of our available cash and the unused portion of our revolving credit facility to make large acquisitions, which we would generally obtain from access to the credit markets. There can be no assurance that if a large acquisition is identified that we would have access to sufficient capital to complete such acquisition. Should we require additional debt financing above our existing credit limit, we cannot be assured such financing would be available to us or available to us on reasonable economic terms.

One of our stockholders can exercise substantial influence over our Company.

As of January 28, 2018, Timothy P. Horne beneficially owned 6,329,290 shares of Class B common stock. Our Class B common stock entitles its holders to ten votes for each share and our Class A common stock entitles its holders to one vote per share. As of January 28, 2018, Timothy P. Horne beneficially owned approximately 18.6% of our outstanding shares of Class A common stock (assuming conversion of all shares of Class B common stock beneficially owned by Mr. Horne into Class A common stock) and approximately 99.2% of our outstanding shares of Class B common stock, which represents approximately 69.2% of the total outstanding voting power. As long as Mr. Horne controls shares representing at least a majority of the total voting power of our outstanding stock, Mr. Horne will be able to unilaterally determine the outcome of most stockholder votes, and other stockholders will not be able to affect the outcome of any such votes.

Conversion and sale of a significant number of shares of our Class B common stock could adversely affect the market price of our Class A common stock.

As of January 28, 2018, there were outstanding 27,690,781 shares of our Class A common stock and 6,379,290 shares of our Class B common stock. Shares of our Class B common stock may be converted into Class A common stock at any time on a one for one basis. Under the terms of a registration rights agreement with respect to outstanding shares of our Class B common stock, the holders of our Class B common stock have rights with respect to the registration of the underlying Class A common stock. Under these registration rights, the holders of Class B common stock may require, on up to two occasions that we register their shares for public resale. If we are eligible to use Form S-3 or a similar short-form registration statement, the holders of Class B common stock may require that we register their shares for public resale up to two times per year. If we elect to register any shares of Class A common stock for any public offering, the holders of Class B common stock are entitled to include shares of Class A common stock into which such shares of Class B common stock may be converted in such registration. However, we may reduce the number of shares proposed to be registered in view of market conditions. We will pay all expenses in connection with any registration, other than underwriting discounts and commissions. If all of the available registered shares are sold into the public market the trading price of our Class A common stock could decline.

Item 1B. UNRESOLVED STAFF COMMENTS.

None.

Item 2. PROPERTIES.

We maintain 31 principal manufacturing, warehouse and distribution centers worldwide, including our corporate headquarters located in North Andover, Massachusetts. Additionally, we maintain numerous sales offices and other smaller manufacturing facilities and warehouses. The principal properties in each of our three geographic segments and their location, principal use and ownership status are set forth below:

Americas:

Location	Principal Use	Owned/Leased
North Andover, MA	Corporate Headquarters	Owned
Burlington, ON, Canada	Distribution Center	Owned
Export, PA	Manufacturing	Owned
Franklin, NH	Manufacturing/Distribution	Owned
St. Pauls, NC	Manufacturing	Owned
Fort Worth, TX	Manufacturing/Distribution	Owned
San Antonio, TX	Warehouse/Distribution	Owned
Spindale, NC	Distribution Center	Owned
Blauvelt, NY	Manufacturing/Distribution	Leased
Peoria, AZ	Manufacturing/Distribution	Leased
Reno, NV	Distribution Center	Leased
Vernon, BC, Canada	Manufacturing/Distribution	Leased
Woodland, CA	Manufacturing	Leased
Groveport, OH	Distribution Center	Leased

Europe

Location	Principal Use	Owned/Leased
Biassono, Italy	Manufacturing/Distribution	Owned
Hautvillers, France	Manufacturing	Owned
Landau, Germany	Manufacturing/Distribution	Owned
Mery, France	Manufacturing	Owned
Plovdiv, Bulgaria	Manufacturing	Owned
Sorgues, France	Distribution Center	Owned
Vilbjerg, Denmark	Manufacturing/Distribution	Owned
Virey-le-Grand, France	Manufacturing/Distribution	Owned
Amsterdam, Netherlands	Europe Headquarters	Leased
Gardolo, Italy	Manufacturing	Leased
Monastir, Tunisia	Manufacturing	Leased
Rosières, France	Manufacturing/Distribution	Leased
St. Neots, United Kingdom	Manufacturing/Distribution	Leased

Asia-Pacific, Middle East, and Africa:

Location	Principal Use	Owned/Leased
Ningbo, Beilun, China	Manufacturing	Owned
Shanghai, China	Asia-Pacific Headquarters	Leased
Ningbo, Beilun District, China	Distribution Center	Leased
Auckland, New Zealand	Manufacturing/Distribution	Leased

Certain of our facilities are subject to capital lease arrangements and collateral assignments under loan agreements with long-term lenders. In general, we believe that our properties, including machinery, tools and equipment, are in good condition, well maintained and adequate and suitable for their intended uses.

Item 3. LEGAL PROCEEDINGS.

We are from time to time involved in various legal and administrative proceedings. See Item 1. “Business—Product Liability, Environmental and Other Litigation Matters,” and Note 15 of the Notes to Consolidated Financial Statements, both of which are incorporated herein by reference.

Item 4. MINE SAFETY DISCLOSURES.

Not applicable.

PART II
Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.

The following table sets forth the high and low sales prices of our Class A common stock on the New York Stock Exchange during 2017 and 2016 and cash dividends declared per share.

	2017			2016		
	High	Low	Dividend	High	Low	Dividend
First Quarter	\$67.70	\$60.10	\$ 0.18	\$55.70	\$44.94	\$ 0.17
Second Quarter	65.90	59.35	0.19	60.55	53.95	0.18
Third Quarter	70.65	60.70	0.19	65.90	57.11	0.18
Fourth Quarter	77.55	66.80	0.19	70.60	59.25	0.18

There is no established public trading market for our Class B common stock, which is held by members of the Horne family. The principal holders of such stock are subject to restrictions on transfer with respect to their shares. Each share of our Class B common stock (10 votes per share) is convertible into one share of Class A common stock (1 vote per share).

On February 8, 2018, we declared a quarterly dividend of nineteen cents (\$0.19) per share on each outstanding share of Class A common stock and Class B common stock.

Aggregate common stock dividend payments in 2017 were \$25.9 million, which consisted of \$21.1 million and \$4.8 million for Class A shares and Class B shares, respectively. Aggregate common stock dividend payments in 2016 were \$24.5 million, which consisted of \$20.0 million and \$4.5 million for Class A shares and Class B shares, respectively. While we presently intend to continue to pay comparable cash dividends, the payment of future cash dividends depends upon the Board of Directors' assessment of our earnings, financial condition, capital requirements and other factors.

The number of record holders of our Class A common stock as of January 30, 2018 was 160. The number of record holders of our Class B common stock as of January 30, 2018 was 10.

We satisfy the minimum withholding tax obligation due upon the vesting of shares of restricted stock and the conversion of restricted stock units into shares of Class A common stock by automatically withholding from the shares being issued a number of shares with an aggregate fair market value on the date of such vesting or conversion that would satisfy the withholding amount due.

The following table includes information with respect to shares of our Class A common stock withheld to satisfy withholding tax obligations during the quarter ended December 31, 2017.

Period	Issuer Purchases of Equity Securities			
	(a) Total Number of Shares (or Units) Purchased	(b) Average Price Paid per Share (or Unit)	(c) Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Number (or Approximate Dollar Value) of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs
October 2, 2017 - October 29, 2017	101	\$ 67.60	—	—
October 30, 2017 - November 26, 2017	—	\$ —	—	—
November 27, 2017 - December 31, 2017	497	\$ 73.99	—	—
Total	598	\$ 70.80	—	—

The following table includes information with respect to repurchases of our Class A common stock during the three-month period ended December 31, 2017 under our stock repurchase program.

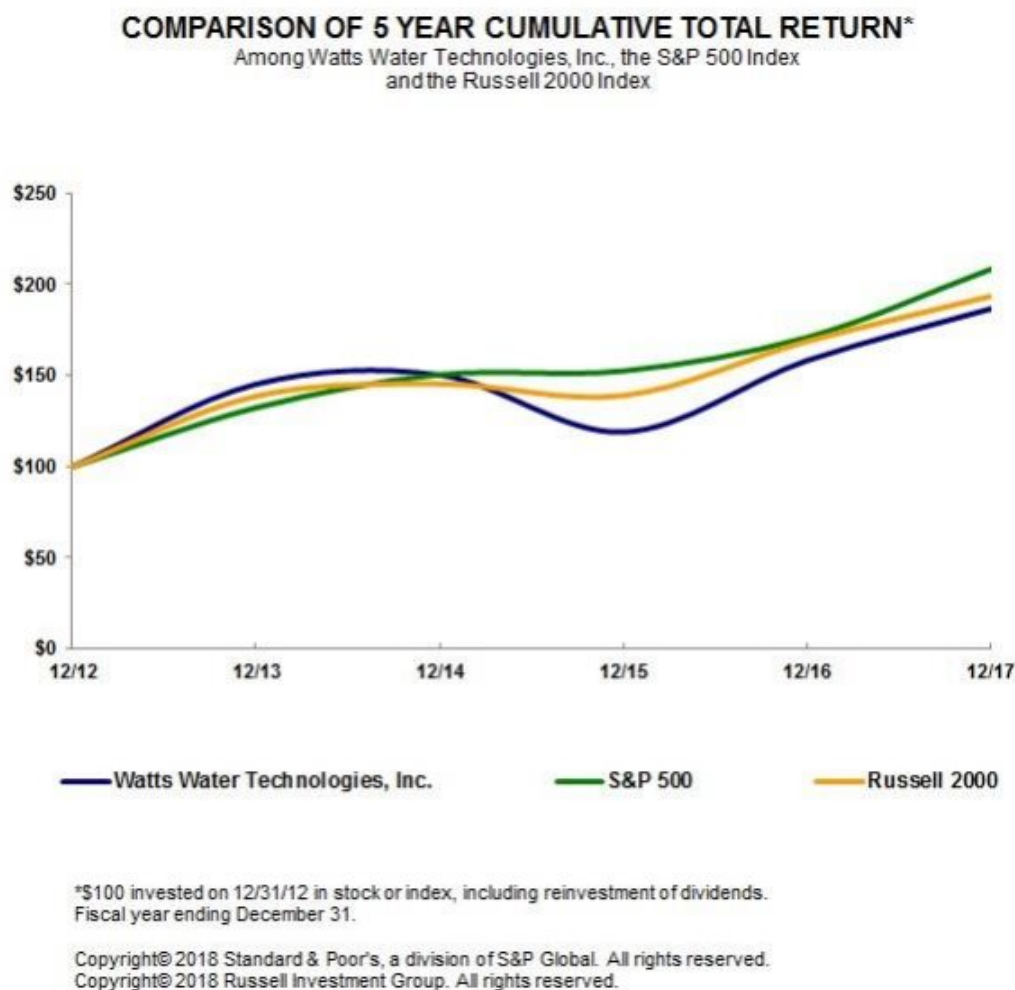
Period	Issuer Purchases of Equity Securities			
	(a) Total Number of Shares (or Units) Purchased(1)	(b) Average Price Paid per Share (or Unit)	(c) Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Number (or Approximate Dollar Value) of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs
October 2, 2017 - October 29, 2017	2,270	\$ 69.96	2,270	\$ 42,575,148
October 30, 2017 - November 26, 2017	20,407	\$ 70.29	20,407	\$ 41,140,737
November 27, 2017 - December 31, 2017	40,754	\$ 74.69	40,754	\$ 37,779,401
Total	63,431	\$ 73.10	63,431	

- (1) On July 27, 2015, the Board of Directors authorized a stock repurchase program of up to \$100 million of the Company's Class A common stock to be purchased from time to time on the open market or in privately negotiated transactions. The timing and number of shares repurchased will be determined by the Company's management based on its evaluation of market conditions and other factors.

Performance Graph

Set forth below is a line graph comparing the cumulative total shareholder return on our Class A common stock for the last five years with the cumulative return of companies on the Standard & Poor's 500 Stock Index and the Russell 2000 Index. We chose the Russell 2000 Index because it represents companies with a market capitalization similar to that of

Watts Water. The graph assumes that the value of the investment in our Class A common stock and each index was \$100 at December 31, 2012 and that all dividends were reinvested.



* \$100 invested on 12/31/12 in stock or index, including reinvestment of dividends. Fiscal year ending December 31.

Cumulative Total Return

	12/31/12	12/31/13	12/31/14	12/31/15	12/31/16	12/31/17
Watts Water Technologies, Inc.	100.00	145.33	150.49	119.23	158.37	186.62
S & P 500	100.00	132.39	150.51	152.59	170.84	208.14
Russell 2000	100.00	138.82	145.62	139.19	168.85	193.58

The above Performance Graph and related information shall not be deemed "soliciting material" or to be "filed" with the Securities and Exchange Commission, nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933 or Securities Exchange Act of 1934, each as amended, except to the extent that we specifically incorporate it by reference into such filing.

Item 6. *SELECTED FINANCIAL DATA.*

The selected financial data set forth below should be read in conjunction with our consolidated financial statements, related Notes thereto and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included herein.

FIVE-YEAR FINANCIAL SUMMARY

(Amounts in millions, except per share and cash dividend information)

	Year Ended 12/31/17(1)	Year Ended 12/31/16(2)	Year Ended 12/31/15(3)	Year Ended 12/31/14(4)	Year Ended 12/31/13(5) (6)
Statement of operations data:					
Net sales	\$ 1,456.7	\$ 1,398.4	\$ 1,467.7	\$ 1,513.7	\$ 1,473.5
Net income (loss) from continuing operations	73.1	84.2	(112.9)	50.3	60.9
Loss from discontinued operations, net of taxes	—	—	—	—	(2.3)
Net income (loss)	73.1	84.2	(112.9)	50.3	58.6
DILUTED EPS					
Income (loss) per share:					
Continuing operations	2.12	2.44	(3.24)	1.42	1.71
Discontinued operations	—	—	—	—	(0.07)
NET INCOME (LOSS)	2.12	2.44	(3.24)	1.42	1.65
Cash dividends declared per common share	\$ 0.75	\$ 0.71	\$ 0.66	\$ 0.58	\$ 0.50
Balance sheet data (at year end):					
Total assets	\$ 1,736.5	\$ 1,763.2	\$ 1,692.8	\$ 1,948.0	\$ 1,740.2
Long-term debt, net of current portion	474.6	511.3	576.2	577.8	305.5

- (1) For the year ended December 31, 2017, net income includes the following pre-tax costs: long-lived asset impairment charges of \$1.0 million, deployment costs related to the Americas and Europe transformation programs of \$2.9 million, restructuring charges of \$6.8 million, and acquisition costs of \$0.2 million. The net after-tax cost of these items was \$7.3 million. Net income also includes a tax charge of \$25.1 million related to the impact of the 2017 Tax Act.
- (2) For the year ended December 31, 2016, net income includes the following net pre-tax costs: long-lived asset impairment charges of \$0.5 million, acquisition costs of \$2.0 million, purchase accounting adjustments of \$2.0 million, restructuring charges of \$4.7 million, deployment costs related to the Americas, APMEA, and Europe transformation programs of \$14.2 million, and debt issuance costs of \$0.3 million. Net income also includes a pre-tax gain of \$8.7 million related to the disposition of a subsidiary in China. The net after-tax cost of these items was \$6.2 million.
- (3) For the year ended December 31, 2015, net loss includes the following net pre-tax costs: goodwill and other long-lived asset impairment of \$130.5 million, acquisition related costs of \$1.6 million, restructuring related costs of \$21.4 million, Americas, APMEA, and Europe transformation deployment costs of \$14.3 million, a \$3.5 million charge for a settlement in principle relating to two class action lawsuits, a \$2.5 million charge related to the resolution of certain product liability legacy claims for non-core products which we have exited, and long-term obligations settlements, including our pension plan and supplemental employee retirement plan obligations of \$64.7 million. The net after-tax cost of these items was \$197.3 million.
- (4) For the year ended December 31, 2014, net income includes the following net pre-tax costs: goodwill and other long-lived asset impairment of \$14.2 million, acquisition related costs of \$5.8 million, restructuring and severance related costs of \$16.4 million, Europe and Americas transformation deployment costs of \$9.3 million, and customs settlement costs of \$1.9 million. The net after-tax cost of these items was \$38.5 million.
- (5) For the year ended December 31, 2013, net income from continuing operations includes the following net pre-tax costs: legal costs of \$15.3 million, restructuring charges of \$8.7 million, goodwill and other long-lived asset impairment of \$2.3 million (of which \$1.1 million is recorded in cost of goods sold), Europe transformation deployment costs of \$1.2 million, earn-out adjustments of \$0.9 million, acceleration of executive share based compensation expense of \$0.9 million and an adjustment to the disposal of the business related to the sale of Tianjin

Watts Valve Company Ltd. (TWVC) of \$0.6 million. The net after-tax cost of these items was \$18.3 million.

- (6) In August 2013, we disposed of 100% of the stock of Austroflex. Results from operations and a loss on disposal are recorded in discontinued operations for 2013.

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

Overview

We are a leading supplier of products and solutions that conserve water and manage the flow of fluids and energy into, through and out of buildings in the residential and commercial markets of the Americas, Europe and APMEA. For over 140 years, we have designed and produced valve systems that safeguard and regulate water systems, energy efficient heating and hydronic systems, drainage systems and water filtration technology that helps conserve water. We earn revenue and income almost exclusively from the sale of our products. Our principal product lines include:

- Residential & commercial flow control products—includes products typically sold into plumbing and hot water applications such as backflow preventers, water pressure regulators, temperature and pressure relief valves, and thermostatic mixing valves.
- HVAC & gas products—includes commercial high-efficiency boilers, water heaters and heating solutions, hydronic and electric heating systems for under-floor radiant applications, custom heat and hot water solutions, hydronic pump groups for boiler manufacturers and alternative energy control packages, and flexible stainless steel connectors for natural and liquid propane gas in commercial food service and residential applications. HVAC is an acronym for heating, ventilation and air conditioning.
- Drainage & water re-use products—includes drainage products and engineered rain water harvesting solutions for commercial, industrial, marine and residential applications.
- Water quality products—includes point-of-use and point-of-entry water filtration, conditioning and scale prevention systems for both commercial and residential applications.

Our business is reported in three geographic segments: Americas, Europe, and APMEA. We distribute our products through four primary distribution channels: wholesale, original equipment manufacturers (OEMs), specialty, and do-it-yourself (DIY). In September 2015, we divested a substantial portion of our DIY business in the Americas, which reduced the significance of DIY as a distribution channel for our products in 2017 and 2016.

Prior to 2017, our Europe segment was formerly referred to as EMEA (Europe, Middle East, and Africa) and our APMEA segment was formerly referred to as Asia-Pacific. As of January 1, 2017, we began reporting the results of Watts Industries Middle East, an indirect, wholly owned subsidiary, within our APMEA segment to align with internal operating changes. These results had previously been reported within our former EMEA segment. This change does not affect our reportable segments but represents only a change in composition that better aligns with the structure of our internal organization. The 2016 and 2015 results by segment have been retrospectively revised for comparative purposes.

We believe that the factors relating to our future growth include continued product innovation that meets the needs of our customers and our end markets; our ability to make selective acquisitions, both in our core markets as well as in new complementary markets; regulatory requirements relating to the quality and conservation of water and the safe use of water; increased demand for clean water; continued enforcement of plumbing and building codes; and a healthy economic environment. We have completed 10 acquisitions in the last decade. Our acquisition strategy focuses on businesses that promote our key macro themes around safety & regulation, energy efficiency and water conservation. We target businesses that will provide us with one or more of the following: an entry into new markets and/or new geographies, improved channel access, unique and/or proprietary technologies, advanced production capabilities or complementary solution offerings.

Our innovation strategy is focused on differentiated products that provide greater opportunity to distinguish ourselves in the market place. Conversely, we want to migrate away from commoditized products where we cannot add value. Our

goal is to be a solutions provider, not merely a components supplier. We continually look for strategic opportunities to invest in new products and markets or divest existing product lines where necessary in order to meet those objectives.

Products representing a majority of our sales are subject to regulatory standards and code enforcement, which typically require that these products meet stringent performance criteria. Together with our commissioned manufacturers' representatives, we have consistently advocated for the development and enforcement of such plumbing codes. We are focused on maintaining stringent quality control and testing procedures at each of our manufacturing facilities in order to manufacture products in compliance with code requirements and take advantage of the resulting demand for compliant products. We believe that the product development, product testing capability and investment in plant and equipment needed to manufacture products in compliance with code requirements, represent a competitive advantage for us.

In 2017, we successfully completed our transformation programs and realized the benefits of our product portfolio rationalization, footprint optimization, and global sourcing initiatives, while simultaneously reinvesting in the business. We continued to drive commercial and operational excellence. We completed the integration of PVI Industries, LLC ("PVI") to our portfolio during the year. We continued to streamline our product portfolio across the regions as we focus on our core product lines and rationalize certain low-margin, non-core products. Our financial performance in 2017 was solid, driven by growth in the Americas and Europe segments and realization of our productivity and transformation savings.

The 2017 Tax Act has resulted in significant changes to the U.S. corporate income tax system and was enacted on December 22, 2017. These changes include a federal statutory rate reduction from 35% to 21% effective on January 1, 2018, the elimination or reduction of certain domestic deductions and credits, and limitations on the deductibility of interest expense and executive compensation. The 2017 Tax Act transitions international taxation from a worldwide system to a modified territorial system and includes base erosion prevention measures on non-U.S. earnings. The 2017 Tax Act also includes a one-time mandatory deemed repatriation tax on accumulated foreign subsidiaries' previously untaxed foreign earnings ("Toll Tax").

Changes in tax rates and tax laws are accounted for in the period of enactment and deferred tax assets and liabilities are measured at the enacted tax rate. Therefore, during the year ended December 31, 2017, we recorded a charge totaling \$25.1 million related to our current estimate of the provisions of the 2017 Tax Act, including an estimated \$23.3 million expense under the Toll Tax. The Toll Tax will be paid over an eight-year period, starting in 2018, and will not accrue interest. The provisions of the 2017 Tax Act allows us more flexibility in deploying our global cash resources as we continue to drive a balanced capital allocation strategy. We expect that the 2017 Tax Act will have a positive effect on our income tax rate in 2018.

Overall, reported sales for 2017 increased 4.2%, or \$58.3 million, primarily related to an increase in acquired sales of \$47.0 million, or 3.3%, relating to the acquisitions of PVI and Watts Korea, an increase in organic sales of \$7.0 million, or 0.5%, and an increase in sales due to foreign exchange of \$7.8 million, or 0.7%. This increase was partially offset by a decrease in sales of \$3.5 million related to product lines we divested by the first quarter of 2016 in the Americas segment as part of our Americas transformation program. Compared to 2016, reported sales as a percentage of segment sales in the Americas and Europe increased by 5.6% and 2.1%, respectively, while reported sales in APMEA declined by 2.6%. As a percentage of segment sales, organic sales in the Americas and Europe increased 0.8% and 0.6% respectively, while organic sales in APMEA declined by 4.6% compared to 2016. The increase in organic sales in the Americas was primarily driven by increased sales in our valve, HVAC, and drainage products, partially offset by declines in our tankless water heater and condensing boiler products. In Europe, the increase was primarily driven by our drains and electronics products, offset by a decline in our plumbing products due to the impact of product rationalization. The decline in APMEA sales primarily related to the impact of product rationalization, partially offset by increased demand for our underfloor heating products and commercial valves and growth in Korea. Operating income of \$162.3 million increased by \$17.3 million, or 11.9% compared to 2016. This increase is driven by incremental transformation and productivity savings, lower transformation costs, the acquisition of PVI, and higher sales volume.

Organic sales is a non-GAAP measure that excludes the impacts of acquisitions, divestitures and foreign exchange from year-over-year comparisons. Divested sales includes the exit of our non-core products through sale and through the discontinuation of product lines. Management believes reporting organic sales growth provides useful information to investors, potential investors and others, because it allows for a more complete understanding of underlying sales trends by providing sales growth on a consistent basis. We reconcile the change in organic sales to our reported sales for each region within our results below.

In December 2017, we concluded our transformation program relating to our Americas and APMEA businesses, which primarily involved the exit and discontinuation of low-margin, non-core product lines, enhancing global sourcing capabilities and the reduction of the square footage of our Americas facilities. The transformation program was approved by our Board of Directors in 2015. Over the course of the program, we eliminated approximately \$165 million of the combined Americas and APMEA net sales, primarily within our do-it-yourself (DIY) distribution channel. As part of the exit of non-core product lines, we entered into an agreement to sell an operating subsidiary in China that was dedicated exclusively to the manufacturing of products being discontinued. The sale was finalized in the second quarter of 2016, and we recognized a pre-tax gain of \$8.7 million and received proceeds from the sale of \$8.4 million. The program also involved the consolidation of manufacturing facilities and distribution center network optimization, reducing the square footage of our Americas facilities net operating footprint by approximately 30%. The footprint focus of the program was designed to improve the utilization of our remaining facilities, better leverage our cost structure, reduce working capital, and improve execution of customer delivery requirements.

The total pre-tax cost for our transformation program related to our Americas and APMEA businesses was \$59.8 million, including restructuring costs of \$18.1 million, goodwill and intangible asset impairments of \$13.5 million and other transformation and deployment costs of approximately \$28.3 million. The other transformation and deployment costs included consulting and project management fees, inventory write-offs, and other associated costs. The program originally included estimated pre-tax charges totaling approximately \$65 million. In the third quarter of 2017, the total expected costs of the planned actions were reduced to approximately \$60 million, primarily related to reduced expected facility exit costs and reduced other transformation and deployment costs. All costs associated with the Americas and APMEA transformation program were incurred as of December 31, 2017. Refer to Note 3 and Note 4 of the Notes to Consolidated Financial Statements in this Annual Report on Form 10-K for further details.

Acquisitions and Disposals

On November 2, 2016, we acquired 100% of the shares of PVI Riverside Holdings, Inc., the parent company of PVI. The aggregate purchase price, including the final working capital adjustment, was approximately \$79.1 million. PVI is a leading manufacturer of commercial stainless steel water heating equipment, focused on the high capacity market in North America and is based in Fort Worth, Texas. PVI's water heater product offering complements AERCO's boiler products, allowing us to address customers' heating and hot water requirements.

On February 26, 2016, we acquired an additional 50% of the outstanding shares of Watts Korea for an aggregate purchase price of approximately \$4 million. Prior to February 26, 2016, the Company held a 40% interest in Watts Korea, which operated as a joint venture. We acquired the remaining 10% ownership in the fourth quarter of 2016 and now own 100% of Watts Korea. Watts Korea strengthens our strategic vision to expand solutions sales into the Korean market. We accounted for the transaction as a step acquisition within a business combination. We recognized a \$1.7 million pre-tax gain on the previously held 40% ownership interest in the first quarter of 2016.

On September 22, 2015, we signed an agreement to sell an operating subsidiary in China that was dedicated to the production of non-core products. The sale was finalized in the second quarter of 2016, and we received total proceeds of approximately \$8.4 million from the sale as of the fourth quarter of 2016. We recognized a pre-tax gain of \$8.7 million, which includes a non-cash accumulated currency translation adjustment of \$7.3 million. The net after-tax gain was approximately \$8.3 million.

On November 30, 2015, we acquired 80% of the outstanding shares of Apex Valves Limited ("Apex"). Apex specializes in the design and manufacturing of control valves for low and high pressure hot water and filtration systems. Apex also produces an extensive range of float and reservoir valves for the agricultural industry. The aggregate purchase price was approximately \$20.4 million and we recorded a long-term liability of \$5.5 million as the estimate of the acquisition date fair value on the contractual call option to purchase the remaining 20% within three years of closing. Apex manufactures high-end valves for the New Zealand market that we believe could be introduced in the China market and other countries in South East Asia. We acquired an additional 10% ownership in the first quarter of 2017 for approximately \$2.9 million and now own 90% of the outstanding shares of Apex. We maintain a current liability of approximately \$2.9 million for the estimated fair value on the remaining 10% contractual call option, which is expected to be exercised in 2018.

