

FLOWSERVE CORP
Form 10-K
February 16, 2017

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, 2016

OR

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

Commission file number 1-13179

FLOWSERVE CORPORATION

(Exact name of registrant as specified in its charter)

New York 31-0267900
(State or other jurisdiction of (I.R.S. Employer
incorporation or organization) Identification No.)

5215 N. O'Connor Boulevard 75039
Suite 2300, Irving, Texas (Zip Code)
(Address of principal executive offices)

Registrant's telephone number, including area code:
(972) 443-6500

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

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, \$1.25 Par Value	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 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 (§ 232.405 of this chapter) 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, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer Smaller Reporting company
(Do not check if a smaller reporting company)

Edgar Filing: FLOWSERVE CORP - Form 10-K

Indicate by check mark whether the registrant is a shell company. Yes No

The aggregate market value of the common stock held by non-affiliates of the registrant, computed by reference to the closing price of the registrant's common stock as reported on June 30, 2016 (the last business day of the registrant's most recently completed second fiscal quarter), was approximately \$3,389,096,066. For purposes of the foregoing calculation only, all directors, executive officers and known 5% beneficial owners have been deemed affiliates.

Number of the registrant's common shares outstanding as of February 10, 2017 was 130,520,401.

DOCUMENTS INCORPORATED BY REFERENCE

Certain information contained in the definitive proxy statement for the registrant's 2017 Annual Meeting of Shareholders scheduled to be held on May 18, 2017 is incorporated by reference into Part III hereof.

FLOWSERVE CORPORATION
FORM 10-K

TABLE OF CONTENTS

	Page
<u>PART I</u>	
<u>Item 1. Business</u>	<u>1</u>
<u>Item 1A. Risk Factors</u>	<u>15</u>
<u>Item 1B. Unresolved Staff Comments</u>	<u>23</u>
<u>Item 2. Properties</u>	<u>23</u>
<u>Item 3. Legal Proceedings</u>	<u>23</u>
<u>Item 4. Mine Safety Disclosures</u>	<u>24</u>
<u>PART II</u>	
<u>Item 5. Market for the Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	<u>24</u>
<u>Item 6. Selected Financial Data</u>	<u>27</u>
<u>Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>28</u>
<u>Item 7A. Quantitative and Qualitative Disclosures About Market Risk</u>	<u>51</u>
<u>Item 8. Financial Statements and Supplementary Data</u>	<u>53</u>
<u>Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	<u>106</u>
<u>Item 9A. Controls and Procedures</u>	<u>106</u>
<u>Item 9B. Other Information</u>	<u>107</u>
<u>PART III</u>	
<u>Item 10. Directors, Executive Officers and Corporate Governance</u>	<u>108</u>
<u>Item 11. Executive Compensation</u>	<u>108</u>
<u>Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	<u>108</u>
<u>Item 13. Certain Relationships and Related Transactions, and Director Independence</u>	<u>108</u>
<u>Item 14. Principal Accounting Fees and Services</u>	<u>109</u>
<u>PART IV</u>	
<u>Item 15. Exhibits, Financial Statement Schedules</u>	<u>109</u>
<u>Item 16. Form 10-K Summary</u>	<u>110</u>
<u>Signatures</u>	<u>111</u>
EX-31.1	
EX-31.2	
EX-32.1	
EX-32.2	
EX-101 INSTANCE DOCUMENT	
EX-101 SCHEMA DOCUMENT	
EX-101 CALCULATION LINKBASE DOCUMENT	
EX-101 LABELS LINKBASE DOCUMENT	
EX-101 PRESENTATION LINKBASE DOCUMENT	
EX-101 DEFINITION LINKBASE DOCUMENT	

PART I

ITEM 1. BUSINESS

OVERVIEW

Flowserve Corporation is a world leading manufacturer and aftermarket service provider of comprehensive flow control systems. Under the name of a predecessor entity, we were incorporated in the State of New York on May 1, 1912. Flowserve Corporation as it exists today was created in 1997 through the merger of two leading fluid motion and control companies — BW/IP and Durco International. Over the years, we have evolved through organic growth and strategic acquisitions, and our 220-year history of Flowserve heritage brands serves as the foundation for the breadth and depth of our products and services today. Unless the context otherwise indicates, references to "Flowserve," "the Company" and such words as "we," "our" and "us" include Flowserve Corporation and its subsidiaries.

We develop and manufacture precision-engineered flow control equipment integral to the movement, control and protection of the flow of materials in our customers' critical processes. Our product portfolio of pumps, valves, seals, automation and aftermarket services supports global infrastructure industries, including oil and gas, chemical, power generation (including nuclear, fossil and renewable) and water management, as well as certain general industrial markets where our products and services add value. Through our manufacturing platform and global network of Quick Response Centers ("QRCs"), we offer a broad array of aftermarket equipment services, such as installation, advanced diagnostics, repair and retrofitting.

We sell our products and services to more than 10,000 companies, including some of the world's leading engineering, procurement and construction firms ("EPC"), original equipment manufacturers, distributors and end users. Our products and services are used in several distinct industries having a broad geographic reach. Our bookings mix by industry in 2016 and 2015 consisted of:

	2016	2015
• oil and gas	36 %	36 %
• general industries(1)	25 %	24 %
• chemical	21 %	22 %
• power generation	14 %	14 %
• water management	4 %	4 %

General industries includes mining and ore processing, pharmaceuticals, pulp and paper, food and beverage and (1) other smaller applications, as well as sales to distributors whose end customers typically operate in the industries we primarily serve.

The breakdown of the geographic regions to which our sales were shipped in 2016 and 2015 were as follows:

	2016	2015
• North America	40 %	39 %
• Europe	22 %	22 %
• Asia Pacific	18 %	18 %
• Middle East and Africa	13 %	12 %
• Latin America	7 %	9 %

We have pursued a strategy of industry diversity and geographic breadth to mitigate the impact on our business of normal economic downturns in any one of the industries or in any particular part of the world we serve. For events that may occur and adversely impact our business, financial condition, results of operations and cash flows, refer to "Item 1A. Risk Factors" of this Annual Report on Form 10-K for the year ended December 31, 2016 ("Annual Report"). For information on our sales and long-lived assets by geographic areas, see Note 16 to our consolidated financial statements included in "Item 8. Financial Statements and Supplementary Data" ("Item 8") of this Annual Report.

We conduct our operations through three business segments based on type of product and how we manage the business:

- Engineered Product Division ("EPD") for long lead time, custom and other highly-engineered pumps and pump systems, mechanical seals, auxiliary systems and replacement parts and related services;

- Industrial Product Division ("IPD") for pre-configured engineered pumps and pump systems and related products and services; and

Flow Control Division ("FCD") for engineered and industrial valves, control valves, actuators and controls and related services.

Our business segments share a focus on industrial flow control technology and benefit from our global footprint and our economies of scale in reducing administrative and overhead costs to serve customers more cost effectively. EPD and IPD have a high number of common customers and complementary product offerings and technologies that are often combined in applications that provide us a net competitive advantage. All segments share certain resources and functions, including elements of research and development ("R&D"), supply chain, safety, quality assurance and administrative functions that provide efficiencies and an overall lower cost structure.

Our operations leadership reports to our Chief Operating Officer, and the segments share leadership for operational support functions such as R&D, marketing and supply chain. We believe this leadership structure positions the Company to leverage operational excellence, cost reduction initiatives and internal synergies across our entire operating platform to drive further growth and increase shareholders' value.

Our sales, product management and commercialization, R&D and strategy leadership reports to our Chief Sales and Strategy Officer. We believe this structure positions the Company to execute coordinated customer-centric business and sales strategies, promoting collaboration and best practices across the organization to drive growth.

Strategies

Our overarching objective is to grow our position as a product and integrated solutions provider in the flow control industry. This objective includes continuing to sell products by building on existing sales relationships and leveraging the power of our portfolio of products and services to attract new customers. It also includes delivering specific end-user solutions that help customers attain their business goals by ensuring maximum reliability at a decreased cost of ownership. This objective is pursued by cultivating a corporate culture based on workplace safety for our employees, ethical and transparent business practices and a dedicated focus on serving our customers. These three pillars support a collaborative, 'One Flowserve' approach that leverages a diverse and inclusive work environment worldwide. We seek to drive increasing enterprise value by using the following strategies: disciplined profitable growth, customer intimacy, innovation and portfolio management, strategic localization, operational excellence, employee focus and sustainable business model. The key elements of these strategies are outlined below.

Disciplined Profitable Growth

Disciplined profitable growth is focused on growing revenues profitably from our existing portfolio of products and services, as well as through the development or acquisition of new customer-driven products and services. Its overarching goals are to focus on opportunities that can maximize the organic growth from existing customers and to evaluate potential new customer-partnering initiatives that maximize the capture of products' total life cycle value. We believe we are the largest major pump, valve and seal company that can offer customers a differentiated option of flow management products and services across a broad portfolio, as well as offer additional options that include any combination of products and solution support packages.

We also seek to continue to review our substantial installed pump, valve and seal base as a means to expand the aftermarket parts and services business. To date, the aftermarket business has provided us with a steady source of revenues and cash flows at higher margins than are typically realized with original equipment sales. Aftermarket sales represented approximately 45% and 43% of total sales in 2016 and 2015, respectively. We are building on our established presence through an extensive global QRC network to provide the immediate parts, service and technical support required to effectively manage and expand the aftermarket business created from our installed base.

Customer Relationship

Through our ongoing relationships with our customers, we seek to gain a rich understanding of their business objectives and how our portfolio of offerings can best help them succeed. We collaborate with our customers on the front-end engineering and design work to drive flow management solutions that effectively generate the desired business outcomes. As we progress through original equipment projects, we work closely with our customers to understand and prepare for the long-term support needs for their operations with the intent of maximizing total life cycle value for our customers' investments.

We seek to capture additional aftermarket business by creating mutually beneficial opportunities for us and our customers through sourcing and maintenance alliance programs where we provide all or an agreed-upon portion of customers' parts and servicing needs. These alliances enable us to develop long-term relationships with our customers

and serve as an effective platform for introducing new products and services and generating additional sales.

2

Innovation and Portfolio Management

The ongoing management of our portfolio of products and services is critical to our success. As part of managing our portfolio, we continue to rationalize our portfolio of products and services to ensure alignment with changing market requirements. We also continue to invest in R&D to expand the scope of our product offerings and our deployment of advanced technologies. The infusion of advanced technologies into new products and services continues to play a critical role in the ongoing evolution of our product portfolio. Our objective is to improve the percentage of revenue derived from new products as a function of overall sales, utilizing technological innovation to improve overall product life cycle and reduce total cost of ownership for our customers.

We employ a robust portfolio management and project execution process to seek out new product and technology opportunities, evaluate their potential return on investment and allocate resources to their development on a prioritized basis. Each project is reviewed on a routine basis for such performance measures as time to market, net present value, budget adherence, technical and commercial risk and compliance with customer requirements. Technical skill sets and knowledge are deployed across business segment boundaries to ensure that we bring the best capabilities to bear for each project. Collectively, our R&D portfolio is a key to our ability to differentiate our product and service offerings from other competitors in our target markets.

We are focused on exploring and commercializing new technologies. In many of our research areas, we are teaming with universities and experts in the appropriate scientific fields to accelerate the required learning and to shorten the development time in leveraging the value of applied technologies in our products and services. Our intent is to be a market leader in the application of advanced technology to improve product performance and return on investment for our customers.

We have a track record of success in the area of remotely monitoring and diagnosing flow control equipment for our customers. Our approach is to build on that success by utilizing new technologies and best-in-class technology partners. The growth and acceleration in this space has created new opportunities to build on our existing capabilities, while also creating opportunities to offer more comprehensive solutions that help our customers leverage their infrastructure investments and gain new insight into the performance and reliability of their pump and flow control products. Partnering with best-in-class technology vendors provides both Flowserve and our partners a mutually beneficial opportunity to deliver solutions that benefit customers by optimizing their operating performance and lowering their total cost of ownership.

We continually evaluate acquisitions, joint ventures and other strategic investment opportunities to broaden our product portfolio, service capabilities, geographic presence and operational capabilities to meet the growing needs of our customers. We evaluate all investment opportunities through a decision filtering process to ensure a good strategic, financial and cultural fit.

Strategic Localization

Strategic localization continues to drive our global growth strategy. While we are a global company, we recognize that opportunities still remain. Therefore, we strive to advance our presence in geographies that we believe are critical to our future success as a company by focusing on the following areas:

- expanding our global presence to capture business in developing geographic market areas;
- expanding our low-cost manufacturing capabilities in Southeast Asia and Latin America for local markets and exports;
- utilizing low-cost sourcing opportunities to remain competitive in the global economy; and
- attracting and retaining the global intellectual capital required to support our growth plans in new geographical areas.

We believe there are attractive opportunities in international markets, particularly in Africa, China, India, Latin America and the Middle East, and we intend to continue to utilize our global presence and strategically invest to further penetrate these markets. In the aftermarket services business, we seek to strategically add QRC sites in order to provide rapid response, fast delivery and field repair on a global scale for our customers.

We believe that our future success will be supported by investments made to establish indigenous operations to effectively serve the local market while taking advantage of low-cost manufacturing, competent engineering and strategic sourcing to support both local markets and export. We believe that this positions us well to support our global customers from project conception through commissioning and throughout the life of their operations. For

example, we are currently expanding our pump and valve operations in China, valve operations in India and pump operations in Mexico.

3

We continue to develop and increase our manufacturing, engineering and sourcing functions in lower-cost regions and emerging markets such as India, China, Mexico, Latin America, the Middle East and Eastern Europe as we drive higher value-add from our supply base of materials and components and satisfy local content requirements. In 2016, these lower-cost regions supplied our business segments with direct materials ranging from 25% to 35% of business segment spending.

Operational Excellence

The operational excellence strategy encapsulates ongoing programs that work to drive increased customer fulfillment and yield internal productivity. This initiative includes:

- driving improved customer fulfillment through metrics such as on-time delivery, cost reduction, quality, cycle time reduction and warranty cost reduction as a percentage of sales;
- continuing to develop a culture of continuous improvement that delivers maximum productivity and cost efficiencies; and
- implementing global functional competencies to drive standardized processes.

We seek to increase our operational efficiency through our Continuous Improvement Process ("CIP") initiative, which utilizes tools such as value analysis, value engineering, six sigma methodology, lean manufacturing and capacity management to improve quality and processes, reduce product cycle times and lower costs. Recognizing that employees are our most valuable resource in achieving operational excellence goals, we have instituted CIP training tailored to maximize the impact on our business. At this date, we have approximately 1,700 active employees that are CIP-trained or certified as "Green Belts," "Black Belts" or "Master Black Belts," and are deployed on CIP projects throughout our operations and supporting functions of the business. As a result of the CIP initiative, we have developed and implemented processes at various sites to reduce our engineering and manufacturing process cycle time, improve on-time delivery and service response time, optimize working capital levels and reduce costs. We have also experienced success in sharing and applying best practices achieved in one business segment and deploying those ideas to other segments of the business.

We continue to rationalize existing Enterprise Resource Planning ("ERP") systems onto six strategic ERP systems. Going forward, these six strategic ERP systems will be maintained as core systems with standard tool sets, and will be enhanced as needed to meet the growing needs of the business in areas such as e-commerce, back office optimization and export compliance. Further investment in non-strategic ERP systems will be limited to compliance matters and conversion to strategic ERP systems.

We also seek to improve our working capital utilization, with a particular focus on management of accounts receivable and inventory. See further discussion in the "Liquidity and Capital Resources" section of "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" ("Item 7") of this Annual Report.

Employee Focus

We focus on several elements in our strategic efforts to continuously enhance our organizational capability, including:

- institutionalizing our succession planning along with our core competencies and performance management capabilities, with a focus on key positions and critical talent pools;
- utilizing these capabilities to drive employee engagement through our training initiatives and leadership development programs and facilitate our cross-business segment and functional development assignments;
- developing talent acquisition programs to address current and future critical talent needs to support our emerging markets and global growth;
- capturing the intellectual capital in the current workforce, disseminating it throughout our company and sharing it with customers as a competitive advantage;
- creating a total compensation program that provides our associates with equitable opportunities that are competitive and linked to business and individual performance while promoting employee behavior consistent with our code of business conduct and risk tolerance; and
- building a diverse and globally inclusive organization with a strong ethical and compliance culture based on transparency and trust.

We continue to focus on training through the distribution of electronic learning packages in multiple languages for our Code of Business Conduct, workplace harassment, facility safety, anti-bribery, export compliance and other regulatory and compliance programs. We also drive our training and leadership development programs through the deployment of general management development, manager competencies and a series of multi-lingual programs that focus on enhancing people management skills.

Sustainable Business Model

The sustainable business model initiative is focused on areas that have the potential of adversely affecting our reputation, limiting our financial flexibility or creating unnecessary risk for any of our stakeholders. We proactively administer an enterprise risk management program with regular reviews of high-level matters with our Board of Directors. We work with our capital sourcing partners to ensure that the terms of our credit facilities and long-term debt are appropriately aligned with our business strategy. We also train our associates on and monitor matters of a legal or ethical nature to support understanding and compliance on a global basis.

Competition

Despite consolidation activities in past years, the markets for our products remain highly competitive, with primary competitive drivers being price, reputation, project management, timeliness of delivery, quality, proximity to service centers and technical expertise, as well as contractual terms and previous installation history. In the pursuit of large capital projects, competitive drivers and competition vary depending on the industry and products involved. Industries experiencing slow growth generally tend to have a competitive environment more heavily influenced by price due to supply outweighing demand, and price competition tends to be more significant for original equipment orders than aftermarket services. Considering the domestic and global economic environments in 2016 and current forecasts for 2017, pricing was and may continue to be a particularly influential competitive factor. The unique competitive environments in each of our three business segments are discussed in more detail under the "Business Segments" heading below.