Recent Developments

On February 8, 2018, we declared a quarterly dividend of nineteen cents (\$0.19) per share on each outstanding share of Class A common stock and Class B common stock payable on March 16, 2018 to stockholders of record on March 2, 2018.

Results of Operations

Year Ended December 31, 2017 Compared to Year Ended December 31, 2016

Net Sales. Our business is reported in three geographic segments: Americas, Europe and APMEA. Our net sales in each of these segments for the years ended December 31, 2017 and December 31, 2016 were as follows:

	Year Ended December 31, 2017		Year Ended December 31, 2016		% Change to Consolidated Net Sales	
	Net Sales	% Sales	Net Sales	% Sales	Change	Net Sales
(dollars in millions)						
Americas	\$ 951.9	65.4 %	\$ 900.9	64.5 %	\$ 51.0	3.6 %
Europe	440.3	30.2	431.3	30.8	9.0	0.7
APMEA	64.5	4.4	66.2	4.7	(1.7)	(0.1)
Total	<u>\$1,456.7</u>	<u>100.0 %</u>	<u>\$1,398.4</u>	<u>100.0 %</u>	<u>\$ 58.3</u>	<u>4.2 %</u>

The change in net sales was attributable to the following:

	Change As a % of Consolidated Net Sales				Change As a % of Segment Net Sales			
	Americas	Europe	APMEA	Total	Americas	Europe	APMEA	Total
(dollars in millions)								
Organic	\$ 7.4	\$ 2.5	\$ (2.9)	\$ 7.0	0.5 %	0.2 %	(0.2)%	0.5 %
Foreign exchange	1.4	6.5	(0.1)	7.8	0.1	0.5	—	0.6
Divested	(3.5)	—	—	(3.5)	(0.3)	—	—	(0.3)
Acquisition	45.7	—	1.3	47.0	3.3	—	0.1	3.4
Total	<u>\$ 51.0</u>	<u>\$ 9.0</u>	<u>\$ (1.7)</u>	<u>\$ 58.3</u>	<u>3.6 %</u>	<u>0.7 %</u>	<u>(0.1)%</u>	<u>4.2 %</u>

The change in organic net sales as a percentage of consolidated net sales and of segment net sales in the Americas excludes divested sales for both periods presented.

Our products are sold to wholesalers, OEMs, various specialty channels, and DIY chains. The change in organic net sales by channel was attributable to the following:

	Change As a % of Prior Year Sales				
	Wholesale	OEMs	Specialty	DIY	Total
(dollars in millions)					
Americas	\$ 19.9	\$ 1.9	\$ (9.4)	\$ (5.0)	\$ 7.4
Europe	7.6	(3.3)	—	(1.8)	2.5
APMEA	2.0	(4.9)	—	—	(2.9)
Total	<u>\$ 29.5</u>	<u>\$ (6.3)</u>	<u>\$ (9.4)</u>	<u>\$ (6.8)</u>	<u>\$ 7.0</u>

The organic sales increase of \$7.0 million was partially muted by the \$15.1 million impact of our ongoing product rationalization efforts across our regions, as we continue to focus on our core product lines. The product rationalization mainly affected our DIY and OEM channels.

Organic net sales in the Americas increased \$7.4 million mainly from growth in the wholesale channel, driven by valve, HVAC, and drainage products. This increase was partially offset by declines in the specialty channels, where we experienced weakness in our tankless water heater and condensing boiler products. There was also a decrease in the DIY channel due to the product rationalization discussed above.

Organic net sales in Europe increased \$2.5 million primarily due to growth in the wholesale channel from increased sales of our drains products. This increase was also due to higher demand for our electronics products in Germany. These increases were partially offset by product rationalization and reduced demand for our HVAC products in Italy.

Organic net sales in APMEA decreased \$2.9 million driven primarily by the impact of product rationalization. This decrease was offset partly by higher demand in China for our residential underfloor heating products and commercial valves products, as well as growth in South Korea from an expanded product offering.

The net increase in sales due to foreign exchange was primarily due to the appreciation of the euro and the Canadian dollar against the U.S. dollar in 2017. We cannot predict whether foreign currencies will appreciate or depreciate against the U.S. dollar in future periods or whether future foreign exchange rate fluctuations will have a positive or negative impact on our net sales.

The decrease in total net sales due to divested products of \$3.5 million relates to the discontinuation of product lines we divested by the end of the first quarter of 2016 in the Americas segment as part of our Americas transformation program.

The increase in net sales from acquisitions in the Americas and APMEA segments are related to the fourth quarter 2016 acquisition of PVI and the first quarter 2016 acquisition of Watts Korea, respectively.

Gross Profit. Gross profit and gross profit as a percent of net sales (gross margin) for 2017 and 2016 were as follows:

	Year Ended December 31,	
	2017	2016
	(dollars in millions)	
Gross profit	\$ 602.4	\$ 565.6
Gross margin	41.4 %	40.5 %

The increase in gross margin percentage is attributable to increased volume, manufacturing productivity, changes to our product mix, and incremental savings from our transformation and restructuring programs primarily within the Americas and Europe.

Selling, General and Administrative Expenses. Selling, general and administrative, or SG&A, expenses increased \$8.2 million, or 1.9%, in 2017 compared to 2016. The increase in SG&A expenses was attributable to the following:

	(in millions)	% Change
Organic	\$ (7.3)	(1.7)%
Foreign exchange	1.7	0.4
Acquisition	13.8	3.2
Total	\$ 8.2	1.9 %

SG&A expenses increased primarily as a result of our 2016 acquisitions of PVI and Watts Korea, as well as increases in foreign exchange primarily from the appreciation of the euro and the Canadian dollar against the U.S. dollar compared to 2016. Organically SG&A expenses decreased \$7.3 million compared to 2016, primarily related to a decline in product liability costs of \$9.4 million, lower transformation costs of \$8.1 million as we completed our transformation program in 2017, and lower property tax and other tax charges of \$1.1 million. The decline in product liability costs was primarily due to the resolution of the class action lawsuits related to certain legacy claims for undifferentiated products which we have exited, and the associated reduction in reported claims. The organic decrease was partially offset by \$8.2 million for investments in strategic initiatives, which includes \$2.5 million in research and development costs, and \$4.2 million of higher distribution and freight costs. Total SG&A expenses, as a percentage of sales, were 29.7% in 2017 compared to 30.3% in 2016.

Restructuring. In 2017, we recorded a net charge of \$6.8 million, primarily for the transformation of our Americas business, involuntary terminations and other costs incurred as part of our restructuring initiatives, as compared to a net charge of \$4.7 million in 2016. For a more detailed description of our current restructuring plans, see Note 3 of Notes to Consolidated Financial Statements in this Annual Report Form 10-K.

Goodwill and Other Long-Lived Asset Impairment Charges. In 2017, we recorded an impairment of \$1.0 million, primarily related to a technology asset in the Americas operating segment. In 2016, we recorded impairment charges of \$0.5 million, primarily related to an indefinite lived tradename in the Europe operating segment. See Note 6 of Notes to Consolidated Financial Statements in this Annual Report on Form 10-K for additional information regarding these impairments.

Gain on disposition. In the second quarter of 2016, we recorded a pre-tax gain of \$8.7 million related to the sale of a China subsidiary that was dedicated to the production of non-core products and part of the transformation of our Americas and APMEA businesses. The pre-tax gain included a non-cash accumulated currency translation adjustment of \$7.3 million.

Operating Income (Loss). Operating income (loss) by geographic segment for 2017 and 2016 was as follows:

	Year Ended			% Change to Consolidated Operating
	December 31, 2017	December 31, 2016	Change	Income
	(dollars in millions)			
Americas	\$ 146.8	\$ 127.1	\$ 19.7	13.6 %
Europe	47.6	40.0	7.6	5.2
APMEA	4.7	15.1	(10.4)	(7.2)
Corporate	(36.8)	(37.2)	0.4	0.3
Total	\$ 162.3	\$ 145.0	\$ 17.3	11.9 %

The increase (decrease) in operating income (loss) is attributable to the following:

	Change As a % of Consolidated Operating Income					Change As a % of Segment Operating Income				
	Americas	Europe	APMEA	Corporate	Total	Americas	Europe	APMEA	Corporate	Total
	(dollars in millions)									
Organic	\$ 19.1	\$ 6.5	\$ (1.4)	\$ 1.0	\$ 25.2	13.2 %	4.5 %	(1.0)%	0.7 %	17.4 %
Foreign exchange	0.2	0.4	—	—	0.6	0.1	0.3	—	—	0.4
Acquisition	2.9	—	—	—	2.9	2.0	—	—	—	2.0
Gain on disposition	—	—	(8.7)	—	(8.7)	—	—	(6.0)	—	(6.0)
Restructuring, impairment charges	(2.5)	0.7	(0.3)	(0.6)	(2.7)	(1.7)	0.4	(0.2)	(0.4)	(1.9)
Total	\$ 19.7	\$ 7.6	\$ (10.4)	\$ 0.4	\$ 17.3	13.6 %	5.2 %	(7.2)%	0.3 %	11.9 %

The increase in consolidated operating income was primarily driven by increased volume and gross margin improvements in the Americas, as well as savings from our restructuring initiatives in Europe. The increase in operating income was also driven by reduced transformation costs compared to 2016 in the Americas and APMEA as our transformation program was completed in 2017. Contributing to the increase in consolidated operating income was \$2.9 million from the acquisition of PVI. Included in operating income in 2016 was an \$8.7 million gain on a disposition of a China subsidiary.

Interest Expense. Interest expense decreased \$3.5 million, or 15.5%, in 2017 from 2016 as we repaid over \$150 million in outstanding debt during 2017. Further, our weighted average interest rate decreased marginally year to year as we retired higher cost private placement debt in the middle of 2016 and replaced with lower cost revolver debt and we replaced certain U.S. based revolver debt with lower cost euro denominated debt in late 2016. Refer to Note 11 of the Notes to Consolidated Financial Statements in this Annual Report on Form 10-K for further details.

Other expense (income), net. Other expense (income), net, decreased \$5.5 million to a net expense balance of \$1.1 million in 2017 as compared to a net other income balance of (\$4.4) million in 2016. Included in other income in 2016 was a \$1.7 million non-cash gain recognized on the acquisition of Watts Korea. The remaining decrease is primarily due to net foreign currency transaction losses in 2017.

Income Taxes. Our effective income tax rate changed to 48.9% in 2017, from 34.1% in 2016. The tax rate increased primarily due to the impact of the 2017 Tax Act, which was enacted on December 22, 2017, and has resulted in significant changes to the U.S. corporate income tax system. These changes include lowering the corporate tax rate from

35% to 21% in 2018, implementing a territorial tax system, and imposing a one-time deemed repatriation toll tax on cumulative undistributed foreign earnings.

Changes in tax rates and tax laws are accounted for in the period of enactment and deferred tax assets and liabilities are measured at the enacted tax rate. Therefore, during the year ended December 31, 2017, we recorded a provisional charge of \$25.1 million related to our current estimate of the provisions of the 2017 Tax Act, including an estimated \$23.3 million expense under the Toll Tax. The Toll Tax will be paid over an eight-year period, starting in 2018, and will not accrue interest.

Net Income (Loss). Net income for 2017 was \$73.1 million, or \$2.12 per common share, compared to \$84.2 million, or \$2.44 per common share, for 2016. Results for 2017 include a charge of \$25.1 million within income tax expense, or \$0.73 per common share, related to the impact of the 2017 Tax Act, \$1.9 million, or \$0.06 per common share, for the Europe and Americas transformation costs; \$4.7 million, or \$0.14 per common share, for restructuring charges; \$0.6 million, or \$0.02 per common share for long-lived asset impairment charges, partially offset by \$1.6 million or \$0.05 per common share in tax benefits.

Results for 2016 include after-tax benefits of \$8.3 million, or \$0.24 per common share, for a gain on disposition and \$1.0 million, or \$0.03 per common share, for a gain on acquisition of Watts Korea, offset by an after-tax charge of \$8.8 million, or \$0.26 per common share, for the Europe and Americas transformation deployment costs; \$3.2 million, or \$0.09 per common share, for restructuring charges; \$1.3 million, or \$0.04 per common share for purchase accounting adjustments related to our acquisitions in 2016; \$1.2 million, or \$0.03 per common share for acquisition costs in 2016; and \$2.6 million, or \$0.08 per common share for other items, primarily related to tax charges related to the transformation.

Results of Operations

Year Ended December 31, 2016 Compared to Year Ended December 31, 2015

Net Sales. Our business is reported in three geographic segments: Americas, Europe and APMEA. Our net sales in each of these segments for the years ended December 31, 2016 and 2015 were as follows:

	Year Ended December 31, 2016		Year Ended December 31, 2015		% Change to Consolidated	
	Net Sales	% Sales	Net Sales	% Sales	Change	Net Sales
(dollars in millions)						
Americas	\$ 900.9	64.5 %	\$ 978.5	66.7 %	\$ (77.6)	(5.3)%
Europe	431.3	30.8	436.0	29.7	(4.7)	(0.3)
APMEA	66.2	4.7	53.2	3.6	13.0	0.9
Total	\$1,398.4	100.0 %	\$1,467.7	100.0 %	\$ (69.3)	(4.7)%

The change in net sales was attributable to the following:

	Change as a % of Consolidated Net Sales				Change as a % of Segment Net Sales			
	Americas	Europe	APMEA	Total	Americas	Europe	APMEA	Total
(dollars in millions)								
Organic	\$ 7.7	\$ 0.5	\$ 6.1	\$ 14.3	0.6 %	0.1 %	0.4 %	1.1 %
Foreign exchange	(2.4)	(5.2)	(2.0)	(9.6)	(0.2)	(0.4)	(0.1)	(0.7)
Divested	(91.8)	—	(6.2)	(98.0)	(6.3)	—	(0.4)	(6.7)
Acquisitions	8.9	—	15.1	24.0	0.6	—	1.0	1.6
Total	\$ (77.6)	\$ (4.7)	\$ 13.0	\$ (69.3)	(5.3)%	(0.3)%	0.9 %	(4.7)%

The change in organic net sales as a percentage of consolidated net sales and of segment net sales in the Americas and APMEA excluded divested sales for both periods presented.

Our products are sold to wholesalers, OEMs, various specialty channels and DIY chains. The change in organic net sales by channel was attributable to the following:

	Wholesale	OEMs	Specialty	DIY	Total	Change As a % of Prior Year Sales				
						Wholesale	OEMs	Specialty	DIY	
(dollars in millions)										
Americas	\$ 3.7	\$ 4.3	\$ (1.3)	\$ 1.0	\$ 7.7	0.7 %	6.3 %	(0.5)%	1.7 %	
Europe	1.3	2.2	—	(3.0)	0.5	0.6	1.0	—	(35.6)	
APMEA	9.9	(3.8)	—	—	6.1	39.1	(36.2)	—	—	
Total	\$ 14.9	\$ 2.7	\$ (1.3)	\$(2.0)	\$14.3					

The change in organic net sales by channel in the Americas and APMEA excluded divested sales for both periods presented.

Organic net sales in the Americas increased \$7.7 million compared to 2015 primarily due to growth in our wholesale markets and OEM channels, particularly relating to backflow, valve, and drainage products.

Organic net sales in Europe increased slightly compared to 2015 mainly due to improved demand in certain key markets such as Italy, and new product introductions in our electronics platform. These increases were partially offset by declines in the OEM boiler market in Germany, sales declines in France, and by project delays in our drains business partly driven by the impact of economic and political uncertainty in the UK.

Organic net sales in the APMEA wholesale market increased as compared to 2015 primarily due to strong demand for our underfloor heating products for residential applications as well as for our water and plumbing products outside of China.

The net decrease in sales due to foreign exchange was primarily due to the depreciation of the euro, Chinese yuan and the Canadian dollar against the U.S. dollar in 2016. We cannot predict whether foreign currencies will appreciate or depreciate against the U.S. dollar in future periods or whether future foreign exchange rate fluctuations will have a positive or negative impact on our net sales.

The decrease in total net sales due to divested products of \$98.0 million was a result of the exit of our low margin, non-core products beginning after the first quarter 2015 in our Americas and APMEA segments. Divested sales included the exit of our non-core products through sale and through the discontinuation of product lines.

The increase in net sales from acquisitions in APMEA was related to the fourth quarter 2015 acquisition of Apex and the first quarter 2016 acquisition of Watts Korea. The increase in net sales from acquisitions in the Americas was related to the acquisition of PVI in the fourth quarter of 2016.

Gross Profit. Gross profit and gross profit as a percent of net sales (gross margin) for 2016 and 2015 were as follows:

	Year Ended December 31,	
	2016	2015
	(dollars in millions)	
Gross profit	\$ 565.6	\$ 553.1
Gross margin	40.5 %	37.7 %

Americas' gross margin percentage increased compared to 2015 due primarily to a favorable product mix, including the 2015 exit of our low-margin, non-core product lines, as well as manufacturing efficiencies and commodity cost savings. Europe's gross margin percentage increased marginally due to manufacturing productivity, restructuring savings and commodity cost savings, compared to 2015. APMEA's gross margin percentage increased compared to 2015 primarily due to increased trade sales and product mix, offset by the decreased intercompany activity.

Selling, General and Administrative Expenses. Selling, general and administrative, or SG&A, expenses decreased \$67.2 million, or 13.7%, in 2016 compared to 2015. The decrease in SG&A expenses was attributable to the following:

	(in millions)	% Change
Organic	\$ (72.2)	(14.8)%
Foreign exchange	(2.2)	(0.4)
Acquisitions	7.2	1.5
Total	\$ (67.2)	(13.7)%

The organic decrease in SG&A expenses was primarily due to the 2015 settlement of certain long-term obligations, including our pension plan and supplemental employee retirement plan obligations of \$64.7 million and a \$6.0 million charge incurred in 2015 to settle legacy product liability claims. Product liability expense decreased \$2.8 million in 2016 compared to 2015 due to a reduction in the frequency of reported claims. These decreases were partially offset by an increase in stock compensation expense of \$2.5 million in 2016 compared to 2015 mainly due to a change in timing of our 2016 grants, which were granted earlier in 2016 than in 2015. SG&A expenses from acquisitions related to the Apex, Watts Korea, and PVI acquisitions. Total SG&A expenses, as a percentage of sales, were 30.3% in 2016 compared to 33.5% in 2015.

Restructuring. In 2016, we recorded a net charge of \$4.7 million primarily for the transformation of our Americas and APMEA businesses and involuntary terminations and other costs incurred as part of our Europe restructuring plans, as compared to \$21.4 million in 2015. For a more detailed description of our current restructuring plans, see Note 3 of Notes to Consolidated Financial Statements in this Annual Report on Form 10-K.

Goodwill and Other Long-Lived Asset Impairment Charges. In 2016, we recorded impairment charges of \$0.5 million, primarily related to an indefinite lived tradename in the Europe reporting unit. In 2015, we recorded impairment charges of \$130.5 million, primarily relating to a \$129.7 million goodwill impairment charge in the Europe reporting unit. See Note 2 of Notes to Consolidated Financial Statements in this Annual Report on Form 10-K for additional information regarding these impairments.

Gain on disposition. In the second quarter of 2016, we recorded a pre-tax gain of \$8.7 million related to the sale of a China subsidiary that was dedicated to the production of non-core products and part of the transformation of our Americas and APMEA businesses. The pre-tax gain included a non-cash accumulated currency translation adjustment of \$7.3 million.

Operating Income (loss). Operating income (loss) by geographic segment for 2016 and 2015 was as follows:

	Year Ended			% Change to Consolidated Operating Income
	December 31, 2016	December 31, 2015	Change	
	(Dollars in millions)			
Americas	\$ 127.1	\$ 109.9	\$ 17.2	19.1 %
Europe	40.0	(99.6)	139.6	154.9
APMEA	15.1	0.5	14.6	16.2
Corporate	(37.2)	(100.9)	63.7	70.7
Total	\$ 145.0	\$ (90.1)	\$ 235.1	260.9 %

The change in operating income was attributable to the following:

	Change as a % of Consolidated Operating Income					Change as a % of Segment Operating Income			
	Americas	Europe	APMEA	Corp.	Total	Americas	Europe	APMEA	Corp.
	(Dollars in millions)								
Organic	\$ 10.5	\$ 7.2	\$ 0.6	\$ 62.1	\$ 80.4	11.7 %	7.9 %	0.7 %	68.9 %
Foreign exchange	(0.3)	(0.3)	(0.5)	—	(1.1)	(0.3)	(0.3)	(0.6)	—
Acquisitions	(1.4)	—	1.8	—	0.4	(1.6)	—	2.0	—
Restructuring, impairment charges	8.4	132.7	4.0	1.6	146.7	—	—	9.7	—
Gain on disposition	—	—	8.7	—	8.7	9.3	147.3	4.4	1.8
Total	\$ 17.2	\$ 139.6	\$ 14.6	\$ 63.7	\$ 235.1	19.1 %	154.9 %	16.2 %	70.7 %

Operating income in 2016 of \$145.0 million increased by \$235.1 million compared to 2015. This increase is primarily related to the \$129.7 million goodwill impairment charge in the Europe reporting unit, the 2015 settlement charge of \$64.7 million for certain long-term obligations, including our pension plan and supplemental employee retirement plan, \$16.7 million less in restructuring costs recognized in 2016 compared to 2015, as well as the \$6.0 million charge to settle legacy product liability claims in 2015. We also recognized a gain of \$8.7 million in the second quarter of 2016 on the disposition of a subsidiary in China. The remaining \$9.3 million increase was due to favorable sales mix, favorable sourcing, and productivity.

Interest Expense. Interest expense decreased \$1.7 million, or 7%, in 2016 as compared to 2015 primarily due to the retirement in April 2016 of a \$225 million higher interest bearing private placement note that was replaced by \$230 million drawn on our line of credit. Refer to Note 11 of the Notes to Consolidated Financial Statements in this Annual Report on Form 10-K for further details.

Other income, net. Other income, net, increased \$2.0 million to an income balance of \$4.4 million in 2016 as compared to 2015, primarily due to the \$1.7 million non-cash gain recognized on the acquisition of Watts Korea in the first quarter of 2016. Refer to Note 5 of the Notes to Consolidated Financial Statements in this Annual Report on Form 10-K for further details on the acquisition. The remaining increase is due to net foreign currency transaction gains in 2016 as a result of the depreciation of the euro and the Canadian dollar against the U.S. dollar in 2016 compared to 2015.

Income Taxes. Our effective income tax rate changed to 34.1% in 2016, from (1.7%) in 2015. The significant change in the tax rate was due to the impact that the non-deductible and other income tax reserve items had on a loss before income taxes reported in 2015, primarily related to the goodwill impairment charge and the settlement of our pension plan and supplemental employee retirement plan obligations.

Net Income (loss). Net income was \$84.2 million, or \$2.45 per common share, compared to a net loss of (\$112.9) million, or (\$3.24) per common share, for 2015. Results for 2016 include after-tax benefits for a gain on disposition of \$8.3 million, or \$0.24 per common share, and \$1.0 million, or \$0.03 per common share, for a gain on acquisition of Watts Korea, offset by an after-tax charge of \$8.8 million, or \$0.26 per common share, for the Europe and Americas transformation deployment costs; \$3.2 million, or \$0.09 per common share, for restructuring charges; \$1.3 million, or \$0.04 per common share for purchase accounting adjustments related to our acquisitions in 2016; \$1.2 million, or \$0.03 per common share for acquisition costs in 2016; and \$2.6 million, or \$0.08 per common share for other items, primarily related to tax charges related to the transformation.

Results for 2015 include an after-tax charge of \$126.8 million, or \$3.63 per common share, for goodwill and other long-lived asset impairment charges; \$44.6 million, or \$1.28 per common share, for long-term obligation settlements including pension obligations; \$13.9 million, or \$0.40 per common share, for restructuring; \$9.0 million, or \$0.26 per common share, for the Europe and Americas transformation deployment costs; \$3.7 million, or \$0.11 per common share, for legal and other settlements; and \$0.9 million, or \$0.03 per common share, for acquisition related costs.

Liquidity and Capital Resources

2017 Cash Flows

We generated \$155.9 million of net cash from operating activities in 2017 as compared to \$138.1 million of net cash generated from operating activities in 2016. The increase was primarily related to higher net income after excluding the non-cash effect of the 2017 Tax Act and the impact of non-cash adjustments, partially offset by the timing of working capital fluctuations compared to 2016. We generated \$126.9 million of free cash flow (a non-GAAP financial measure, which we reconcile below, defined as net cash provided by operating activities minus capital expenditures plus proceeds from sale of assets), compared to free cash flow of \$102.2 million in 2016.

We used \$27.3 million of net cash for investing activities in 2017 compared to \$114.0 million in 2016. We used \$88.1 million less cash in 2017 for acquisitions as 2016 included the acquisition of PVI and Watts Korea. We used \$6.6 million less cash for purchases of capital equipment compared to 2016. The decrease in cash used for investing activities was partially offset by a \$1.5 million purchase of additional intangible assets, and \$6.8 million less cash generated from the sale of assets in 2017. We anticipate investing between \$36 million to \$40 million in capital equipment in 2018 to improve our manufacturing capabilities.

We used \$205.3 million of net cash from financing activities in 2017 primarily due to payments of long-term debt of \$178.0 million, dividend payments of \$25.9 million, and payments to repurchase approximately 278,000 shares of Class A common stock at a cost of \$18.2 million. This was partially offset by proceeds from an additional draw on our line of credit of \$20.0 million during 2017.

On February 12, 2016, we terminated our prior Credit Agreement and entered into a new Credit Agreement (the “Credit Agreement”) among the Company, certain subsidiaries of the Company who became borrowers under the Credit Agreement, JPMorgan Chase Bank, N.A., as Administrative Agent, Swing Line Lender and Letter of Credit Issuer, and the other lenders referred to therein. The Credit Agreement provides for a \$500 million, five-year, senior unsecured revolving credit facility (the “Revolving Credit Facility”) with a sublimit of up to \$100 million in letters of credit. The Credit Agreement also provided for a \$300 million, five-year, term loan facility (the “Term Loan Facility”) available to us in a single draw. The Credit Agreement matures on February 12, 2021, subject to extension under certain circumstances and subject to the terms of the Credit Agreement. As of December 31, 2017, we had \$277.5 million of borrowings outstanding on the term loan and \$147.0 million drawn on the Revolving Credit Facility; had \$25.7 million of stand-by letters of credit outstanding and had \$327.3 million of unused and available credit under the Revolving Credit Facility. As of December 31, 2017, we were in compliance with all covenants related to the Credit Agreement.

On December 16, 2016, Watts International Holdings Limited (“Watts International”), a wholly owned subsidiary of the Company, entered into a Facility Agreement (the “Facility Agreement”) among Watts International, as original borrower and original guarantor, Watts Water Technologies EMEA B.V., a wholly owned subsidiary of the Company (“Watts EMEA”), as original guarantor, JPMorgan Chase Bank, N.A., as sole bookrunner and sole lead arranger (“JP Morgan Chase Bank”), J.P. Morgan Europe Limited, as agent to the financial parties, and the other lenders referred to therein. The Facility Agreement provides for a €110 million, 364 day, term loan facility available to the Company in a single draw. On December 20, 2016, Watts International borrowed the full amount available for borrowing under the Facility Agreement. The loan made on December 20, 2016 bears interest at a rate per annum equal to (i) the Euro InterBank Offered Rate (EURIBOR), provided that if such rate is less than zero, then EURIBOR shall be deemed to be zero, plus (ii) a margin of 1.875%, provided that if no event of default is continuing and Watts International’s consolidated leverage ratio is at a specified level, the margin shall decrease to 1.50%. Accrued interest on the loan is payable on the last day of each interest period. The first interest period is set at one month and may be changed subsequently to a period of one, two, or three months (or such other period agreed with all the lenders). Substantially all of the proceeds of the borrowings made on December 20, 2016 under the Facility Agreement were used to pay down \$113 million outstanding under the Revolving Credit Facility. As of the third quarter of 2017, the Company had repaid in full the Facility Agreement.

We have historically financed our operating and capital needs primarily through cash flows generated by our operations. We expect to continue funding future operating requirements principally through our cash flows from operations, in addition to existing cash resources. We believe that our existing funds, when combined with cash generated from operations and our ability to access additional financing resources, if needed, are sufficient to satisfy our operating, working capital, strategic initiatives, capital expenditure and debt service requirements for the foreseeable future. In

addition, we may choose to opportunistically return cash to shareholders and pursue other business initiatives, including acquisition activities. We may, from time to time, also seek additional funding through a combination of equity and debt financings should we identify a significant new opportunity.

As of December 31, 2017, we held \$280.2 million in cash and cash equivalents. Of this amount, \$259.3 million was held by foreign subsidiaries. As of December 31, 2017, we considered none of our earnings to be permanently reinvested outside of the U.S. Previously, earnings of foreign subsidiaries were only subject to U.S. income tax upon repatriation to the U.S. However, the 2017 Tax Act, requires us to pay a one-time deemed repatriation toll charge on cumulative undistributed foreign earnings for which we have not previously provided U.S. taxes. Cumulative earnings in the form of cash and cash equivalents, as defined in the 2017 Tax Act, will be taxed at a rate of 15.5% and all other earnings will be taxed at a rate of 8.0%. We estimate that our obligation associated with this one-time deemed repatriation toll charge to be \$23.3 million, which will be paid in installments over eight years. We can repatriate cumulative undistributed foreign earnings back to the U.S. when needed and have recorded provisional charges of \$14.6 million for the year ended December 31, 2017 related to future repatriation of earnings. Over the next twelve months we expect to repatriate approximately \$125 million of cash back to the U.S. We are currently evaluating all potential uses for the cash in the U.S., with debt reduction expected to be a priority.

Covenant compliance

Under the Credit Agreement, we are required to satisfy and maintain specified financial ratios and other financial condition tests as of December 31, 2017. The financial ratios included a consolidated interest coverage ratio based on consolidated earnings before income taxes, interest expense, depreciation, and amortization (Consolidated EBITDA) to consolidated interest expense, as defined in the Credit Agreement. Our Credit Agreement defined Consolidated EBITDA to exclude unusual or non-recurring charges and gains. We were also required to maintain a consolidated leverage ratio of consolidated funded debt to Consolidated EBITDA. Consolidated funded debt, as defined in the Credit Agreement, included all long and short-term debt, capital lease obligations and any trade letters of credit that are outstanding, less cash on the balance sheet that exceeded \$50 million.

As of December 31, 2017, our actual financial ratios calculated in accordance with our Credit Agreement compared to the required levels under the Credit Agreement were as follows:

	<u>Actual Ratio</u>	<u>Required Level</u>
		Minimum level
Interest Charge Coverage Ratio	12.49 to 1.00	3.50 to 1.00
		Maximum level
Leverage Ratio	1.12 to 1.00	3.25 to 1.00

As of December 31, 2017, we were in compliance with all covenants related to the Credit Agreement.

We have one senior note agreement as further detailed in Note 11 of Notes to Consolidated Financial Statements in this Annual Report Form 10-K. This senior note agreement requires us to maintain a fixed charge coverage ratio of consolidated EBITDA plus consolidated rent expense during the period to consolidated fixed charges. Consolidated fixed charges are the sum of consolidated interest expense for the period and consolidated rent expense.

As of December 31, 2017, our actual fixed charge coverage ratio calculated in accordance with our senior note agreements compared to the required ratio therein was as follows:

	<u>Actual Ratio</u>	<u>Required Level</u>
		Minimum level
Fixed Charge Coverage Ratio	7.03 to 1.00	2.00 to 1.00

In addition to financial ratios, the Credit Agreement and senior note agreement contain affirmative and negative covenants that include limitations on disposition or sale of assets, prohibitions on assuming or incurring any liens on assets with limited exceptions and limitations on making investments other than those permitted by the agreements.

Working capital (defined as current assets less current liabilities) as of December 31, 2017 was \$456.2 million compared to \$393.9 million as of December 31, 2016. The ratio of current assets to current liabilities was 2.4 to 1 as of December 31, 2017 compared to 1.9 to 1 as of December 31, 2016. The increase in working capital is primarily related to more cash generated from operations, as well as less cash used for purchases of capital equipment and repurchases of common stock in 2017.

2016 Cash Flows

In 2016, we generated \$138.1 million of cash from operating activities as compared to \$109.4 million in 2015. Cash flows from operating activities in 2015 included a \$49.2 million settlement of certain long-term obligations, including pension obligations. We generated approximately \$102.2 million of free cash flow (a non-GAAP financial measure, which we reconcile below, defined as net cash provided by operating activities minus capital expenditures plus proceeds from sale of assets), compared to free cash flow of \$81.8 million in 2015.

In 2016, we used \$114.0 million of net cash for investing activities compared to \$17.3 million in 2015. We used \$67.6 million more cash in 2016 than 2015 relating to the acquisitions of PVI and Watts Korea. We also increased our purchases of capital equipment during 2016 by \$8.3 million. In 2015, we received approximately \$20.8 million more in cash proceeds from the sale of assets, primarily relating to the sale of non-core product lines in the Americas.

In 2016, we generated \$27.7 million of net cash from financing activities as compared to \$70.9 million of net cash used in 2015. The increase in cash generated is primarily due to net proceeds from long-term borrowings of \$74.4 million and \$17.8 million less in stock repurchases in 2016. We also received an additional \$5.7 million in cash proceeds from share transactions under employee stock plans in 2016 compared to 2015.

2015 Cash Flows

In 2015, we generated \$109.4 million of cash from operating activities as compared to \$135.2 million in 2014. The decrease was primarily due to the \$49.2 million settlement of certain long-term obligations, including the pension plan, offset by inventory reduction efforts and stronger accounts receivable collections. We generated approximately \$81.8 million of free cash flow (a non-GAAP financial measure, which we reconcile below, defined as net cash provided by continuing operating activities minus capital expenditures plus proceeds from sale of assets).

In 2015, we used \$17.3 million of net cash for investing activities, including \$20.4 million for the purchase of Apex and \$27.7 million of cash for capital equipment, offset by cash proceeds of approximately \$33.1 million for the sale of certain assets relating to divested product lines in the Americas.

In 2015, we used \$70.9 million of net cash from financing activities including \$44.6 million used to repurchase approximately 813,000 shares of Class A common stock and \$23.1 million used to pay dividends.

Non-GAAP Financial Measures

In accordance with the SEC's Regulation G and item 10(e) of Regulation S-K, the following provides definitions of the non-GAAP measures used by management. We believe that these measures provide for a more complete perspective of underlying business results and trends. These non-GAAP measures are not intended to be considered by the user in place of the related GAAP measure, but rather as supplemental information to more fully understand our business results. These non-GAAP measures may not be the same as similar measures used by other companies due to possible differences in method and in the items or events being adjusted.

Organic sales growth is a non-GAAP measure of sales growth that excludes the impacts of acquisitions, divestitures and foreign exchange from period-over-period comparisons. A reconciliation to the most closely related U.S.GAAP measure, net sales, has been included in our discussion within "Results of Operations" above. Organic net sales should be considered in addition to, and not as a replacement for or as a superior measure to net sales. Management believes reporting organic sales growth provides useful information to investors, potential investors and others, by facilitating easier comparisons of our revenue performance with prior and future periods.

Adjusted operating income, adjusted operating margins, adjusted net income, and adjusted earnings per share are non-GAAP measures that exclude certain expenses that relate primarily to our global restructuring programs, deployment

costs, acquisition related costs, purchase accounting adjustments, gains on acquisition and disposition, goodwill and other long-lived asset impairments, certain other costs and the related income tax impacts on these items and other tax adjustments, including the impact of the 2017 Tax Act. Management believes reporting these financial measures provides useful information to investors, potential investors and others, by facilitating easier comparisons of our performance with prior and future periods.

A reconciliation of U.S. GAAP results to these adjusted non-GAAP measures is provided below:

	Year Ended	
	December 31, 2017	December 31, 2016
Net sales	\$ 1,456.7	\$ 1,398.4
Operating income - as reported	162.3	145.0
<i>Operating margin %</i>	<i>11.1%</i>	<i>10.4%</i>
Adjustments for special items:		
Goodwill and other long-lived asset impairment charges	1.0	0.5
Acquisitions costs/purchase accounting adjustments	0.2	4.0
Restructuring	6.8	4.7
Transformation and deployment costs	2.9	14.2
Gain on disposition	—	(8.7)
Debt issuance costs and other items	—	0.3
Total adjustments for special items	\$ 10.9	\$ 15.0
Operating income - as adjusted	\$ 173.2	\$ 160.0
<i>Adjusted operating margin %</i>	<i>11.9%</i>	<i>11.4%</i>
Net income - as reported	\$ 73.1	\$ 84.2
Adjustments for special items - tax affected:		
Goodwill and other long-lived asset impairment charges	0.6	0.4
Acquisitions costs/purchase accounting adjustments	0.1	1.5
Restructuring	4.7	3.2
Transformation and deployment costs	1.9	8.8
Gain on disposition	—	(8.3)
Tax adjustments	(1.6)	2.6
2017 Tax Act	25.1	—
Total Adjustments for special items - tax affected:	\$ 30.8	\$ 8.2
Net income as adjusted	\$ 103.9	\$ 92.4
Diluted earnings per share - as reported	2.12	2.44
<i>Adjustments for special items</i>	<i>0.90</i>	<i>0.23</i>
Diluted earnings per share - as adjusted	\$ 3.02	\$ 2.67

Free cash flow is a non-GAAP measure that does not represent cash generated from operating activities in accordance with U.S. GAAP. Therefore it should not be considered an alternative to net cash provided by operating activities as an indication of our performance. The cash conversion rate of free cash flow to net income is also a measure of our performance in cash flow generation. We believe free cash flow to be an appropriate supplemental measure of our operating performance because it provides investors with a measure of our ability to generate cash, repay debt, pay dividends, repurchase stock and fund acquisitions.

A reconciliation of net cash provided by operating activities to free cash flow and calculation of our cash conversion rate is provided below:

	Year Ended December 31,		
	2017	2016	2015
	(in millions)		
Net cash provided by operating activities	\$ 155.9	\$ 138.1	\$ 109.4
Less: additions to property, plant, and equipment	(29.4)	(36.0)	(27.7)
Plus: proceeds from the sale of property, plant, and equipment	0.4	0.1	0.1
Free cash flow	\$ 126.9	\$ 102.2	\$ 81.8
Net income (loss)—as reported	\$ 73.1	\$ 84.2	\$(112.9)
Cash conversion rate of free cash flow to net income (loss)	173.6 %	121.4 %	NM %
Free cash flow	\$ 126.9	\$ 102.2	\$ 81.8
Plus: payments made on long - term obligations	—	—	49.2
Free cash flow—as adjusted	\$ 126.9	\$ 102.2	\$ 131.0

Our free cash flow increased in 2017 when compared to the free cash flow for 2016 primarily due to an increase in cash flows provided by operations and lower capital investment spending in 2017, partially offset by the timing of working capital fluctuations compared to 2016.

Our net debt to capitalization ratio, a non-GAAP financial measure used by management, decreased to 20.7% for 2017 from 29.8% in 2016. The decrease was driven by a decrease in net debt outstanding at December 31, 2017, primarily due to the full repayment of the Facility Agreement during the third quarter of 2017. Management believes the net debt to capitalization ratio is an appropriate supplemental measure because it helps investors understand our ability to meet our financing needs and serves as a basis to evaluate our financial structure. Our computation may not be comparable to other companies that may define their net debt to capitalization ratios differently.

A reconciliation of long-term debt (including current portion) to net debt and our net debt to capitalization ratio is provided below:

	December 31,	
	2017	2016
	(in millions)	
Current portion of long - term debt	\$ 22.5	\$ 139.1
Plus: long-term debt, net of current portion	474.6	511.3
Less: cash and cash equivalents	(280.2)	(338.4)
Net debt	\$ 216.9	\$ 312.0

A reconciliation of capitalization is provided below:

	December 31,	
	2017	2016
	(in millions)	
Net debt	\$ 216.9	\$ 312.0
Total stockholders' equity	829.0	736.3
Capitalization	\$ 1,045.9	\$ 1,048.3
Net debt to capitalization ratio	20.7 %	29.8 %

Contractual Obligations

Our contractual obligations as of December 31, 2017 are presented in the following table:

Contractual Obligations	Payments Due by Period				
	Less than		1 -	4 -	More than
	Total	1 year	3 years	5 years	5 years
(in millions)					
Long-term debt obligations, including current maturities(a)(c)	\$ 499.5	\$ 22.5	\$ 135.0	\$ 342.0	\$ —
Operating lease obligations	36.9	11.4	17.0	5.3	3.2
Capital lease obligations(a)	3.8	1.3	2.3	0.2	—
Pension contributions	8.8	0.8	1.1	1.3	5.6
Interest	21.0	9.3	11.7	—	—
Redeemable financial instrument(a)	2.9	2.9	—	—	—
2017 Tax Act Toll Tax payable	23.3	3.8	3.8	5.3	10.4
Other(b)	43.7	42.0	1.6	0.1	—
Total	\$ 639.9	\$ 94.0	\$ 172.5	\$ 354.2	\$ 19.2

- (a) as recognized in the consolidated balance sheet.
- (b) the majority relates to commodity and capital commitments at December 31, 2017.
- (c) the payment in less than one year represents the second year of amortization of the term loan under the Credit Agreement. See Note 11 of Notes to Consolidated Financial Statements in this Annual Report on Form 10-K for further details of our financing arrangements.

We maintain letters of credit that guarantee our performance or payment to third parties in accordance with specified terms and conditions. Amounts outstanding were approximately \$25.7 million as of December 31, 2017 and \$25.6 million as of December 31, 2016. Our letters of credit are primarily associated with insurance coverage and, to a lesser extent, foreign purchases and generally expire within one year of issuance. These instruments may exist or expire without being drawn down; therefore they do not necessarily represent future cash flow obligations and are not included in the table above.

Off-Balance Sheet Arrangements

Except for operating lease commitments, we have no off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to investors.

Application of Critical Accounting Policies and Key Estimates

The preparation of our consolidated financial statements in accordance with U.S. GAAP requires management to make judgments, assumptions and estimates that affect the amounts reported. A critical accounting estimate is an assumption about highly uncertain matters and could have a material effect on the consolidated financial statements if another, also reasonable, amount were used, or, a change in the estimate is reasonably likely from period to period. We base our assumptions on historical experience and on other estimates that we believe are reasonable under the circumstances. Actual results could differ significantly from these estimates. There were no significant changes in our accounting policies or significant changes in our accounting estimates during 2017.

We periodically discuss the development, selection and disclosure of the estimates with our Audit Committee. Management believes the following critical accounting policies reflect our more significant estimates and assumptions.

Revenue recognition

We recognize revenue when all of the following criteria are met: (1) we have entered into a binding agreement, (2) the product has shipped and title has passed, (3) the sales price to the customer is fixed or is determinable and

(4) collectability is reasonably assured. We recognize revenue based upon a determination that all criteria for revenue recognition have been met, which, based on the majority of our shipping terms, is considered to have occurred upon shipment of the finished product. Some shipping terms require the goods to be received by the customer before title passes. In those instances, revenues are not recognized until the customer has received the goods. We record estimated reductions to revenue and a corresponding asset for customer returns and allowances and for customer programs. Provisions for returns and allowances are made at the time of sale, derived from historical trends and form a portion of the allowance for doubtful accounts. Customer programs, which are primarily annual volume incentive plans, allow customers to earn credit for attaining agreed upon purchase targets from us. We record estimated reductions to revenue, made at the time of sale, for customer programs based on estimated purchase targets.

Inventory valuation

Inventories are stated at the lower of cost or net realizable value with costs determined primarily on a first-in first-out basis. We utilize both specific product identification and historical product demand as the basis for determining our excess or obsolete inventory reserve. We identify all inventories that exceed a range of one to three years in sales. This is determined by comparing the current inventory balance against unit sales for the trailing twelve months. New products added to inventory within the past twelve months are excluded from this analysis. A portion of our products contain recoverable materials, therefore the excess and obsolete reserve is established net of any recoverable amounts. Changes in market conditions, lower-than- expected customer demand or changes in technology or features could result in additional obsolete inventory that is not saleable and could require additional inventory reserve provisions.

In certain countries, additional inventory reserves are maintained for potential shrinkage experienced in the manufacturing process. The reserve is established based on the prior year's inventory losses adjusted for any change in the gross inventory balance.

Goodwill and other intangibles

We have made numerous acquisitions over the years and have recognized a significant amount of goodwill. Goodwill is tested for impairment annually or more frequently if an event or circumstance indicates that an impairment loss may have been incurred. Application of the goodwill impairment test requires judgment, including the identification of reporting units, assignment of assets and liabilities to reporting units, and determination of the fair value of each reporting unit. We estimate the fair value of our reporting units using an income approach based on the present value of estimated future cash flows, and when appropriate, guideline public company and guideline transaction market approaches.

Accounting guidance allows us to review goodwill for impairment utilizing either qualitative or quantitative analyses. We have the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If, after assessing the totality of events and circumstances, we determine it is more likely than not that the fair value of a reporting unit is greater than its carrying amount, then performing the quantitative impairment test is unnecessary.

We first identify those reporting units that we believe could pass a qualitative assessment to determine whether further impairment testing is necessary. For each reporting unit identified, our qualitative analysis includes:

- 1) A review of the most recent fair value calculation to identify the extent of the cushion between fair value and carrying amount, to determine if a substantial cushion existed.
- 2) A review of events and circumstances that have occurred since the most recent fair value calculation to determine if those events or circumstances would have affected our previous fair value assessment. Items identified and reviewed include macroeconomic conditions, industry and market changes, cost factor changes, events that affect the reporting unit, and financial performance against expectations and the reporting unit's performance relative to peers.

We then compile this information and make our assessment of whether it is more likely than not that the fair value of the reporting unit is less than its carrying amount. If we determine it is not more likely than not, then no further quantitative analysis is required.

In 2017, we had eight reporting units. One of these reporting units, Water Quality, had no goodwill. We performed a qualitative analysis for six of the remaining seven reporting units, which include Blücher, Dormont, US Drains, Europe, Residential and Commercial, and APMEA. For one reporting unit, Heating and Hot Water Solutions (“HHWS”), we performed a quantitative analysis.

As of our October 29, 2017 testing date, we had \$547.5 million of goodwill on our balance sheet. As a result of our qualitative analyses, we determined that the fair values of the six reporting units noted above were more likely than not greater than the carrying amounts. We performed a quantitative impairment analysis for the HHWS reporting unit in connection with the annual strategic plan and due to underperformance to budget, primarily caused by continuing softness in the condensing boiler market, weakness in our tankless water heater products and competitive pricing pressure. We estimated the fair value of the reporting unit using a weighted calculation of the income approach and the market approach. Inherent in our development of the fair value of the reporting unit are the assumptions and estimates used in the income, and where appropriate, market approaches. The income approach calculates the present value of future cash flow projections based on assumptions and estimates derived from a review of our operating results, business plans, expected growth rates, the appropriate revenue and EBITDA multiples, and discount rates. We also made certain assumptions about future economic conditions and market data. We developed our assumptions based on our historical results, including sales growth, operating profits, working capital levels and income tax rates. The market approach calculates the estimated fair value based on valuation multiples derived from stock prices and enterprise values of publicly traded companies that are comparable to the reporting unit and based on valuation multiples are derived from actual transactions for comparable public companies when appropriate.

We believe that the income approach is sensitive to the selected discount rate and the market approach is sensitive to valuation multiples used. We use third-party valuation specialists to help develop the appropriate discount rate and valuation multiples. We use standard valuation practices to arrive at a weighted average cost of capital (“WACC”) based on the market and guideline public companies. The higher the discount rate, the lower the discounted cash flows. While we believe that our estimate of future cash flows and market approach valuations are reasonable, different assumptions could significantly affect our valuation and result in impairments in the future.

The expected cash flows are discounted to present value using a WACC. The key assumptions used to determine the appropriate WACC rates utilized in the income approach for the HHWS reporting unit were as follows:

- A risk free rate based on the 20-year U.S. Treasury Bonds as of the assessment date.
- A market risk premium that is determined, in part, through published historical studies adjusted for the business risk index for the reporting unit. The business risk index is derived from comparable companies and measures the estimated stock price volatility.
- Comparable company and market interest rate information used to determine the cost of debt and the appropriate long-term capital structure in order to weight the cost of debt and the cost of equity into an overall WACC.
- A small stock premium based on the size of the reporting unit.

For the HHWS reporting unit, the underlying analyses supporting our fair value assessment are related to our comparable companies' historical and projected results, current transaction values and our outlook of our business' long-term performance, which included key assumptions as to the appropriate revenue and EBITDA multiples, discount rate and long-term growth rate. In connection with the HHWS impairment assessment, we utilized a discount rate of 9% and growth rates beyond our planning periods ranging from 5% to 7% and a long-term terminal growth rate of 3%. Future increases in discount rates due to changing interest rates or a declining economic environment and different market multiples could impact our assumptions and the value of our reporting units. However, taking into consideration the various elements of the 2017 Tax Act would result in a net increase to the discounted cash flows generated by the reporting unit in our strategic plan, which would increase the fair value of the reporting unit.

The estimated fair value of the reporting unit of \$397.0 million exceeded the carrying value of \$373.8 million by approximately \$23.2 million, or 6%, in 2017 and therefore, no impairment was recorded.

In 2015, we recognized a pre-tax impairment charge of \$129.7 million in the Europe reporting unit. The remaining goodwill balance as of December 31, 2015 in this reporting unit was \$46.4 million.

Intangible assets such as trademarks and trade names are generally recorded in connection with a business acquisition. Values assigned to intangible assets are determined by an independent valuation firm based on our estimates and judgments regarding expectations of the success and life cycle of products and technology acquired. Accounting guidance allows us to perform a qualitative impairment assessment of indefinite-lived intangible assets consistent with the goodwill guidance noted previously. For our 2017 impairment assessment, which occurred as of October 29, 2017, we performed quantitative assessments for all indefinite-lived intangible assets. The methodology we employed was the relief from royalty method, a subset of the income approach. During 2017, no impairment was recognized on our indefinite-lived intangible assets. In 2016, we recognized a non-cash pre-tax charge of approximately \$0.4 million related to an indefinite lived tradename in our Europe reporting unit. In 2015, we recognized a non-cash pre-tax impairment charge of \$0.6 million of certain of our indefinite-lived intangible assets.

Product liability

Because of retention requirements associated with our insurance policies, we are generally self-insured for potential product liability claims. We are subject to a variety of potential liabilities in connection with product liability cases and we maintain a high self-insured retention limit within our product liability and general liability coverage, which we believe to be generally in accordance with industry practices. For product liability cases in the U.S., management establishes its product liability accrual, which includes legal costs associated with accrued claims, by utilizing third-party actuarial valuations which incorporate historical trend factors and our specific claims experience derived from loss reports provided by third-party administrators. The product liability accrual is established after considering any applicable insurance coverage. Changes in the nature of product liability claims, legal costs, or the actual settlement amounts could affect the adequacy of the estimates and require changes to the accrual. Because the liability is an estimate, the ultimate liability may be more or less than reported.

We determine the trend factors for product liability based on consultation with outside actuaries. We maintain excess liability insurance to minimize our risks related to claims in excess of our primary insurance policies. Any material change in the aforementioned factors could have an adverse impact on our operating results.

Legal contingencies

We are a defendant in numerous legal matters including those involving environmental issues and product liability as discussed in more detail in Part I, Item 1. “Business—Product Liability, Environmental and Other Litigation Matters.” As required by GAAP, we determine whether an estimated loss from a loss contingency should be accrued by assessing whether a loss is deemed probable and the loss amount can be reasonably estimated. When it is possible to estimate reasonably possible loss or range of loss above the amount accrued, that estimate is aggregated and disclosed. Estimates of potential outcomes of these contingencies are often developed in consultation with outside counsel. While this assessment is based upon all available information, litigation is inherently uncertain and the actual liability to fully resolve litigation cannot be predicted with any assurance of accuracy. In the event of an unfavorable outcome in one or more legal matters, the ultimate liability may be in excess of amounts currently accrued, if any, and may be material to our operating results or cash flows for a particular quarterly or annual period. However, based on information currently known to us, management believes that the ultimate outcome of all legal contingencies, as they are resolved over time, is not likely to have a material adverse effect on our financial condition, though the outcome could be material to our operating results for any particular period depending, in part, upon the operating results for such period.

Income taxes

We are subject to income taxes in the U.S. (federal and state) and foreign jurisdictions. Significant judgment is required in evaluating our uncertain tax positions, determining our provision for income taxes, and evaluating the impact of the 2017 Tax Act.

We estimate and use our expected annual effective income tax rates to accrue income taxes. Effective tax rates are determined based on budgeted earnings before taxes, including our best estimate of permanent items that will affect the effective rate for the year. Management periodically reviews these rates with outside tax advisors and changes are made if material variances from expectations are identified.

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis and operating loss and tax credit carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

A valuation allowance is provided to offset any net deferred tax assets if, based upon the available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. We consider estimated future taxable income and future reversals of the deferred tax liabilities in assessing the need for a valuation allowance.

The 2017 Tax Act was enacted on December 22, 2017 and introduces significant changes to U.S. income tax law. Effective in 2018, the 2017 Tax Act reduces the U.S. statutory tax rate from 35% to 21% and creates new taxes on certain foreign-sourced earnings and certain related-party payments, which are referred to as the global intangible low-taxed income tax and the base erosion tax, respectively. In addition, in 2017 we are subject to the Toll Tax, a one-time transition tax on accumulated foreign subsidiary earnings not previously subject to U.S. income tax. Accounting for the income tax effects of the 2017 Tax Act requires significant judgments and estimates in the interpretation and calculations of the provisions of the 2017 Tax Act.

We are required to recognize the effect of the tax law changes in the period of enactment, such as determining the Toll Tax, remeasuring our U.S. deferred tax assets and liabilities as well as reassessing the net realizability of our deferred tax assets and liabilities. Due to the timing of the enactment and the complexity involved in applying the provisions of the 2017 Tax Act, we have made reasonable estimates of the effects and recorded provisional amounts in our financial statements for the year ended December 31, 2017. In December 2017, the SEC staff issued Staff Accounting Bulletin No. 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act (SAB 118), which allows us to record provisional amounts during a measurement period not to extend beyond one year of the enactment date. As we collect and prepare necessary data, and interpret any additional guidance issued by the U.S. Treasury Department, the IRS or other standard-setting bodies, we may make adjustments to the provisional amounts. Those adjustments may materially impact the provision for income taxes and the effective tax rate in the period or periods in which the adjustments are made. The accounting for the tax effects of the enactment of the 2017 Tax Act will be completed in 2018.

New Accounting Standards

A discussion of recent accounting pronouncements is included in Note 2 of the Notes to Consolidated Financial Statements in this Annual Report on Form 10-K.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We use derivative financial instruments primarily to reduce exposure to adverse fluctuations in foreign exchange rates, interest rates and costs of certain raw materials used in the manufacturing process. We do not enter into derivative financial instruments for trading purposes. As a matter of policy, all derivative positions are used to reduce risk by hedging underlying economic exposure. The derivatives we use are instruments with liquid markets. See Note 16 of Notes to the Consolidated Financial Statements for further details.