In the aftermarket portion of our business, we compete against large, well-established national and global competitors and, in some markets, against regional and local companies. In the oil and gas and chemical industries, the primary competitors for aftermarket services tend to be customers' own in-house capabilities. In the nuclear power generation industry, we possess certain competitive advantages due to our "N Stamp" certification, which is a prerequisite to serve customers in that industry, as well as our considerable base of proprietary knowledge. Aftermarket competition for standardized products is aggressive due to the existence of common standards allowing for easier replacement or repair of the installed products.

In the sale of aftermarket products and services, we benefit from our large installed base of pumps, valves and seals, which continually require maintenance, repair and replacement parts due to the nature of the products and the conditions under which they operate. Timeliness of delivery, quality and the proximity of service centers are important customer considerations when selecting a provider for aftermarket products and services. In geographic regions where we are locally positioned to provide a quick response, customers have traditionally relied on us, rather than our competitors, for aftermarket products relating to our highly-engineered and customized products, although we are seeing increased competition in this area.

Generally, our customers attempt to reduce the number of vendors from which they purchase, thereby reducing the size and diversity of their supply chain. Although vendor reduction programs could adversely affect our business, we have been successful in establishing long-term supply agreements with a number of customers. While the majority of these agreements do not provide us with exclusive rights, they can provide us a "preferred" status with our customers and thereby increase opportunities to win future business. We also utilize our LifeCycle Advantage program to establish fee-based contracts to manage customers' aftermarket requirements. These programs provide an opportunity to manage the customer's installed base and expand the business relationship with the customer.

Our ability to use our portfolio of products, solutions and services to meet customer needs is a competitive strength. Our market approach is to create value for our customers throughout the life cycle of their investments in flow control management. We continue to explore and develop potential new offerings in conjunction with our customers. In the early phases of project design, we endeavor to create value in optimizing the selection of equipment for the customer's specific application, as we are capable of providing technical expertise on product and system capabilities even outside the scope of our specific products, solutions and services. After the equipment is constructed and delivered to

the customer's site, we continue to create value through our aftermarket capabilities by optimizing the performance of the equipment over its operational life. Our skilled service personnel can provide these aftermarket services for our products, as well as many competitors' products, within the installed base. This value is further enhanced by the global reach of our QRCs and, when combined with our other solutions for our customers' flow control management needs, allows us to create value for our customers during all phases of the capital and operating expenditure cycles.

5

New Product Development

We spent \$42.8 million, \$45.9 million and \$40.9 million during 2016, 2015 and 2014, respectively, on company-sponsored R&D initiatives. Our R&D group consists of engineers involved in new product development and improvement of existing products. Additionally, we sponsor consortium programs for research with various universities and jointly conduct limited development work with certain vendors, licensees and customers. We believe our R&D expenditures are adequate to sustain our ongoing and necessary future product development. In addition, we work closely with our customers on customer-sponsored research activities to help execute their R&D initiatives in connection with our products and services. New product development in each of our three business segments is discussed in more detail under the "Business Segments" heading below.

Customers

We sell to a wide variety of customers globally including leading EPC firms, original equipment manufacturers, distributors and end users in several distinct industries: oil and gas, chemical, power generation, water management and general industries. We believe that we do not have sales to any individual customer that represent 10% or more of consolidated 2016 revenues. Customer information relating to each of our three business segments is discussed in more detail under the "Business Segments" heading below.

We are not normally required to carry unusually high amounts of inventory to meet customer delivery requirements, although higher backlog levels and longer lead times generally require higher amounts of inventory. We typically require advance cash payments from customers on longer lead time projects to help offset our investment in inventory. We have initiated programs targeted at improving our operational effectiveness to reduce our overall working capital needs. While we do provide cancellation policies through our contractual relationships, we generally do not provide rights of product return for our customers.

Selling and Distribution

We primarily distribute our products through direct sales by employees assigned to specific regions, industries or products. In addition, we use distributors and sales representatives to supplement our direct sales force in countries where it is more appropriate due to business practices or customs, or whenever the use of direct sales staff is not economically efficient. We generate a majority of our sales leads through existing relationships with vendors, customers and prospects or through referrals.

Intellectual Property

We own a number of trademarks and patents relating to the names and designs of our products. We consider our trademarks and patents to be valuable assets of our business. In addition, our pool of proprietary information, consisting of know-how and trade secrets related to the design, manufacture and operation of our products, is considered particularly valuable. Accordingly, we take proactive measures to protect such proprietary information. We generally own the rights to the products that we manufacture and sell and are unencumbered by licensing or franchise agreements. Our trademarks can typically be renewed indefinitely as long as they remain in use, whereas our existing patents generally expire 10 to 20 years from the dates they were filed, which has occurred at various times in the past. We do not believe that the expiration of any individual patent will have a material adverse impact on our business, financial condition or results of operations.

Raw Materials

The principal raw materials used in manufacturing our products are readily available and include ferrous and non-ferrous metals in the form of bar stock, machined castings, fasteners, forgings and motors, as well as silicon, carbon faces, gaskets and fluoropolymer components. A substantial volume of our raw materials is purchased from outside sources, and we have been able to develop a robust supply chain and anticipate no significant shortages of such materials in the future. We continually monitor the business conditions of our suppliers to manage competitive market conditions and to avoid potential supply disruptions. We continue to expand global sourcing to capitalize on localization in emerging markets and low-cost sources of purchased goods balanced with efficient consolidated and compliant logistics.

Metal castings used in the manufacture of our pump, valve, and mechanical seals are purchased from qualified and approved foundry sources. We remain vertically integrated with metal castings in certain strategic product families.

Concerning the products we supply to customers in the nuclear power generation industry, suppliers of raw materials for nuclear power generation markets must be qualified to meet the requirements of nuclear industry standards and governmental regulations. Supply channels for these materials are currently adequate, and we do not anticipate difficulty in obtaining such materials in the future.

Employees and Labor Relations

We have approximately 18,000 employees globally as of December 31, 2016. In the United States ("U.S."), a portion of the hourly employees at our pump manufacturing plant located in Vernon, California, our valve manufacturing plant located in Lynchburg, Virginia and our foundry located in Dayton, Ohio, are represented by unions.

Additionally, some employees at select facilities in the following countries are unionized or have employee works councils: Argentina, Australia, Austria, Brazil, Finland, France, Germany, India, Italy, Mexico, The Netherlands, Spain, South Africa, Sweden, Thailand and the United Kingdom ("U.K."). We believe relations with our employees throughout our operations are generally satisfactory, including those employees represented by unions and employee works councils. No unionized facility accounted for more than 10% of our consolidated 2016 revenues.

Environmental Regulations and Proceedings

We are subject to environmental laws and regulations in all jurisdictions in which we have operating facilities. These requirements primarily relate to the generation and disposal of waste, air emissions and waste water discharges. We periodically make capital expenditures to enhance our compliance with environmental requirements, as well as to abate and control pollution. At present, we have no plans for any material capital expenditures for environmental control equipment at any of our facilities. However, we have incurred and continue to incur operating costs relating to ongoing environmental compliance matters. Based on existing and proposed environmental requirements and our anticipated production schedule, we believe that future environmental compliance expenditures will not have a material adverse effect on our financial condition, results of operations or cash flows.

We use hazardous substances and generate hazardous wastes in many of our manufacturing and foundry operations. Most of our current and former properties are or have been used for industrial purposes and some may require clean-up of historical contamination. During the due diligence phase of our acquisitions, we conduct environmental site assessments to identify potential environmental liabilities and required clean-up measures. We are currently conducting follow-up investigation and/or remediation activities at those locations where we have known environmental concerns. We have cleaned up a majority of the sites with known historical contamination and are addressing the remaining identified issues.

Over the years, we have been involved as one of many potentially responsible parties ("PRP") at former public waste disposal sites that are or were subject to investigation and remediation. We are currently involved as a PRP at five Superfund sites. The sites are in various stages of evaluation by government authorities. Our total projected "fair share" cost allocation at these five sites is expected to be immaterial. See "Item 3. Legal Proceedings" included in this Annual Report for more information.

We have established reserves that we currently believe to be adequate to cover our currently identified on-site and off-site environmental liabilities.

Exports

Our export sales from the U.S. to foreign unaffiliated customers were \$259.1 million in 2016, \$295.6 million in 2015 and \$338.5 million in 2014.

Licenses are required from U.S. and other government agencies to export certain products. In particular, products with nuclear power generation and/or military applications are restricted, as are certain other pump, valve and seal products.

BUSINESS SEGMENTS

In addition to the business segment information presented below, Note 16 to our consolidated financial statements in Item 8 of this Annual Report contains additional financial information about our business segments and geographic areas in which we have conducted business in 2016, 2015 and 2014.

ENGINEERED PRODUCT DIVISION

Our largest business segment is EPD, through which we design, manufacture, distribute and service custom and other highly-engineered pumps and pump systems, mechanical seals, auxiliary systems, replacement parts and related services. EPD includes longer lead time, highly-engineered pump products, and shorter cycle engineered pumps and mechanical seals that are generally manufactured within shorter lead times. EPD also manufactures replacement parts and related equipment and provides a full array of replacement parts, repair and support services (collectively referred to as "aftermarket"). EPD products and services are primarily used by companies that operate in the oil and gas, power generation, chemical, water management and general industries. We market our pump and mechanical seal products through our global sales force and our regional QRCs and service and repair centers or through independent distributors and sales representatives. A portion of our mechanical seal products are sold directly to original equipment manufacturers for incorporation into rotating equipment requiring mechanical seals.

Our pump products are manufactured in a wide range of metal alloys and with a variety of configurations to meet the critical operating demands of our customers. Mechanical seals are critical to the reliable operation of rotating equipment in that they prevent leakage and emissions of hazardous substances from the rotating equipment and reduce shaft wear on the equipment caused by the use of non-mechanical seals. We also manufacture a gas-lubricated mechanical seal that is used in high-speed compressors for gas pipelines and in the oil and gas production and process markets. Our products are currently manufactured at 32 plants worldwide, 10 of which are located in Europe, 10 in North America, seven in Asia Pacific and five in Latin America.

We also conduct business through strategic foreign joint ventures. We have six unconsolidated joint ventures that are located in China, India, Japan, Saudi Arabia, South Korea and the United Arab Emirates, where a portion of our products are manufactured, assembled or serviced in these territories. These relationships provide numerous strategic opportunities, including increased access to our current and new markets, access to additional manufacturing capacity and expansion of our operational platform to support low-cost sourcing initiatives and capacity demands for other markets.

EPD Products

We manufacture more than 40 different active types of pumps and approximately 185 different models of mechanical seals and sealing systems. The following is a summary list of our EPD products and globally recognized brands:

EPD Product Types

Between Bearings Pumps	Overhung Pumps
<ul style="list-style-type: none"> • Single Case — Axially Split • Single Case — Radially Split • Double Case 	<ul style="list-style-type: none"> • API Process
Positive Displacement Pumps	Mechanical Seals and Seal Support Systems
<ul style="list-style-type: none"> • Multiphase • Screw 	<ul style="list-style-type: none"> • Gas Barrier Seals • Dry-Running Seals
Specialty Products	
<ul style="list-style-type: none"> • Nuclear Pumps • Nuclear Seals • Cryogenic Pumps • CVP Concrete Volute Pumps • Wireless Transmitters 	<ul style="list-style-type: none"> • Power Recovery — DWEER • Power Recovery — Hydroturbine • Energy Recovery Devices • Hydraulic Decoking Systems • API Slurry Pumps

EPD Brand Names

- BW Seals
- Byron Jackson
- Calder Energy Recovery Devices
- Cameron
- Durametalllic
- FEDD Wireless
- Five Star Seal
- Flowserve
- GASPAC™
- IDP
- Interseal
- Lawrence
- LifeCycle Advantage
- Niigata Worthington
- QRC™
- Pacific
- Pacific Weitz
- Pac-Seal
- ReadySeal
- United Centrifugal
- Western Land Roller
- Wilson-Snyder
- Worthington
- Worthington-Simpson

EPD Services

We provide engineered aftermarket services through our global network of 123 QRCs, some of which are co-located in manufacturing facilities, in 47 countries. Our EPD service personnel provide a comprehensive set of equipment services for flow management control systems, including installation, commissioning, repair, advanced diagnostics, re-rate and retrofit programs, machining and comprehensive asset management solutions. We provide asset management services and condition monitoring for rotating equipment through special contracts with many of our customers that reduce maintenance costs. A large portion of EPD's service work is performed on a quick response basis, and we offer 24-hour service in all of our major markets.

EPD New Product Development

Our investments in new product R&D continue to focus on increasing the capability of our products as customer applications become more advanced, demanding greater levels of production (i.e., flow, power and pressure) and under more extreme conditions beyond the level of traditional technology. We continue to develop innovations that improve product performance and our competitive position in the engineered equipment industry, specifically targeting pipeline, offshore and downstream applications for the oil and gas market. The emergence of extreme pressure applications prompted the development of an advanced stage design and construction of high pressure test capability necessary to validate the technology prior to introduction into the market.

As new sources of energy generation are explored, we continue to develop new product designs to support the most critical applications in the power generation market. New designs and qualification test programs continue to support the critical services found in the modern nuclear power generation plant. Continued engagement with our end users is exemplified through completion of advancements in coke cutting technology, nozzle design and auxiliary equipment improvements, as well as creation of an automated cutting system to improve operator safety.

We continue to address our core products with design enhancements to improve performance and the speed at which we can deliver our products. Application of advanced computational fluid dynamics methods utilizing unsteady flow analysis led to the development of an advanced inlet chamber and impeller vane design for high energy injection water pumps. Our engineering teams continue to apply and develop sophisticated design technology and methods supporting continuous improvement of our proven technology. Additionally, we are incentivizing our operations and tracking the R&D projects more closely, which is leading to broader engagement in developing new products.

In 2016, EPD continued to advance our Insight platform (formerly known as Technology Advantage) through the Integrated Solutions Organization ("ISO"). This platform utilizes a combination of our developed technologies and leading edge technology partners to increase our asset management and service capabilities for our end-user customers. These technologies include intelligent devices, advanced communication and security protocols, wireless and satellite communications and web-enabled data convergence. Additionally, we have been exploring the "additive manufacturing" opportunities in our products and auxiliary systems.

None of these newly developed products or services required the investment of a material amount of our assets or was otherwise material to our business.

EPD Customers

Our customer mix is diversified and includes leading EPC firms, original equipment manufacturers, distributors and end users. Our sales mix of original equipment products and aftermarket products and services diversifies our business and helps mitigate the impact of normal economic cycles on our business. Our sales are diversified among several industries, including oil and gas, power generation, chemical, water management and general industries.

EPD Competition

The pump and mechanical seal industry is highly fragmented, with hundreds of competitors. We compete, however, primarily with a limited number of large companies operating on a global scale. Competition among our closest competitors is generally driven by delivery times, expertise, price, breadth of product offerings, contractual terms, previous installation history and reputation for quality. Some of our largest industry competitors include: Sulzer Pumps; Ebara Corp.; SPX FLOW, Inc.; Eagle Burgmann, which is a joint venture of two traditional global seal manufacturers, A. W. Chesterton Co. and AES Corp.; John Crane Inc., a unit of Smiths Group Plc; and Weir Group Plc.

The pump and mechanical seal industry continues to undergo considerable consolidation, which is primarily driven by (i) the need to lower costs through reduction of excess capacity and (ii) customers' preference to align with global full service suppliers to simplify their supplier base. Despite the consolidation activity, the market remains highly competitive.

We believe that our strongest sources of competitive advantage rest with our extensive range of pumps for the oil and gas, chemical and power generation industries, our large installed base of products, our strong customer relationships, our more than 200 years of legacy experience in manufacturing and servicing pumping equipment, our reputation for providing quality engineering solutions and our ability to deliver engineered new seal product orders within 72 hours from the customer's request.

EPD Backlog

EPD's backlog of orders as of December 31, 2016 was \$966.8 million (including \$11.7 million of interdivision backlog, which is eliminated and not included in consolidated backlog), compared with \$1,157.3 million (including \$10.5 million of interdivision backlog) as of December 31, 2015. We expect to ship approximately 87% of December 31, 2016 backlog during 2017.

INDUSTRIAL PRODUCT DIVISION

Through IPD we design, manufacture, distribute and service pre-configured engineered pumps and pump systems, including submersible motors, for industrial markets. Our globalized operating platform, low-cost sourcing and continuous improvement initiatives are essential aspects of this business. IPD's standardized, general purpose pump products are primarily utilized by the oil and gas, chemical, water management, power generation and general industries. Our products are currently manufactured in 20 manufacturing facilities, five of which are located in the U.S and 10 in Europe, four in Asia, one in Latin America. IPD operates 32 QRCs worldwide, including 20 sites in Europe, six in the U.S., three in Asia Pacific and three in Latin America.