Our consolidated earnings, which are reported in United States dollars, are subject to translation risks due to changes in foreign currency exchange rates. This risk is concentrated in the exchange rate between the U.S. dollar and the euro; the U.S. dollar and the Canadian dollar; and the U.S. dollar and the Chinese yuan.

Our non-U.S. subsidiaries transact most business, including certain intercompany transactions, in foreign currencies. Such transactions are principally purchases or sales of materials and are denominated in European currencies or the U.S. or Canadian dollar. We use foreign currency forward exchange contracts from time to time to manage the risk related to intercompany loans, intercompany purchases that occur during the course of a year, and certain open foreign currency denominated commitments to sell products to third parties. In the third quarter of 2017, we did not renew the two forward exchange contracts which were entered to manage the foreign currency rate exposure between the Hong Kong dollar and the euro regarding two intercompany loans, as the loans have been settled. These forward contracts were marked-to-market with changes in the fair value recorded to earnings throughout 2017.

Prior to 2016, we generally had a low exposure on the cost of our debt to changes in interest rates. On February 12, 2016, the Company entered into a new Credit Agreement pursuant to which it received a funding commitment under a Term Loan of \$300 million, of which \$277.5 million is outstanding and a Revolving Commitment of \$500 million, of which \$147.0 million has been drawn as of December 31, 2017. Both facilities mature on February 12, 2021. For each facility, we can choose either an Adjusted LIBOR or Alternative Base Rate (“ABR”). Accordingly, our earnings and cash flows are exposed to interest rate risk from changes in Adjusted LIBOR. In order to manage our exposure to changes in cash flows attributable to fluctuations in LIBOR-indexed interest payments related to our floating rate debt, we entered into two interest rate swaps. For each interest rate swap, the Company receives the three-month USD-LIBOR subject to a 0% floor, and pays a fixed rate of 1.31375% on a notional amount of \$225.0 million. Information about our long-term debt including principal amounts and related interest rates appears in Note 11 of Notes to the Consolidated Financial Statements.

We purchase significant amounts of bronze ingot, brass rod, cast iron, stainless steel and plastic, which are utilized in manufacturing our many product lines. Our operating results can be adversely affected by changes in commodity prices if we are unable to pass on related price increases to our customers. We manage this risk by monitoring related market prices, working with our suppliers to achieve the maximum level of stability in their costs and related pricing, seeking alternative supply sources when necessary and passing increases in commodity costs to our customers, to the maximum extent possible, when they occur.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

The financial statements listed in section (a) (1) of “Part IV, Item 15. Exhibits and Financial Statement Schedules” of this Annual Report are incorporated herein by reference.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

None.

Item 9A. CONTROLS AND PROCEDURES.

As required by Rule 13a-15(b) under the Securities Exchange Act of 1934, as amended, or Exchange Act, as of the end of the period covered by this report, we carried out an evaluation under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures. In designing and evaluating our disclosure controls and procedures, we recognize that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and our management necessarily applies its judgment in evaluating and implementing possible controls and procedures. The effectiveness of our disclosure controls and procedures is also necessarily limited by the staff and other resources available to us and the geographic diversity of our operations. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of the end of the period covered by this report, our disclosure controls and procedures were effective, in that they provide reasonable assurance that information required to be disclosed by us in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission’s rules and forms and are designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act are accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

There was no change in our internal control over financial reporting that occurred during the quarter ended December 31, 2017, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. In connection with these rules, we will continue to review and document our disclosure controls and procedures, including our internal control over financial reporting, and may from time to time make changes aimed at enhancing their effectiveness and to ensure that our systems evolve with our business.

Management's Annual Report on Internal Control Over Financial Reporting

Management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. The Company's internal control over financial reporting is designed 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. The Company's internal control over financial reporting includes those policies and procedures that:

- (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and
- (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management, including our Chief Executive Officer and Chief Financial Officer, assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2017. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control—Integrated Framework (2013).

Based on our assessment and those criteria, management believes that the Company maintained effective internal control over financial reporting as of December 31, 2017.

The independent registered public accounting firm that audited the Company's consolidated financial statements included elsewhere in this Annual Report on Form 10-K has also audited the effectiveness of the Company's internal control over financial reporting as of December 31, 2017, as stated in this Annual Report on Form 10-K under the heading, "Report of Independent Registered Public Accounting Firm."

Item 9B. OTHER INFORMATION.

None.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

Information with respect to the executive officers of the Company is set forth in Part I, Item 1 of this Report under the caption “Executive Officers and Directors” and is incorporated herein by reference. The information provided under the captions “Information as to Nominees for Director,” “Corporate Governance,” and “Section 16(a) Beneficial Ownership Reporting Compliance” in our definitive Proxy Statement for our 2018 Annual Meeting of Stockholders to be held on May 16, 2018 is incorporated herein by reference.

We have adopted a Code of Business Conduct applicable to all officers, employees and Board members. The Code of Business Conduct is posted in the Investors section of our website, www.wattswater.com. We will provide you with a print copy of our Code of Business Conduct free of charge on written request to Kenneth R. Lepage, Secretary, Watts Water Technologies, Inc., 815 Chestnut Street, North Andover, MA 01845. Any amendments to, or waivers of, the Code of Business Conduct which apply to our Chief Executive Officer, Chief Financial Officer, Corporate Controller or any person performing similar functions will be disclosed on our website promptly following the date of such amendment or waiver.

Item 11. EXECUTIVE COMPENSATION.

The information provided under the captions “Director Compensation,” “Corporate Governance,” “Compensation Discussion and Analysis,” “Executive Compensation,” “Compensation Committee Interlocks and Insider Participation,” and “Compensation Committee Report” in our definitive Proxy Statement for our 2018 Annual Meeting of Stockholders to be held on May 16, 2018 is incorporated herein by reference.

The “Compensation Committee Report” contained in our Proxy Statement shall not be deemed “soliciting material” or “filed” with the Securities and Exchange Commission or otherwise subject to the liabilities of Section 18 of the Securities Exchange Act of 1934, nor shall it be deemed incorporated by reference in any filings under the Securities Act of 1933 or the Exchange Act, except to the extent we specifically request that such information be treated as soliciting material or specifically incorporate such information by reference into a document filed under the Securities Act or Exchange Act.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

The information appearing under the caption “Principal Stockholders” in our definitive Proxy Statement for our 2018 Annual Meeting of Stockholders to be held on May 16, 2018 is incorporated herein by reference.

Securities Authorized for Issuance Under Equity Compensation Plans

The following table provides information as of December 31, 2017, about the shares of Class A common stock that may be issued upon the exercise of stock options issued under the Company’s Second Amended and Restated 2004 Stock Incentive Plan, and the settlement of restricted stock units granted under our Management Stock Purchase Plan as well as the number of shares remaining for future issuance under our Second Amended and Restated 2004 Stock Incentive Plan and Management Stock Purchase Plan.

Plan Category	Equity Compensation Plan Information		
	Number of securities to be	Weighted -	Number of securities remaining
	issued upon exercise of outstanding options, warrants and rights (a)	average exercise price of outstanding options, warrants and rights (b)	available for future issuance under equity compensation plan (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	566,943 (1) \$	—	2,106,091 (2)
Equity compensation plans not approved by security holders	None	None	None
Total	566,943 (1) \$	—	2,106,091 (2)

- (1) Represents 94,544 outstanding options, 272,670 performance share awards and 25,959 deferred shares under the Second Amended and Restated 2004 Stock Incentive Plan, and 173,770 outstanding restricted stock units under the Management Stock Purchase Plan.
- (2) Includes 1,342,858 shares available for future issuance under the Second Amended and Restated 2004 Stock Incentive Plan, and 763,233 shares available for future issuance under the Management Stock Purchase Plan.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.

The information provided under the captions “Corporate Governance” and “Certain Relationships and Related Transactions” in our definitive Proxy Statement for our 2018 Annual Meeting of Stockholders to be held on May 16, 2018 is incorporated herein by reference.

Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

The information provided under the caption “Ratification of Independent Registered Public Accounting Firm” in our definitive Proxy Statement for our 2018 Annual Meeting of Stockholders to be held on May 17, 2017 is incorporated herein by reference.

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a)(1) Financial Statements

The following financial statements are included in a separate section of this Report commencing on the page numbers specified below:

Report of Independent Registered Public Accounting Firm	48
Consolidated Statements of Operations for the years ended December 31, 2017, 2016 and 2015	50
Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2017, 2016 and 2015	51
Consolidated Balance Sheets as of December 31, 2017 and 2016	52
Consolidated Statements of Stockholders’ Equity for the years ended December 31, 2017, 2016 and 2015	53
Consolidated Statements of Cash Flows for the years ended December 31, 2017, 2016 and 2015	54
Notes to Consolidated Financial Statements	55

(a)(2) Schedules

[Schedule II—Valuation and Qualifying Accounts for the years ended December 31, 2017, 2016
and 2015](#)

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All other required schedules for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission are included in the Notes to the Consolidated Financial Statements.

(a)(3) Exhibits

The exhibits listed in the Exhibit Index immediately preceding the signature page hereto are filed as part of this Annual Report on Form 10-K.

Item 16. FORM 10-K SUMMARY.

None.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Watts Water Technologies, Inc.:

Opinions on the Consolidated Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated balance sheets of Watts Water Technologies, Inc. (the “Company”) as of December 31, 2017 and 2016, the related consolidated statements of operations, comprehensive income (loss), stockholders’ equity, and cash flows for each of the years in the three-year period ended December 31, 2017, and the related notes and financial statement Schedule II-Valuation and Qualifying Accounts (collectively, the “consolidated financial statements”). We also have audited the Company’s internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Basis for Opinions

The Company’s management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company’s consolidated financial statements and an opinion on the Company’s internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control Over Financial Reporting

A company’s internal control over financial reporting is a process designed 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. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting

principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ KPMG LLP

We have served as the Company's auditor since 1997.

Boston, Massachusetts

February 23, 2018

Watts Water Technologies, Inc. and Subsidiaries

Consolidated Statements of Operations

(Amounts in millions, except per share information)

	Year Ended December 31,		
	2017	2016	2015
Net sales	\$ 1,456.7	\$ 1,398.4	\$ 1,467.7
Cost of goods sold	854.3	832.8	914.6
GROSS PROFIT	602.4	565.6	553.1
Selling, general and administrative expenses	432.3	424.1	491.3
Restructuring	6.8	4.7	21.4
Goodwill and other long-lived asset impairment charges	1.0	0.5	130.5
Gain on disposition	—	(8.7)	—
OPERATING INCOME (LOSS)	162.3	145.0	(90.1)
Other (income) expense:			
Interest income	(1.0)	(1.0)	(1.0)
Interest expense	19.1	22.6	24.3
Other expense (income), net	1.1	(4.4)	(2.4)
Total other expense	19.2	17.2	20.9
INCOME (LOSS) BEFORE INCOME TAXES	143.1	127.8	(111.0)
Provision for income taxes	70.0	43.6	1.9
NET INCOME (LOSS)	\$ 73.1	\$ 84.2	\$ (112.9)
Basic EPS			
NET INCOME (LOSS) PER SHARE	\$ 2.12	\$ 2.45	\$ (3.24)
Weighted average number of shares	34.4	34.4	34.9
Diluted EPS			
NET INCOME (LOSS) PER SHARE	\$ 2.12	\$ 2.44	\$ (3.24)
Weighted average number of shares	34.4	34.5	34.9
Dividends declared per share	\$ 0.75	\$ 0.71	\$ 0.66

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

Watts Water Technologies, Inc. and Subsidiaries
Consolidated Statements of Comprehensive Income (Loss)
(Amounts in millions)

	Year Ended December 31,		
	2017	2016	2015
Net income (loss)	\$ 73.1	\$ 84.2	\$ (112.9)
Other comprehensive income (loss):			
Foreign currency translation adjustments	51.1	(32.4)	(75.2)
Reversal of foreign currency translation for sale of foreign entity, net of tax	—	6.9	—
Cash flow hedges, net of tax	0.6	2.9	—
Defined benefit pension plans, net of tax:		—	36.1
Other comprehensive income (loss)	51.7	(22.6)	(39.1)
Comprehensive income (loss)	<u>\$ 124.8</u>	<u>\$ 61.6</u>	<u>\$ (152.0)</u>

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

Watts Water Technologies, Inc. and Subsidiaries

Consolidated Balance Sheets

(Amounts in millions, except share information)

	December 31,	
	2017	2016
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$ 280.2	\$ 338.4
Trade accounts receivable, less allowance for doubtful accounts of \$14.3 million at December 31, 2017 and \$14.2 million at December 31, 2016	216.1	198.0
Inventories, net	259.1	239.4
Prepaid expenses and other current assets	26.7	40.5
Assets held for sale	1.5	3.1
Total Current Assets	783.6	819.4
PROPERTY, PLANT AND EQUIPMENT		
Property, plant and equipment, at cost	525.8	498.1
Accumulated depreciation	(327.3)	(308.4)
Property, plant and equipment, net	198.5	189.7
OTHER ASSETS:		
Goodwill	550.5	532.7
Intangible assets, net	185.2	202.5
Deferred income taxes	1.6	3.0
Other, net	17.1	15.9
TOTAL ASSETS	\$ 1,736.5	\$ 1,763.2
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	\$ 123.8	\$ 101.1
Accrued expenses and other liabilities	125.8	136.8
Accrued compensation and benefits	55.3	48.5
Current portion of long-term debt	22.5	139.1
Total Current Liabilities	327.4	425.5
LONG-TERM DEBT, NET OF CURRENT PORTION	474.6	511.3
DEFERRED INCOME TAXES	55.2	48.6
OTHER NONCURRENT LIABILITIES	50.3	41.5
STOCKHOLDERS' EQUITY:		
Preferred Stock, \$0.10 par value; 5,000,000 shares authorized; no shares issued or outstanding	—	—
Class A common stock, \$0.10 par value; 80,000,000 shares authorized; 1 vote per share; issued and outstanding, 27,724,192 shares at December 31, 2017 and 27,831,013 shares at December 31, 2016	2.8	2.8
Class B common stock, \$0.10 par value; 25,000,000 shares authorized; 10 votes per share; issued and outstanding, 6,379,290 shares at December 31, 2017 and December 31, 2016	0.6	0.6
Additional paid-in capital	551.8	535.2
Retained earnings	372.9	348.5
Accumulated other comprehensive loss	(99.1)	(150.8)
Total Stockholders' Equity	829.0	736.3
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$ 1,736.5	\$ 1,763.2

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

Watts Water Technologies, Inc. and Subsidiaries
Consolidated Statements of Stockholders' Equity

(Amounts in millions, except share information)

	Class A Common Stock		Class B Common Stock		Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Amount	Shares	Amount				
Balance at December 31, 2014	28,552,065	\$ 2.9	6,479,290	\$ 0.6	\$ 497.4	\$ 500.6	\$ (89.1)	\$ 912.4
Net loss	—	—	—	—	—	(112.9)	—	(112.9)
Other comprehensive loss	—	—	—	—	—	—	(39.1)	(39.1)
Comprehensive loss	—	—	—	—	—	—	—	(152.0)
Shares of Class B common stock converted to Class A common stock	100,000	—	(100,000)	—	—	—	—	—
Shares of Class A common stock issued upon the exercise of stock options	66,749	—	—	—	2.5	—	—	2.5
Stock-based compensation	—	—	—	—	10.9	—	—	10.9
Stock repurchase	(812,540)	(0.1)	—	—	—	(44.6)	—	(44.7)
Issuance of shares of restricted Class A common stock	123,000	—	—	—	—	(1.6)	—	(1.6)
Net change in restricted stock units	20,634	—	—	—	1.2	(0.7)	—	0.5
Common stock dividends	—	—	—	—	—	(23.1)	—	(23.1)
Balance at December 31, 2015	28,049,908	\$ 2.8	6,379,290	\$ 0.6	\$ 512.0	\$ 317.7	\$ (128.2)	\$ 704.9
Net income	—	—	—	—	—	84.2	—	84.2
Other comprehensive loss	—	—	—	—	—	—	(22.6)	(22.6)
Comprehensive income	—	—	—	—	—	—	—	61.6
Shares of Class A common stock issued upon the exercise of stock options	217,030	—	—	—	8.2	—	—	8.2
Stock-based compensation	—	—	—	—	13.4	—	—	13.4
Stock repurchase	(501,229)	—	—	—	—	(26.8)	—	(26.8)
Issuance of net shares of restricted Class A common stock	53,714	—	—	—	—	(1.6)	—	(1.6)
Net change in restricted stock units	11,590	—	—	—	1.6	(0.5)	—	1.1
Common stock dividends	—	—	—	—	—	(24.5)	—	(24.5)
Balance at December 31, 2016	27,831,013	\$ 2.8	6,379,290	\$ 0.6	\$ 535.2	\$ 348.5	\$ (150.8)	\$ 736.3
Share based payment change in accounting principle	—	—	—	—	—	(0.5)	—	(0.5)
Net income	—	—	—	—	—	73.1	—	73.1
Other comprehensive income	—	—	—	—	—	—	51.7	51.7
Comprehensive income	—	—	—	—	—	—	—	124.8
Shares of Class A common stock issued upon the exercise of stock options	31,377	—	—	—	1.7	—	—	1.7
Stock-based compensation	—	—	—	—	13.9	—	—	13.9
Stock repurchase	(277,886)	—	—	—	—	(18.2)	—	(18.2)
Issuance of net shares of restricted Class A common stock	87,443	—	—	—	—	(2.4)	—	(2.4)
Net change in restricted stock units	52,245	—	—	—	1.0	(1.7)	—	(0.7)
Common stock dividends	—	—	—	—	—	(25.9)	—	(25.9)
Balance at December 31, 2017	27,724,192	\$ 2.8	6,379,290	\$ 0.6	\$ 551.8	\$ 372.9	\$ (99.1)	\$ 829.0

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

Watts Water Technologies, Inc. and Subsidiaries
Consolidated Statements of Cash Flows
(Amounts in millions)

	Year Ended December 31,		
	2017	2016	2015
OPERATING ACTIVITIES			
Net income (loss)	\$ 73.1	\$ 84.2	\$ (112.9)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation	29.7	30.4	31.6
Amortization of intangibles	22.5	20.8	20.9
Loss on disposal and impairment of intangibles, property, plant and equipment and other	2.1	3.7	132.4
Gain on disposition	—	(8.6)	—
Gain on acquisition	—	(1.7)	—
Stock-based compensation	13.9	13.4	10.9
Deferred income tax	6.4	3.5	(20.5)
Defined benefit plans settlement	—	—	59.7
Changes in operating assets and liabilities, net of effects from business acquisitions and divestitures:			
Accounts receivable	(7.5)	(7.1)	13.0
Inventories	(8.4)	9.8	21.2
Prepaid expenses and other assets	14.7	4.9	(17.8)
Accounts payable, accrued expenses and other liabilities	9.4	(15.2)	(29.1)
Net cash provided by operating activities	155.9	138.1	109.4
INVESTING ACTIVITIES			
Additions to property, plant and equipment	(29.4)	(36.0)	(27.7)
Proceeds from the sale of property, plant and equipment	0.4	0.1	0.1
Net proceeds from the sale of assets, and other	3.1	9.9	30.7
Purchase of intangible assets	(1.5)	—	—
Business acquisitions, net of cash acquired	0.1	(88.0)	(20.4)
Net cash used in investing activities	(27.3)	(114.0)	(17.3)
FINANCING ACTIVITIES			
Proceeds from long-term borrowings	20.0	688.8	—
Payments of long-term debt	(178.0)	(614.4)	(2.0)
Payment of capital leases and other	(4.9)	(1.9)	(4.0)
Proceeds from share transactions under employee stock plans	1.7	8.2	2.5
Tax benefit of stock awards exercised	—	0.4	0.3
Payments to repurchase common stock	(18.2)	(26.8)	(44.6)
Debt issuance costs	—	(2.1)	—
Dividends	(25.9)	(24.5)	(23.1)
Net cash (used in) provided by financing activities	(205.3)	27.7	(70.9)
Effect of exchange rate changes on cash and cash equivalents	18.5	(9.6)	(26.1)
(DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(58.2)	42.2	(4.9)
Cash and cash equivalents at beginning of year	338.4	296.2	301.1
CASH AND CASH EQUIVALENTS AT END OF YEAR	\$ 280.2	\$ 338.4	\$ 296.2
NON CASH INVESTING AND FINANCING ACTIVITIES			
Acquisition of businesses:			
Fair value of assets acquired	\$ —	\$ 112.6	\$ 29.8
Cash paid, net of cash acquired	—	88.0	20.4
Gain on acquisition	(0.1)	1.7	—
Liabilities assumed	\$ —	\$ 22.9	\$ 9.4
Acquisitions of fixed assets under financing agreement	\$ —	\$ —	\$ 0.2
Issuance of stock under management stock purchase plan	\$ 0.9	\$ 0.7	\$ 0.3
CASH PAID FOR:			
Interest	\$ 18.8	\$ 20.2	\$ 23.1
Income taxes	\$ 39.4	\$ 33.5	\$ 24.5

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

Watts Water Technologies, Inc. and Subsidiaries

Notes to Consolidated Financial Statements

(1) Description of Business

Watts Water Technologies, Inc. (the Company) is a leading supplier of products and solutions that manage and conserve the flow of fluids and energy into, through and out of buildings in the residential and commercial markets of the Americas, Europe, and Asia-Pacific, Middle East, and Africa (APMEA). For over 140 years, the Company has designed and produced valve systems that safeguard and regulate water systems, energy efficient heating and hydronic systems, drainage systems and water filtration technology that helps conserve water.

(2) Accounting Policies

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its majority and wholly owned subsidiaries. Upon consolidation, all intercompany accounts and transactions are eliminated.

Cash Equivalents

Cash equivalents consist of instruments with remaining maturities of three months or less at the date of purchase and consist primarily of money market funds, for which the carrying amount is a reasonable estimate of fair value.

Allowance for Doubtful Accounts

The allowance for doubtful accounts is established to represent the Company's best estimate of the net realizable value of the outstanding accounts receivable. The development of the Company's allowance for doubtful accounts varies by region but in general is based on a review of past due amounts, historical write-off experience, as well as aging trends affecting specific accounts and general operational factors affecting all accounts. In addition, factors are developed in certain regions utilizing historical trends of sales and returns and allowances and cash discount activities to derive a reserve for returns and allowances and cash discounts.

The Company uniformly considers current economic trends and changes in customer payment terms when evaluating the adequacy of the allowance for doubtful accounts. The Company also aggressively monitors the creditworthiness of the Company's largest customers and periodically reviews customer credit limits to reduce risk. If circumstances relating to specific customers change or unanticipated changes occur in the general business environment, the Company's estimates of the recoverability of receivables could be further adjusted.

Concentration of Credit

The Company sells products to a diversified customer base and, therefore, has no significant concentrations of credit risk. In 2017, 2016, and 2015, no customer accounted for 10% or more of the Company's total sales or accounts receivable.

Inventories

Inventories are stated at the lower of cost or market, using primarily the first-in, first-out method. Market value is determined by replacement cost or net realizable value. Historical usage is used as the basis for determining the reserve for excess or obsolete inventories.

Goodwill and Other Intangible Assets

Goodwill is recorded when the consideration paid for acquisitions exceeds the fair value of net tangible and intangible assets acquired. Goodwill and other intangible assets with indefinite useful lives are not amortized, but rather are tested for impairment at least annually or more frequently if events or circumstances indicate that it is "more likely than not"

that they might be impaired, such as from a change in business conditions. The Company performs its annual goodwill and indefinite-lived intangible assets impairment assessment in the fourth quarter of each year.

Long-Lived Assets

Intangible assets with estimable lives and other long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset or asset group may not be recoverable. Recoverability of intangible assets with estimable lives and other long-lived assets is measured by a comparison of the carrying amount of an asset or asset group to future net undiscounted pretax cash flows expected to be generated by the asset or asset group. If these comparisons indicate that an asset is not recoverable, the impairment loss recognized is the amount by which the carrying amount of the asset or asset group exceeds the related estimated fair value. Estimated fair value is based on either discounted future pretax operating cash flows or appraised values, depending on the nature of the asset. The Company determines the discount rate for this analysis based on the weighted average cost of capital using the market and guideline public companies for the related businesses and does not allocate interest charges to the asset or asset group being measured. Judgment is required to estimate future operating cash flows.

Property, Plant and Equipment

Property, plant and equipment are recorded at cost. Depreciation is provided on a straight-line basis over the estimated useful lives of the assets, which range from 10 to 40 years for buildings and improvements and 3 to 15 years for machinery and equipment. Leasehold improvements are depreciated over the lesser of the economic useful life of the asset or the remaining lease term.

Taxes, Other than Income Taxes

Taxes assessed by governmental authorities on sale transactions are recorded on a net basis and excluded from sales in the Company's consolidated statements of operations.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

The Company recognizes tax benefits when the item in question meets the more-likely-than-not (greater than 50% likelihood of being sustained upon examination by the taxing authorities) threshold. During 2017, unrecognized tax benefits of the Company increased by a net amount of \$2.6 million. Unrecognized tax benefits increased by approximately \$3.1 million, consisting of \$1.7 million related to European tax positions, \$0.5 million related to China tax positions, \$0.2 million related to U.S. tax positions and \$0.7 million related to currency movements. Unrecognized tax benefits decreased by \$0.5 million, which was primarily related to the settlement of a Belgium audit and various statute expirations.

As of December 31, 2017, the Company had gross unrecognized tax benefits of approximately \$7.7 million, approximately \$3.6 million of which, if recognized, would affect the effective tax rate. The difference between the amount of unrecognized tax benefits and the amount that would affect the effective tax rate consists of the federal tax benefit of state income tax items and allowable correlative adjustments that are available for certain jurisdictions.

A reconciliation of the beginning and ending amount of unrecognized tax is as follows:

	(in millions)
Balance at January 1, 2017	\$ 5.1
Increases related to prior year tax positions	2.4
Decreases related to statute expirations	(0.3)
Settlements	(0.2)
Currency movement	0.7
Balance at December 31, 2017	<u>\$ 7.7</u>

The Company estimates that it is reasonably possible that the balance of unrecognized tax benefits as of December 31, 2017 may decrease by approximately \$0.5 million in the next twelve months, as a result of lapses in statutes of limitations and settlements of open audits.

In January of 2017, the United States Internal Revenue Service commenced an audit of the Company's 2015 tax year. The Company does not anticipate any material adjustments to arise as a result of the audit. The Company conducts business in a variety of locations throughout the world resulting in tax filings in numerous domestic and foreign jurisdictions. The Company is subject to tax examinations regularly as part of the normal course of business. The Company's major jurisdictions are the U.S., France, Germany, Canada, and the Netherlands. The statute of limitations in the U.S. is subject to tax examination for 2014 and later; France, Germany, Canada and the Netherlands are subject to tax examination for 2012-2014 and later. All other jurisdictions, with few exceptions, are no longer subject to tax examinations in state and local, or international jurisdictions for tax years before 2012.

The Company accounts for interest and penalties related to uncertain tax positions as a component of income tax expense.

Foreign Currency Translation

The functional currency for most of our foreign subsidiaries is their local currency. For our non-U.S. subsidiaries that transact in a functional currency other than the U.S. dollar, assets and liabilities are translated at current rates of exchange at the balance sheet date. Income and expense items are translated at the average foreign currency exchange rates for the period. Adjustments resulting from the translation of the financial statements of our foreign operations into U.S. dollars are excluded from the determination of net income and are recorded in accumulated other comprehensive income, a separate component of equity. For subsidiaries where the functional currency of the assets and liabilities differs from the local currency, non-monetary assets and liabilities are translated at the rate of exchange in effect on the date assets were acquired while monetary assets and liabilities are translated at current rates of exchange as of the balance sheet date. Income and expense items are translated at the average foreign currency rates for the period. Translation adjustments of these subsidiaries are included in other expense (income), net in our consolidated statements of operations.

Stock-Based Compensation

The Company records compensation expense in the financial statements for share-based awards based on the grant date fair value of those awards for restricted stock awards and deferred shares. Stock-based compensation expense for restricted stock awards and deferred shares is recognized over the requisite service periods of the awards on a straight-line basis, which is generally commensurate with the vesting term. The performance stock units offered by the Company to employees are amortized to expense over the vesting period, and based on the Company's performance relative to the performance goals, may be adjusted. Changes to the estimated shares expected to vest will result in adjustments to the related share-based compensation expense that will be recorded in the period of change. In March 2016, the FASB issued ASU 2016-09, "Improvements to Employee Share-Based Payment Accounting," and the Company adopted this standard in the first quarter of 2017 with an immaterial change to retained earnings. As part of the adoption of this standard, the Company elected to account for forfeitures as they occur, rather than estimate expected forfeitures over the vesting period of the respective grant. The Company also no longer reclassifies the benefits associated with tax deductions in excess of recognized compensation cost from operating activities to financing activities in the Consolidated Statement of Cash Flows.

At December 31, 2017, the Company had one stock-based compensation plan with total unrecognized compensation costs related to unvested stock-based compensation arrangements of approximately \$14.8 million and a total weighted

average remaining term of 1.57 years. For 2017, 2016 and 2015, the Company recognized compensation costs related to stock-based programs of approximately \$13.9 million, \$13.4 million and \$10.9 million, respectively. For 2017, 2016, and 2015 stock compensation expense, \$0.8 million, \$0.9 million and \$0.4 million, respectively, was recorded in cost of goods sold and \$13.1 million, \$12.5 million and \$10.5 million, respectively, was recorded in selling, general and administrative expenses. For 2017, 2016 and 2015, the Company recorded approximately \$0.1 million, \$0.8 million and \$0.3 million, respectively, of tax benefits for the compensation expense relating to its stock options. For 2017, 2016 and 2015, the Company recorded approximately \$3.9 million, \$2.8 million and \$2.0 million, respectively, of tax benefit for its other stock-based plans. For 2017, 2016 and 2015, the recognition of total stock-based compensation expense impacted both basic and diluted net income per common share by \$0.28, \$0.29 and \$0.25, respectively.

Net Income (Loss) Per Common Share

Basic net income (loss) per common share is calculated by dividing net income (loss) by the weighted average number of common shares outstanding. The calculation of diluted net income (loss) per share assumes the conversion of all dilutive securities (see Note 13).

Net income (loss) and number of shares used to compute net income (loss) per share, basic and assuming full dilution, are reconciled below:

	Year Ended December 31,								
	2017			2016			2015		
	Net Income	Shares	Per Share Amount	Net Income	Shares	Per Share Amount	Net Loss	Shares	Per Share Amount
	(Amounts in millions, except per share information)								
Basic EPS	\$ 73.1	34.4	\$ 2.12	\$ 84.2	34.4	\$ 2.45	\$ (112.9)	34.9	\$ (3.24)
Dilutive securities, principally common stock options	—	—	—	—	0.1	(0.01)	—	—	—
Diluted EPS	\$ 73.1	34.4	\$ 2.12	\$ 84.2	34.5	\$ 2.44	\$ (112.9)	34.9	\$ (3.24)

The computation of diluted net income (loss) per share for the years ended December 31, 2016 and 2015 excludes the effect of the potential exercise of options to purchase approximately 0.1 million and 0.3 million shares, respectively, because the exercise price of the option was greater than the average market price of the Class A common stock and the effect would have been anti-dilutive.

Financial Instruments

In the normal course of business, the Company manages risks associated with commodity prices, foreign exchange rates and interest rates through a variety of strategies, including the use of hedging transactions, executed in accordance with the Company's policies. The Company's hedging transactions include, but are not limited to, the use of various derivative financial and commodity instruments. As a matter of policy, the Company does not use derivative instruments unless there is an underlying exposure. Any change in value of the derivative instruments would be substantially offset by an opposite change in the value of the underlying hedged items. The Company does not use derivative instruments for trading or speculative purposes.

Derivative instruments may be designated and accounted for as either a hedge of a recognized asset or liability (fair value hedge) or a hedge of a forecasted transaction (cash flow hedge). For a fair value hedge, both the effective and ineffective portions of the change in fair value of the derivative instrument, along with an adjustment to the carrying amount of the hedged item for fair value changes attributable to the hedged risk, are recognized in earnings. For a cash flow hedge, changes in the fair value of the derivative instrument that are highly effective are deferred in accumulated other comprehensive income or loss until the underlying hedged item is recognized in earnings. The Company has two interest rate swaps designated as cash flow hedges as of December 31, 2017 and 2016. The Company had one foreign currency swap which was a non-designated cash flow hedge as of December 31, 2016. Refer to Note 16 for further details.

If a fair value or cash flow hedge were to cease to qualify for hedge accounting or be terminated, it would continue to be carried on the balance sheet at fair value until settled, but hedge accounting would be discontinued prospectively. If a forecasted transaction were no longer probable of occurring, amounts previously deferred in accumulated other comprehensive income would be recognized immediately in earnings. On occasion, the Company may enter into a derivative instrument that does not qualify for hedge accounting because it is entered into to offset changes in the fair

value of an underlying transaction which is required to be recognized in earnings (natural hedge). These instruments are reflected in the Consolidated Balance Sheets at fair value with changes in fair value recognized in earnings.

Portions of the Company's outstanding debt are exposed to interest rate risks. The Company monitors its interest rate exposures on an ongoing basis to maximize the overall effectiveness of its interest rates.

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. An entity is required to maximize the use of observable inputs, where available, and minimize the use of unobservable inputs when measuring fair value.

The Company has certain financial assets and liabilities that are measured at fair value on a recurring basis and certain nonfinancial assets and liabilities that may be measured at fair value on a nonrecurring basis. The fair value disclosures of these assets and liabilities are based on a three-level hierarchy, which is defined as follows:

- Level 1** Quoted prices in active markets for identical assets or liabilities that the entity has the ability to access at the measurement date.
- Level 2** Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level 3** Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

Assets and liabilities subject to this hierarchy are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the asset or liability. Refer to Note 16 for further details.

Shipping and Handling

Shipping and handling costs included in selling, general and administrative expense amounted to \$52.1 million, \$47.9 million and \$53.5 million for the years ended December 31, 2017, 2016 and 2015, respectively.

Research and Development

Research and development costs included in selling, general, and administrative expense amounted to \$29.0 million, \$26.5 million and \$23.5 million for the years ended December 31, 2017, 2016 and 2015, respectively.

Revenue Recognition

The Company recognizes revenue when all of the following criteria have been met: the Company has entered into a binding agreement, the product has been shipped and title passes, the sales price to the customer is fixed or is determinable, and collectability is reasonably assured. Provisions for estimated returns and allowances are made at the time of sale, and are recorded as a reduction of sales and included in the allowance for doubtful accounts in the Consolidated Balance Sheets. The Company also records a right of return asset for estimated returns of product that is included within other assets on the Consolidated Balance Sheets. The Company records provisions for sales incentives (primarily volume rebates), as an adjustment to net sales, at the time of sale based on estimated purchase targets.

Basis of Presentation

Certain amounts in the 2016 and 2015 consolidated financial statements have been reclassified to permit comparison with the 2017 presentation, including from adoption of recent accounting standards. These reclassifications had no effect on reported results of operations or stockholders' equity.

Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Recently Adopted Accounting Standards

In January 2017, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2017-04, “Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment.” ASU 2017-04 eliminates the need to determine the fair value of individual assets and liabilities of a reporting unit to measure goodwill impairment. A goodwill impairment will now be the amount by which a reporting unit’s carrying value exceeds its fair value. The revised guidance will be applied prospectively and is effective for calendar year-end SEC filers in 2020. Early adoption is permitted for any impairment tests performed after January 1, 2017. The Company’s adoption of the new guidance effective January 1, 2017 did not have a material impact on the Company’s financial statements.

In March 2016, the FASB issued ASU 2016-09, “Improvements to Employee Share-Based Payment Accounting.” ASU 2016-09 simplifies several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as equity or liabilities, forfeitures, and classification on the statement of cash flows. The Company adopted this standard in the first quarter of 2017. The impact of the adoption of this standard resulted in the following:

- The Company elected to account for forfeitures as they occur, rather than estimate expected forfeitures over the vesting period of the respective grant. This was adopted using a modified retrospective approach with a cumulative effect adjustment of \$0.5 million to retained earnings as of January 1, 2017.
- The Company no longer reclassifies the excess tax benefit from operating activities to financing activities in the Consolidated Statement of Cash Flows. This change has been applied prospectively in the Statement of Cash Flows. The Company had an excess tax benefit of \$0.4 million for the year ended December 31, 2016.
- The Company no longer records windfall or shortfall tax benefits to additional paid-in capital and records these tax benefits directly to operations. This change has been applied prospectively as is required by the standard and therefore the comparative period has not been adjusted. This change may create volatility in the Company’s effective tax rate on a prospective basis.

In November 2015, the FASB issued ASU 2015-17, “Income Taxes: Balance Sheet Classification of Deferred Taxes.” ASU 2015-17 requires that deferred tax liabilities and assets be classified as noncurrent in a classified statement of financial position. ASU 2015-17 is effective for financial statements issued for annual periods beginning after December 15, 2016 and all interim periods thereafter. The Company adopted the provision of this ASU during the first quarter of 2017 and applied it retrospectively. As of December 31, 2016, the Company had \$38.6 million of current deferred tax assets, \$1.5 million of noncurrent deferred tax assets, and \$85.7 million of noncurrent deferred tax liabilities. The adoption of this standard resulted in a reclassification of \$38.6 million of current deferred tax assets to noncurrent deferred tax liabilities and a reclassification of \$1.5 million of noncurrent deferred tax liabilities to noncurrent deferred tax assets. Therefore, the restated noncurrent deferred tax asset balance and noncurrent deferred tax liability balance as of December 31, 2016 was \$3.0 million and \$48.6 million, respectively. Adoption of this standard did not affect results of operations, retained earnings, or cash flows in the current or previous interim and annual reporting periods.

In July 2015, the FASB issued ASU 2015-11, “Inventory: Simplifying the Measurement of Inventory.” This new standard changes inventory measurement from lower of cost or market to lower of cost and net realizable value. The standard eliminates the requirement to consider replacement cost or net realizable value less a normal profit margin when measuring inventory. ASU 2015-11 was effective in the first quarter of 2017 for public companies with calendar year ends, and should be applied prospectively with early adoption permitted. The adoption of this guidance did not have a material impact on the Company’s financial statements.

Accounting Standards Updates

In August 2017, the FASB issued ASU 2017-12 “Derivatives and Hedging (Topic 815)-Targeted Improvements to Accounting for Hedging Activities.” ASU 2017-12 amends the hedge accounting guidance to improve the financial

reporting of hedging relationships to better portray the economic results of an entity's risk management activities in the financial statements. This guidance permits hedge accounting for risk components in hedging relationships that involve nonfinancial risk, reduces complexity in hedging for fair value hedges of interest rate risk, eliminates the requirement to separately measure and report hedging ineffectiveness, and simplifies certain hedge effectiveness assessment requirements. This standard is effective for fiscal years beginning after December 15, 2018, including interim periods within that reporting period. The Company is currently evaluating the impact of this guidance, including transition elections and required disclosures, on our financial statements.

In January 2017, the FASB issued ASU 2017-01 "Business Combinations (Topic 805)-Clarifying the Definition of a Business", which clarifies the definition of a business to assist entities with evaluating whether transactions should be accounted for as acquisitions or disposals of assets or businesses. The standard introduces a screen for determining when assets acquired are not a business and clarifies that a business must include, at a minimum, an input and a substantive process that contribute to an output to be considered a business. This standard is effective for fiscal years beginning after December 15, 2017, including interim periods within that reporting period. The adoption of this guidance is not expected to have a material impact on the Company's financial statements.

In February 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)." ASU 2016-02 requires a lessee to recognize in the statement of financial position a liability to make lease payments and a right-of-use asset representing the right to use the underlying asset for the lease term for both finance and operating leases. ASU 2016-02 is effective for financial statements issued for annual periods beginning after December 15, 2018 and all interim periods thereafter. Early adoption is permitted for all entities. The Company plans to adopt this standard effective January 1, 2019, using the modified retrospective approach. The Company is currently reviewing its leasing arrangements in order to evaluate the impact of this standard on the Company's financial statements.

In May 2014, the FASB issued ASU 2014-09, "Revenue from Contracts with Customers." ASU 2014-09 converges revenue recognition under U.S. GAAP and International Financial Reporting Standards ("IFRS"). For U.S. GAAP, the standard generally eliminates transaction and industry-specific revenue recognition guidance. This includes current guidance on long-term construction-type contracts, software arrangements, real estate sales, telecommunication arrangements, and franchise sales. Under the new standard, revenue is recognized based on a five-step model. The FASB issued ASU 2015-14 in August 2015 which deferred the effective date of ASU 2014-09 for public companies to periods beginning after December 15, 2017, with early adoption permitted. The Company assessed the impact of the guidance on its revenues by reviewing its contract portfolio to identify potential differences that would result from applying the new standard to its current revenue arrangements, including evaluation of potential performance obligations and variable consideration. The Company completed this analysis and concluded the adoption of this guidance will not have a material impact on the Company's financial results in the year of adoption. The Company adopted this new standard effective January 1, 2018 using the modified retrospective approach. Under the new standard entities are required to disaggregate and disclose revenue into categories to depict how the nature, amount, timing, and uncertainty of revenue and cash flows are affected by economic factors. The Company expects to disaggregate revenue by geographic segment, and further disaggregate revenue to distribution channel and product line. The Company is evaluating the impact of this standard on the internal controls over financial reporting and enhanced disclosure requirements, beyond the impact of disaggregating revenue.

(3) Restructuring and Other Charges, Net

The Company's Board of Directors approves all major restructuring programs that may involve the discontinuance of significant product lines or the shutdown of significant facilities. From time to time, the Company takes additional restructuring actions, including involuntary terminations that are not part of a major program. The Company accounts for these costs in the period that the liability is incurred. These costs are included in restructuring charges in the Company's consolidated statements of operations.

A summary of the pre-tax cost by restructuring program is as follows:

	Year Ended December 31,		
	2017	2016	2015
	(in millions)		
Restructuring costs:			
2015 Actions	\$ 2.4	\$ 2.1	\$ 13.6
Other Actions	4.4	2.6	7.8
Total restructuring charges	\$ 6.8	\$ 4.7	\$ 21.4

The Company recorded pre-tax restructuring in its business segments as follows:

	Year Ended December 31,		
	2017	2016	2015
	(in millions)		
Americas	\$ 3.1	\$ 1.6	\$ 9.4
Europe	3.3	3.4	6.7
APMEA	0.4	0.2	4.2
Corporate	—	(0.5)	1.1
Total	\$ 6.8	\$ 4.7	\$ 21.4

2015 Actions

In 2015, the Board of Directors of the Company approved a transformation program relating to the Company's Americas and APMEA businesses, which primarily involved the exit of low-margin, non-core product lines, and enhancing global sourcing capabilities ("phase one"). The Company eliminated approximately \$165 million of the combined Americas and APMEA net sales primarily within the Company's do-it-yourself (DIY) distribution channel. As part of the exit of non-core product lines, the Company entered into an agreement to sell an operating subsidiary in China that was dedicated exclusively to the manufacturing of products being discontinued. The sale was finalized in the second quarter of 2016, and the Company recognized a pre-tax gain of \$8.7 million and received proceeds from the sale of \$8.4 million.

The second phase of the program involved the consolidation of manufacturing facilities and distribution center network optimization, including reducing the square footage of the Company's Americas facilities, which together with phase one, reduced the Americas net operating footprint by approximately 30%. This phase of the program was designed to improve the utilization of our remaining facilities, better leverage our cost structure, reduce working capital, and improve execution of customer delivery requirements. As of December 31, 2017, the second phase was complete.

On a combined basis, the total pre-tax cost for the Company's transformation program related to its Americas and APMEA businesses was approximately \$59.8 million, including restructuring costs of \$18.1 million, goodwill and intangible asset impairments of \$13.5 million and other transformation and deployment costs of approximately \$28.2 million. The other transformation and deployment costs included consulting and project management fees, inventory write-offs, and other associated costs. The program originally included estimated pre-tax charges totaling approximately \$65 million. In the third quarter of 2017, the total expected costs of the planned actions were reduced to approximately \$60 million, primarily related to reduced expected facility exit costs and reduced other transformation and deployment costs. All costs associated with the Americas and APMEA transformation program were incurred as of December 31, 2017.

The following table summarizes by type, the total incurred pre-tax restructuring costs for the Company's transformation program related to its Americas and APMEA businesses (phase one and phase two combined):

	Severance	Legal and consultancy	Asset write- downs	Facility exit and other	Total
	(in millions)				
Costs incurred—2015	\$ 8.5	\$ 0.7	\$ 1.6	\$ 2.8	\$ 13.6
Costs incurred—2016	(1.5)	0.2	2.9	0.5	2.1
Costs incurred—2017	—	—	2.2	0.2	2.4
Total restructuring costs	\$ 7.0	\$ 0.9	\$ 6.7	\$ 3.5	\$ 18.1

The following table summarizes pre-tax restructuring costs incurred for the year ended December 31, 2017 and total pre-tax restructuring costs incurred for the program, by business segment for the Company's Americas and APMEA 2015 transformation program. There are no remaining costs to be incurred:

	Year Ended December 31, 2017	Total program costs
	(in millions)	
APMEA	\$ 0.2	\$ 4.6
Americas	2.2	13.5
Total restructuring costs	\$ 2.4	\$ 18.1

Details of the restructuring reserve activity for the Company's Americas and APMEA 2015 transformation program for the year ended December 31, 2017 are as follows:

	Severance	Legal and consultancy	Asset write- downs	Facility exit and other	Total
	(in millions)				
Balance at December 31, 2015	\$ 5.0	\$ 0.4	\$ —	\$ 1.0	\$ 6.4
Net pre-tax restructuring charges	(1.5)	0.2	2.9	0.5	2.1
Utilization and foreign currency impact	(2.3)	(0.6)	(2.9)	(1.5)	(7.3)
Balance at December 31, 2016	\$ 1.2	\$ —	\$ —	\$ —	\$ 1.2
Net pre-tax restructuring charges	—	—	2.2	0.2	2.4
Utilization and foreign currency impact	(1.0)	—	(2.2)	(0.2)	(3.4)
Balance at December 31, 2017	\$ 0.2	\$ —	\$ —	\$ —	\$ 0.2

Other Actions

The Company periodically initiates other actions which are not part of a major program. Total "Other Actions" pre-tax restructuring expense was \$ 4.4 million for the year ended December 31, 2017. Included in "Other Actions" are European restructuring activities initiated in 2017, the 2015 Europe restructuring actions, as well as certain other minor initiatives for which the Company incurred restructuring expenses for the year ended December 31, 2017.

In the fourth quarter of 2017, management initiated certain restructuring actions related to reductions in force within the Company's Europe segment. The restructuring activities primarily included severance benefits. The total pre-tax charges associated with the Europe restructuring activities were approximately \$4.1 million with costs being fully incurred in 2017. The restructuring reserve associated with these actions is approximately \$3.1 million as of December 31, 2017, and relates to severance benefits.

In the fourth quarter of 2015 management initiated certain restructuring actions and strategic initiatives with respect to the Company's Europe segment in response to the ongoing economic challenges in Europe and additional product rationalization. The restructuring actions included severance benefits and limited costs relating to asset write offs, professional fees and relocation.

The total pre-tax charge for the Europe 2015 restructuring initiatives was expected to be approximately \$10.0 million. As of December 31, 2017, the company revised its forecast to approximately \$9.3 million. The reduction in estimated costs is primarily due to reduced expected severance costs. Through December 31, 2017, the Company has incurred approximately \$7.7 million for the program to date. The remaining expected costs relate to potential additional severance and legal costs resulting from foreign statutes of limitations associated with the 2015 program; these statutes expire in 2018.

The following table summarizes total expected, incurred and remaining pre-tax restructuring costs for the Europe 2015 restructuring actions:

	Severance	Legal and consultancy (in millions)	Facility Exit and other	Total
Costs incurred—2015	\$ 6.6	\$ —	\$ 0.3	\$ 6.9
Costs incurred—2016	1.3	0.5	—	1.8
Adjustments to restructuring costs—2017	(1.0)	—	—	(1.0)
Remaining costs to be incurred	1.4	0.2	—	1.6
Total expected restructuring costs	\$ 8.3	\$ 0.7	\$ 0.3	\$ 9.3

Details of the Company's Europe 2015 restructuring reserve activity for the year ended December 31, 2017 are as follows:

	Severance	Legal and Consultancy (in millions)	Facility exit and other	Total
Balance at December 31, 2015	\$ 6.4	\$ —	\$ —	\$ 6.4
Net pre-tax restructuring charges	1.3	0.5	—	1.8
Utilization and foreign currency impact	(2.9)	(0.5)	—	(3.4)
Balance at December 31, 2016	\$ 4.8	\$ —	\$ —	\$ 4.8
Net pre-tax restructuring adjustments	(1.0)	—	—	(1.0)
Utilization and foreign currency impact	(2.8)	—	—	(2.8)
Balance at December 31, 2017	\$ 1.0	\$ —	\$ —	\$ 1.0

(4) Sale of Business

Gain on Sale of China Operating Subsidiary

On September 22, 2015, the Company signed an agreement to sell an operating subsidiary in China that was dedicated to the production of non-core products. The sale was finalized in the second quarter of 2016, and the Company received proceeds of \$8.4 million from the sale as of the fourth quarter of 2016. The Company recognized a pre-tax gain of \$8.7 million, which includes a non-cash accumulated currency translation adjustment of \$7.3 million. The net after-tax gain was approximately \$8.3 million.

Sale of Certain Americas Product Lines

On September 15, 2015, the Company completed the sale of certain assets related to the Company's fittings, brass and tubular and vinyl tubing product lines to a third party in an all-cash transaction. The Company received net cash proceeds of approximately \$33.1 million, after inventory adjustments and transaction fees. Total net assets sold were \$33.4 million, resulting in an immaterial loss.

(5) Business Acquisitions

PVI Industries, LLC

On November 2, 2016, the Company acquired 100% of the shares of PVI Riverside Holdings, Inc., the parent company of PVI Industries, LLC ("PVI"). The aggregate purchase price, including the final working capital adjustment, was approximately \$79.1 million.

PVI is a leading manufacturer of commercial stainless steel water heating equipment, focused on the high capacity market in North America and is based in Fort Worth, Texas. PVI's water heater product offering complements AERCO's boiler products, allowing the Company to address customers' heating and hot water requirements. The results for PVI are included in the Company's Americas segment.

The Company accounted for the transaction as a purchased business combination and the acquisition was funded partially with available cash and partially from borrowings under the Company's Credit Agreement. During the second quarter of 2017, the Company finalized the purchase price allocation for the PVI purchase. The acquisition resulted in the recognition of \$41.1 million in goodwill and \$31.0 million in intangible assets. The intangible assets acquired consist of customer relationships valued at \$17.6 million with estimated lives of 15 years, developed technology valued at \$10.2 million with estimated lives of 10 years, and the trade name valued at \$3.2 million with an estimated life of 20 years. The goodwill is attributable to the workforce of PVI and the strategic platform adjacency that will allow Watts to extend its product offerings as a result of the acquisition. Approximately \$6.9 million of the goodwill is deductible for tax purposes. The following table summarizes the value of the assets and liabilities acquired (in millions):

Accounts receivable	\$ 5.7
Inventory	12.7
Fixed assets	8.1
Other assets	2.8
Intangible assets	31.0
Goodwill	41.1
Accounts payable	(4.0)
Accrued expenses and other	(9.2)
Deferred tax liability	(9.1)
Purchase price	<u>\$ 79.1</u>

Watts Korea

On February 26, 2016, the Company acquired an additional 50% of the outstanding shares of Watts Korea for an aggregate purchase price of approximately \$4 million. Prior to February 26, 2016, the Company held a 40% interest in Watts Korea, which operated as a joint venture. The Company acquired the remaining 10% ownership in the fourth quarter of 2016 for \$0.7 million and now owns 100% of Watts Korea. Watts Korea strengthens Watts' strategic vision to expand solutions sales into the Korean market. The Company accounted for the transaction as a step acquisition within a business combination. The Company recognized a \$1.7 million pre-tax gain on the previously held 40% ownership interest in the first quarter of 2016.

The Company completed a valuation of the assets and liabilities acquired that resulted in the recognition of \$3.3 million in goodwill, \$1.6 million in intangible assets and \$0.8 million as the estimate of the acquisition date fair value on commitment to purchase the remaining 10% ownership by December 31, 2017. The intangible assets acquired consisted entirely of customer relationships. The amortization period of these customer relationships is 10 years. The goodwill is not deductible for tax purposes. The balance sheet and results of operations for Watts Korea are included in the Company's APMEA segment since acquisition date.

Apex Valves Limited

On November 30, 2015, the Company acquired 80% of the outstanding shares of Apex Valves Limited (“Apex”). Apex specializes in the design and manufacturing of control valves for low and high pressure hot water and filtration systems. Apex also produces an extensive range of float and reservoir valves for the agricultural industry. The aggregate purchase price was approximately \$20.4 million and the Company recorded a long-term liability of \$5.5 million as the estimate of the acquisition date fair value on the contractual call option to purchase the remaining 20% within three years of closing. The Company accounted for the transaction as a business combination. The Company completed a purchase price allocation that resulted in the recognition of \$12.9 million in goodwill and \$10.1 million in intangible assets. Intangible assets consist primarily of customer relationships with an estimated life of 10 years and a trade name with an estimated life of 15 years. The goodwill is not deductible for tax purposes. The results of operations for Apex are included in the Company’s APMEA segment since acquisition date.

The Company acquired an additional 10% ownership in the first quarter of 2017 for approximately \$2.9 million and now owns 90% of the outstanding shares of Apex. The Company maintains a current liability of approximately \$2.9 million for the estimated fair value on the remaining 10% contractual call option, which is expected to be exercised in 2018.

(6) Goodwill & Intangibles

Goodwill

The Company performs its annual goodwill impairment testing for each reporting unit as of fiscal October month end or earlier if there is a triggering event or circumstance that indicates an impairment loss may have occurred. As of the October 29, 2017 testing date, the Company had \$547.5 million of goodwill on its balance sheet. In 2017, the Company had eight reporting units. One of these reporting units, Water Quality, had no goodwill. The Company performed a qualitative analysis for six of the remaining seven reporting units, which include Blücher, Dormont, US Drains, Europe, Residential and Commercial, and APMEA. As of January 1, 2017, the Company began reporting the results of Watts Industries Middle East FZE (“Watts Middle East”), an indirect, wholly owned subsidiary, as part of the Company’s former Asia-Pacific segment, which is now referred to as APMEA. Watts Middle East had previously been reported within the former EMEA segment, which is now referred to as Europe. This change in segment composition aligns with the structure of the Company’s internal organization and did not result in a material change to previously reported segment information. There was no change in the determination of our eight reporting units for the purpose of goodwill testing. The Company followed the guidance in ASC 352-20-35-39 through ASC 350-20-35-40 to reassign assets and liabilities to the reporting units affected, including the allocation of an immaterial amount of goodwill.