IPD Products

We manufacture approximately 40 different active types of pumps, which are available in a wide range of metal alloys and non-metallics with a variety of configurations to meet the critical operating demands of our customers. The following is a summary list of our IPD products and globally recognized brands:

IPD Pump Product Types

- | | |
|---------------------------------|--------------------------------|
| Overhung | Between Bearings |
| • Chemical Process ASME and ISO | • Side Channel Multistage |
| • Industrial Process | • Segmental Channel Multistage |
| • Slurry and Solids Handling | • Single Case — Axially Split |
| | • Single Case — Radially Split |

- | | |
|------------------------|--------------------------------|
| Specialty Products | Vertical |
| • Ag Chem | • Wet Pit and Suction Case API |
| • Molten Salt VTP Pump | • Deep Well Submersible Motor |
| • Submersible Pump | • Slurry and Solids Handling |
| • Thruster | • Sump |
| • Geothermal Deepwell | • Vacuum Systems |
| • Barge Pump | |
| • Sewage Submersible | Vacuum Systems |

- | | |
|-----------------------|---------------|
| | • Liquid Ring |
| Positive Displacement | • LR Systems |
| • Gear | • Dry Systems |

IPD Brand Names

- | | |
|---------------------------|-----------------------|
| • Aldrich | • Sier Bath |
| • Durco | • SIHI |
| • Halberg | • TKL |
| • IDP | • Western Land Roller |
| • Innomag | • Worthington |
| • Labour | • Worthington-Simpson |
| • Meregalli | |
| • Pacific | |
| • Pleuger & Byron Jackson | |
| • Scienco | |

IPD Services

We market our pump products through our worldwide sales force and our regional service and repair centers or through independent distributors and sales representatives. We provide an array of aftermarket services including product installation and commissioning services, spare parts, repairs, re-rate and upgrade solutions, advanced diagnostics and maintenance solutions through our global network of QRCs.

IPD New Product Development

Our IPD development projects target product feature enhancements, design improvements and sourcing opportunities that we believe will improve the competitive position of our industrial pump product lines. We will invest in our chemical product platform to expand and enhance our products offered to the global chemical industry.

We continue to address our core products with design enhancements to improve performance and the speed at which we can deliver our products. Successful new product release of permanent magnet motor technology in our submersible motor products demonstrated improved product efficiency. We will further our energy efficiency initiatives in response to various global governmental directives. Cost reduction projects incorporating product rationalization, value engineering, lean manufacturing and overhead reduction continue to be key drivers for IPD. None of these newly developed products or services required the investment of a material amount of our assets or was otherwise material.

IPD Customers

Our customer mix is diversified and includes leading EPC firms, original equipment manufacturers, distributors and end users. Our sales mix of original equipment products and aftermarket products and services diversifies our business and helps mitigate the impact of normal economic cycles on our business. Our sales are diversified among several industries, including oil and gas, chemical, water management, power generation and general industries.

IPD Competition

The industrial pump industry is highly fragmented, with many competitors. We compete, however, primarily with a limited number of large companies operating on a global scale. Competition among our closest competitors is generally driven by delivery times, expertise, price, breadth of product offerings, contractual terms, previous installation history and reputation for quality. Some of our largest industry competitors include ITT Industries, KSB Inc. and Sulzer Pumps.

We believe that our strongest sources of competitive advantage rest with our extensive range of pumps for the chemical industry, our large installed base, our strong customer relationships, our more than 200 years of legacy experience in manufacturing and servicing pumping equipment and our reputation for providing quality engineering solutions.

IPD Backlog

IPD's backlog of orders as of December 31, 2016 was \$373.5 million (including \$14.2 million of interdivision backlog, which is eliminated and not included in consolidated backlog), compared with \$424.6 million (including \$15.7 million of interdivision backlog) as of December 31, 2015. We expect to ship approximately 90% of December 31, 2016 backlog during 2017.

FLOW CONTROL DIVISION

FCD designs, manufactures, distributes and services a broad portfolio of industrial valve and automation solutions, including isolation and control valves, actuation, controls and related equipment. In addition, FCD offers energy management products such as steam traps, boiler controls and condensate and energy recovery systems. FCD leverages its experience and application know-how by offering a complete menu of engineering and project management services to complement its expansive product portfolio. FCD products are used to control, direct and manage the flow of liquids and gases and are an integral part of any flow control system. Our valve products are most often customized and engineered to perform specific functions within each customer's unique flow control environment.

Our flow control products are primarily used by companies operating in the chemical, power generation, oil and gas, water management and general industries. Our products are currently manufactured in 26 principal manufacturing facilities, five of which are located in the U.S., 13 located in Europe, seven located in Asia Pacific and one located in Latin America. FCD operates 32 QRCs worldwide, including 11 sites in Europe, 11 in the U.S., nine in Asia Pacific and one in Latin America.

FCD Products

Our valve, automation and controls product and solutions portfolio represents one of the most comprehensive in the flow control industry. Our products are used in a wide variety of applications, from general service to the most severe and demanding services, including those involving high levels of corrosion, extreme temperatures and/or pressures, zero fugitive emissions and emergency shutdown.

Our "smart" valve and diagnostic technologies integrate sensors, microprocessor controls and software into high performance integrated control valves, digital positioners and switchboxes for automated on/off valve assemblies and electric actuators. These technologies permit real-time system analysis, system warnings and remote indication of asset health. These technologies have been developed in response to the growing demand for reduced maintenance, improved process control efficiency and digital communications at the plant level. We are committed to further enhancing the quality of our product portfolio by continuing to upgrade our existing offerings with cutting-edge technologies.

Our valve automation products encompass a broad range of pneumatic, electric, hydraulic and stored energy actuation designs to take advantage of whatever power source the customer has available. FCD's actuation products can utilize the process fluid flowing through the pipeline as a source of power to actuate the valve. Our actuation products also cover one of the widest ranges of output torques in the industry, providing the ability to automate anything from the smallest linear globe valve to the largest multi-turn gate valve. Most importantly, FCD combines best-in-class mechanical designs with the latest in digital controls in order to provide complete integrated automation solutions that optimize the combined valve-actuator-controls package.

The following is a summary list of our generally available valve and automation products and globally recognized brands:

FCD Product Types

- Valve Automation Systems
- Control Valves
- Ball Valves
- Gate Valves
- Globe Valves
- Check Valves
- Butterfly Valves
- Lined Plug Valves
- Lined Ball Valves
- Lubricated Plug Valves
- Non-Lubricated Plug Valves
- Integrated Valve Controllers
- Diagnostic Software
- Electro Pneumatic Positioners
- Digital Positioners
- Pneumatic Positioners
- Intelligent Positioners
- Electric/Electronic Actuators
- Pneumatic Actuators
- Hydraulic Actuators
- Diaphragm Actuators
- Direct Gas and Gas-over-Oil Actuators
- Limit Switches
- Steam Traps
- Condensate and Energy Recovery Systems
- Boiler Controls
- Digital Communications
- Valve and Automation Repair Services

FCD Brand Names

- Accord
- Anchor/Darling
- Argus
- Atomac
- Automax
- Durco
- Edward
- Flowserve
- Gestra
- Kammer
- Limitorque
- McCANNA/MARPAC
- NAF
- Noble Alloy
- Norbro
- Nordstrom
- PMV
- Serck Audco
- Schmidt Armaturen
- Valbart
- Valtek
- Vogt
- Worcester Controls

FCD Services

Our service personnel provide comprehensive equipment maintenance services for flow control systems, including advanced diagnostics, repair, installation, commissioning, retrofit programs and field machining capabilities. A large portion of our service work is performed on a quick response basis, which includes 24-hour service in all of our major markets. We also provide in-house repair and return manufacturing services worldwide through our manufacturing facilities. We believe our ability to offer comprehensive, quick turnaround services provides us with a unique competitive advantage and unparalleled access to our customers' installed base of flow control products.

FCD New Product Development

Our R&D investment is focused on areas that will advance our technological leadership and further differentiate our competitive advantage from a product perspective. Investment has been focused on significantly enhancing the digital integration and interoperability of valve top works (e.g., positioners, actuators, limit switches and associated accessories) with Distributed Control Systems ("DCS"). We continue to pursue the development and deployment of next-generation hardware and software for valve diagnostics and the integration of the resulting device intelligence through the DCS to provide a practical and effective asset management capability for the end user. In addition to developing these new capabilities and value-added services, our investments also include product portfolio expansion and fundamental research in material sciences in order to increase the temperature, pressure and corrosion/erosion-resistance limits of existing products, as well as noise and cavitation reduction. These investments are made by adding new resources and talent to the organization, as well as leveraging the experience of EPD and IPD and increasing our collaboration with third parties. We expect to continue our R&D investments in the areas discussed above.

None of these newly developed valve products or services required the investment of a material amount of our assets or was otherwise material.

FCD Customers

Our customer mix spans several markets, including the chemical, power generation, oil and gas, water management, pulp and paper, mining and other general industries. Our product mix includes original equipment and aftermarket parts and services. FCD contracts with a variety of customers, ranging from EPC firms, to distributors, end users and other original equipment manufacturers.

FCD Competition

While in recent years the valve market has undergone a significant amount of consolidation, the market remains highly fragmented. Some of the largest valve industry competitors include Pentair Ltd., Cameron International Corp. (a Schlumberger company), Emerson Electric Co., General Electric Co. and Crane Co.

Our market research and assessments indicate that the top 10 global valve manufacturers collectively comprise less than 25% of the total valve market. Based on independent industry sources, we believe that we are the fourth largest industrial valve supplier in the world. We believe that our strongest sources of competitive advantage rest with our comprehensive portfolio of valve products and services, our focus on execution and our expertise in severe corrosion and erosion applications.

FCD Backlog

FCD's backlog of orders as of December 31, 2016 was \$584.5 million, compared with \$622.0 million as of December 31, 2015. We expect to ship approximately 87% of December 31, 2016 backlog during 2017.

AVAILABLE INFORMATION

We maintain an Internet web site at www.flowserve.com. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to those reports filed or furnished pursuant to Section 13(a) of the Securities Exchange Act of 1934 are made available free of charge through the "Investor Relations" section of our Internet web site as soon as reasonably practicable after we electronically file the reports with, or furnish the reports to, the U.S. Securities and Exchange Commission ("SEC").

Also available on our Internet web site are our Corporate Governance Guidelines for our Board of Directors and Code of Ethics and Business Conduct, as well as the charters of the Audit, Finance, Organization and Compensation and Corporate Governance and Nominating Committees of our Board of Directors and other important governance documents. All of the foregoing documents may be obtained through our Internet web site as noted above and are available in print without charge to shareholders who request them. Information contained on or available through our Internet web site is not incorporated into this Annual Report or any other document we file with, or furnish to, the SEC.

ITEM 1A. RISK FACTORS

Any of the events discussed as risk factors below may occur. If they do, our business, financial condition, results of operations and cash flows could be materially adversely affected. While we believe all known material risks are disclosed, additional risks and uncertainties not presently known to us, or that we currently deem immaterial, may also impair our business operations. Because of these risk factors, as well as other variables affecting our operating results, past financial performance may not be a reliable indicator of future performance, and historical trends should not be used to anticipate results or trends in future periods.

Our business depends on the levels of capital investment and maintenance expenditures by our customers, which in turn are affected by numerous factors, including the state of domestic and global economies, global energy demand, the cyclical nature of their markets, their liquidity and the condition of global credit and capital markets. Demand for most of our products and services depends on the level of new capital investment and planned maintenance expenditures by our customers. The level of capital expenditures by our customers depends, in turn, on general economic conditions, availability of credit, economic conditions within their respective industries and expectations of future market behavior. Additionally, volatility in commodity prices can negatively affect the level of these activities and can result in postponement of capital spending decisions or the delay or cancellation of existing orders. The ability of our customers to finance capital investment and maintenance may also be affected by factors independent of the conditions in their industry, such as the condition of global credit and capital markets.

The businesses of many of our customers, particularly oil and gas companies, chemical companies and general industrial companies, are to varying degrees cyclical and have experienced periodic downturns. Our customers in these industries, particularly those whose demand for our products and services is primarily profit-driven, historically have tended to delay large capital projects, including expensive maintenance and upgrades, during economic downturns. For example, our chemical customers generally tend to reduce their spending on capital investments and operate their facilities at lower levels in a soft economic environment, which reduces demand for our products and services. Additionally, fluctuating energy demand forecasts and lingering uncertainty concerning commodity pricing, specifically the price of oil, can cause our customers to be more conservative in their capital planning, which may reduce demand for our products and services. Reduced demand for our products and services could result in the delay or cancellation of existing orders or lead to excess manufacturing capacity, which unfavorably impacts our absorption of fixed manufacturing costs. This reduced demand may also erode average selling prices in our industry. Any of these results could adversely affect our business, financial condition, results of operations and cash flows.

Additionally, some of our customers may delay capital investment and maintenance even during favorable conditions in their industries or markets. Despite these favorable conditions, the general health of global credit and capital markets and our customers' ability to access such markets may impact investments in large capital projects, including necessary maintenance and upgrades. In addition, the liquidity and financial position of our customers could impact capital investment decisions and their ability to pay in full and/or on a timely basis. Any of these factors, whether individually or in the aggregate, could have a material adverse effect on our customers and, in turn, our business, financial condition, results of operations and cash flows.

Volatility in commodity prices, effects from credit and capital market conditions and global economic growth forecasts could prompt customers to delay or cancel existing orders, which could adversely affect the viability of our backlog and could impede our ability to realize revenues on our backlog.

Our backlog represents the value of uncompleted customer orders. While we cannot be certain that reported backlog will be indicative of future results, our ability to accurately value our backlog can be adversely affected by numerous factors, including the health of our customers' businesses and their access to capital, volatility in commodity prices (e.g., copper, nickel, stainless steel) and economic uncertainty. While we attempt to mitigate the financial consequences of order delays and cancellations through contractual provisions and other means, if we were to experience a significant increase in order delays or cancellations that can result from the aforementioned economic conditions or other factors beyond our control, it could impede or delay our ability to realize anticipated revenues on our backlog. Such a loss of anticipated revenues could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We may be unable to deliver our backlog on time, which could affect our revenues, future sales and profitability and our relationships with customers.

At December 31, 2016, backlog was \$1.9 billion. In 2017, our ability to meet customer delivery schedules for backlog is dependent on a number of factors including, but not limited to, sufficient manufacturing plant capacity, adequate supply channel access to the raw materials and other inventory required for production, an adequately trained and capable workforce, project engineering expertise for certain large projects and appropriate planning and scheduling of manufacturing resources. Many of the contracts we enter into with our customers require long manufacturing lead times and contain penalty clauses related to on-time delivery. Failure to deliver in accordance with customer expectations could subject us to financial penalties, may result in damage to existing customer relationships and could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We sell our products in highly competitive markets, which results in pressure on our profit margins and limits our ability to maintain or increase the market share of our products.

The markets for our products and services are geographically diverse and highly competitive. We compete against large and well-established national and global companies, as well as regional and local companies, low-cost replicators of spare parts and in-house maintenance departments of our end-user customers. We compete based on price, technical expertise, timeliness of delivery, contractual terms, previous installation history and reputation for quality and reliability. Competitive environments in slow-growth industries and for original equipment orders have been inherently more influenced by pricing and domestic and global economic conditions and current economic forecasts suggest that the competitive influence of pricing has broadened. Additionally, some of our customers have been attempting to reduce the number of vendors from which they purchase in order to reduce the size and diversity of their supply chain. To remain competitive, we must invest in manufacturing, marketing, customer service and support and our distribution networks. No assurances can be made that we will have sufficient resources to continue to make the investment required to maintain or increase our market share or that our investments will be successful. If we do not compete successfully, our business, financial condition, results of operations and cash flows could be materially adversely affected.

If we are unable to obtain raw materials at favorable prices, our operating margins and results of operations may be adversely affected.

We purchase substantially all electric power and other raw materials we use in the manufacturing of our products from outside sources. The costs of these raw materials have been volatile historically and are influenced by factors that are outside our control. In recent years, the prices for energy, metal alloys, nickel and certain other of our raw materials have been volatile. While we strive to offset our increased costs through supply chain management, contractual provisions and our CIP initiative, where gains are achieved in operational efficiencies, our operating margins and results of operations and cash flows may be adversely affected if we are unable to pass increases in the costs of our raw materials on to our customers or operational efficiencies are not achieved.

Economic, political and other risks associated with international operations could adversely affect our business.

A substantial portion of our operations is conducted and located outside the U.S. We have manufacturing, sales or service facilities in more than 50 countries and sell to customers in over 90 countries, in addition to the

U.S. Moreover, we primarily outsource certain of our manufacturing and engineering functions to, and source our raw materials and components from, China, Eastern Europe, India and Latin America. Accordingly, our business and results of operations are subject to risks associated with doing business internationally, including:

- instability in a specific country's or region's political or economic conditions, particularly economic conditions in Europe, and political conditions in Russia, the Middle East, North Africa, Latin America and other emerging markets;
- trade protection measures, such as tariff increases, and import and export licensing and control requirements;
- political or economic instability relating to the recent Brexit referendum in the United Kingdom;
- uncertainties related to any geopolitical, economic and regulatory effects or changes due to the 2016 U.S. presidential election;
- potentially negative consequences from changes in tax laws or tax examinations;
- difficulty in staffing and managing widespread operations;

- increased aging and slower collection of receivables, particularly in Latin America and other emerging markets;
- difficulty of enforcing agreements and collecting receivables through some foreign legal systems;
- differing and, in some cases, more stringent labor regulations;
- potentially negative consequences from fluctuations in foreign currency exchange rates;
- partial or total expropriation;
- differing protection of intellectual property;
- inability to repatriate income or capital; and
- difficulty in administering and enforcing corporate policies, which may be different than the customary business practices of local cultures.

For example, political unrest or work stoppages could negatively impact the demand for our products from customers in affected countries and other customers, such as U.S. oil refineries, that could be affected by the resulting disruption in the supply of crude oil. Similarly, military conflicts in Russia, the Middle East and North Africa could soften the level of capital investment and demand for our products and services.

Some of the risks outlined above are particularly prevalent in Venezuela. The operating environment in Venezuela is challenging, with high inflation, increased risk of political and economic instability and increased government restrictions. As a result of these factors, we have experienced delays in payments from the national oil company in Venezuela, our primary Venezuelan customer, though these amounts are not disputed. Due to certain actions of this customer and the diminished activity of business and payments in 2016, we have estimated that our ability to fully collect the accounts receivable from our primary Venezuelan customer has become less than probable and we recorded a charge to selling, general and administrative expense ("SG&A") to fully reserve for those potential uncollectible accounts receivable and a charge to cost of sales ("COS") to reserve for related net inventory exposures. For additional information, see the discussion in Item 7 of this Annual Report and under Note 1 to our consolidated financial statements included in Item 8 of this Annual Report. Going forward, additional government actions, political and labor unrest, or other economic headwinds, including the Venezuelan government's inability to fulfill its fiscal obligations, could have further adverse impacts on our ability to fully collect our receivable and our business in Venezuela.

In order to manage our day-to-day operations, we must overcome cultural and language barriers and assimilate different business practices. In addition, we are required to create compensation programs, employment policies and other administrative programs that comply with laws of multiple countries. We also must communicate and monitor standards and directives across our global network. Our failure to successfully manage our geographically diverse operations could impair our ability to react quickly to changing business and market conditions and to enforce compliance with standards and procedures.

Our future success will depend, in large part, on our ability to anticipate and effectively manage these and other risks associated with our international operations. Any of these factors could, however, materially adversely affect our international operations and, consequently, our financial condition, results of operations and cash flows.

Our international operations and foreign subsidiaries are subject to a variety of complex and continually changing laws and regulations.

Due to the international scope of our operations, the system of laws and regulations to which we are subject is complex and includes, without limitation, regulations issued by the U.S. Customs and Border Protection, the U.S. Department of Commerce's Bureau of Industry and Security, the U.S. Treasury Department's Office of Foreign Assets Control and various foreign governmental agencies, including applicable export controls, customs, currency exchange control and transfer pricing regulations, as applicable. No assurances can be made that we will continue to be found to be operating in compliance with, or be able to detect violations of, any such laws or regulations. In addition, we cannot predict the nature, scope or effect of future regulatory requirements to which our international operations might be subject or the manner in which existing laws might be administered or interpreted.

There may be uncertainty as to the position the U.S. will take with respect to world affairs and events following the 2016 U.S. presidential election and related change in the U.S. political agenda, coupled with the transition of administrations. This uncertainty may relate to such issues as the new administration's support or plans for new or existing treaty and trade relationships with other countries, such as the January 2017 U.S. withdrawal from the Trans-Pacific Partnership, which may affect restrictions or tariffs imposed on products we buy or sell. This

uncertainty, together with other key global events during

17

2016 (such as the continuing uncertainty arising from the Brexit referendum in the U.K. as well as ongoing terrorist activity), may adversely impact the ability or willingness of non-U.S. companies to transact business in the U.S. This uncertainty may also affect regulations and trade agreements affecting U.S. companies, global stock markets (including the NYSE, on which our common shares are traded), currency exchange rates, and general global economic conditions. All of these factors are outside of our control, but may nonetheless cause us to adjust our strategy in order to compete effectively in global markets.

Our international operations expose us to fluctuations in foreign currency exchange rates.

A significant portion of our revenue and certain of our costs, assets and liabilities, are denominated in currencies other than the U.S. dollar. The primary currencies to which we have exposure are the Euro, British pound, Mexican peso, Brazilian real, Indian rupee, Japanese yen, Singapore dollar, Argentine peso, Canadian dollar, Australian dollar, Chinese yuan, Colombian peso, Chilean peso and South African rand. Certain of the foreign currencies to which we have exposure, such as the Venezuelan bolivar and Argentine peso, have undergone significant devaluation in the past, which can reduce the value of our local monetary assets, reduce the U.S. dollar value of our local cash flow, generate local currency losses that may impact our ability to pay future dividends from our subsidiary to the parent company and potentially reduce the U.S. dollar value of future local net income. Although we enter into forward exchange contracts to economically hedge some of our risks associated with transactions denominated in certain foreign currencies, no assurances can be made that exchange rate fluctuations will not adversely affect our financial condition, results of operations and cash flows.

We could be adversely affected by violations of the U.S. Foreign Corrupt Practices Act and similar worldwide anti-bribery laws and regulations.

The U.S. Foreign Corrupt Practices Act ("FCPA") and similar anti-bribery laws and regulations in other jurisdictions, such as the UK Bribery Act, generally prohibit companies and their intermediaries from making improper payments to government officials for the purpose of obtaining or retaining business or securing an improper advantage. Because we operate in many parts of the world and sell to industries that have experienced corruption to some degree, our policies mandate compliance with applicable anti-bribery laws worldwide. If we are found to be in violation of the FCPA or other similar anti-bribery laws or regulations, whether due to our or others' actions or inadvertence, we could be subject to civil and criminal penalties or other sanctions that could have a material adverse impact on our business, financial condition, results of operations and cash flows. In addition, actual or alleged violations could damage our reputation or ability to do business.

Terrorist acts, conflicts and wars may materially adversely affect our business, financial condition and results of operations and may adversely affect the market for our common stock.

As a global company with a large international footprint, we are subject to increased risk of damage or disruption to us, our employees, facilities, partners, suppliers, distributors, resellers or customers due to terrorist acts, conflicts and wars, wherever located around the world. The potential for future attacks, the national and international responses to attacks or perceived threats to national security, and other actual or potential conflicts or wars, such as the Israeli-Hamas conflict and ongoing instability in Syria and Egypt, have created many economic and political uncertainties. In addition, as a global company with headquarters and significant operations located in the U.S., actions against or by the U.S. may impact our business or employees. Although it is impossible to predict the occurrences or consequences of any such events, they could result in a decrease in demand for our products, make it difficult or impossible to deliver products to our customers or to receive components from our suppliers, create delays and inefficiencies in our supply chain and pose risks to our employees, resulting in the need to impose travel restrictions, any of which could adversely affect our business, financial condition, results of operations and cash flows.

Environmental compliance costs and liabilities could adversely affect our financial condition, results of operations and cash flows.

Our operations and properties are subject to regulation under environmental laws, which can impose substantial sanctions for violations. We must conform our operations to applicable regulatory requirements and adapt to changes in such requirements in all countries in which we operate.

We use hazardous substances and generate hazardous wastes in many of our manufacturing and foundry operations. Most of our current and former properties are or have been used for industrial purposes, and some may require

clean-up of historical contamination. We are currently conducting investigation and/or remediation activities at a number of locations where we have known environmental concerns. In addition, we have been identified as one of many PRPs at five Superfund sites. The projected cost of remediation at these sites, as well as our alleged "fair share" allocation, while not anticipated to

be material, has been reserved. However, until all studies have been completed and the parties have either negotiated an amicable resolution or the matter has been judicially resolved, some degree of uncertainty remains.

We have incurred, and expect to continue to incur, operating and capital costs to comply with environmental requirements. In addition, new laws and regulations, stricter enforcement of existing requirements, the discovery of previously unknown contamination or the imposition of new clean-up requirements could require us to incur costs or become the basis for new or increased liabilities. Moreover, environmental and sustainability initiatives, practices, rules and regulations are under increasing scrutiny of both governmental and non-governmental bodies, which can cause rapid change in operational practices, standards and expectations and, in turn, increase our compliance costs. Any of these factors could have a material adverse effect on our financial condition, results of operations and cash flows.

We are party to asbestos-containing product litigation that could adversely affect our financial condition, results of operations and cash flows.

We are a defendant in a substantial number of lawsuits that seek to recover damages for personal injury allegedly resulting from exposure to asbestos-containing products formerly manufactured and/or distributed by us. Such products were used as internal components of process equipment, and we do not believe that there was any significant emission of asbestos-containing fibers during the use of this equipment. Although we are defending these allegations vigorously and believe that a high percentage of these lawsuits are covered by insurance or indemnities from other companies, there can be no assurance that we will prevail or that coverage or payments made by insurance or such other companies would be adequate. Unfavorable rulings, judgments or settlement terms could have a material adverse impact on our business, financial condition, results of operations and cash flows.

Our business may be adversely impacted by work stoppages and other labor matters.

As of December 31, 2016, we had approximately 18,000 employees, of which approximately 5,000 were located in the U.S. Approximately 5% of our U.S. employees are represented by unions. We also have unionized employees or employee work councils in Argentina, Australia, Austria, Brazil, Finland, France, Germany, India, Italy, Mexico, The Netherlands, Spain, South Africa, Sweden, Thailand and the U.K. No individual unionized facility produces more than 10% of our revenues. Although we believe that our relations with our employees are generally satisfactory and we have not experienced any material strikes or work stoppages recently, no assurances can be made that we will not in the future experience these and other types of conflicts with labor unions, works councils, other groups representing employees or our employees generally, or that any future negotiations with our labor unions will not result in significant increases in our cost of labor.

Our ability to implement our business strategy and serve our customers is dependent upon the continuing ability to employ talented professionals and attract, train, develop and retain a skilled workforce. We are subject to the risk that we will not be able to effectively replace the knowledge and expertise of an aging workforce as workers retire.

Without a properly skilled and experienced workforce, our costs, including productivity costs and costs to replace employees may increase, and this could negatively impact our earnings.

We depend on key personnel, the loss of whom would harm our business.

Our future success will depend in part on the continued service of key executive officers and personnel. The loss of the services of any key individual could harm our business. Our future success also depends on our ability to recruit, retain and engage our personnel sufficiently, both to maintain our current business and to execute our strategic initiatives. Competition for officers and employees in our industry is intense and we may not be successful in attracting and retaining such personnel.

We have recently experienced changes in our senior management, including the resignation and retirement of Mark A. Blinn, our President and Chief Executive Officer, effective March 31, 2017, and the hiring of his successor, R. Scott Rowe.

Inability to protect our intellectual property could negatively affect our competitive position.

We rely on a combination of patents, copyrights, trademarks, trade secrets, confidentiality provisions and licensing arrangements to establish and protect our proprietary rights. We cannot guarantee, however, that the steps we have taken to protect our intellectual property will be adequate to prevent infringement of our rights or misappropriation of our technology. For example, effective patent, trademark, copyright and trade secret protection may be unavailable or limited in some of the foreign countries in which we operate. In addition, while we generally enter into confidentiality

agreements with our employees and third parties to protect our intellectual property, such confidentiality agreements could be breached or otherwise may not provide meaningful protection for our trade secrets and know-how related to the design, manufacture or operation of our products. If it became necessary for us to resort to litigation to protect our intellectual property rights, any proceedings could

be burdensome and costly, and we may not prevail. Further, adequate remedies may not be available in the event of an unauthorized use or disclosure of our trade secrets and manufacturing expertise. If we fail to successfully enforce our intellectual property rights, our competitive position could suffer, which could harm our business, financial condition, results of operations and cash flows.

Significant changes in pension fund investment performance or assumptions changes may have a material effect on the valuation of our obligations under our defined benefit pension plans, the funded status of these plans and our pension expense.

We maintain defined benefit pension plans that are required to be funded in the U.S., Belgium, Canada, India, Italy, Mexico, The Netherlands, Switzerland and the U.K., and defined benefit plans that are not required to be funded in Austria, France, Germany, Japan and Sweden. Our pension liability is materially affected by the discount rate used to measure our pension obligations and, in the case of the plans that are required to be funded, the level of plan assets available to fund those obligations and the expected long-term rate of return on plan assets. A change in the discount rate can result in a significant increase or decrease in the valuation of pension obligations, affecting the reported status of our pension plans and our pension expense. Significant changes in investment performance or a change in the portfolio mix of invested assets can result in increases and decreases in the valuation of plan assets or in a change of the expected rate of return on plan assets. This impact may be particularly prevalent where we maintain significant concentrations of specified investments, such as the U.K. equity and fixed income securities in our non-U.S. defined benefit plans. Changes in the expected return on plan assets assumption can result in significant changes in our pension expense and future funding requirements.

We continually review our funding policy related to our U.S. pension plan in accordance with applicable laws and regulations. U.S. regulations have increased the minimum level of funding for U.S. pension plans in prior years, which has at times required significant contributions to our pension plans. Contributions to our pension plans reduce the availability of our cash flows to fund working capital, capital expenditures, R&D efforts and other general corporate purposes.

We may incur material costs as a result of product liability and warranty claims, which could adversely affect our financial condition, results of operations and cash flows.

We may be exposed to product liability and warranty claims in the event that the use of one of our products results in, or is alleged to result in, bodily injury and/or property damage or our products actually or allegedly fail to perform as expected. While we maintain insurance coverage with respect to certain product liability claims, we may not be able to obtain such insurance on acceptable terms in the future, and any such insurance may not provide adequate coverage against product liability claims. In addition, product liability claims can be expensive to defend and can divert the attention of management and other personnel for significant periods of time, regardless of the ultimate outcome. An unsuccessful defense of a product liability claim could have an adverse effect on our business, financial condition, results of operations and cash flows. Even if we are successful in defending against a claim relating to our products, claims of this nature could cause our customers to lose confidence in our products and our company. Warranty claims are not generally covered by insurance, and we may incur significant warranty costs in the future for which we would not be reimbursed.

The recording of increased deferred tax asset valuation allowances in the future or the impact of tax law changes on such deferred tax assets could affect our operating results.

We currently have significant net deferred tax assets resulting from tax credit carryforwards, net operating losses and other deductible temporary differences that are available to reduce taxable income in future periods. Based on our assessment of our deferred tax assets, we determined, based on projected future income and certain available tax planning strategies, that approximately \$290 million of our deferred tax assets will more likely than not be realized in the future, and no valuation allowance is currently required for this portion of our deferred tax assets. Should we determine in the future that these assets will not be realized we will be required to record an additional valuation allowance in connection with these deferred tax assets and our operating results would be adversely affected in the period such determination is made. In addition, tax law changes could negatively impact our deferred tax assets. Our outstanding indebtedness and the restrictive covenants in the agreements governing our indebtedness limit our operating and financial flexibility.

We are required to make scheduled repayments and, under certain events of default, mandatory repayments on our outstanding indebtedness, which may require us to dedicate a substantial portion of our cash flows from operations to payments on our indebtedness, thereby reducing the availability of our cash flows to fund working capital, capital expenditures, R&D

20

efforts and other general corporate purposes, such as dividend payments and share repurchases, and could generally limit our flexibility in planning for, or reacting to, changes in our business and industry.

In addition, the agreements governing our indebtedness impose certain operating and financial restrictions on us and somewhat limit management's discretion in operating our businesses. These agreements limit or restrict our ability, among other things, to: incur additional debt; pay dividends and make other distributions; prepay subordinated debt; make investments and other restricted payments; create liens; sell assets; and enter into transactions with affiliates. We are also required to maintain certain debt ratings, comply with leverage and interest coverage financial covenants and deliver to our lenders audited annual and unaudited quarterly financial statements. Our ability to comply with these covenants may be affected by events beyond our control. Failure to comply with these covenants could result in an event of default which, if not cured or waived, may have a material adverse effect on our business, financial condition, results of operations and cash flows.

We may not be able to continue to expand our market presence through acquisitions, and any future acquisitions may present unforeseen integration difficulties or costs.

Since 1997, we have expanded through a number of acquisitions, and we may pursue strategic acquisitions of businesses in the future. Our ability to implement this growth strategy will be limited by our ability to identify appropriate acquisition candidates, covenants in our credit agreement and other debt agreements and our financial resources, including available cash and borrowing capacity. Acquisitions may require additional debt financing, resulting in higher leverage and an increase in interest expense. In addition, acquisitions may require large one-time charges and can result in the incurrence of contingent liabilities, adverse tax consequences, substantial depreciation or deferred compensation charges, the amortization of identifiable purchased intangible assets or impairment of goodwill, any of which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Should we acquire another business, the process of integrating acquired operations into our existing operations may create operating difficulties and may require significant financial and managerial resources that would otherwise be available for the ongoing development or expansion of existing operations. Some of the more common challenges associated with acquisitions that we may experience include:

- loss of key employees or customers of the acquired company;
- conforming the acquired company's standards, processes, procedures and controls, including accounting systems and controls, with our operations, which could cause deficiencies related to our internal control over financial reporting;
- coordinating operations that are increased in scope, geographic diversity and complexity;
- retooling and reprogramming of equipment;
- hiring additional management and other critical personnel; and
- the diversion of management's attention from our day-to-day operations.

Further, no guarantees can be made that we would realize the cost savings, synergies or revenue enhancements that we may anticipate from any acquisition, or that we will realize such benefits within the time frame that we expect. If we are not able to timely address the challenges associated with acquisitions and successfully integrate acquired businesses, or if our integrated product and service offerings fail to achieve market acceptance, our business could be adversely affected.

Goodwill impairment could negatively impact our net income and stockholders' equity.

Goodwill is not amortized, but is tested for impairment at the reporting unit level, which is an operating segment or one level below an operating segment. Goodwill is required to be tested for impairment annually and between annual tests if events or circumstances indicate that it is more likely than not that the fair value of a reporting unit is less than its carrying value. Reductions in or impairment of the value of our goodwill or other intangible assets will result in charges against our earnings, which could have a material adverse effect on our reported results of operations and financial position in future periods.

There are numerous risks that may cause the fair value of a reporting unit to fall below its carrying amount, which could lead to the measurement and recognition of goodwill impairment. These risks include, but are not limited to, lowered expectations of future financial results, adverse changes in the business climate, increase in the discount rate, an adverse action or assessment by a regulator, the loss of key personnel, a more-likely-than-not expectation that all or a significant portion of a reporting unit may be disposed of, failure to realize anticipated synergies from acquisitions, a

sustained decline

21

in the Company's market capitalization, and significant, prolonged negative variances between actual and expected financial results. In recent years, the estimated fair value of EPO and IPD have fluctuated, partially due to broad-based capital spending declines and heightened pricing pressures experienced in the oil and gas markets. Although we have concluded that there is no impairment on the goodwill associated with our EPO and IPD reporting units as of December 31, 2016, we will continue to monitor their performance and related market conditions for future indicators of potential impairment. For additional information, see the discussion in Item 7 of this Annual Report and under Note 1 to our consolidated financial statements included in Item 8 of this Annual Report.