As a result of the PVI acquisition in November 2016, the Company combined two components, AERCO and PVI, into the Heating and Hot Water Solutions (“HHWS”) reporting unit. The Company evaluated the aggregation criteria under ASC 350 in combining these components. AERCO was a standalone reporting unit for the 2016 annual impairment assessment. In the fourth quarter of 2017, the Company performed a quantitative impairment analysis for the HHWS reporting unit in connection with the annual strategic plan and due to underperformance to budget, primarily caused by continuing softness in the condensing boiler market, weakness in the Company’s tankless water heater products and competitive pricing pressure. The Company estimated the fair value of the reporting unit using a weighted calculation of the income approach and the market approach. The income approach calculated the present value of expected future cash flows. The guideline public company method (market approach) calculated the estimated fair values based on valuation multiples derived from stock prices and enterprise values of publicly traded companies that are comparable to the reporting unit. The estimated fair value of the reporting unit exceeded the carrying value by approximately 6% in 2017 and therefore, no impairment was recorded.

In the fourth quarter of 2015, the Company performed a quantitative impairment analysis for the Europe reporting unit in connection with the annual strategic plan and due to the underperformance to budget, primarily caused by the continued challenging European macroeconomic environment. The Company estimated the fair value of the reporting unit using a weighted calculation of the income approach and the market approach. The income approach calculated the present value of expected future cash flows and included the impact of recent underperformance of the reporting unit due to the continued challenging macroeconomic environment in Europe and the Company’s lowered expectations for the reporting unit included in the strategic plan. The guideline public company method (market approach) calculated estimated fair

values based on valuation multiples derived from stock prices and enterprise values of publicly traded companies that are comparable to the Company. In the second step of the impairment test, the carrying value of the goodwill exceeded the implied fair value of goodwill, resulting in a pre-tax impairment charge of \$129.7 million. There was a tax benefit associated with the impairment of \$3.4 million, resulting in a net impairment charge of \$126.3 million.

The changes in the carrying amount of goodwill by geographic segment are as follows:

	December 31, 2017							
	Gross Balance			Accumulated Impairment Losses			Net Goodwill	
	Balance January 1,	Acquired During the Period	Foreign Currency Translation and Other	Balance December 31,	Balance January 1,	Impairment Loss During the Period	Balance December 31,	December 31,
	2017	(1)		2017	2017		2017	2017
	(in millions)							
Americas	\$ 434.7	2.0	0.7	437.4	\$ (24.5)	—	(24.5)	412.9
Europe	234.9	—	14.4	249.3	(129.7)	—	(129.7)	119.6
APMEA	30.2	—	0.7	30.9	(12.9)	—	(12.9)	18.0
Total	\$ 699.8	2.0	15.8	717.6	\$ (167.1)	—	(167.1)	550.5

- (1) Americas goodwill additions during 2017 includes purchase accounting adjustments related to the PVI acquisition discussed in Note 5 of the Notes to the Consolidated Financial Statements.

	December 31, 2016							
	Gross Balance			Accumulated Impairment Losses			Net Goodwill	
	Balance January 1, 2016	Acquired During the Period	Foreign Currency Translation and Other	Balance December 31, 2016	Balance January 1, 2016	Impairment Loss During the Period	Balance December 31, 2016	December 31, 2016
	(in millions)							
Americas	\$ 391.2	43.3	0.2	434.7	\$ (24.5)	—	(24.5)	410.2
Europe	238.6	—	(3.7)	234.9	(129.7)	—	(129.7)	105.2
APMEA	26.3	3.7	0.2	30.2	(12.9)	—	(12.9)	17.3
Total	\$ 656.1	47.0	(3.3)	699.8	\$ (167.1)	—	(167.1)	532.7

On November 2, 2016, the Company acquired 100% of the shares of PVI Riverside Holdings, Inc., the parent company of PVI. The aggregate purchase price recorded, including the final working capital adjustment, was approximately \$79.1 million. The Company accounted for the transaction as a purchased business combination. The Company finalized the purchase price allocation that resulted in the recognition of \$41.1 million in goodwill and \$31.0 million in intangible during the second quarter of 2017.

On February 26, 2016, the Company acquired an additional 50% of the outstanding shares of Watts Korea for an aggregate purchase price of approximately \$4 million. Prior to February 26, 2016, the Company held a 40% interest in Watts Korea, which operated as a joint venture. On December 30, 2016, the Company acquired the remaining 10% of the outstanding shares of Watts Korea for \$0.8 million. The Company completed a valuation of the assets and liabilities acquired that resulted in the recognition of \$3.7 million in goodwill and \$1.6 million in intangible assets.

Long-Lived Assets

Indefinite-lived intangibles are tested for impairment at least annually or more frequently if events or circumstances, such as a change in business conditions, indicate that it is “more likely than not” that an intangible asset might be impaired. The Company performs its annual indefinite-lived intangibles impairment assessment in the fourth quarter of each year. For the 2017, 2016 and 2015 impairment assessments, the Company performed quantitative assessments for all indefinite-lived intangible assets. The methodology employed was the relief from royalty method, a subset of the income approach. Based on the results of the assessment, the Company did not recognize an impairment on any indefinite-lived intangibles in 2017. In 2016 and 2015, Company recognized non-cash pre-tax impairment charges of approximately \$0.4 million and \$0.6 million, respectively. The impairment charge of \$0.4 million in 2016 related to a trade name in the Europe segment. The \$0.6 million impairment charge in 2015 included tradenames in the Americas and Europe segment for \$0.5 million and \$0.1 million, respectively.

Intangible assets with estimable lives and other long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset or asset group may not be recoverable. Recoverability of intangible assets with estimable lives and other long-lived assets is measured by a comparison of the carrying amount of an asset or asset group to future net undiscounted pretax cash flows expected to be generated by the asset or asset group. If these comparisons indicate that an asset is not recoverable, the impairment loss recognized is the amount by which the carrying amount of the asset or asset group exceeds the related estimated fair value. Estimated fair value is based on either discounted future pretax operating cash flows or appraised values, depending on the nature of the asset. The Company determines the discount rate for this analysis based on the weighted average cost of capital using the market and guideline public companies for the related businesses and does not allocate interest charges to the asset or asset group being measured. Judgment is required to estimate future operating cash flows. In the fourth quarter of 2017, the Company recognized a \$1.0 million impairment charge in the Americas segment for a technology asset as a change in market expectations indicated the carrying amount of this asset was no longer recoverable.

Intangible assets include the following:

	December 31,					
	2017			2016		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
	(in millions)					
Patents	\$ 16.1	\$ (15.4)	\$ 0.7	\$ 16.1	\$ (14.9)	\$ 1.2
Customer relationships	233.2	(133.5)	99.7	231.5	(117.3)	114.2
Technology	53.9	(23.1)	30.8	53.1	(19.2)	33.9
Trade names	25.5	(9.7)	15.8	25.1	(8.1)	17.0
Other	6.9	(6.0)	0.9	6.8	(5.9)	0.9
Total amortizable intangibles	335.6	(187.7)	147.9	332.6	(165.4)	167.2
Indefinite-lived intangible assets	37.3	—	37.3	35.3	—	35.3
	<u>\$ 372.9</u>	<u>\$ (187.7)</u>	<u>\$ 185.2</u>	<u>\$ 367.9</u>	<u>\$ (165.4)</u>	<u>\$ 202.5</u>

The Company acquired \$31.0 million in intangible assets as part of the PVI acquisition in 2016, consisting of customer relationships valued at \$17.6 million, technology of \$10.2 million, and the trade name of \$3.2 million. The weighted-average amortization period in total and by asset category of customer relationships, technology, and the trade name is 16.1 years, 15 years, 10 years, and 20 years, respectively.

The Company acquired \$1.6 million in intangible assets as part of the Watts Korea acquisition in 2016, consisting entirely of customer relationships. The weighted-average amortization period for the customer relationships acquired in 10 years.

Aggregate amortization expense for amortized intangible assets for 2017, 2016 and 2015 was \$22.5 million, \$20.8 million and \$20.9 million, respectively. Additionally, future amortization expense on amortizable intangible assets is expected to be \$19.5 million for 2018, \$15.5 million for 2019, \$15.0 million for 2020, \$13.3 million for 2021, and \$11.6 million for 2022. Amortization expense is provided on a straight-line basis over the estimated useful lives of the intangible assets. The weighted-average remaining life of total amortizable intangible assets is 12.5 years. Patents, customer relationships, technology, trade names and other amortizable intangibles have weighted-average remaining lives of 3.3 years, 11.3 years, 8.1 years, 14.4 years and 19.7 years, respectively. Indefinite-lived intangible assets primarily include trade names and trademarks.

(7) Inventories, net

Inventories consist of the following:

	December 31,	
	2017	2016
	(in millions)	
Raw materials	\$ 81.8	\$ 81.5
Work-in-process	17.5	13.7
Finished goods	159.8	144.2
	<u>\$ 259.1</u>	<u>\$ 239.4</u>

Raw materials, work-in-process and finished goods are net of valuation reserves of \$28.2 million and \$28.4 million as of December 31, 2017 and 2016, respectively. Finished goods of \$17.5 million and \$13.0 million as of December 31, 2017 and 2016, respectively, were consigned.

(8) Property, Plant and Equipment

Property, plant and equipment consist of the following:

	December 31,	
	2017	2016
	(in millions)	
Land	\$ 14.5	\$ 13.7
Buildings and improvements	164.6	146.9
Machinery and equipment	336.9	323.4
Construction in progress	9.8	14.1
	<u>525.8</u>	<u>498.1</u>
Accumulated depreciation	<u>(327.3)</u>	<u>(308.4)</u>
	<u>\$ 198.5</u>	<u>\$ 189.7</u>

(9) Income Taxes

The significant components of the Company's deferred income tax liabilities and assets are as follows:

	December 31,	
	2017	2016
	(in millions)	
Deferred income tax liabilities:		
Excess tax over book depreciation	\$ 13.5	\$ 15.5
Intangibles	37.1	55.2
Goodwill	16.3	20.4
Foreign earnings	14.6	—
Other	5.7	6.1
Total deferred tax liabilities	<u>87.2</u>	<u>97.2</u>
Deferred income tax assets:		
Accrued expenses	17.8	22.9
Capital loss carry forward	0.3	1.4
Foreign tax credits	22.0	—
Net operating loss carry forward	6.5	7.3
Inventory reserves	5.8	13.5
Other	9.9	13.5
Total deferred tax assets	<u>62.3</u>	<u>58.6</u>
Less: valuation allowance	<u>(28.7)</u>	<u>(7.1)</u>
Net deferred tax assets	<u>33.6</u>	<u>51.5</u>
Net deferred tax liabilities	<u>\$ (53.6)</u>	<u>\$ (45.7)</u>

The provision for income taxes is based on the following pre-tax income:

	Year Ended December 31,		
	2017	2016	2015
	(in millions)		
Domestic	\$ 80.3	\$ 64.8	\$ (25.8)
Foreign	62.8	63.0	(85.2)
	<u>\$ 143.1</u>	<u>\$ 127.8</u>	<u>\$ (111.0)</u>

The provision for income taxes consists of the following:

	Year Ended December 31,		
	2017	2016	2015
	(in millions)		
Current tax expense:			
Federal	\$ 42.1	\$ 18.3	\$ 3.4
Foreign	17.3	17.2	18.1
State	4.2	3.9	2.0
	<u>63.6</u>	<u>39.4</u>	<u>23.5</u>
Deferred tax expense (benefit):			
Federal	4.0	3.6	(13.6)
Foreign	8.5	0.6	(7.0)
State	5.9	—	(1.0)
	<u>18.4</u>	<u>4.2</u>	<u>(21.6)</u>
Deferred tax remeasurement of the 2017 Tax Act	<u>(12.0)</u>	<u>—</u>	<u>—</u>
	<u>\$ 70.0</u>	<u>\$ 43.6</u>	<u>\$ 1.9</u>

The 2017 Tax Cuts and Jobs Act (“2017 Tax Act”) was enacted on December 22, 2017 and has resulted in significant changes to the U.S. corporate income tax system. These changes include lowering the U.S. Corporate income tax rate from 35% to 21% and the elimination or reduction of certain domestic deductions and credits. The 2017 Tax Act also transitions international taxation from a worldwide system to a modified territorial system creating new taxes on certain foreign-sourced earnings and certain related party payments, which are referred to as the Global Intangible Low-taxed Income Tax and the Annual Anti-Base Erosion Tax, respectively. The 2017 Tax Act also imposes a one-time mandatory deemed repatriation tax (“Toll Tax”) on foreign subsidiaries’ previously untaxed accumulated foreign earnings.

Due to the timing of the enactment and the complexity involved applying the provisions of the 2017 Tax Act, the Company made reasonable estimates of the effects and recorded provisional amounts in its financial statements. In December 2017, the SEC staff issued Staff Accounting Bulletin No. 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act (SAB 118), which allows companies to record provisional amounts during a measurement period not to extend beyond one year of the enactment date. As additional regulatory guidance is issued by the applicable taxing authorities, as accounting treatment is clarified, as the Company performs additional analysis on the application of the law, and as the Company refines estimates in calculating the effect, the Company’s final analysis, which will be recorded in the period completed, may be different from the Company’s current provisional amounts, which could materially affect the Company’s tax obligations and effective tax rate in the period or periods in which the adjustments are made.

Changes in tax rates and tax laws are accounted for in the period of enactment. Therefore, the Company recorded a provisional tax expense of \$25.1 million related to the 2017 Tax Act, as of December 31, 2017. This amount also includes an immaterial benefit to the Company’s 2017 current year tax expense.

The final determination of the Toll Tax, impacts to the Company’s deferred assets and liabilities, and valuation allowances will be completed as additional information becomes available, but no later than one year from the enactment of the 2017 Tax Act.

Toll Tax

The 2017 Tax Act imposes a one-time toll tax requiring the Company to pay U.S. income taxes on accumulated foreign subsidiary earnings not previously subject to U.S. income tax at a rate of 15.5% to the extent of foreign cash and cash equivalents and 8% on the remaining earnings. The Company recorded a provisional amount based on estimates of the

effects of the 2017 Tax Act of \$23.3 million which will be paid over eight years starting in 2018 and will not accrue interest.

Deferred Tax Remeasurement

As the Company's deferred tax liabilities exceeded the balance of the Company's deferred tax assets, the Company recorded a provisional amount of tax benefit of \$12 million, reflecting the decrease in the U.S. Corporate income tax rate.

Tax on Foreign Earnings

As a result of the 2017 Tax Act, the Company can repatriate its cumulative undistributed foreign earning back to the U.S. with minimal U.S. income tax consequences other than the one-time Toll Tax. The Company has recorded a provisional amount of deferred tax expense of \$14.6 million for the future repatriation of foreign earnings.

Actual income taxes reported are different than what would have been computed by applying the federal statutory tax rate to income before income taxes. The reasons for these differences are as follows:

	Year Ended December 31,		
	2017	2016	2015
	(in millions)		
Computed expected federal income expense	\$ 50.1	\$ 44.7	\$ (38.8)
State income taxes, net of federal tax benefit	2.7	2.2	0.8
Foreign tax rate differential	(6.7)	(6.7)	7.5
Goodwill impairment	—	—	29.0
Impact of the 2017 Tax Act	25.1	—	—
Change in valuation allowance	—	—	(1.8)
Other, net	(1.2)	3.4	5.2
	\$ 70.0	\$ 43.6	\$ 1.9

At December 31, 2017, the Company had foreign net operating loss carry forwards of \$26.1 million for income tax purposes before considering valuation allowances; \$26.1 million of the losses can be carried forward indefinitely. The net operating losses consist of \$26.1 million related to Austrian operations.

At December 31, 2017, the Company had U.S. capital loss carry forwards of \$0.3 million for income tax purposes before considering valuation allowances. The U.S. capital loss carry forwards expire in 2018.

At December 31, 2017, the Company had foreign tax credit carry forwards of \$22.0 million for income tax purposes before considering valuation allowances. The foreign tax credit carry forwards expire in 2027.

At December 31, 2017 and December 31, 2016, the Company had valuation allowances of \$28.7 million and \$7.1 million, respectively. At December 31, 2017, \$0.3 million relates to U.S. capital losses, \$22.0 million relates to foreign tax credits and \$6.4 million relates to Austrian net operating losses. As a result of the 2017 Tax Act, the Company recorded a provisional amount of foreign tax credits that was previously not recorded, and recognized a valuation allowance related to the credits. The provisional amount requires further analysis by the Company during the measurement period. At December 31, 2016, \$1.5 million relates to U.S. capital losses and \$5.7 million relates to Austrian net operating losses. Management believes that the ability of the Company to use such losses within the applicable carry forward period does not rise to the level of the more likely than not threshold. The Company does not have a valuation allowance on other deferred tax assets, as management believes that it is more likely than not that the Company will recover the net deferred tax assets. Management believes it is more likely than not that the future reversals of the deferred tax liabilities, together with forecasted income, will be sufficient to fully recover the deferred tax assets.

At December 31, 2017, the Company considered none of the Company's earnings to be permanently reinvested outside the U.S. and therefore recorded a provisional amount of deferred tax liabilities associated with the repatriation of those earnings.

(10) Accrued Expenses and Other Liabilities

Accrued expenses and other liabilities consist of the following:

	December 31,	
	2017	2016
	(in millions)	
Commissions and sales incentives payable	\$ 40.1	\$ 36.0
Product liability and workers' compensation	24.5	28.1
Other	57.6	68.6
Income taxes payable	3.6	4.1
	<u>\$ 125.8</u>	<u>\$ 136.8</u>

(11) Financing Arrangements

The Company's debt consists of the following:

	December 31,	
	2017	2016
	(in millions)	
5.05% notes due June 2020	\$ 75.0	75.0
Term Loan due February 2021	277.5	300.0
Term Loan due December 2017	—	115.8
Line of Credit due February 2021	147.0	162.0
Other—consists primarily of European borrowings (at interest rates ranging from 1.1% to 6.0%)	—	0.8
Total debt outstanding	499.5	653.6
Less debt issuance costs (deduction from debt liability)	(2.4)	(3.2)
Less current maturities	(22.5)	(139.1)
Total long-term debt	<u>\$ 474.6</u>	<u>\$ 511.3</u>

Principal payments during each of the next five years and thereafter are due as follows (in millions): 2018—\$22.5; 2019—\$30.0; 2020—\$105.0; 2021—\$342.0; and 2022 and thereafter - \$0

On February 12, 2016, the Company entered into a Credit Agreement (the "Credit Agreement") among the Company, certain subsidiaries of the Company who become borrowers under the Credit Agreement, JPMorgan Chase Bank, N.A., as Administrative Agent, Swing Line Lender and Letter of Credit Issuer, and the other lenders referred to therein. The Credit Agreement provides for a \$500 million, five-year, senior unsecured revolving credit facility (the "Revolving Credit Facility") with a sublimit of up to \$100 million in letters of credit. As of December 31, 2017, the Company had \$147.0 million drawn on the line of credit. The Credit Agreement also provides for a \$300 million, five-year, term loan facility (the "Term Loan Facility") available to the Company in a single draw, of which the entire \$300 million had been drawn in February 2016. The Company had \$277.5 million of borrowings outstanding on the term loan as of December 31, 2017. Borrowings outstanding under the Revolving Credit Facility bear interest at a fluctuating rate per annum equal to an applicable percentage defined as (i) in the case of Eurocurrency rate loans, the ICE Benchmark Administration LIBOR rate plus an applicable percentage, ranging from 0.975% to 1.45%, determined by reference to the Company's consolidated leverage ratio, or (ii) in the case of base rate loans and swing line loans, the highest of (a) the federal funds rate plus 0.5%, (b) the rate of interest in effect for such day as announced by JPMorgan Chase Bank, N.A. as its "prime rate," and (c) the ICE Benchmark Administration LIBOR rate plus 1.0%, plus an applicable percentage, ranging from 0.00% to 0.45%, determined by reference to the Company's consolidated leverage ratio. Borrowings outstanding under the Term Loan Facility will bear interest at a fluctuating rate per annum equal to an applicable percentage defined as the ICE Benchmark Administration LIBOR rate plus an applicable percentage, ranging from 1.125% to 1.75%, determined by reference to the Company's consolidated leverage ratio. The interest rates as of December 31, 2017 on the Revolving Credit Facility and on the Term Loan Facility were 2.56% and 2.67%, respectively.

The loan under the Term Loan Facility amortizes as follows: 0% per annum during the first year, 7.5% in the second and third years, 10% in the fourth and fifth years, and the remaining unpaid balance paid in full on the maturity date.

Payments when due are made ratably each year in quarterly installments. The Company paid quarterly installments of \$22.5 million during 2017. In addition to paying interest under the Credit Agreement, the Company is also required to pay certain fees in connection with the credit facility, including, but not limited to, an unused facility fee and letter of credit fees. The Credit Agreement matures on February 12, 2021, subject to extension under certain circumstances and subject to the terms of the Credit Agreement. The Company may repay loans outstanding under the Credit Agreement from time to time without premium or penalty, other than customary breakage costs, if any, and subject to the terms of the Credit Agreement. Once repaid, amounts borrowed under the Term Loan Facility may not be borrowed again.

The Company maintains letters of credit that guarantee its performance or payment to third parties in accordance with specified terms and conditions. Amounts outstanding were \$25.7 million as of December 31, 2017 and \$25.6 million as of December 31, 2016. The Company's letters of credit are primarily associated with insurance coverage. The Company's letters of credit generally expire within one year of issuance and are drawn down against the revolving credit facility. These instruments may exist or expire without being drawn down. Therefore, they do not necessarily represent future cash flow obligations.

On December 16, 2016, Watts International Holdings Limited ("Watts International"), a wholly owned subsidiary of the Company, entered into a Facility Agreement (the "Facility Agreement") among Watts International, as original borrower and original guarantor, Watts Water Technologies EMEA B.V., a wholly owned subsidiary of the Company ("Watts EMEA"), as original guarantor, JPMorgan Chase Bank, N.A., as sole bookrunner and sole lead arranger ("JP Morgan Chase Bank"), J.P. Morgan Europe Limited, as agent to the financial parties, and the other lenders referred to therein. The Facility Agreement provides for a €110 million, 364 day, term loan facility available to the Company in a single draw. On December 20, 2016, Watts International borrowed the full amount available for borrowing under the Facility Agreement. The loan made on December 20, 2016 bears interest at a rate per annum equal to (i) the Euro InterBank Offered Rate (EURIBOR), provided that if such rate is less than zero, then EURIBOR shall be deemed to be zero, plus (ii) a margin of 1.875%, provided that if no event of default is continuing and Watts International's consolidated leverage ratio is at a specified level, the margin shall decrease to 1.50%. Accrued interest on the loan is payable on the last day of each interest period. The first interest period is set at one month and may be changed subsequently to a period of one, two, or three months (or such other period agreed with all the lenders). Substantially all of the proceeds of the borrowings made on December 20, 2016 under the Facility Agreement were used to pay down \$113 million outstanding under the Revolving Credit Facility. As of the third quarter of 2017, the Company had repaid in full the Facility Agreement.

As of December 31, 2017, the Company had \$327.3 million of unused and available credit under the Credit Agreement and \$25.7 million of stand-by letters of credit outstanding on the Credit Agreement. As of December 31, 2017, the Company was in compliance with all covenants related to the Credit Agreement.

On June 18, 2010, the Company entered into a note purchase agreement with certain institutional investors (the 2010 Note Purchase Agreement). Pursuant to the 2010 Note Purchase Agreement, the Company issued senior notes of \$75.0 million in principal, due June 18, 2020. The Company will pay interest on the outstanding balance of the Notes at the rate of 5.05% per annum, payable semi-annually on June 18th and December 18th until the principal on the Notes shall become due and payable. The Company may, at its option, upon notice, and subject to the terms of the 2010 Note Purchase Agreement, prepay at any time all or part of the Notes in an amount not less than \$1.0 million by paying the principal amount plus a make-whole amount, which is dependent upon the yield of respective U.S. Treasury securities. The 2010 Note Purchase Agreement includes operational and financial covenants, with which the Company is required to comply, including, among others, maintenance of certain financial ratios and restrictions on additional indebtedness, liens and dispositions. As of December 31, 2017, the Company was in compliance with all covenants related to the 2010 Note Purchase Agreement.

(12) Common Stock

The Class A common stock and Class B common stock have equal dividend and liquidation rights. Each share of the Company's Class A common stock is entitled to one vote on all matters submitted to stockholders, and each share of Class B common stock is entitled to ten votes on all such matters. Shares of Class B common stock are convertible into shares of Class A common stock on a one-to-one basis at the option of the holder. As of December 31, 2017, the Company had reserved a total of 2,673,034 shares of Class A common stock for issuance under its stock-based compensation plans and 6,379,290 shares for conversion of Class B common stock to Class A common stock.

On July 27, 2015, the Company's Board of Directors authorized the repurchase of up to \$100 million of the Company's Class A common stock from time to time on the open market or in privately negotiated transactions. In connection with this stock repurchase program, the Company entered into a Rule 10b5-1 plan, which permits shares to be repurchased when the Company might otherwise be precluded from doing so under insider trading laws. The repurchase program may be suspended or discontinued at any time, subject to the terms of the Rule 10b5-1 plan the Company entered into with respect to the repurchase program. As of December 31, 2017, there was approximately \$37.8 million remaining authorized for share repurchases under this program.

The following table summarizes the cost and the number of shares of Class A common stock repurchased under the July 27, 2015 programs for the years ended December 31, 2017 and 2016:

	Year Ended December 31,			
	2017		2016	
	Number of shares repurchased	Cost of shares repurchased	Number of shares repurchased	Cost of shares repurchased
	(amounts in millions, except share amount)			
Stock repurchase programs:				
July 27, 2015	277,886	18.2	501,229	26.8
Total	277,886	\$ 18.2	501,229	\$ 26.8

(13) Stock-Based Compensation

As of December 31, 2017, the Company maintains one stock incentive plan, the Second Amended and Restated 2004 Stock Incentive Plan (the "2004 Stock Incentive Plan"). At December 31, 2017, 1,342,858 shares of Class A common stock were authorized for future grants of new equity awards under this plan. The Company grants shares of restricted stock and deferred shares to key employees and stock awards to non-employee members of the Company's Board of Directors under the 2004 Stock Incentive Plan. Stock awards to non-employee members of the Company's Board of Directors vest immediately. Employees' restricted stock awards and deferred shares typically vest over a three-year period at the rate of one-third per year.

The Company also grants performance stock units to key employees under the 2004 Stock Incentive Plan. Performance stock units cliff vest at the end of a performance period set by the Compensation Committee of the Board of Directors at the time of grant. Upon vesting, the number of shares of the Company's Class A common stock awarded to each performance stock unit recipient will be determined based on the Company's performance relative to certain performance goals set at the time the performance stock units were granted. The recipient of a performance stock unit award may earn from zero shares to twice the number of target shares awarded to such recipient. The performance stock units are amortized to expense over the vesting period, and based on the Company's performance relative to the performance goals, may be adjusted. Changes to the estimated shares expected to vest will result in adjustments to the related share-based compensation expense that will be recorded in the period of change. If the performance goals are not met, no awards are earned and previously recognized compensation expense is reversed. The Company granted performance stock units in 2017, 2016 and 2015. The performance goals for the performance stock units are based on the compound annual growth rate of the Company's revenue over the three-year performance period and the Company's return on invested capital ("ROIC") for the third year of the performance period.

Previously under the 2004 Stock Incentive Plan, key employees were granted nonqualified stock options to purchase the Company's Class A common stock. Options typically became exercisable over a four-year period at the rate of 25% per year and expire ten years after the grant date. However, most options granted in 2014 become exercisable over a three-year period at a rate of one-third per year. Options granted under the plan may have exercise prices of not less than 100% of the fair market value of the Class A common stock on the date of grant. The Company's practice was to grant all options at fair market value on the grant date. Upon exercise of options, the Company issues shares of Class A common stock. Beginning in 2015, the Company stopped granting stock options as part of its annual equity awards to employees.