Cybersecurity threats could disrupt our business and result in the loss of critical and confidential information. Our information technology networks and related systems and devices are critical to the operation of our business and essential to our ability to successfully perform day-to-day operations. Cybersecurity breaches could expose us to a risk of loss, misuse, or interruption of sensitive and critical information and functions, including our proprietary information and information related to our customers, suppliers and employees. While we devote substantial resources to maintaining adequate levels of cybersecurity, there can be no assurance that we will be able to prevent all of the rapidly evolving forms of increasingly sophisticated and frequent cyberattacks. The potential consequences of a material cybersecurity incident include reputational damage, litigation with third parties, regulatory actions, theft of intellectual property, and increased cybersecurity protection and remediation costs. If we are unable to prevent, detect or adequately respond to security breaches, our operations could be disrupted and our business could be materially and adversely affected.

If we are not able to successfully execute and realize the expected financial benefits from our strategic realignment and other cost-saving initiatives, our business could be adversely affected.

In April 2015, we announced cost saving actions and a strategic manufacturing optimization initiative intended to reduce our cost structure and drive an optimized, low-cost manufacturing footprint. This initiative was expanded in the latter half of 2015 and the beginning of 2016 to include additional realignment activities that will continue beyond 2016. This initiative will involve reducing our workforce, accelerating structural changes in our global manufacturing footprint through leveraging investments in low-cost regions, additional consolidation of product manufacturing and further SG&A reductions.

While we expect significant financial benefits from our strategic realignment, we may not realize the full benefits that we currently expect within the anticipated time frame or at all. Adverse effects from our execution of realignment activities could interfere with our realization of anticipated synergies, customer service improvements and cost savings from these strategic initiatives. Additionally, our ability to fully realize the benefits and implement the realignment program may be limited by the terms of our credit facilities and other contractual commitments.

Moreover, because such expenses are difficult to predict and are necessarily inexact, we may incur substantial expenses in connection with the execution of our realignment plans in excess of what is currently forecast. Further, realignment activities are a complex and time-consuming process that can place substantial demands on management, which could divert attention from other business priorities or disrupt our daily operations. Any of these failures could, in turn, materially adversely affect our business, financial condition, results of operations and cash flows, which could constrain our liquidity.

If these measures are not successful or sustainable, we may undertake additional realignment and cost reduction efforts, which could result in future charges. Moreover, our ability to achieve our other strategic goals and business plans may be adversely affected, and we could experience business disruptions with customers and elsewhere if our realignment efforts prove ineffective.

Forward-Looking Information is Subject to Risk and Uncertainty

This Annual Report and other written reports and oral statements we make from time-to-time include "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical facts included in this Annual Report regarding our financial position, business strategy, plans and objectives of management for future operations, industry conditions, market conditions and indebtedness covenant compliance are forward-looking statements. In some cases forward looking statements can be identified by terms such as "may," "should," "expects," "could," "intends," "projects," "predicts," "plans," "anticipates," "estimates," "believes," "forecasts" or other comparable terminology. These statements are not historical facts or guarantees of future

performance, but instead are based on current expectations and are subject to significant risks, uncertainties and other factors, many of which are outside of our control.

We have identified factors that could cause actual plans or results to differ materially from those included in any forward-looking statements. These factors include those described above under this "Risk Factors" heading, or as may be identified in our other SEC filings from time to time. These uncertainties are beyond our ability to control, and in many cases, it is not possible to foresee or identify all the factors that may affect our future performance or any forward-looking information, and

new risk factors can emerge from time to time. Given these risks and uncertainties, undue reliance should not be placed on forward-looking statements as a prediction of actual results.

All forward-looking statements included in this Annual Report are based on information available to us on the date of this Annual Report and the risk that actual results will differ materially from expectations expressed in this report will increase with the passage of time. We undertake no obligation, and disclaim any duty, to publicly update or revise any forward-looking statement or disclose any facts, events or circumstances that occur after the date hereof that may affect the accuracy of any forward-looking statement, whether as a result of new information, future events, changes in our expectations or otherwise. This discussion is provided as permitted by the Private Securities Litigation Reform Act of 1995 and all of our forward-looking statements are expressly qualified in their entirety by the cautionary statements contained or referenced in this section.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our principal executive offices, including our global headquarters, are located at 5215 N. O'Connor Boulevard, Suite 2300, Irving, Texas 75039. Our global headquarters is a leased facility, which we began to occupy on January 1, 2004. In September 2011, we extended our original lease term an additional 10 years to December 31, 2023. We have the option to renew the current lease for two additional five-year periods. We currently occupy 125,000 square feet at this facility.

Our major manufacturing facilities (those with 50,000 or more square feet of manufacturing capacity) operating at December 31, 2016 are presented in the table below. See "Item 1. Business" in this Annual Report for further information with respect to all of our manufacturing and operational facilities, including QRCs.

	Number of Facilities	Approximate Square Footage
EPD		
U.S.	4	725,000
Non-U.S.	15	2,741,000
IPD		
U.S.	4	593,000
Non-U.S.	10	2,648,000
FCD		
U.S.	5	1,027,000
Non-U.S.	12	1,764,000

We own the majority of our manufacturing facilities, and those manufacturing facilities we do not own are leased. We also maintain a substantial network of U.S. and foreign service centers and sales offices, most of which are leased. The majority of our manufacturing leased facilities are covered by lease agreements with terms ranging from two to seven years, with individual lease terms generally varying based on the facilities' primary usage. We believe we will be able to extend leases on our various facilities as necessary, as they expire.

We believe that our current facilities are adequate to meet the requirements of our present and foreseeable future operations. We continue to review our capacity requirements as part of our strategy to optimize our global manufacturing efficiency. See Note 10 to our consolidated financial statements included in Item 8 of this Annual Report for additional information regarding our operating lease obligations.

ITEM 3. LEGAL PROCEEDINGS

We are party to the legal proceedings that are described in Note 12 to our consolidated financial statements included in Item 8 of this Annual Report, and such disclosure is incorporated by reference into this Item 3. In addition to the foregoing, we and our subsidiaries are named defendants in certain other routine lawsuits incidental to our business and are involved from time to time as parties to governmental proceedings, all arising in the ordinary course of business. Although the outcome

of lawsuits or other proceedings involving us and our subsidiaries cannot be predicted with certainty, and the amount of any liability that could arise with respect to such lawsuits or other proceedings cannot be predicted accurately, management does not currently expect these matters, either individually or in the aggregate, to have a material effect on our financial position, results of operations or cash flows. We have established reserves covering exposures relating to contingencies to the extent believed to be reasonably estimable and probable based on past experience and available facts.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS 5. AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information and Dividends

Our common stock is traded on the New York Stock Exchange ("NYSE") under the symbol "FLS." On February 10, 2017, our records showed 1,113 shareholders of record. The following table sets forth the range of high and low prices per share of our common stock as reported by the NYSE for the periods indicated.

PRICE RANGE OF FLOWSERVE COMMON STOCK

(Intraday High/Low Prices)

	2016	2015
First Quarter	\$47.21/\$35.40	\$64.41/\$52.75
Second Quarter	52.32/42.10	59.99/51.14
Third Quarter	49.45/44.17	53.01/39.47
Fourth Quarter	51.72/41.35	48.64/39.72

The table below presents declaration, record and payment dates, as well as the per share amounts, of dividends on our common stock during 2016 and 2015:

Declaration Date	Record Date	Payment Date	Dividend Per Share
December 23, 2016	January 3, 2017	January 13, 2017	\$0.19
August 29, 2016	September 30, 2016	October 14, 2016	0.19
May 19, 2016	June 24, 2015	July 8, 2016	0.19
February 18, 2016	March 25, 2016	April 8, 2016	0.19

Declaration Date	Record Date	Payment Date	Dividend Per Share
December 8, 2015	December 23, 2015	January 6, 2016	\$0.18
September 14, 2015	September 25, 2015	October 9, 2015	0.18
May 21, 2015	June 26, 2015	July 10, 2015	0.18
February 17, 2015	March 27, 2015	April 10, 2015	0.18

On February 15, 2016, our Board of Directors authorized an increase in the payment of quarterly dividends on our common stock from \$0.18 per share to \$0.19 per share payable beginning on April 8, 2016. On February 17, 2015, our Board of Directors authorized an increase in the payment of quarterly dividends on our common stock from \$0.16 per share to \$0.18 per share payable beginning on April 10, 2015. On February 17, 2014, our Board of Directors authorized an increase in the payment of quarterly dividends on our common stock from \$0.14 per share to \$0.16 per share payable beginning on April 11, 2014. Any subsequent dividends will be reviewed by our Board of Directors on a quarterly basis and declared at its discretion dependent on its assessment of our financial situation and business outlook at the applicable time. Our credit facilities contain covenants that could restrict our ability to declare and pay

dividends on our common stock. See the discussion of our credit

24

facilities under Item 7 of this Annual Report and in Note 10 to our consolidated financial statements included in Item 8 of this Annual Report.

Issuer Purchases of Equity Securities

Note 14 to our consolidated financial statements included in Item 8 of this Annual Report includes a discussion of our share repurchase activity and payment of quarterly dividends on our common stock.

During the quarter ended December 31, 2016, we had no repurchases of common shares. As of December 31, 2016, we have \$160.7 million of remaining capacity under our current share repurchase program. The following table sets forth the repurchase data for each of the three months during the quarter ended December 31, 2016:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plan	Maximum Number of Shares (or Dollar Value) That May Yet Be Purchased Under the Plan (In millions)
October 1 - 31	181	(1)\$ 43.39	—	\$ 160.7
November 1 - 30	3,329	(2)41.79	—	160.7
December 1 - 31	148	(1)48.15	—	160.7
Total	3,658	\$ 42.13	—	

(1) Shares tendered by employees to satisfy minimum tax withholding amounts for Restricted Shares.

Represents 25 shares that were tendered by employees to satisfy minimum tax withholding amounts for Restricted Shares at an average price per share of \$45.90, and 3,304 shares purchased at a price of \$41.76 per share by a rabbi

(2) trust that we established in connection with our director deferral plans, pursuant to which non-employee directors may elect to defer directors' quarterly cash compensation to be paid at a later date in the form of common stock.

Stock Performance Graph

The following graph depicts the most recent five-year performance of our common stock with the S&P 500 Index and S&P 500 Industrial Machinery. The graph assumes an investment of \$100 on December 31, 2011, and assumes the reinvestment of any dividends over the following five years. The stock price performance shown in the graph is not necessarily indicative of future price performance.

Company/Index	Base	December 31,				
	Period	2011	2012	2013	2014	2015
Flowserve Corporation	\$100.00	\$149.54	\$243.13	\$186.21	\$132.99	\$154.29
S&P 500 Index	100.00	115.99	153.54	174.54	176.94	198.09
S&P 500 Industrial Machinery	100.00	127.49	185.89	195.27	187.54	238.07

ITEM 6. SELECTED FINANCIAL DATA

	Year Ended December 31,					
	2016(a)	2015(b)(g)	2014(g)	2013(c)(g)	2012(g)	
	(Amounts in thousands, except per share data and ratios)					
RESULTS OF OPERATIONS						
Sales	\$3,991,462	\$4,561,030	\$4,877,885	\$4,954,619	\$4,751,339	
Gross profit	1,231,554	1,487,318	1,714,617	1,688,095	1,580,951	
Selling, general and administrative expense	(965,322)	(971,611)	(936,900)	(966,829)	(922,125)	
Operating income	277,455	525,568	789,832	760,283	675,778	
Interest expense	(60,137)	(65,270)	(60,322)	(54,413)	(43,520)	
Provision for income taxes	(75,286)	(148,922)	(208,305)	(204,701)	(160,766)	
Net earnings attributable to Flowserve Corporation	145,060	267,669	518,824	485,530	448,339	
Net earnings per share of Flowserve Corporation common shareholders (basic)(d)	1.11	2.01	3.79	3.43	2.86	
Net earnings per share of Flowserve Corporation common shareholders (diluted)(d)	1.11	2.00	3.76	3.41	2.84	
Cash flows from operating activities	227,594	418,102	570,160	488,628	516,723	
Cash dividends declared per share(d)	0.76	0.72	0.64	0.56	0.48	
FINANCIAL CONDITION						
Working capital	\$ 1,153,220	\$ 1,127,234	\$ 1,176,333	\$ 1,144,154	\$ 1,006,152	
Total assets	4,742,762	4,980,657	4,856,258	4,928,277	4,743,597	
Total debt	1,570,623	1,620,996	1,145,658	1,190,231	919,398	
Retirement obligations and other liabilities	410,168	387,786	362,970	387,823	406,231	
Total equity	1,669,195	1,683,733	1,941,843	1,877,121	1,894,475	
FINANCIAL RATIOS						
Return on average net assets(e)	5.5	% 9.9	% 18.6	% 17.5	% 16.7	%
Net debt to net capital ratio(f)	41.9	% 42.7	% 26.4	% 30.6	% 24.5	%

(a) Results of operations in 2016 include costs of \$94.8 million resulting from realignment initiatives, resulting in a reduction of after tax net earnings of \$75.8 million.

(b) Results of operations in 2015 include costs of \$108.1 million resulting from realignment initiatives, resulting in a reduction of after tax net earnings of \$85.0 million.

(c) Results of operations in 2013 include costs of \$10.7 million resulting from realignment initiatives, resulting in a reduction of after tax net earnings of \$7.6 million.

(d) Periods prior to 2013 have been retrospectively adjusted for a three-for-one stock split.

Calculated as adjusted net income divided by adjusted net assets, where adjusted net income is the sum of earnings before income taxes plus interest expense multiplied by one minus our effective tax rate and adjusted net assets is the average of beginning of year and end of year net assets, excluding cash and cash equivalents and debt due in one year.

(f) Calculated as total debt minus cash and cash equivalents divided by the sum of total debt and shareholders' equity minus cash and cash equivalents.

Financial condition and financial ratios have been retrospectively adjusted to reflect the adoption of ASU No. 2015-03, "Interest - Imputation of Interest (Subtopic 835-30) and ASU No. 2015-17, Balance Sheet Classification of Deferred Taxes." These adjustments are more fully described in Note 1 to our consolidated financial statements included in Item 8 of this Annual Report.

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

The following discussion and analysis is provided to increase the understanding of, and should be read in conjunction with, the accompanying consolidated financial statements and notes. See "Item 1A. Risk Factors" and the "Forward-Looking Statements" included in this Annual Report on Form 10-K for the year ended December 31, 2016 ("Annual Report") for a discussion of the risks, uncertainties and assumptions associated with these statements. Unless otherwise noted, all amounts discussed herein are consolidated.

EXECUTIVE OVERVIEW

Our Company

We believe that we are a world-leading manufacturer and aftermarket service provider of comprehensive flow control systems. We develop and manufacture precision-engineered flow control equipment integral to the movement, control and protection of the flow of materials in our customers' critical processes. Our product portfolio of pumps, valves, seals, automation and aftermarket services supports global infrastructure industries, including oil and gas, chemical, power generation and water management, as well as general industrial markets where our products and services add value. Through our manufacturing platform and global network of Quick Response Centers ("QRCs"), we offer a broad array of aftermarket equipment services, such as installation, advanced diagnostics, repair and retrofitting. We currently employ approximately 18,000 employees in more than 50 countries.

Our business model is significantly influenced by the capital spending of global infrastructure industries for the placement of new products into service and maintenance spending for aftermarket services for existing operations. The worldwide installed base of our products is an important source of aftermarket revenue, where products are expected to ensure the maximum operating time of many key industrial processes. Over the past several years, we have significantly invested in our aftermarket strategy to provide local support to drive customer investments in our offerings and use of our services to replace or repair installed products. The aftermarket portion of our business also helps provide business stability during various economic periods. The aftermarket business, which is primarily served by our network of 183 QRCs located around the globe, provides a variety of service offerings for our customers including spare parts, service solutions, product life cycle solutions and other value-added services. It is generally a higher margin business compared to our original equipment business and a key component of our profitable growth strategy.

Our operations are conducted through three business segments that are referenced throughout this Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A"):

- Engineered Product Division for long lead time, custom and other highly-engineered pumps and pump systems, mechanical seals, auxiliary systems and replacement parts and related services;
- Industrial Product Division for pre-configured engineered pumps and pump systems and related products and services; and
- Flow Control Division for engineered and industrial valves, control valves, actuators and controls and related services.

Our business segments share a focus on industrial flow control technology and have a high number of common customers. These segments also have complementary product offerings and technologies that are often combined in applications that provide us a net competitive advantage. Our segments also benefit from our global footprint and our economies of scale in reducing administrative and overhead costs to serve customers more cost effectively. For example, our segment leadership reports to our Chief Operating Officer ("COO") and the segments share leadership for operational support functions, such as research and development, marketing and supply chain.

The reputation of our product portfolio is built on more than 50 well-respected brand names such as Worthington, IDP, Valtek, Limitorque, Durco, Edward, Anchor/Darling and Durametallc, which we believe to be one of the most comprehensive in the industry. Our products and services are sold either directly or through designated channels to more than 10,000 companies, including some of the world's leading engineering, procurement and construction ("EPC") firms, original equipment manufacturers, distributors and end users.

We continue to leverage our QRC network to be positioned as near to customers as possible for service and support in order to capture valuable aftermarket business. Along with ensuring that we have the local capability to sell, install

and service our equipment in remote regions, it is equally imperative to continuously improve our global operations. We continue to expand our global supply chain capability to meet global customer demands and ensure the quality and timely delivery of our

28

products. Additionally, we continue to devote resources to improving the supply chain processes across our business segments to find areas of synergy and cost reduction and to improve our supply chain management capability to ensure it can meet global customer demands. We also remain focused on improving on-time delivery and quality, while managing warranty costs as a percentage of sales across our global operations, through the assistance of a focused Continuous Improvement Process ("CIP") initiative. The goal of the CIP initiative, which includes lean manufacturing, six sigma business management strategy and value engineering, is to maximize service fulfillment to customers through on-time delivery, reduced cycle time and quality at the highest internal productivity.

During 2015, 2016 and in early 2017, we have been challenged by broad-based capital spending declines, originating in the oil and gas industry, heightened pricing pressures and negative currency impacts caused by a stronger U.S. dollar. This has been further compounded by economic and geo-political conditions in Latin America, the Middle East and China. In addition, we experienced lower than expected activity levels in our aftermarket business due to deferred spending of our customers' repair and maintenance budgets. We expect that the current environment will persist into 2017, with potential improvement in the second half of the year.

We have experienced a deterioration from plan in the operating results of our Engineered Product Operations ("EPO") and IPD reporting units which we believe was both operationally and market driven. We have concluded that there is no impairment of the goodwill associated with EPO and IPD as of December 31, 2016. Conditions are uncertain and can quickly change in the markets in which we operate which could result in sustained or further deterioration and could impact the recoverability of certain of our long-lived assets, including goodwill. We will continue to closely monitor their performance and related market conditions.

To better align costs and improve long-term efficiency, we initiated Realignment Programs to accelerate both short- and long-term strategic plans, including targeted manufacturing optimization through the consolidation of facilities, SG&A efficiency initiatives, transfer of activities from high-cost regions to lower-cost facilities and the divestiture of certain non-strategic assets. At the completion of the programs, we expect a 15% to 20% reduction in our global workforce, relative to early 2015 workforce levels. With an expected near-term investment of approximately \$400 million, including projects still under final evaluation, we expect the results of our Realignment Programs will deliver annualized run-rate savings of approximately \$230 million. Since inception of the Realignment Programs in 2015, we have incurred charges of \$222.6 million and we expect to incur most remaining charges in 2017.

In addition, we are focusing on our ongoing low-cost sourcing, including greater use of third-party suppliers and increasing our lower-cost, emerging market capabilities.

Our Markets

The following discussion should be read in conjunction with the "Outlook for 2017" section included below in this MD&A.

Our products and services are used in several distinct industries: oil and gas, chemical, power generation, water management, and a number of other industries that are collectively referred to as "general industries."

Demand for most of our products depends on the level of new capital investment and planned and unplanned maintenance expenditures by our customers. The level of new capital investment depends, in turn, on capital infrastructure projects driven by the need for oil and gas, chemicals, power generation and water management, as well as general economic conditions. These drivers are generally related to the phase of the business cycle in their respective industries and the expectations of future market behavior. The levels of maintenance expenditures are additionally driven by the reliability of equipment, planned and unplanned downtime for maintenance and the required capacity utilization of the process.

Sales to EPC firms and original equipment manufacturers are typically for large project orders and critical applications, as are certain sales to distributors. Project orders are typically procured for customers either directly from us or indirectly through contractors for new construction projects or facility enhancement projects.

The quick turnaround business, which we also refer to as "short-cycle," is defined as orders that are received from the customer (booked) and shipped generally within six months of receipt. These orders are typically for more standardized, general purpose products, parts or services. Each of our three business segments generate certain levels of this type of business.

In the sale of aftermarket products and services, we benefit from a large installed base of our original equipment, which requires periodic maintenance, repair and replacement parts. We use our manufacturing platform and global

network of QRCs to offer a broad array of aftermarket equipment services, such as installation, advanced diagnostics, repair and retrofitting. In

29

geographic regions where we are positioned to provide quick response, we believe customers have traditionally relied on us, rather than our competitors, for aftermarket products due to our highly engineered and customized products. However, the aftermarket for standard products is competitive, as the existence of common standards allows for easier replacement of the installed products. As proximity of service centers, timeliness of delivery and quality are important considerations for all aftermarket products and services, we continue to selectively expand our global QRC capabilities to improve our ability to capture this important aftermarket business.

Oil and Gas

The oil and gas industry represented approximately 36% of our bookings in both 2016 and 2015. Capital spending in the oil and gas industry decreased in 2016 compared to the previous year due to continued broad-based capital spending declines, heightened pricing pressures and negative currency impacts caused by a stronger U.S. dollar. Aftermarket opportunities in this industry decreased in 2016 due to deferred spending on our customers' repair and maintenance budgets and the impact of end-user union strikes in North America.

The outlook for the oil and gas industry is heavily dependent on the demand growth from both mature markets and developing geographies. We believe lower oil prices that began in the fourth quarter of 2014 will continue to negatively impact oil and gas upstream investment most acutely and impact mid-stream and downstream investment to a lesser extent. In addition, a reduction in the overall level of spending by oil and gas companies could continue to decrease demand for our products and services. However, we believe the long-term fundamentals for this industry remain solid in spite of the current down cycle as the industry works through current excess supply with projected depletion rates of existing fields and forecasted long-term demand growth. With our long-standing reputation in providing successful solutions for upstream, mid-stream and downstream applications, along with the advancements in our portfolio of offerings, we believe that we continue to be well-positioned to assist our customers in this challenging environment.

Chemical

The chemical industry, which represented approximately 21% and 22% of our bookings in 2016 and 2015, respectively, experienced a decreased level of capital spending in 2016 due to broad-based capital spending declines, heightened pricing pressures and negative currency impacts caused by a stronger U.S. dollar. The aftermarket opportunities decreased in 2016 due to deferred spending of our customers' repair and maintenance budgets.

The outlook for the chemical industry remains heavily dependent on global economic conditions. As global economies stabilize and unemployment conditions improve, a rise in consumer spending should follow. An increase in spending would drive greater demand for chemical-based products supporting improved levels of capital investment. We believe the chemical industry in the near-term will continue to invest in North America and Middle East capacity additions, maintenance and upgrades for optimization of existing assets and that developing regions will selectively invest in capital infrastructure to meet current and future indigenous demand. We believe our global presence and our localized aftermarket capabilities are well-positioned to serve the potential growth opportunities in this industry.

Power Generation

The power generation industry represented approximately 14% of our bookings in both 2016 and 2015. In 2016, the power generation industry continued to experience some softness in capital spending in the mature regions driven by the uncertainty related to environmental regulations, as well as potential regulatory impacts to the overall civilian nuclear market. In the developing regions, capital investment remained in place driven by increased demand forecasts for electricity in countries such as China and India. Global concerns about the environment continue to support an increase in desired future capacity from renewable energy sources. The majority of the active and planned construction throughout 2016 continued to utilize designs based on fossil fuels. Natural gas increased its percentage of utilization driven by market prices for gas remaining low and relatively stable. With the potential of unconventional sources of gas, such as shale gas, the power generation industry is forecasting an increased use of this form of fuel for power generation plants.

We believe the outlook for the power generation industry remains favorable. Current legislative efforts to limit the emissions of carbon dioxide may have an adverse effect on investment plans depending on the potential requirements imposed and the timing of compliance by country. However, we believe that proposed methods of limiting carbon dioxide emissions offer business opportunities for our products and services. We believe the long-term fundamentals for the power generation industry remain solid based on projected increases in demand for electricity driven by global

population growth, advancements of industrialization and growth of urbanization in developing markets. We also believe that our long-standing reputation in the power generation industry, our portfolio of offerings for the various generating methods, our advancements in serving the

30

renewable energy market and carbon capture methodologies, as well as our global service and support structure, position us well for the future opportunities in this important industry.

Water Management

The water management industry represented approximately 4% our bookings in both 2016 and 2015. Water management industry activity level experienced some softness in 2016 despite worldwide demand for fresh water and water treatment continuing to create requirements for new facilities or for upgrades of existing systems, many of which require products that we offer, particularly pumps. The proportion of people living in regions that find it difficult to meet water requirements is expected to double by 2025. We believe that the persistent demand for fresh water during all economic cycles supports continued investments, especially in North America and developing regions.

General Industries

General industries represented, in the aggregate, approximately 25% and 24% of our bookings in 2016 and 2015, respectively. General industries comprises a variety of different businesses, including mining and ore processing, pharmaceuticals, pulp and paper, food and beverage and other smaller applications, none of which individually represented more than 5% of total bookings in 2016 and 2015. General industries also includes sales to distributors, whose end customers operate in the industries we primarily serve.

The outlook for this group of industries is heavily dependent upon the condition of global economies and consumer confidence levels. The long-term fundamentals of many of these industries remain sound, as many of the products produced by these industries are common staples of industrialized and urbanized economies. We believe that our specialty product offerings designed for these industries and our aftermarket service capabilities will provide continued business opportunities.

OUR RESULTS OF OPERATIONS

Throughout this discussion of our results of operations, we discuss the impact of fluctuations in foreign currency exchange rates. We have calculated currency effects on operations by translating current year results on a monthly basis at prior year exchange rates for the same periods.

In the first and second quarters of 2015, we initiated realignment programs that consist of both restructuring and non-restructuring charges ("Realignment Programs") that are further discussed in Note 18 of our consolidated financial statements included in Item 8 of this Annual Report. The Realignment Programs have continued throughout 2016 and the total charges for the Realignment Programs by segment are detailed below for the years ended December 31, 2016 and 2015:

(Amounts in thousands)	December 31, 2016			Subtotal—Reportable Segments	Eliminations and All Other	Consolidated Total
	Engineered Product Division	Industrial Product Division	Flow Control Division			
Total Realignment Program Charges						
COS	\$30,642	\$26,224	\$8,038	\$64,904	\$8	\$64,912
SG&A	13,804	8,400	3,367	25,571	4,450	30,021
Income tax expense	6,000	2,800	600	9,400	—	9,400
Total	\$50,446	\$37,424	\$12,005	\$99,875	\$4,458	\$104,333

(Amounts in thousands)	December 31, 2015			Subtotal—Reportable Segments	Eliminations and All Other	Consolidated Total
	Engineered Product Division	Industrial Flow Product Division	Control Division			
Total Realignment Program Charges						
COS	\$20,229	\$28,607	\$17,884	\$ 66,720	\$	—\$ 66,720
SG&A	14,006	15,407	11,024	40,437	—	40,437
Income tax expense	3,400	6,500	1,200	11,100	—	11,100
Total	\$37,635	\$50,514	\$30,108	\$ 118,257	\$	—\$ 118,257

We anticipate a total investment in these Realignment Programs of approximately \$400 million, including projects still under final evaluation. Since inception of the Realignment Programs in 2015, we have incurred charges of \$222.6 million and we expect to incur most remaining charges in 2017.

Based on actions under our Realignment Programs, we estimate that we have achieved annual cost savings of approximately \$120 million as of December 31, 2016, of which approximately \$75 million was in COS with the remainder in SG&A. Upon completion of the Realignment Programs, we expect annual run-rate cost savings of approximately \$230 million. Actual savings could vary from expected savings, which represent management's best estimate to date.

Effective January 7, 2015, we acquired for inclusion in IPD, 100% of SIHI Group B.V. ("SIHI"), a global provider of engineered vacuum and fluid pumps and related services.

Effective March 31, 2014, we sold our FCD Naval OY ("Naval") business to a Finnish valve manufacturer. The sale included Naval's manufacturing facility located in Laitila, Finland and a service and support center located in St. Petersburg, Russia.

Note 2 to our consolidated financial statements included in Item 8 of this Annual Report discusses the details of the above acquisition and disposition.

Bookings and Backlog

	2016	2015	2014
	(Amounts in millions)		
Bookings	\$3,760.4	\$4,176.8	\$5,161.0
Backlog (at period end)	1,897.7	2,173.2	2,704.2

We define a booking as the receipt of a customer order that contractually engages us to perform activities on behalf of our customer in regards to the manufacture, delivery, and/or support of products or the delivery of service. Bookings recorded and subsequently canceled within the same fiscal period are excluded from bookings. Bookings of \$3.8 billion in 2016 decreased by \$416.4 million, or 10.0%, as compared with 2015. The decrease included negative currency effects of approximately \$108 million. The decrease was primarily driven by the oil and gas industry, and to a lesser extent, the chemical and general industries. The decrease was primarily due to customer original equipment bookings.

Bookings in 2015 decreased by \$984.2 million, or 19.1%, as compared with 2014. The decrease included negative currency effects of approximately \$377 million. The decrease was primarily driven by the oil and gas industry, and to a lesser extent, the general and chemical industries. The decrease was more heavily weighted toward customer original equipment bookings.

Backlog represents the aggregate value of booked but uncompleted customer orders and is influenced primarily by bookings, sales, cancellations and currency effects. Backlog of \$1.9 billion at December 31, 2016 decreased by \$275.5 million, or 12.7%, as compared with December 31, 2015. The decrease included negative currency effects of approximately \$18 million (currency effects on backlog are calculated using the change in period end exchange rates). Backlog related to aftermarket orders was approximately 30% and 26% of the backlog at December 31, 2016 and 2015, respectively. We expect to ship approximately 88% of December 31, 2016 backlog during 2017.

Backlog of \$2.2 billion at December 31, 2015 decreased by \$531.0 million, or 19.6%, as compared with December 31, 2014. The decrease included negative currency effects of approximately \$145 million and the impact of cancellations

of

32

\$118.4 million of orders booked during prior years. Order cancellations do not typically result in material negative impacts to our financial results due to the cancellation provisions of our long lead time contracts.

Sales

	2016	2015	2014
	(Amounts in millions)		
Sales	\$3,991.5	\$4,561.0	\$4,877.9

Sales in 2016 decreased by \$569.5 million, or 12.5%, as compared with 2015. The decrease included negative currency effects of approximately \$114 million. The decrease was more heavily weighted toward original equipment sales. Sales decreased into every region except for sales into the Middle East.

Sales in 2015 decreased by \$316.9 million, or 6.5%, as compared with 2014. The decrease included negative currency effects of approximately \$433 million. The decrease was more heavily weighted towards original equipment sales.

Sales decreased into every region except for sales into Europe, primarily due to the favorable impact of SIHI sales into the region. Sales in 2015 include \$294.2 million sales from SIHI which do not compare to 2014.

Sales to international customers, including export sales from the U.S., were approximately 64% of total sales in 2016, 66% in 2015 and 68% in 2014. Sales into Europe, the Middle East and Africa ("EMA") were approximately 35%, 34% and 32% of total sales in 2016, 2015 and 2014, respectively. Sales into Asia Pacific were approximately 18% of total sales for 2016, 18% for 2015 and 20% for 2014. Sales into Latin America were approximately 7% of total sales in 2016, 9% for 2015 and 11% for 2014.

Gross Profit and Gross Profit Margin

	2016	2015	2014
	(Amounts in millions, except percentages)		
Gross profit	\$1,231.6	\$1,487.3	\$1,714.6
Gross profit margin	30.9 %	32.6 %	35.2 %

Gross profit in 2016 decreased by \$255.7 million, or 17.2%, as compared with 2015. Gross profit margin in 2016 of 30.9% decreased from 32.6% in 2015. The decrease in gross profit and gross profit margin was primarily attributed to the negative impact of decreased sales on our absorption of fixed manufacturing costs, unfavorable impacts of short-term operational inefficiencies related to the initial execution of certain Realignment Programs, lower margin projects that shipped from backlog and a \$15.5 million charge to write down inventory in Brazil, partially offset by realignment savings achieved related to our Realignment Programs and a mix shift to higher margin aftermarket sales. Aftermarket sales increased to approximately 45% of total sales, as compared with approximately 43% of total sales for the same period in 2015.

Gross profit in 2015 decreased by \$227.3 million, or 13.3%, as compared with 2014. Gross profit margin in 2015 of 32.6% decreased from 35.2% in 2014. The decrease in gross profit and gross profit margin was primarily attributed to the negative impact resulting from purchase accounting adjustments on acquired SIHI backlog and inventory of \$18.1 million, charges related to our Realignment Programs of \$66.7 million, and to a lesser extent, certain lower margin projects that shipped from backlog and the negative impact of decreased sales on our absorption of fixed manufacturing costs, as compared with the same period in 2014. The decrease was partially offset by a decrease in compensation, which included a decrease in broad-based annual incentive program compensation, and a mix shift to higher margin aftermarket sales. Aftermarket sales increased to approximately 43% of total sales, as compared with approximately 42% of total sales for the same period in 2014.

SG&A

	2016	2015	2014
	(Amounts in millions, except percentages)		
SG&A	\$965.3	\$971.6	\$936.9
SG&A as a percentage of sales	24.2 %	21.3 %	19.2 %

SG&A in 2016 decreased by \$6.3 million, or 0.6%, as compared with 2015. Currency effects yielded a decrease of approximately \$24 million. SG&A as a percentage of sales in 2016 increased 290 basis points as compared with the same period in 2015 due primarily to increased bad debt expense as a result of the \$63.2 million reserve established for our primary Venezuelan customer in the third quarter of 2016 and lower sales leverage, partially offset by decreased charges and savings achieved related to our Realignment Programs and lower SIHI integration costs.

SG&A in 2015 increased by \$34.7 million, or 3.7%, as compared with 2014. Currency effects yielded a decrease of approximately \$81 million. SG&A as a percentage of sales in 2015 increased 210 basis points as compared with the same period in 2014 due in part to \$41.2 million of charges related to our Realignment Programs, \$11.6 million of SIHI acquisition-related costs, lower sales leverage, a \$11.9 million increase in bad debt expense and the \$13.4 million gain from the sale of the Naval business in the first quarter of 2014, partially offset by a decrease in compensation, which included a decrease in broad-based annual incentive program compensation, and a \$6.8 million gain from the reversal of contingent consideration on our purchase of Innovative Mag-Drive, LLC ("Innomag").