The Company also has a Management Stock Purchase Plan that allows for the granting of restricted stock units (RSUs) to key employees. On an annual basis, key employees may elect to receive a portion of their annual incentive compensation in RSUs instead of cash. Participating employees may use up to 50% of their annual incentive bonus to purchase RSUs for a purchase price equal to 80% of the fair market value of the Company's Class A common stock as

of the date of grant. Beginning with annual incentive compensation for 2016, the purchase price for RSUs was increased from 67% to 80% of the fair market value of the Company's Class A common stock. RSUs vest either annually over a three-year period from the grant date or upon the third anniversary of the grant date. Receipt of the shares underlying RSUs is deferred for a minimum of three years, or such greater number of years as is chosen by the employee, from the date of grant. An aggregate of 2,000,000 shares of Class A common stock may be issued under the Management Stock Purchase Plan. At December 31, 2017, 763,233 shares of Class A common stock were authorized for future grants under the Company's Management Stock Purchase Plan.

2004 Stock Incentive Plan

The following is a summary of unvested restricted stock and deferred shares activity and related information:

	Year Ended December 31,					
	2017		2016		2015	
	Shares	Weighted Average Grant Date Fair Value	Shares	Weighted Average Grant Date Fair Value	Shares	Weighted Average Grant Date Fair Value
	(Shares in thousands)					
Unvested at beginning of year	210	\$ 53.79	244	\$ 52.61	214	\$ 53.74
Granted	139	60.88	140	56.33	180	50.87
Cancelled/Forfeitures	(9)	55.55	(42)	54.43	(28)	53.99
Vested	(123)	55.35	(132)	53.10	(122)	51.72
Unvested at end of year	217	\$ 57.31	210	\$ 53.79	244	\$ 52.61

The total fair value of shares vested during 2017, 2016 and 2015 was \$7.7 million, \$7.9 million and \$6.6 million, respectively. At December 31, 2017, total unrecognized compensation cost related to unvested restricted stock and deferred shares was approximately \$8.3 million with a total weighted average remaining term of 1.63 years. For 2017, 2016 and 2015, the Company recognized compensation costs of \$6.9 million, \$7.6 million and \$6.7 million, respectively.

The aggregate intrinsic value of restricted stock and deferred shares granted and outstanding approximated \$16.5 million representing the total pre-tax intrinsic value based on the Company's closing Class A common stock price of \$75.95 as of December 31, 2017.

The following is a summary of unvested performance share award activity and related information:

	Year Ended December 31,					
	2017		2016		2015	
	Shares	Weighted Average Grant Date Fair Value	Shares	Weighted Average Grant Date Fair Value	Shares	Weighted Average Grant Date Fair Value
	(Shares in thousands)					
Unvested at beginning of year	267	\$ 56.96	201	\$ 57.98	107	\$ 56.97
Granted	98	60.45	107	55.27	106	58.94
Cancelled/Forfeitures	(38)	57.12	(41)	57.56	(12)	57.51
Vested	(54)	56.81	—	—	—	—
Unvested at end of year	273	\$ 58.23	267	\$ 56.96	201	\$ 57.98

The total fair value of shares vested during 2017 was \$3.5 million. For 2016 and 2015, no performance share awards vested. At December 31, 2017, total unrecognized compensation cost related to unvested performance shares was approximately \$5.3 million with a total weighted average remaining term of 1.51 years. For 2017, 2016, and 2015, the Company recognized compensation costs of \$4.8 million, \$4.0 million and \$1.7 million, respectively.

The aggregate intrinsic value of performance shares granted and outstanding approximated \$20.7 million representing the total pre-tax intrinsic value based on the Company's closing Class A common stock price of \$75.95 as of December 31, 2017.

The following is a summary of stock option activity and related information:

	Year Ended December 31,					
	2017		2016		2015	
	Options	Weighted Average Exercise Price	Options	Weighted Average Exercise Price	Options	Weighted Average Exercise Price
	(Options in thousands)					
Outstanding at beginning of year	130	\$ 54.46	362	\$ 48.46	495	\$ 47.34
Granted	—	—	—	—	—	—
Cancelled/Forfeitures	(3)	55.81	(43)	52.93	(69)	51.66
Exercised	(32)	53.19	(189)	43.31	(64)	36.29
Outstanding at end of year	95	\$ 54.91	130	\$ 54.46	362	\$ 48.46
Exercisable at end of year	93	\$ 54.85	82	\$ 53.38	192	\$ 45.10

As of December 31, 2017, substantially all stock options that have been granted under the 2004 Stock Incentive plan have vested. For 2017, 2016 and 2015, the Company recognized compensation cost for options of \$0.5 million, \$1.1 million and \$1.9 million, respectively. As of December 31, 2017, there is no unrecognized compensation cost related to unvested options. As of December 31, 2017, the aggregate intrinsic value of exercisable options was approximately \$2.0 million, representing the total pre-tax intrinsic value, based on the Company's closing Class A common stock price of \$75.95 as of December 31, 2017, which would have been received by the option holders had all option holders exercised their options as of that date. The total intrinsic value of options exercised for 2017, 2016 and 2015 was approximately \$0.5 million, \$3.5 million and \$1.2 million, respectively.

The following table summarizes information about options outstanding at December 31, 2017:

Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Number Outstanding	Weighted Average Remaining Contractual Life (years)	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
	(Options in thousands)				
\$29.05-\$37.41	7,150	4.45	\$ 36.24	7,150	\$ 36.24
\$54.76-\$54.76	39,781	5.59	54.76	39,781	54.76
\$57.47-\$60.10	47,613	6.35	57.84	46,411	57.78
	94,544	5.88	\$ 54.91	93,342	\$ 54.85

Management Stock Purchase Plan

Total unrecognized compensation cost related to unvested RSUs was approximately \$1.2 million at December 31, 2017 with a total weighted average remaining term of 1.4 years. For 2017, 2016 and 2015 the Company recognized compensation cost of \$1.0 million, \$0.7 million and \$0.6 million, respectively. Dividends declared for RSUs, that are paid to individuals, that remain unpaid at December 31, 2017 total approximately \$0.1 million.

A summary of the Company's RSU activity and related information is shown in the following table:

	Year Ended December 31,					
	2017		2016		2015	
	RSUs	Weighted Average Purchase Price	Weighted Average Intrinsic Value	RSUs	Weighted Average Purchase Price	Weighted Average Purchase Price
	(RSU's in thousands)					
Outstanding at beginning of year	148	\$ 36.37		101	\$ 36.14	80 \$ 32.08
Granted	47	49.92		89	35.41	60 37.13
Cancelled/Forfeitures	(3)	41.55		(28)	32.25	(9) 36.92
Settled	(18)	39.09		(14)	36.91	(30) 27.10
Outstanding at end of year	174	\$ 39.68	36.27	148	\$ 36.37	101 \$ 36.14
Vested at end of year	57	\$ 36.26	39.69	28	\$ 37.78	25 \$ 33.35

As of December 31, 2017, the aggregate intrinsic values of outstanding and vested RSUs were approximately \$6.3 million and \$2.3 million, respectively, representing the total pre-tax intrinsic value, based on the Company's closing Class A common stock price of \$75.95 as of December 31, 2017, which would have been received by the RSUs holders had all RSUs settled as of that date. The total intrinsic value of RSUs settled for 2017, 2016 and 2015 was approximately \$0.4 million, \$1.5 million and \$0.8 million, respectively. Upon settlement of RSUs, the Company issues shares of Class A common stock.

The following table summarizes information about RSUs outstanding at December 31, 2017:

Range of Purchase Prices	RSUs Outstanding		RSUs Vested	
	Number Outstanding	Weighted Average Purchase Price	Number Vested	Weighted Average Purchase Price
	(RSUs in thousands)			
\$31.63-\$35.41	85	\$ 35.37	28	\$ 35.30
\$37.13-\$49.92	89	43.75	29	37.21
	174	\$ 39.68	57	\$ 36.26

The fair value of each share issued under the Management Stock Purchase Plan is estimated on the date of grant, using the Black-Scholes-Merton Model, based on the following weighted average assumptions:

	Year Ended December 31,		
	2017	2016	2015
Expected life (years)	3.0	3.0	3.0
Expected stock price volatility	25.0 %	24.8 %	23.4 %
Expected dividend yield	1.2 %	1.3 %	1.2 %
Risk-free interest rate	1.5 %	0.9 %	1.1 %

The risk-free interest rate is based upon the U.S. Treasury yield curve at the time of grant for the respective expected life of the RSUs. The expected life (estimated period of time outstanding) of RSUs and volatility were calculated using historical data. The expected dividend yield of stock is the Company's best estimate of the expected future dividend yield.

The above assumptions were used to determine the weighted average grant-date fair value of RSUs granted of \$16.84, \$18.15 and \$19.04 during 2017, 2016 and 2015, respectively.

The Company distributed dividends of \$0.75 per share for 2017, \$0.71 per share for 2016, \$0.66 per share for 2015, respectively, on the Company's Class A common stock and Class B common stock.

(14) Employee Benefit Plans

The Company's domestic employees are eligible to participate in the Company's 401(k) savings plan. Since January 1, 2012, the Company has provided a base contribution of 2% of an employee's salary, regardless of whether the employee participates in the plan. Further, the Company matches the contribution of up to 100% of the first 4% of an employee's contribution. The Company's match contributions for the years ended December 31, 2017, 2016 and 2015, were \$5.0 million, \$5.4 million, and \$4.3 million, respectively. Charges for Europe pension plans approximated \$4.1 million, \$4.5 million and \$4.9 million for the years ended December 31, 2017, 2016 and 2015, respectively. These costs relate to plans administered by certain European subsidiaries, with benefits calculated according to government requirements and paid out to employees upon retirement or change of employment.

Prior to January 1, 2012, for the majority of its U.S. employees, the Company had sponsored a funded non-contributory defined benefit pension plan, the Watts Water Technologies, Inc. Pension Plan (the "Pension Plan"), and an unfunded non-contributory defined benefit pension plan, the Watts Water Technologies, Inc. Supplemental Employees Retirement Plan (the "SERP"). On April 28, 2014, the Company's Board of Directors voted to terminate the Company's Pension Plan and the SERP. The Board of Directors authorized the Company to make such contributions to the Pension Plan and SERP as may be necessary to make the plans sufficient to settle all plan liabilities. The Pension Plan was terminated effective July 31, 2014, and on June 4, 2015 the Company received the Internal Revenue Service's favorable determination letter for terminating the Pension Plan. The SERP was terminated effective May 15, 2014. In September 2015, the Company settled its Pension Plan and SERP benefit obligations. The Company made cash contributions in September 2015 of \$43.2 million to fully fund the settlement actions.

The cumulative actuarial losses of \$59.7 million that were previously recorded in accumulated other comprehensive income were recognized in selling, general and administrative expenses for the quarter ended September 27, 2015. The associated deferred tax asset of \$23.0 million that was previously recorded in accumulated other comprehensive income and netted within long-term deferred tax liabilities was reversed in the quarter ended September 27, 2015.

On August 18, 2015, the Company entered into Amendment No. 3 to Supplemental Compensation Agreement (the "Amendment") with Timothy P. Horne, the Company's former Chief Executive Officer and President and a principal stockholder. Under the Supplemental Compensation Agreement, dated September 1, 1995, as amended on July 25, 2000 and October 23, 2002 (the "Compensation Agreement"), between the Company and Mr. Horne, Mr. Horne received payments for consulting services equal to the greater of (i) one-half of the average of his annual base salary as an employee of the Company during the three years immediately prior to his retirement or (ii) \$400,000 for each calendar year following his retirement until the date of his death, subject to certain cost-of-living increases each year. Mr. Horne was paid \$598,562 for his consulting services in 2014. Under the Compensation Agreement Mr. Horne was also entitled to receive lifetime benefits, including use of secretarial services, use of an office, retiree health insurance, reimbursement of tax and financial planning expenses, and certain other benefits. The Amendment provided for a \$6 million lump-sum buyout of all of the Company's ongoing lifetime payment obligations and all benefits under the Compensation Agreement, except for the use of an office and administrative support. The Amendment also provides for consulting services from Mr. Horne as requested by the Company rather than per year hourly requirements. The Company paid the \$6 million lump-sum buyout amount to Mr. Horne in September 2015, which resulted in a \$5 million pre-tax charge for the year ended December 31, 2015.

(15) Contingencies and Environmental Remediation

Accrual and Disclosure Policy

The Company is a defendant in numerous legal matters arising from its ordinary course of operations, including those involving product liability, environmental matters, and commercial disputes.

The Company reviews its lawsuits and other legal proceedings on an ongoing basis and follows appropriate accounting guidance when making accrual and disclosure decisions. The Company establishes accruals for matters when the Company assesses that it is probable that a loss has been incurred and the amount of the loss can be reasonably estimated. The Company does not establish accruals for such matters when the Company does not believe both that it is probable that a loss has been incurred and the amount of the loss can be reasonably estimated. The Company's assessment of whether a loss is probable is based on its assessment of the ultimate outcome of the matter following all appeals.

Under the FASB issued ASC 450 “Contingencies”, an event is “reasonably possible” if “the chance of the future event or events occurring is more than remote but less than likely” and an event is “remote” if “the chance of the future event or events occurring is slight”. Thus, references to the upper end of the range of reasonably possible loss for cases in which the Company is able to estimate a range of reasonably possible loss mean the upper end of the range of loss for cases for which the Company believes the risk of loss is more than slight.

There may continue to be exposure to loss in excess of any amount accrued. When it is possible to estimate the reasonably possible loss or range of loss above the amount accrued for the matters disclosed, that estimate is aggregated and disclosed. The Company records legal costs associated with its legal contingencies as incurred, except for legal costs associated with product liability claims which are included in the actuarial estimates used in determining the product liability accrual.

As of December 31, 2017, the Company estimates that the aggregate amount of reasonably possible loss in excess of the amount accrued for its legal contingencies is approximately \$6.1 million pre-tax. With respect to the estimate of reasonably possible loss, management has estimated the upper end of the range of reasonably possible loss based on (i) the amount of money damages claimed, where applicable, (ii) the allegations and factual development to date, (iii) available defenses based on the allegations, and/or (iv) other potentially liable parties. This estimate is based upon currently available information and is subject to significant judgment and a variety of assumptions, and known and unknown uncertainties. The matters underlying the estimate will change from time to time, and actual results may vary significantly from the current estimate. In the event of an unfavorable outcome in one or more of the matters, the ultimate liability may be in excess of amounts currently accrued, if any, and may be material to the Company’s operating results or cash flows for a particular quarterly or annual period. However, based on information currently known to it, management believes that the ultimate outcome of all matters, as they are resolved over time, is not likely to have a material adverse effect on the financial condition of the Company, though the outcome could be material to the Company’s operating results for any particular period depending, in part, upon the operating results for such period.

Connector Class Actions

In November and December 2014, Watts Water Technologies, Inc. and Watts Regulator Co. were named as defendants in three separate putative nationwide class action complaints (Meyers v. Watts Water Technologies, Inc., United States District Court for the Southern District of Ohio; Ponzo v. Watts Regulator Co., United States District Court for the District of Massachusetts; Sharp v. Watts Regulator Co., United States District Court for the District of Massachusetts) seeking to recover damages and other relief based on the alleged failure of water heater connectors. On June 26, 2015, plaintiffs in the three actions filed a consolidated amended complaint, under the case captioned Ponzo v. Watts Regulator Co., in the United States District Court for the District of Massachusetts (hereinafter “Ponzo”). Watts Water Technologies was voluntarily dismissed from the Ponzo case. The complaint sought among other items, damages in an unspecified amount, replacement costs, injunctive relief, declaratory relief, and attorneys’ fees and costs. On August 7, 2015, the Company filed a motion to dismiss the complaint, which motion was mooted by the class settlements.

In February 2015, Watts Regulator Co. was named as a defendant in a putative nationwide class action complaint (Klug v. Watts Water Technologies, Inc., et al., United States District Court for the District of Nebraska) seeking to recover damages and other relief based on the alleged failure of the Company’s Floodsafe connectors (hereinafter “Klug”). On June 26, 2015, the Company filed a partial motion to dismiss the complaint. In response, on July 17, 2015, plaintiff filed an amended complaint which added additional named plaintiffs and sought to correct deficiencies in the original complaint, Klug v. Watts Regulator Co., United States District Court for the District of Nebraska. The complaint seeks among other items, damages in an unspecified amount, injunctive relief, declaratory relief, and attorneys’ fees and costs. On July 31, 2015, the Company filed a partial motion to dismiss the complaint which was granted in part and denied in part on December 29, 2015. The Company answered the amended complaint on February 2, 2016. No formal discovery was conducted.

The Company participated in mediation sessions of the Ponzo and Klug cases in December 2015 and January 2016. On February 16, 2016, the Company reached an agreement in principle to settle all claims. The proposed total settlement amount is \$14 million, of which the Company is expected to pay approximately \$4.1 million after insurance proceeds of up to \$9.9 million. The parties executed final written settlement agreements in April 2016. Motions for preliminary approval of the settlements were submitted on May 4, 2016 before the District of Nebraska Federal Court. On December 7, 2016, the Court issued an order preliminarily approving the settlements. After a fairness hearing held on April 12,

2017, the Court entered Final Orders and Judgments approving the settlements on April 13, 2017. No appeals were filed and the settlements became final on May 15, 2017.

During the fourth quarter of 2015, the Company recorded a liability of \$14 million related to the Ponzo and Klug matters of which \$7.8 million was included in current liabilities and \$6.2 million in other noncurrent liabilities. The liability was reduced by \$8.7 million during the first nine months of 2017 for \$0.8 million in notice and claims administrator payments, counsel fees of \$4.3 million and initial contributions to the class action fund of \$3.6 million. The remaining liability of \$5.3 million will be paid over four years. A \$9.5 million receivable was recorded in current assets related to insurance proceeds due as of December 31, 2015 and was subsequently increased in the first quarter of 2017 to \$9.9 million based on costs incurred as of April 3, 2017. The Company received the \$9.9 million insurance proceeds in the second quarter of 2017.

Product Liability

The Company is subject to a variety of potential liabilities in connection with product liability cases. The Company maintains a high self-insured retention limit within our product liability and general liability coverage, which the Company believes to be generally in accordance with industry practices. For product liability cases in the U.S., management establishes its product liability accrual, which includes legal costs associated with accrued claims, by utilizing third-party actuarial valuations which incorporate historical trend factors and the Company's specific claims experience derived from loss reports provided by third-party claims administrators. The product liability accrual is established after considering any applicable insurance coverage. Changes in the nature of product liability claims or the actual settlement amounts could affect the adequacy of the estimates and require changes to the provisions. Because the liability is an estimate, the ultimate liability may be more or less than reported.

Environmental Remediation

The Company has been named as a potentially responsible party with respect to a limited number of identified contaminated sites. The levels of contamination vary significantly from site to site as do the related levels of remediation efforts. Environmental liabilities are recorded based on the most probable cost, if known, or on the estimated minimum cost of remediation. Accruals are not discounted to their present value, unless the amount and timing of expenditures are fixed and reliably determinable. The Company accrues estimated environmental liabilities based on assumptions, which are subject to a number of factors and uncertainties. Circumstances that can affect the reliability and precision of these estimates include identification of additional sites, environmental regulations, level of clean-up required, technologies available, number and financial condition of other contributors to remediation and the time period over which remediation may occur. The Company recognizes changes in estimates as new remediation requirements are defined or as new information becomes available.

Chemetco, Inc. Superfund Site, Hartford, Illinois

In August 2017, Watts Regulator Co. received a "Notice of Environmental Liability" from the U.S. Environmental Protection Agency ("USEPA") for the Chemetco, Inc. Superfund Site in Hartford, Illinois (the Site). The letter from the Chemetco Site Group ("Group") alleges that Watts Regulator Co. is a potentially responsible party because it arranged for the disposal or treatment of hazardous substances that were contained in materials sent to the Site and that resulted in the release or threat of release of hazardous substances at the Site. As of August 2017, 162 companies were members of the Group; the final number of members is subject to change and unknown at this time. The letter offered Watts Regulator Co. the opportunity to join the Group and participate in the Remedial Investigation and Feasibility Study ("RI/FS") at the Site. Watts Regulator Co. joined the Group in September 2017. Based on information currently known to it, management believes that Watts Regulator Co.'s share of the costs of the RI/FS is not likely to have a material adverse effect on the financial condition of the Company, or have a material adverse effect on the Company's operating results for any particular period. The Company is unable to estimate a range of reasonably possible loss for the above matter in which damages have not been specified because: (i) the RI/FS has not been completed to determine what remediation plan will be implemented and the costs of such plan; (ii) the total number of potentially responsible parties who may or may not agree to fund or perform any remediation has not yet been determined; (iii) the share contribution for potentially responsible parties to any remediation has not been determined; and (iv) the number of years required to complete the RI/FS and implement a remediation plan acceptable to USEPA is uncertain.

Asbestos Litigation

The Company is defending approximately 355 lawsuits in different jurisdictions, alleging injury or death as a result of exposure to asbestos. The complaints in these cases typically name a large number of defendants and do not identify any particular Company products as a source of asbestos exposure. To date, discovery has failed to yield evidence of substantial exposure to any Company products and no judgments have been entered against the Company.

Other Litigation

Other lawsuits and proceedings or claims, arising from the ordinary course of operations, are also pending or threatened against the Company.

(16) Financial Instruments

Fair Value

The carrying amounts of cash and cash equivalents, trade receivables and trade payables approximate fair value because of the short maturity of these financial instruments.

The fair value of the Company's 5.05% senior notes due 2020 is based on quoted market prices of similar notes (level 2). The fair value of the Company's borrowings outstanding under the Credit Agreement, Facility Agreement, and the Company's variable rate debt approximates its carrying value. The carrying amount and the estimated fair market value of the Company's long-term debt, including the current portion, are as follows:

	December 31,	
	2017	2016
	(in millions)	
Carrying amount	\$ 499.5	\$ 653.6
Estimated fair value	\$ 501.1	\$ 658.3

Financial Instruments

The Company measures certain financial assets and liabilities at fair value on a recurring basis, including deferred compensation plan assets and related liabilities, redeemable financial instruments, and derivatives. The fair values of these certain financial assets and liabilities were determined using the following inputs at December 31, 2017 and December 31, 2016:

	Fair Value Measurement at December 31, 2017 Using:					
	Quoted Prices in Active Markets for Identical Assets		Significant Other Observable Inputs		Significant Unobservable Inputs	
	Total	(Level 1)	(Level 2)		(Level 3)	
	(in millions)					
Assets						
Plan asset for deferred compensation(1)	\$ 3.2	\$ 3.2	\$ —	\$ —		
Interest rate swaps (1)	\$ 5.6	\$ —	\$ 5.6	\$ —		
Total assets	\$ 8.8	\$ 3.2	\$ 5.6	\$ —		
Liabilities						
Plan liability for deferred compensation(2)	\$ 3.2	\$ 3.2	\$ —	\$ —		
Redeemable financial instrument(3)	\$ 2.9	\$ —	\$ —	\$ 2.9		
Total liabilities	\$ 6.1	\$ 3.2	\$ —	\$ 2.9		

	Fair Value Measurements at December 31, 2016 Using:			
	Quoted Prices in Active Markets for Identical Assets		Significant Other Observable Inputs	Significant Unobservable Inputs
Total	(Level 1)		(Level 2)	(Level 3)
(in millions)				
Assets				
Plan asset for deferred compensation(1)	\$ 3.0	\$ 3.0	\$ —	\$ —
Interest rate swaps (1)	\$ 4.6	\$ —	\$ 4.6	\$ —
Total assets	<u>\$ 7.6</u>	<u>\$ 3.0</u>	<u>\$ 4.6</u>	<u>\$ —</u>
Liabilities				
Plan liability for deferred compensation(2)	\$ 3.0	\$ 3.0	\$ —	\$ —
Redeemable financial instrument(3)	5.8	—	—	5.8
Total liabilities	<u>\$ 8.8</u>	<u>\$ 3.0</u>	<u>\$ —</u>	<u>\$ 5.8</u>

- (1) Included on the Company's consolidated balance sheet in other assets (other, net).
- (2) Included on the Company's consolidated balance sheet in accrued compensation and benefits.
- (3) Included on the Company's consolidated balance sheet in other current liabilities as of December 31, 2017 and in other noncurrent liabilities as of December 31, 2016 and relates to a mandatorily redeemable equity instrument as part of the Apex acquisition in 2015.

The table below provides a summary of the changes in fair value of all financial assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) for the period December 31, 2016 to December 31, 2017.

	Balance December 31, 2016	Settlements	Purchases	Total realized and unrealized (gains) losses included in:		Balance December 31, 2017
				Net earnings adjustments	Comprehensive income	
	(in millions)					
Redeemable financial instrument	\$ 5.8	(2.9)	\$ —	—	\$ —	\$ 2.9

In connection with the acquisition of Apex, a liability of \$5.5 million was recognized on November 30, 2015 as the estimate of the acquisition date fair value of the mandatorily redeemable equity instrument. The Company acquired an additional 10% ownership in the first quarter of 2017 for approximately \$2.9 million and now owns 90% of Apex outstanding shares. The remaining liability is classified as Level 3 under the fair value hierarchy as it is based on the commitment to purchase the remaining 10% of Apex shares within the next year, which is not observable in the market.

Cash equivalents consist of instruments with remaining maturities of three months or less at the date of purchase and consist primarily of money market funds, for which the carrying amount is a reasonable estimate of fair value.

The Company uses financial instruments from time to time to enhance its ability to manage risk, including foreign currency and commodity pricing exposures, which exist as part of its ongoing business operations. The use of derivatives exposes the Company to counterparty credit risk for nonperformance and to market risk related to changes in currency exchange rates and commodity prices. The Company manages its exposure to counterparty credit risk through diversification of counterparties. The Company's counterparties in derivative transactions are substantial commercial banks with significant experience using such derivative instruments. The impact of market risk on the fair value and cash flows of the Company's derivative instruments is monitored and the Company restricts the use of derivative financial instruments to hedging activities. The Company does not enter into contracts for trading purposes nor does the Company enter into any contracts for speculative purposes. The use of derivative instruments is approved by senior management under written guidelines.

Interest Rate Swaps

On February 12, 2016, the Company entered into a Credit Agreement (the “Credit Agreement”) pursuant to which it received a funding commitment under a Term Loan of \$300 million, of which the entire \$300 million has been drawn on, and a Revolving Commitment (“Revolver”) of \$500 million, of which \$147 million has been drawn as of December 31, 2017. Both facilities mature on February 12, 2021. For each facility, the Company can choose either an Adjusted LIBOR or Alternative Base Rate (“ABR”). Upon intended election of Adjusted LIBOR as the interest rate, the Term Loan has quarterly interest payments that began in May 2016, quarterly principal repayments commencing on March 31, 2017, with a balloon payment of principal on maturity date. The Revolver has quarterly interest payments that began on in July 2016.

Accordingly, the Company’s earnings and cash flows are exposed to interest rate risk from changes in Adjusted LIBOR. In order to manage the Company’s exposure to changes in cash flows attributable to fluctuations in LIBOR-indexed interest payments related to the Company’s floating rate debt, the Company entered into two interest rate swaps on February 12, 2016. For each interest rate swap, the Company receives the three-month USD-LIBOR subject to a 0% floor, and pays a fixed rate of 1.31375% on a notional amount of \$225.0 million. The swaps mature on February 12, 2021. The Company formally documents the hedge relationships at hedge inception to ensure that its interest rate swaps qualify for hedge accounting. On a quarterly basis, the Company assesses whether the interest rate swaps are highly effective in offsetting changes in the cash flow of the hedged item. The Company does not hold or issue interest rate swaps for trading purposes. The swaps are designated as cash flow hedges. For the years ended December 31, 2017 and 2016, a net of tax gain of \$0.6 million and \$2.9 million, respectively, was recorded in Accumulated Other Comprehensive Income to recognize the effective portion of the fair value of interest rate swaps that qualify as a cash flow hedge. The Company did not enter into any interest rate swaps during 2017.