Net Earnings from Affiliates

	2016	2015	2014
	(Amounts in millions)		

Net earnings from affiliates	\$11.2	\$9.9	\$12.1
------------------------------	--------	-------	--------

Net earnings from affiliates represents our net income from investments in eight joint ventures (one located in each of Chile, Japan, Saudi Arabia, South Korea, the United Arab Emirates, and India and two in China) that are accounted for using the equity method of accounting. Net earnings from affiliates in 2016 increased by \$1.3 million primarily as a result of increased earnings of our EPD joint venture in South Korea and IPD joint venture in Chile. Net earnings from affiliates in 2015 decreased by \$2.2 million primarily as a result of decreased earnings of our EPD joint venture in South Korea.

Operating Income

	2016	2015	2014
	(Amounts in millions, except percentages)		

Operating income	\$277.5	\$525.6	\$789.8
Operating income as a percentage of sales	7.0 %	11.5 %	16.2 %

Operating income in 2016 decreased by \$248.1 million, or 47.2%, as compared with 2015. The decrease was primarily a result of the \$255.7 million decrease in gross profit, partially offset by the \$6.3 million decrease in SG&A discussed above. The decrease included negative currency effects of approximately \$18 million.

Operating income in 2015 decreased by \$264.2 million, or 33.5%, as compared with 2014. The decrease was primarily a result of the \$227.3 million decrease in gross profit and the \$34.7 million increase in SG&A discussed above. The decrease included negative currency effects of approximately \$46 million and \$108.1 million of realignment expense.

Interest Expense and Interest Income

	2016	2015	2014
	(Amounts in millions)		

Interest expense \$(60.1)	\$(65.3)	\$(60.3)
Interest income 2.8	2.1	1.7

Interest expense in 2016 decreased by \$5.2 million as compared with 2015. The decrease was primarily attributable to decreased commitments and borrowings under our Revolving Credit Facility (as such term is defined in Note 10 to our consolidated financial statements in Item 8 of this Annual Report) in 2016, as compared to the same period in 2015. Interest expense in 2015 increased by \$5.0 million as compared with 2014. The increase was primarily attributable to interest expense associated with increased borrowings in 2015 related to our public offering of €500.0

million of Euro senior notes in aggregate principal amount due March 17, 2022 (the "2022 EUR Senior Notes") issued on March 17, 2015.

Interest income in 2016 increased by \$0.7 million as compared with 2015. Interest income in 2015 increased by \$0.4 million as compared with 2014.

Other Income (Expense), net

	2016	2015	2014
	(Amounts in millions)		

Other income (expense), net	\$3.3	\$(40.2)	\$2.0
-----------------------------	-------	----------	-------

Other income, net increased \$43.5 million from expense of \$40.2 million in 2015 to income of \$3.3 million in 2016. The increase was primarily due to a \$60.7 million decrease in losses arising from transactions in currencies other than our sites' functional currencies, partially offset by a \$18.2 million decrease in gains from foreign exchange contracts. The net change was primarily due to the foreign currency exchange rate movements in the Brazilian real, Canadian dollar and British pound in relation to the U.S. dollar during the year ended December 31, 2016, as compared with the same period in 2015, and the \$18.5 million loss as a result of the remeasurement of our Venezuelan bolivar-denominated net monetary assets in the first quarter of 2015 that did not recur.

Other expense, net increased \$42.2 million from income of \$2.0 million in 2014 to a loss of \$40.2 million in 2015. The increase was primarily due to a \$57.0 million increase in losses arising from transactions in currencies other than our sites' functional currencies, including the impact of the \$18.5 million loss as a result of the first quarter of 2015 remeasurement of our bolivar-denominated Venezuelan net monetary assets, partially offset by a \$15.4 million increase in gains from foreign exchange contracts. The changes are primarily due to the foreign currency exchange rate movements of the Brazilian real, Mexican peso and Euro in relation to the U.S. dollar as compared with the same period in 2014.

Tax Expense and Tax Rate

	2016	2015	2014
	(Amounts in millions, except percentages)		

Provision for income taxes	\$75.3	\$148.9	\$208.3
----------------------------	--------	---------	---------

Effective tax rate	33.7 %	35.3 %	28.4 %
--------------------	--------	--------	--------

The 2016 tax rate differed from the federal statutory rate of 35% primarily due to the net impact of foreign operations, tax impacts from our Realignment Programs and losses in certain foreign jurisdictions for which no tax benefit was provided. Our effective tax rate of 33.7% for the year ended December 31, 2016 decreased from 35.3% in 2015 due primarily to the tax impacts described above. The 2015 tax rate differed from the federal statutory rate of 35% primarily due to tax impacts of the realignment programs, the non-deductible Venezuelan exchange rate remeasurement loss, and the establishment of a valuation allowance against our deferred tax assets in Brazil in the amount of \$12.6 million, partially offset by the net impact of foreign operations, which included the impacts of lower foreign tax rates and changes in our reserves established for uncertain tax positions. The 2014 tax rate differed from the federal statutory rate of 35% primarily due to the net impact of foreign operations, which included the impacts of lower foreign tax rates and changes in our reserves established for uncertain tax positions.

On May 17, 2006, the Tax Increase Prevention and Reconciliation Act of 2005 was signed into law, creating an exclusion from U.S. taxable income for certain types of foreign related party payments of dividends, interest, rents and royalties that, prior to 2006, had been subject to U.S. taxation. On December 18, 2015, this exclusion was further extended for five additional years. This exclusion is effective for the years 2006 through 2019, and applies to certain of our related party payments.

Our effective tax rate is based upon current earnings and estimates of future taxable earnings for each domestic and international location. Changes in any of these and other factors, including our ability to utilize foreign tax credits and net operating losses or results from tax audits, could impact the tax rate in future periods. As of December 31, 2016, we have foreign tax credits of \$60.0 million, expiring in 2020 through 2026 against which we recorded a valuation allowance of \$0.6 million. Additionally, we have recorded other net deferred tax assets of \$86.0 million, which relate to net operating losses, tax credits and other deductible temporary differences that are available to reduce taxable income in future periods, most of which do not have a definite expiration. Should we not be able to utilize all or a portion of these credits and losses, our effective tax rate would increase.

Net Earnings and Earnings Per Share

	2016	2015	2014
	(Amounts in millions, except per share amounts)		
Net earnings attributable to Flowserve Corporation	\$145.1	\$267.7	\$518.8
Net earnings per share — diluted	\$1.11	\$2.00	\$3.76
Average diluted shares	131.0	133.8	137.8

Net earnings in 2016 decreased by \$122.6 million to \$145.1 million, or to \$1.11 per diluted share, as compared with 2015. The decrease was primarily attributable to a \$248.1 million decrease in operating income, partially offset by a \$43.5 million increase in other income, net, a \$5.2 million decrease in interest expense and a \$73.6 million decrease in tax expense.

Net earnings in 2015 decreased by \$251.1 million to \$267.7 million, or to \$2.00 per diluted share, as compared with 2014. The decrease was primarily attributable to a \$264.2 million decrease in operating income, a \$42.2 million increase in other expense, net and a \$5.0 million increase in interest expense, partially offset by a \$59.4 million decrease in tax expense.

Other Comprehensive Loss

	2016	2015	2014
	(Amounts in millions)		
Other comprehensive loss	\$(86.0)	\$(158.2)	\$(158.8)

Other comprehensive loss in 2016 decreased by \$72.2 million to \$86.0 million as compared to \$158.2 million in 2015. The loss was primarily due to foreign currency translation adjustments resulting primarily from exchange rate movements of the British pound, Euro and Mexican peso versus the U.S. dollar at December 31, 2016 as compared with 2015.

Other comprehensive loss in 2015 decreased by \$0.6 million to \$158.2 million as compared to \$158.8 million in 2014. The loss was primarily due to foreign currency translation adjustments resulting primarily from exchange rate movements of the Euro, Brazilian real and Argentine peso versus the U.S. dollar at December 31, 2015 as compared with 2014.

Business Segments

We conduct our operations through three business segments based on type of product and how we manage the business. We evaluate segment performance and allocate resources based on each segment's operating income. See Note 16 to our consolidated financial statements included in Item 8 of this Annual Report for further discussion of our segments. The key operating results for our three business segments, EPD, IPD and FCD, are discussed below.

Engineered Product Division Segment Results

Our largest business segment is EPD, through which we design, manufacture, distribute and service custom and other highly-engineered pumps and pump systems, mechanical seals and auxiliary systems (collectively referred to as "original equipment"). EPD includes longer lead time, highly-engineered pump products, and shorter cycle engineered pumps and mechanical seals that are generally manufactured within shorter lead times. EPD also manufactures replacement parts and related equipment and provides aftermarket services. EPD primarily operates in the oil and gas, power generation, chemical, and general industries. EPD operates in 47 countries with 32 manufacturing facilities worldwide, 10 of which are located in Europe, 10 in North America, seven in Asia and five in Latin America, and it has 123 QRCs, including those co-located in manufacturing facilities and/or shared with FCD.

	EPD				
	2016	2015	2014		
	(Amounts in millions, except percentages)				
Bookings	\$1,823.8	\$2,065.6	\$2,832.8		
Sales	1,994.8	2,260.0	2,564.6		
Gross profit	615.1	746.4	892.5		
Gross profit margin	30.8	% 33.0	% 34.8	%	
Segment operating income	170.1	329.0	447.2		
Segment operating income as a percentage of sales	8.5	% 14.6	% 17.4	%	
Backlog (at period end)	966.8	1,157.3	1,573.3		

Bookings in 2016 decreased by \$241.8 million, or 11.7%, as compared with 2015. The decrease included negative currency effects of approximately \$76 million. The decrease in customer bookings was primarily driven by the oil and gas and general industries, and to a lesser extent, the chemical industry. Customer bookings decreased \$87.0 million into Europe, \$52.0 million into Latin America, \$38.0 million into North America, \$36.4 million into the Middle East, \$26.2 million into Asia Pacific and \$2.6 million into Africa. The decrease was primarily driven by decreased customer original equipment bookings. Of the \$1.8 billion of bookings in 2016, approximately 48% were from oil and gas, 17% from general industries, 18% from chemical, and 17% from power generation. Interdivision bookings (which are eliminated and are not included in consolidated bookings as disclosed above) decreased \$8.4 million.

Bookings in 2015 decreased by \$767.2 million, or 27.1%, as compared with 2014. The decrease included negative currency effects of approximately \$228 million. The decrease in customer bookings was primarily driven by the oil and gas industry, and to a lesser extent, the chemical and general industries. Customer bookings decreased \$267.5 million into North America, \$226.0 million into Latin America, \$149.1 million into Europe, and \$92.4 million into Asia Pacific. The decrease was more heavily weighted toward customer original equipment bookings. Of the \$2.1 billion of bookings in 2015, approximately 47% were from oil and gas, 19% from general industries, 17% from chemical, 15% from power generation and 2% from water management. Interdivision bookings (which are eliminated and are not included in consolidated bookings as disclosed above) decreased \$18.9 million.

Sales in 2016 decreased \$265.2 million, or 11.7%, as compared with 2015. The decrease included negative currency effects of approximately \$87 million. The decrease was proportionally driven by decreased original equipment and aftermarket sales, resulting from decreased customer sales of \$110.2 million into Latin America, \$84.3 million into North America, \$27.7 million into Europe, \$19.3 million into Africa, \$13.5 million into Asia Pacific and \$2.0 million into the Middle East. Interdivision sales (which are eliminated and are not included in consolidated sales as disclosed above) decreased \$14.0 million.

Sales in 2015 decreased \$304.6 million, or 11.9%, as compared with 2014. The decrease included negative currency effects of approximately \$258 million. The decrease was primarily driven by decreased original equipment sales, resulting from decreased customer sales of \$127.4 million into Asia Pacific, \$71.4 million into Latin America, \$39.9 million into the Middle East, \$27.8 million into Europe and \$11.3 million into North America. Interdivision sales (which are eliminated and are not included in consolidated sales as disclosed above) decreased \$10.0 million.

Gross profit in 2016 decreased by \$131.3 million, or 17.6%, as compared with 2015. Gross profit margin in 2016 of 30.8% decreased from 33.0% in 2015. The decrease in gross profit margin was primarily attributable to the negative impact of decreased sales on our absorption of fixed manufacturing costs, a \$15.0 million charge to write down inventory in Brazil and increased charges related to our Realignment Programs, partially offset by realignment savings achieved.

Gross profit in 2015 decreased by \$146.1 million, or 16.4%, as compared with 2014. Gross profit margin in 2015 of 33.0% decreased from 34.8% in 2014. The decrease in gross profit margin was primarily attributable to the charges related to our Realignment Programs and the negative impact of decreased sales on our absorption of fixed manufacturing costs, partially offset by a decrease in broad-based annual incentive program compensation.

Operating income in 2016 decreased by \$158.9 million, or 48.3%, as compared with 2015. The decrease included negative currency effects of approximately \$14 million. The decrease was due to a \$131.3 million decrease in gross

profit, and a \$29.1 million increase in SG&A (including a decrease due to currency effects of approximately \$21 million). The increase in SG&A is primarily due to increased bad debt expense as a result of EPD's \$60.9 million portion of the \$63.2

million reserve established for our primary Venezuelan customer in the third quarter of 2016, partially offset by savings achieved related to our Realignment Programs and lower selling-related expenses.

Operating income in 2015 decreased by \$118.2 million, or 26.4%, as compared with 2014. The decrease included negative currency effects of approximately \$28 million. The decrease was due to a \$146.1 million decrease in gross profit, partially offset by a \$31.0 million decrease in SG&A (including a decrease due to currency effects of approximately \$49 million). The decrease in SG&A was due primarily to decreased selling and marketing-related expenses resulting from lower sales, savings associated with strategic cost reduction programs and a decrease in broad-based annual incentive program compensation, partially offset by charges related to our Realignment Programs and increased bad debt expenses.

Backlog of \$1.0 billion at December 31, 2016 decreased by \$190.5 million, or 16.5%, as compared with December 31, 2015. Currency effects provided a decrease of approximately \$2 million. Backlog at December 31, 2016 included \$11.7 million of interdivision backlog (which is eliminated and not included in consolidated backlog as disclosed above). Backlog of \$1.2 billion at December 31, 2015 decreased by \$416.0 million, or 26.4%, as compared with December 31, 2014. Currency effects provided a decrease of approximately \$80 million. The decrease includes the impact of cancellations of orders booked during prior years. Order cancellations do not typically result in material negative impacts to our financial results due to the cancellation provisions of our long lead time contracts. Backlog at December 31, 2015 included \$10.5 million of interdivision backlog (which is eliminated and not included in consolidated backlog as disclosed above).

Industrial Product Division Segment Results

Through IPD we design, manufacture, distribute and service engineered, pre-configured industrial pumps and pump systems, including submersible motors and specialty products, collectively referred to as "original equipment." Additionally, IPD manufactures replacement parts and related equipment, and provides a full array of support services, collectively referred to as "aftermarket". IPD primarily operates in the oil and gas, chemical, water management, power generation and general industries. IPD operates 20 manufacturing facilities, five of which are located in the U.S and 10 in Europe, four in Asia, one in Latin America and it operates 32 QRCs worldwide, including 20 sites in Europe and six in the U.S. three in Latin America and three in Asia, including those co-located in manufacturing facilities.

	IPD		
	2016	2015	2014
	(Amounts in millions, except percentages)		
Bookings	\$797.7	\$887.2	\$781.0
Sales	837.2	981.9	805.9
Gross profit	189.6	239.7	221.0
Gross profit margin	22.6	% 24.4	% 27.4
Segment operating income	1.0	30.2	107.0
Segment operating income as a percentage of sales	0.1	% 3.1	% 13.3
Backlog (at period end)	373.5	424.6	393.9

Bookings in 2016 decreased by \$89.5 million, or 10.1%, as compared with 2015. The decrease included negative currency effects of approximately \$10 million. The decrease in customer bookings was primarily driven by the oil and gas, power generation and chemical industries. Bookings decreased \$36.7 million into Asia Pacific, \$19.1 million into Europe, \$12.5 million into Africa, \$7.7 million into Latin America and \$7.2 million into North America. The decrease was driven by customer original equipment bookings. Of the \$797.7 million of bookings in 2016, approximately 44% were from general industries, 22% from chemical, 14% from oil and gas, 14% from water management and 6% from power generation. Interdivision bookings (which are eliminated and are not included in consolidated bookings as disclosed above) decreased \$7.4 million.

Bookings in 2015 increased by \$106.2 million, or 13.6%, as compared with 2014. The increase included negative currency effects of approximately \$42 million. Increased customer bookings in the chemical, general and power

generation industries were partially offset by a decrease in the oil and gas and the water management industries. Bookings increased \$116.1 million into Europe and \$30.7 million into Asia Pacific primarily due to SIHI, partially offset by a \$30.5 million decrease into North America. The increase was primarily driven by customer original equipment bookings. Interdivision bookings (which are eliminated and are not included in consolidated bookings as disclosed above) decreased \$4.5 million. Of the \$887.2 million of bookings in 2015, approximately 38% were from general industries, 23% from chemical, 18% from oil and gas, 13% from water management and 8% from power generation.