Non-Designated Cash Flow Hedge

The Company’s foreign subsidiaries transact most business, including certain intercompany transactions, in foreign currencies. Such transactions are principally purchases or sales of materials and are denominated in European currencies or the U.S. or Canadian dollar. The Company uses foreign currency forward exchange contracts from time to time to manage the risk related to intercompany loans, intercompany purchases that occur during the course of a year, and certain open foreign currency denominated commitments to sell products to third parties. The Company entered into one forward contract in the fourth quarter of 2016 and one forward contract in the first quarter of 2017 to manage the foreign currency rate exposure in 2016 and 2017. These forward contracts were entered into to manage the foreign currency rate exposure between the Hong Kong Dollar and the euro regarding two intercompany loans. These forward contracts are marked-to-market with changes in the fair value recorded to earnings. The Company recognized a loss of \$2.9 million related to forward exchange contracts in 2017 and recognized a gain on this forward contract in 2016 of \$0.3 million. The Company did not have any forward contracts in 2015. These forward contracts were not renewed in September 2017 as the intercompany loans for which the Company was hedging the foreign currency rate exposure were settled.

Leases

The Company leases certain manufacturing facilities, sales offices, warehouses, automobiles, and equipment. Generally, the leases carry renewal provisions and require the Company to pay maintenance costs. Future minimum lease payments under capital leases and non-cancelable operating leases as of December 31, 2017 are as follows:

	Capital Leases	Operating Leases
	(in millions)	
2018	\$ 1.4	\$ 11.4
2019	1.3	9.5
2020	1.2	7.5
2021	0.2	3.5
2022	—	1.8
Thereafter	—	3.2
Total	<u>\$ 4.1</u>	<u>\$ 36.9</u>
Less amount representing interest (at rates ranging from 4.3% to 7.0%)	0.3	
Present value of net minimum capital lease payments	3.8	
Less current installments of obligations under capital leases	1.3	
Obligations under capital leases, excluding current installments	<u>\$ 2.5</u>	

Carrying amounts of assets under capital lease include:

	December 31,	
	2017	2016
	(in millions)	
Buildings	\$ 15.3	\$ 13.4
Machinery and equipment	1.7	1.5
	<u>17.0</u>	<u>14.9</u>
Less accumulated depreciation	(6.8)	(5.4)
	<u>\$ 10.2</u>	<u>\$ 9.5</u>

(17) Segment Information

The Company operates in three geographic segments: Americas, Europe, and APMEA. Each of these segments sells similar products and has separate financial results that are reviewed by the Company's chief operating decision-maker. Each segment earns revenue and income almost exclusively from the sale of our products. The Company sells its products into various end markets around the world with sales by region based upon location of the entity recording the sale. Products are sold into four product categories: 1) residential & commercial flow control products, 2) HVAC & gas products, 3) drainage and water re-use products, and 4) water quality products. The Americas sells products across all four product categories, Europe primarily sells residential & commercial flow products, HVAC & gas products, and drainage products, and APMEA primarily sells residential & commercial flow products and HVAC & gas products. All intercompany sales transactions have been eliminated. The accounting policies for each segment are the same as those described in the summary of significant accounting policies (see Note 2).

As of January 1, 2017, the Company began reporting the results of Watts Middle East as part of the Company's former Asia-Pacific segment, which is now referred to as APMEA. Watts Middle East had previously been reported within the former EMEA segment, which is now referred to as Europe. This change in segment composition aligns with the structure of the Company's internal organization and did not result in a material change to previously reported segment information. The 2016 and 2015 results by segment have been retrospectively revised for comparative purposes.

The following is a summary of the Company's significant accounts and balances by segment, reconciled to its consolidated totals:

	Year Ended December 31,		
	2017	2016	2015
	(in millions)		
Net Sales			
Americas	\$ 951.9	\$ 900.9	\$ 978.5
Europe	440.3	431.3	436.0
APMEA	64.5	66.2	53.2
Consolidated net sales	<u>\$ 1,456.7</u>	<u>\$ 1,398.4</u>	<u>\$ 1,467.7</u>
Operating income (loss)			
Americas	\$ 146.8	\$ 127.1	\$ 109.9
Europe(**)	47.6	40.0	(99.6)
APMEA(***)	4.7	15.1	0.5
Subtotal reportable segments	199.1	182.2	10.8
Corporate(*)	(36.8)	(37.2)	(100.9)
Consolidated operating income (loss)	<u>162.3</u>	<u>145.0</u>	<u>(90.1)</u>
Interest income	(1.0)	(1.0)	(1.0)
Interest expense	19.1	22.6	24.3
Other expense (income), net	1.1	(4.4)	(2.4)
Income (loss) before income taxes	<u>\$ 143.1</u>	<u>\$ 127.8</u>	<u>\$ (111.0)</u>
Capital Expenditures			
Americas	\$ 20.7	\$ 25.7	\$ 19.0
Europe	8.0	8.9	7.5
APMEA	0.7	1.4	1.2
Consolidated capital expenditures	<u>\$ 29.4</u>	<u>\$ 36.0</u>	<u>\$ 27.7</u>
Depreciation and Amortization			
Americas	\$ 30.8	\$ 28.8	\$ 29.0
Europe	18.6	19.3	21.0
APMEA	2.8	3.1	2.4
Consolidated depreciation and amortization	<u>\$ 52.2</u>	<u>\$ 51.2</u>	<u>\$ 52.4</u>
Identifiable assets (at end of period)			
Americas	\$ 1,069.2	\$ 1,054.7	\$ 969.6
Europe	524.0	577.3	602.2
APMEA	143.3	131.2	119.0
Consolidated identifiable assets	<u>\$ 1,736.5</u>	<u>\$ 1,763.2</u>	<u>\$ 1,690.8</u>
Property, plant and equipment, net (at end of period)			
Americas	\$ 109.3	\$ 106.2	\$ 88.6
Europe	82.1	75.6	82.2
APMEA	7.1	7.9	13.6
Consolidated property, plant and equipment, net	<u>\$ 198.5</u>	<u>\$ 189.7</u>	<u>\$ 184.4</u>

* Corporate expenses are primarily for administrative compensation expense, compliance costs, professional fees, including corporate-related legal and audit expenses, shareholder services and benefit administration costs. Included in Corporate's operating loss for 2015 is a \$59.7 million charge related to the Company's settlement of its Pension Plan and SERP benefit obligations. Refer to Note 14 "Employee Benefit Plans" for further discussion.

** Included in Europe's operating loss for 2015 is a \$129.7 million charge related to goodwill impairment of the Europe reporting unit. Refer to Note 6 "Goodwill and Intangibles" for further discussion.

*** Included in APMEA's operating income for 2016 is \$8.7 million gain related to the sale of an operating subsidiary in China. Refer to Note 4 "Sale of Business" for further discussion.

The following includes U.S. net sales and U.S. property, plant and equipment of the Company's Americas segment:

	December 31,		
	2017	2016	2015
	(in millions)		
U.S. net sales	\$ 886.2	\$ 839.2	\$ 909.2
U.S. property, plant and equipment, net (at end of year)	\$ 105.1	\$ 102.5	\$ 85.2

The following includes intersegment sales for Americas, Europe and APMEA:

	December 31,		
	2017	2016	2015
	(in millions)		
Intersegment Sales			
Americas	\$ 12.1	\$ 12.0	\$ 8.2
Europe	14.6	12.3	10.5
APMEA	69.7	76.7	110.0
Intersegment sales	\$ 96.4	\$ 101.0	\$ 128.7

The Company sells its products into various end markets around the world and groups net sales to third parties into four product categories. Net sales to third parties for the four product categories are as follows:

	Year Ended December 31,		
	2017	2016	2015
	(in millions)		
Net Sales			
Residential & commercial flow control	\$ 758.9	\$ 779.2	\$ 831.1
HVAC & gas	472.4	408.1	425.1
Drains & water re-use	145.4	132.3	131.0
Water quality	80.0	78.8	80.5
Consolidated net sales	\$ 1,456.7	\$ 1,398.4	\$ 1,467.7

(18) Accumulated Other Comprehensive Loss

Accumulated other comprehensive loss consists of the following:

	Foreign Currency Translation	Cash Flow Hedges	Accumulated Other Comprehensive Loss
	(in millions)		
Balance December 31, 2016	\$ (153.7)	\$ 2.9	\$ (150.8)
Change in period	7.9	0.1	8.0
Balance April 2, 2017	\$ (145.8)	\$ 3.0	\$ (142.8)
Change in period	21.5	(0.7)	20.8
Balance July 2, 2017	\$ (124.3)	\$ 2.3	\$ (122.0)
Change in period	15.4	0.1	15.5
Balance October 1, 2017	\$ (108.9)	\$ 2.4	\$ (106.5)
Change in period	6.3	1.1	7.4
Balance December 31, 2017	\$ (102.6)	\$ 3.5	\$ (99.1)
Balance December 31, 2015	\$ (128.2)	\$ —	\$ (128.2)
Change in period	24.4	(0.2)	24.2
Balance April 03, 2016	\$ (103.8)	\$ (0.2)	\$ (104.0)
Change in period	(19.1)	(1.7)	(20.8)
Balance July 03, 2016	\$ (122.9)	\$ (1.9)	\$ (124.8)
Change in period	3.3	1.3	4.6
Balance October 02, 2016	\$ (119.6)	\$ (0.6)	\$ (120.2)
Change in period	(34.1)	3.5	(30.6)
Balance December 31, 2016	\$ (153.7)	\$ 2.9	\$ (150.8)

(19) Quarterly Financial Information (unaudited)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	(in millions, except per share information)			
Year ended December 31, 2017				
Net sales	\$ 347.2	\$ 378.5	\$ 364.7	\$ 366.3
Gross profit	143.8	156.7	152.7	149.2
Net income (loss)	21.7	27.2	26.5	(2.3)
Per common share:				
Basic				
Net income (loss)	0.63	0.79	0.77	(0.07)
Diluted				
Net income (loss)	0.63	0.79	0.77	(0.07)
Dividends declared per common share	0.18	0.19	0.19	0.19
Year ended December 31, 2016				
Net sales	\$ 344.2	\$ 371.1	\$ 341.1	\$ 342.0
Gross profit	135.2	150.7	142.0	137.7
Net income	16.2	28.6	21.9	17.5
Per common share:				
Basic				
Net income	0.47	0.83	0.63	0.51
Diluted				
Net income	0.47	0.83	0.63	0.51
Dividends declared per common share	0.17	0.18	0.18	0.18

(1) Four quarters may not sum to full year due to rounding.

(20) Subsequent Events

On February 8, 2018, the Company declared a quarterly dividend of nineteen cents (\$0.19) per share on each outstanding share of Class A common stock and Class B common stock payable on March 16, 2018 to stockholders of record on March 2, 2018.

Watts Water Technologies, Inc. and Subsidiaries
Schedule II—Valuation and Qualifying Accounts
(Amounts in millions)

	Balance At Beginning of Period	Additions Charged To Expense	Additions Charged To Other Accounts	Deductions	Balance At End of Period
Year Ended December 31, 2015					
Allowance for doubtful accounts	\$ 10.6	2.8	—	(3.3)	\$ 10.1
Reserve for excess and obsolete inventories	\$ 29.3	11.8	—	(12.0)	\$ 29.1
Year Ended December 31, 2016					
Allowance for doubtful accounts	\$ 10.1	\$ 5.5	0.5	(1.9)	\$ 14.2
Reserve for excess and obsolete inventories	\$ 29.1	\$ 7.0	0.6	(10.6)	\$ 26.1
Year Ended December 31, 2017					
Allowance for doubtful accounts	\$ 14.2	\$ 3.7	0.4	(4.0)	\$ 14.3
Reserve for excess and obsolete inventories	\$ 26.1	\$ 7.3	1.5	(9.5)	\$ 25.4

EXHIBIT INDEX

Exhibit No.	Description
3.1	Restated Certificate of Incorporation, as amended. Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended July 3, 2005 (File No. 001-11499).
3.2	Amended and Restated By-Laws. Incorporated by reference to the Registrant's Current Report on Form 8-K dated July 27, 2015 (File No. 001-11499).
9.1	The Amended and Restated George B. Horne Voting Trust Agreement—1997 dated as of September 14, 1999. Incorporated by reference to the Registrant's Annual Report on Form 10-K for year ended June 30, 1999 (File No. 001-11499).
10.1*	Supplemental Compensation Agreement effective as of September 1, 1996 between the Registrant and Timothy P. Horne. Incorporated by reference to the Registrant's Annual Report on Form 10-K for year ended June 30, 1996 (File No. 001-11499).
10.2*	Amendment No. 1, dated July 25, 2000, to Supplemental Compensation Agreement effective as of September 1, 1996 between the Registrant and Timothy P. Horne. Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for quarter ended September 30, 2000 (File No. 001-11499).
10.3*	Amendment No. 2, dated October 23, 2002, to Supplemental Compensation Agreement effective as of September 1, 1996 between the Registrant and Timothy P. Horne. Incorporated by reference to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2002 (File No. 001-11499).
10.4*	Amendment No. 3, dated August 18, 2015, to Supplemental Compensation Agreement effective as of September 1, 1996 between the Registrant and Timothy P. Horne. Incorporated by reference to the Registrant's Current Report on Form 8-K dated August 18, 2015 (File No. 001-11499).
10.5	Amended and Restated Stock Restriction Agreement dated October 30, 1991. Incorporated by reference to the Registrant's Current Report on Form 8-K dated November 14, 1991 (File No. 001-11499).
10.6	Amendment, dated August 26, 1997, to Amended and Restated Stock Restriction Agreement dated October 30, 1991. Incorporated by reference to the Registrant's Annual Report on Form 10-K for year ended June 30, 1997 (File No. 001-11499).
10.7	Registration Rights Agreement dated July 25, 1986. Incorporated by reference to the Registrant's Form S-1 (No. 33-6515) as part of the Second Amendment to such Form S-1 dated August 21, 1986.
10.8*	Form of Indemnification Agreement between the Registrant and certain directors and officers of the Registrant. Incorporated by reference to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2016 (File No. 001-11499).
10.9*	Watts Water Technologies, Inc. Executive Incentive Bonus Plan. Incorporated by reference to the Registrant's Annual Report on Form 10-K for year ended December 31, 2015 (File No. 001-11499).
10.10*	Non-Employee Director Compensation Arrangements. Incorporated by reference to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2014 (File No. 001-11499).
10.11*	Watts Water Technologies, Inc. Management Stock Purchase Plan Amended and Restated as of October 27, 2015. Incorporated by reference to the Registrant's Current Report on Form 8-K dated October 26, 2015 (File No. 001-11499).
10.12*	Watts Water Technologies, Inc. Second Amended and Restated 2004 Stock Incentive Plan. Incorporated by reference to the Registrant's Current Report on Form 8-K dated May 15, 2013 (File No. 001-11499).
10.13*	Form of Non-Qualified Stock Option Agreement under the Watts Water Technologies, Inc. Second Amended and Restated 2004 Stock Incentive Plan. Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2013 (File No. 001-11499).
10.14*	Form of Restricted Stock Award Agreement for Employees under the Watts Water Technologies, Inc. Second Amended and Restated 2004 Stock Incentive Plan. Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 27, 2015 (File No. 001-11499).

Exhibit No.	Description
10.15*	Form of 2015 Performance Stock Unit Award Agreement under the Watts Water Technologies, Inc. Second Amended and Restated 2004 Stock Incentive Plan. Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 27, 2015 (File No. 001-11499).
10.16*	Form of 2016 Performance Stock Unit Award Agreement under the Watts Water Technologies, Inc. Second Amended and Restated 2004 Stock Incentive Plan. Incorporated by reference to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2016 (File No. 001-11499).
10.17*	Form of 2017 Performance Stock Unit Award Agreement under the Watts Water Technologies, Inc. Second Amended and Restated 2004 Stock Incentive Plan. Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended April 2, 2017 (File No. 001-11499).
10.18*	Form of 2014 Non-Qualified Stock Option Agreement under the Watts Water Technologies, Inc. Second Amended and Restated 2004 Stock Incentive Plan. Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for quarter ended June 29, 2014 (File No. 001-11499).
10.19*	Watts Water Technologies, Inc. Executive Severance Plan, as amended and restated as of February 8, 2018. Incorporated by reference to the Registrant's Current Report on Form 8-K dated February 8, 2018 (File No. 001-11499).
10.20	Credit Agreement, dated as of February 12, 2016, among the Registrant, certain subsidiaries of the Registrant as Borrowers, JPMorgan Chase Bank N.A., as Administrative Agent, Swing Line Lender and L/C Issuer and the other lenders referred to therein. Incorporated by reference to the Registrant's Current Report on Form 8-K dated February 9, 2016 (File No. 001-11499).
10.21	Guaranty, dated as of February 12, 2016, by the Registrant and the Subsidiaries of the Registrant set forth therein, in favor of JPMorgan Chase Bank N.A. and other lenders referred to therein. Incorporated by reference to the Registrant's Current Report on Form 8-K dated February 9, 2016 (File No. 001-11499).
10.22	Note Purchase Agreement, dated as of June 18, 2010, between the Registrant and Purchasers named in Schedule A thereto relating to the Registrants \$75,000,000 5.05% Senior Notes due June 18, 2020. Incorporated by reference to the Registrant's Current Report on Form 8-K dated June 18, 2010 (File No. 001-11499).
10.23	Form of 5.05% Senior Note due June 18, 2020. Incorporated by reference to the Registrant's Current Report on Form 8-K dated June 18, 2010 (File No. 001-11499).
10.24	Form of Subsidiary Guaranty in connection with the Registrant's 5.05% Senior Notes due June 18, 2020, including the form of Joinder to Subsidiary Guaranty. Incorporated by reference to the Registrant's Current Report on Form 8-K dated June 18, 2010 (File No. 001-11499).
10.25	Facility Agreement dated as of December 16, 2016, among Watts International Holdings Limited, as original borrower and original guarantor, Watts Water Technologies EMEA B.V., as original guarantor, JPMorgan Chase Bank, N.A., as sole bookrunner and sole lead arranger, J.P. Morgan Europe Limited, as agent to the financial parties, and the other lenders referred to therein. Incorporated by reference to the Registrant's Current Report on Form 8-K dated December 16, 2016 (File No. 001-11499).
11	Statement Regarding Computation of Earnings per Common Share. Incorporated by reference to notes to Consolidated Financial Statements, Note 2 of this Report.
21†	Subsidiaries
23†	Consent of KPMG LLP, Independent Registered Public Accounting Firm
31.1†	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended
31.2†	Certification of Principal Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended
32.1††	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350
32.2††	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350
101.INS†	XBRL Instance Document.
101.SCH†	XBRL Taxonomy Extension Schema Document.
101.CAL†	XBRL Taxonomy Extension Calculation Linkbase Document.

Exhibit No.	Description
101.DEF†	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB†	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE†	XBRL Taxonomy Extension Presentation Linkbase Document.

* Management contract or compensatory plan or arrangement.

† Filed herewith.

†† Furnished herewith.

Attached as Exhibit 101 to this report are the following formatted in XBRL (Extensible Business Reporting Language):

(i) Consolidated Statements of Operations for the Years Ended December 31, 2017, 2016 and 2015, (ii) Consolidated Statements of Comprehensive (Loss) Income for the Years Ended December 31, 2017, 2016 and 2015, (iii) Consolidated Balance Sheets at December 31, 2017 and December 31, 2016, (iv) Consolidated Statements of Stockholders' Equity for the Years Ended December 31, 2017, 2016 and 2015, (v) Consolidated Statements of Cash Flows for the Years Ended December 31, 2017, 2016 and 2015, and (vi) Notes to Consolidated Financial Statements.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

WATTS WATER TECHNOLOGIES, INC.

By: /s/ Robert J. Pagano, Jr.
 Robert J. Pagano, Jr.
Chief Executive Officer and President

DATED: February 23, 2018

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ ROBERT J. PAGANO, JR.</u> Robert J. Pagano, Jr.	Chief Executive Officer, President and Director (Principal Executive Officer)	February 23, 2018
<u>/s/ TODD A. TRAPP</u> Todd A. Trapp	Chief Financial Officer (Principal Financial Officer)	February 23, 2018
<u>/s/ VIRGINIA A. HALLORAN</u> Virginia A. Halloran	Chief Accounting Officer (Principal Accounting Officer)	February 23, 2018
<u>/s/ ROBERT L. AYERS</u> Robert L. Ayers	Director	February 15, 2018
<u>/s/ CHRISTOPHER L. CONWAY</u> Christopher L. Conway	Director	February 18, 2018
<u>/s/ DAVID A. DUNBAR</u> David A. Dunbar	Director	February 15, 2018
<u>/s/ JES MUNK HANSEN</u> Jes Munk Hansen	Director	February 16, 2018
<u>/s/ W. CRAIG KISSEL</u> W. Craig Kissel	Chairman of the Board	February 21, 2018
<u>/s/ JOSEPH T. NOONAN</u> Joseph T. Noonan	Director	February 20, 2018
<u>/s/ MERILEE RAINES</u> Merilee Raines	Director	February 15, 2018
<u>/s/ JOSEPH W. REITMEIER</u> Joseph W. Reitmeier	Director	February 17, 2018

Entity Name	Domestic Jurisdiction
AERCO International, Inc.	New Jersey
AHC Holding Company, Inc.	Delaware
Apex Valves Limited	New Zealand
Bar pneumatische steuerungssysteme GmbH	Germany
Black Teknigas & Electro Controls Limited	United Kingdom
BLÜCHER France SARL	France
BLÜCHER Germany GmbH	Germany
BLÜCHER Metal A/S	Denmark
BLÜCHER Norway AS	Norway
BLÜCHER Sweden AB	Sweden
BLÜCHER UK LTD	United Kingdom
BM Stainles Steel Drains Limited	United Kingdom
Dormont Manufacturing Company	Pennsylvania
Electro Controls Ltd.	United Kingdom
HF Scientific, Inc.	Florida
Hornet Enterprises, LLC	Michigan
Hornet Manufacturing LLC	Michigan
Mutpec C.V.	Netherlands
PVI Industries, LLC	Delaware
PVI Riverside Holdings, Inc.	Delaware
Socla Benelux S.P.R.L.	Belgium
Socla SAS	France
Socla Valves and Controls Iberica SA	Spain
Taft Engineering, Inc.	Colorado
Tekmar Control Systems Ltd.	British Columbia
Tekmar Control Systems, Inc.	Washington
Valpes S.A.S.	France
Watts (Ningbo) International Trading Co., Ltd.	China
Watts (Shanghai) Management Company Limited	China
Watts Asia Pacific Sales Pte. Ltd.	Singapore
Watts Benelux	Belgium
Watts Denmark Holding ApS	Denmark
Watts Deutschland Holdings GmbH & Co KG	Germany
Watts Electronics S.A.S.	France
Watts EMEA Holding BV	Netherlands
Watts France Holding S.A.S.	France
Watts Germany Holding GmbH	Germany
Watts Holdings Limited	Gibraltar
Watts Ind. Iberica SA	Spain
Watts Industries Bulgaria EAD	Bulgaria
Watts Industries Deutschland GmbH	Germany
Watts Industries France S.A.S.	France
Watts Industries Italia S.r.l.	Italy
Watts Industries Middle East FZE	Dubai
Watts Industries Netherlands BV	Netherlands
Watts Industries Nordic AB	Sweden
Watts Industries Polska Sp. z.o.o.	Poland
Watts Industries Tunisia S.A.S.	Tunisia
Watts Industries U.K. Ltd.	United Kingdom
Watts Insulation NV	Belgium
Watts Interme AG	Switzerland
Watts Interme GmbH	Austria
Watts International Holdings Limited	Gibraltar
Watts Italy Holding S.r.l.	Italy
Watts Korea Co. Ltd.	Republic of Korea
Watts Regulator Co.	Massachusetts
Watts U.K. Ltd.	United Kingdom
Watts Water Equipment Manufacturing (Ningbo) Co., Ltd.	China
Watts Water Quality and Conditioning Products, Inc.	Delaware
Watts Water Technologies (Australia) Pty Ltd.	South Wales
Watts Water Technologies (Canada), Inc.	Federally Chartered
Watts Water Technologies (HK) Holding Limited	Hong Kong
Watts Water Technologies EMEA B.V.	Netherlands
Watts Water Technologies International, LLC	Delaware
Watts Water Technologies Latin America S.A. de C.V.	Mexico
Watts Water Technologies, Inc.	Delaware

Consent of Independent Registered Public Accounting Firm

The Board of Directors
Watts Water Technologies, Inc.:

We consent to the incorporation by reference in the registration statements (Nos. 333-188669, 333-142714, 33-64627, 333-108699 and 333-115968) on Form S-8 and (Nos. 333-85862 and 333-203131) on Form S-3 of Watts Water Technologies, Inc. of our report dated February 23, 2018, with respect to the consolidated balance sheets of Watts Water Technologies, Inc. as of December 31, 2017 and 2016, and the related consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2017, and the related notes and financial statement Schedule II-Valuation and Qualifying Accounts (collectively, the "consolidated financial statements"), and the effectiveness of internal control over financial reporting as of December 31, 2017, which report appears in the December 31, 2017 annual report on Form 10-K of Watts Water Technologies, Inc.

/s/ KPMG LLP

Boston, Massachusetts
February 23, 2018

**WATTS WATER TECHNOLOGIES, INC.
CERTIFICATION PURSUANT TO
SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002**

I, Robert J. Pagano, Jr., certify that:

1. I have reviewed this Annual Report on Form 10-K of Watts Water Technologies, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 23, 2018

/s/ Robert J. Pagano, Jr.

Robert J. Pagano, Jr.
Chief Executive Officer

**WATTS WATER TECHNOLOGIES, INC.
CERTIFICATION PURSUANT TO
SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002**

I, Todd A. Trapp, certify that:

1. I have reviewed this Annual Report on Form 10-K of Watts Water Technologies, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 23, 2018

/s/ Todd A. Trapp
Todd A. Trapp
Chief Financial Officer

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

The undersigned officer of Watts Water Technologies, Inc. (the "Company") hereby certifies that, to his knowledge, the Company's Annual Report on Form 10-K to which this certification is attached (the "Report"), as filed with the Securities and Exchange Commission on the date hereof, fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company. This certification is provided solely pursuant to 18 U.S.C. Section 1350 and Item 601(b)(32) of Regulation S-K ("Item 601(b)(32)") promulgated under the Securities Act of 1933, as amended (the "Securities Act"), and the Exchange Act. In accordance with clause (ii) of Item 601(b)(32), this certification (A) shall not be deemed "filed" for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of that section, and (B) shall not be deemed to be incorporated by reference into any filing under the Securities Act or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.

Date: February 23, 2018

/s/ Robert J. Pagano, Jr.

Robert J. Pagano, Jr.
Chief Executive Officer

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

The undersigned officer of Watts Water Technologies, Inc. (the "Company") hereby certifies that, to his knowledge, the Company's Annual Report on Form 10-K to which this certification is attached (the "Report"), as filed with the Securities and Exchange Commission on the date hereof, fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company. This certification is provided solely pursuant to 18 U.S.C. Section 1350 and Item 601(b)(32) of Regulation S-K ("Item 601(b)(32)") promulgated under the Securities Act of 1933, as amended (the "Securities Act"), and the Exchange Act. In accordance with clause (ii) of Item 601(b)(32), this certification (A) shall not be deemed "filed" for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of that section, and (B) shall not be deemed to be incorporated by reference into any filing under the Securities Act or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.

Date: February 23, 2018

/s/ Todd A. Trapp

Todd A. Trapp
Chief Financial Officer