Sales in 2016 decreased by \$144.7 million, or 14.7%, as compared with 2015. The decrease included negative currency effects of approximately \$13 million and was primarily driven by customer original equipment sales. Customer sales decreased \$54.8 million into Europe, \$31.3 million into North America and \$17.8 million into Asia Pacific, \$14.5 million into the Middle East, \$13.1 million into Latin America and \$5.4 million into Africa. Interdivision sales (which are eliminated and are not included in consolidated sales as disclosed above) decreased \$9.0 million.

Sales in 2015 increased by \$176.0 million, or 21.8%, as compared with 2014. The increase included negative currency effects of approximately \$50 million and was primarily driven by customer original equipment sales. Customer sales increased \$151.7 million into Europe, \$39.8 million into North America and \$36.6 million into Asia Pacific primarily due to SIHI, partially offset by decreased sales of \$29.6 million into Latin America and \$22.1 million into Africa. Interdivision sales (which are eliminated and are not included in consolidated sales as disclosed above) decreased \$0.8 million.

Gross profit in 2016 decreased by \$50.1 million, or 20.9%, as compared with 2015. Gross profit margin in 2016 of 22.6% decreased from 24.4% in 2015. The decrease in gross profit margin was primarily attributable to the negative impact of decreased sales on our absorption of fixed manufacturing costs, lower margin projects that shipped from backlog and the unfavorable impact of short-term operational inefficiencies related to the initial execution of certain Realignment Programs, partially offset by savings achieved related to our Realignment Programs and the reduced impact of SIHI purchase accounting adjustments in 2016.

Gross profit in 2015 increased by \$18.7 million, or 8.5%, as compared with 2014. Gross profit margin in 2015 of 24.4% decreased from 27.4% in 2014. The decrease in gross profit margin was primarily attributable to charges related to our Realignment Programs and the negative impact of SIHI's purchase accounting adjustments, partially offset by a decrease in broad-based annual incentive program compensation.

Operating income for 2016 decreased by \$29.2 million, or 96.7%, as compared with 2015. The decrease included negative currency effects of approximately \$2 million. The decrease was primarily due to the \$50.1 million decrease in gross margin, partially offset by a \$21.0 million decrease in SG&A related primarily to savings achieved and decreased charges related to our Realignment Programs, lower SIHI integration costs and lower selling-related expenses.

Operating income for 2015 decreased by \$76.8 million, or 71.8%, as compared with 2014. The decrease included negative currency effects of approximately \$5 million. The decrease was primarily due to a \$96.6 million increase in SG&A, due primarily to the inclusion of SIHI's SG&A, which included charges related to our Realignment Programs and acquisition-related costs, and increased bad debt expense, partially offset by a decrease in broad-based annual incentive compensation.

Backlog of \$373.5 million at December 31, 2016 decreased by \$51.1 million, or 12.0%, as compared with December 31, 2015. Currency effects provided a decrease of approximately \$17 million. Backlog at December 31, 2016 included \$14.2 million of interdivision backlog (which is eliminated and not included in consolidated backlog as disclosed above). Backlog of \$424.6 million at December 31, 2015 decreased by \$30.7 million, or 7.8%, as compared to December 31, 2014. Currency effects provided an decrease of approximately \$16 million. Backlog at December 31, 2015 included \$15.7 million of interdivision backlog (which is eliminated and not included in consolidated backlog as disclosed above).

Flow Control Division Segment Results

Our second largest business segment is FCD, which designs, manufactures and distributes a broad portfolio of engineered-to-order and configured-to-order isolation valves, control valves, valve automation products, boiler controls and related services. FCD leverages its experience and application know-how by offering a complete menu of engineered services to complement its expansive product portfolio. FCD has a total of 58 manufacturing facilities and QRCs in 25 countries around the world, with five of its 26 manufacturing operations located in the U.S., 13 located in Europe, seven located in Asia Pacific and one located in Latin America. Based on independent industry sources, we believe that FCD is the third largest industrial valve supplier on a global basis.

	FCD				
	2016	2015	2014		
	(Amounts in millions, except percentages)				
Bookings	\$1,216.8	\$1,318.5	\$1,665.2		
Sales	1,233.7	1,415.5	1,615.7		
Gross profit	427.1	497.5	603.0		
Gross profit margin	34.6	% 35.1	% 37.3	%	
Segment operating income	198.2	234.4	322.8		
Segment operating income as a percentage of sales	16.1	% 16.6	% 20.0	%	
Backlog (at period end)	584.5	622.0	774.8		

Bookings in 2016 decreased \$101.7 million, or 7.7%, as compared with 2015. The decrease included negative currency effects of approximately \$22 million. The decrease in customer bookings was primarily driven by the oil and gas industry, and to a lesser extent, the general and chemical industries. Decreased customer bookings of \$69.6 million into North America and \$46.7 million into the Middle East were partially offset by increased bookings of \$22.7 million into Europe and \$6.6 million into Latin America. The decrease was primarily driven by decreased customer original equipment bookings. Of the \$1.2 billion of bookings in 2016, approximately 31% were from oil and gas, 28% from chemical, 24% from general industries, 16% from power generation and 1% from water management.

Bookings in 2015 decreased \$346.7 million, or 20.8%, as compared with 2014. The decrease included negative currency effects of approximately \$107 million. The decrease in customer bookings was primarily driven by the general, chemical, and oil and gas industries. Customer bookings decreased \$136.2 million into Europe, \$129.8 million into Asia Pacific, \$46.3 million into Latin America and \$37.3 million into North America. The decrease was driven by decreased customer original equipment bookings. Of the \$1.3 billion of bookings in 2015, approximately 32% were from oil and gas, 27% from chemical, 24% from general industries, 15% from power generation and 2% from water management.

Sales in 2016 decreased by \$181.8 million, or 12.8%, as compared with 2015. The decrease included negative currency effects of approximately \$14 million and was primarily driven by decreased customer original equipment sales. Sales decreased \$83.5 million into Asia Pacific, \$62.7 million into Europe, \$45.0 million into North America and \$18.3 million into Latin America, partially offset by an increase of \$25.9 million into the Middle East.

Sales in 2015 decreased by \$200.2 million, or 12.4%, as compared with 2014. The decrease included negative currency effects of approximately \$125 million and was primarily driven by decreased customer original equipment sales. Sales decreased \$66.0 million into Asia Pacific, \$54.8 million into Europe, \$38.4 million into North America, \$24.3 million into Latin America, and \$22.2 million into Africa, partially offset by an increase of \$3.5 million into the Middle East.

Gross profit in 2016 decreased by \$70.4 million, or 14.2%, as compared with 2015. Gross profit margin in 2016 of 34.6% decreased from 35.1% for the same period in 2015. The decrease in gross profit margin was primarily attributable to the negative impact of decreased sales on our absorption of fixed manufacturing costs and lower margin projects that shipped from backlog, partially offset by savings achieved and decreased charges related to our Realignment Programs compared to the same period in 2015.

Gross profit in 2015 decreased by \$105.5 million, or 17.5%, as compared with 2014. Gross profit margin in 2015 of 35.1% decreased from 37.3% for the same period in 2014. The decrease in gross profit margin was primarily attributable to unfavorable shift in product line mix and charges related to our Realignment Programs, partially offset by a decrease in broad-based annual incentive compensation.

Operating income in 2016 decreased by \$36.2 million, or 15.4%, as compared with 2015. The decrease included negative currency effects of approximately \$2 million. The decrease was primarily attributable to the \$70.4 million decrease in gross profit, partially offset by the \$34.2 million decrease in SG&A. The decrease in SG&A was primarily

due to savings achieved and decreased charges related to our Realignment Programs and lower selling-related expenses as compared to the same period in 2015.

Operating income in 2015 decreased by \$88.4 million, or 27.4%, as compared with 2014. The decrease included negative currency effects of approximately \$14 million. The decrease was primarily attributable to the \$105.5 million decrease in gross profit, partially offset by the \$17.2 million decrease in SG&A. The decrease in SG&A was primarily driven by the

decrease in broad-based annual incentive compensation, partially offset by charges related to our Realignment Programs and the \$13.4 million gain from the sale of the Naval business in the first quarter of 2014 that did not recur. Backlog of \$584.5 million at December 31, 2016 decreased by \$37.5 million, or 6.0%, as compared with December 31, 2015. Currency effects provided an increase of less than \$1 million. Backlog of \$622 million at December 31, 2015 decreased by \$152.8 million, or 19.7%, as compared to December 31, 2014. Currency effects provided a decrease of approximately \$49 million.

LIQUIDITY AND CAPITAL RESOURCES

Cash Flow Analysis

	2016	2015	2014
	(Amounts in millions)		
Net cash flows provided by operating activities	\$227.6	\$418.1	\$570.2
Net cash flows used by investing activities	(91.5)	(525.3)	(84.1)
Net cash flows (used) provided by financing activities	(130.8)	60.3	(366.9)

Existing cash, cash generated by operations and borrowings available under our existing revolving credit facility are our primary sources of short-term liquidity. We monitor the depository institutions that hold our cash and cash equivalents on a regular basis, and we believe that we have placed our deposits with creditworthy financial institutions. Our sources of operating cash generally include the sale of our products and services and the conversion of our working capital, particularly accounts receivable and inventories. Our total cash balance at December 31, 2016 was \$367.2 million, compared with \$366.4 million at December 31, 2015 and \$450.4 million at December 31, 2014. Our cash provided by operating activities was \$227.6 million, \$418.1 million and \$570.2 million in 2016, 2015 and 2014, respectively, which provided cash to support short-term working capital needs. Cash flow used by working capital increased in 2016 due primarily to lower accounts payable of \$69.8 million and lower accrued liabilities of \$97.7 million, partially offset by higher cash provided by lower accounts receivable of \$37.7 million and lower inventory of \$30.9 million. During 2016, we contributed \$42.5 million to our defined benefit pension plans. Working capital increased in 2015 due primarily to lower accounts payable of \$113.6 million and higher inventory of \$26.2 million, partially offset by lower accounts receivable of \$50.4 million. During 2015, we contributed \$43.8 million to our defined benefit pension plans.

Decreases in accounts receivable provided \$37.7 million of cash flow in 2016, as compared with \$50.4 million in 2015 and a use of \$79.7 million in 2014. The decrease in accounts receivable in 2016 was partially attributable to lower sales during the period. As described more fully in Note 1 to our consolidated financial statements included in Item 8 of this Annual Report, we estimated that our ability to fully collect the accounts receivable from our primary Venezuelan customer became less than probable and in the third quarter of 2016 we recorded a charge of \$63.2 million to selling, general and administrative expense ("SG&A") to fully reserve for those potentially uncollectible accounts receivable. We continue to pursue payments and on-going business with our Venezuelan customer. For the fourth quarter of 2016 our days' sales outstanding ("DSO") was 75 days. DSO was 72 days for 2015 and 73 for 2014. We have not experienced a significant increase in customer payment defaults in 2016.

Decreases in inventory provided \$30.9 million of cash flow in 2016 compared with a use of \$26.2 million in 2015 and a use of \$35.5 million in 2014. The source of cash from inventory in 2016 was primarily due to decreased inventory balances as a result of decreased backlog. The use of cash from inventory in 2015 was primarily due to a decrease in progress billings on large orders at December 31, 2015. Inventory turns were 3.2 times at December 31, 2016, compared with 3.6 times for same period in both 2015 and 2014. Our calculation of inventory turns does not reflect the impact of advanced cash received from our customers.

Decreases in accounts payable used \$69.8 million of cash flow in 2016 compared with \$113.6 million in 2015. Decreases in accrued liabilities and income taxes payable used \$97.7 million of cash flow in 2016 compared with a source of cash of \$33.4 million in 2015.

Cash flows used by investing activities were \$91.5 million, \$525.3 million and \$84.1 million in 2016, 2015 and 2014, respectively. Capital expenditures represent the largest use in 2016 and were \$89.7 million, \$181.9 million and \$132.6 million in 2016, 2015 and 2014, respectively. In the second quarter of 2016 we divested of a non-strategic foundry

business which resulted in a cash outflow of \$5.1 million and a loss of \$7.7 million. Cash outflows for the same period in 2015 resulted

41

primarily from payments for the SIHI acquisition of \$353.7 million. In 2017, we currently estimate capital expenditures to be between \$80 million and \$90 million before consideration of any acquisition activity.

Cash flows used by financing activities were \$130.8 million in 2016 compared with a source of cash of \$60.3 million in 2015 and a use of cash of \$366.9 million in 2014. Cash outflows during 2016 resulted primarily from \$97.7 million of dividend payments and \$60.0 million in payments on long-term debt. Cash inflows during 2015 resulted primarily from the \$526.3 million in proceeds from the issuance of the 2022 EUR Senior Notes, partially offset by outflows from the repurchase of \$303.7 million of our common stock, \$93.7 million of dividend payments and \$45.0 million in payments on long-term debt. Cash outflows during 2014 resulted primarily from the repurchase of \$246.5 million of our common stock, \$85.1 million of dividend payments and \$40.0 million in payments on long-term debt. We have maintained our previously-announced policy of annually returning 40% to 50% of running two-year average net earnings to shareholders following attainment of the previously announced target leverage ratio. On November 13, 2014, our Board of Directors approved a \$500.0 million share repurchase authorization, which included approximately \$175 million of remaining capacity under the previous share repurchase authorization. As of December 31, 2016, we had \$160.7 million of remaining capacity under our current share repurchase program. While we intend to adhere to this policy for the foreseeable future, any future returns of cash through dividends and/or share repurchases, will be reviewed individually, declared by our Board of Directors and implemented by management at its discretion, depending on our financial condition, business opportunities and market conditions at such time.

In the fourth quarter of 2015, through amendment we extended the maturity of our Senior Credit Facility by two years to October 14, 2020, lowered the sublimits for the issuance of letters of credit and reduced the commitment fee from 0.175% to 0.15% on the daily unused portions of the Senior Credit Facility. The amended Senior Credit Facility also increases the maximum permitted leverage ratio from 3.25 to 3.5 times debt to total Consolidated EBITDA (as defined in the Senior Credit Facility). Additionally, on March 17, 2015, we issued \$500.0 million 2022 EUR Senior Notes, which bear an annual stated interest rate of 1.25%. These items are more fully described in Note 10 to our consolidated financial statements included in Item 8 of this Annual Report.

Our cash needs for the next 12 months are expected to be comparable to those of 2016. We believe cash flows from operating activities, combined with availability under our Revolving Credit Facility and our existing cash balances, will be sufficient to enable us to meet our cash flow needs for the next 12 months. However, cash flows from operations could be adversely affected by a decrease in the rate of general global economic growth and an extended decrease in capital spending of our customers, as well as economic, political and other risks associated with sales of our products, operational factors, competition, regulatory actions, fluctuations in foreign currency exchange rates and fluctuations in interest rates, among other factors. We believe that cash flows from operating activities and our expectation of continuing availability to draw upon our credit agreements are also sufficient to meet our cash flow needs for periods beyond the next 12 months.

Acquisitions and Dispositions

We regularly evaluate acquisition opportunities of various sizes. The cost and terms of any financing to be raised in conjunction with any acquisition, including our ability to raise economical capital, is a critical consideration in any such evaluation.

Note 2 to our consolidated financial statements included in Item 8 of this this Annual Report contains a discussion of our acquisition and disposition activity.

Financing

A discussion of our debt and related covenants is included in Note 10 to our consolidated financial statements included in Item 8 of this this Annual Report. We were in compliance with all covenants as of December 31, 2016. Certain financing arrangements contain provisions that may result in an event of default if there was a failure under other financing arrangements to meet payment terms or to observe other covenants that could result in an acceleration of payment due. Such provisions are referred to as "cross default" provisions. The Senior Credit Facility and the Senior Notes as described in Note 10 to our consolidated financial statements included in Item 8 of this Annual Report are cross-defaulted to each other.

The rating agencies assign credit ratings to certain of our debt. Our access to capital markets and costs of debt could be directly affected by our credit ratings. Any adverse action with respect to our credit ratings could generally cause borrowing costs to increase and the potential pool of investors and funding sources to decrease. In particular, a decline

in credit ratings would increase the cost of borrowing under our Senior Credit Facility.

42

Liquidity Analysis

Our cash balance increased by \$0.7 million to \$367.2 million as of December 31, 2016 as compared with December 31, 2015. The slight cash increase included \$89.7 million in capital expenditures, \$97.7 million in dividend payments and \$60.0 million in payments on long-term debt, partially offset by \$227.6 million in operating cash flows. Approximately 27% of our currently outstanding Term Loan Facility (as such term is defined in Note 10 to our consolidated financial statements in Item 8 of this Annual Report) and \$33.3 million of other short-term borrowings are due to mature in 2017 and 2018. Our Senior Credit Facility matures in October 2020. As of December 31, 2016, we had no revolving loans and \$102.6 million letters of credit outstanding under our \$1.0 billion Revolving Credit Facility. As of December 31, 2016, due to a financial covenant in the Senior Credit Facility, the amount available for borrowings under our Revolving Credit Facility was effectively limited to \$553.5 million. Our Revolving Credit Facility is committed and held by a diversified group of financial institutions.

At December 31, 2016 and 2015, as a result of increases in values of the plan's assets and our contributions to the plan, our U.S. pension plan was fully-funded as defined by applicable law. After consideration of our intent to maintain fully funded status, we contributed \$20.0 million to our U.S. pension plan in 2016, excluding direct benefits paid of \$2.5 million. We continue to maintain an asset allocation consistent with our strategy to maximize total return, while reducing portfolio risks through asset class diversification.

At December 31, 2016, \$342.8 million of our total cash balance of \$367.2 million was held by foreign subsidiaries, \$228.8 million of which we consider permanently reinvested outside the U.S. Based on the expected 2017 liquidity needs of our various geographies, we currently do not anticipate the need to repatriate any permanently reinvested cash to fund domestic operations that would generate adverse tax results. However, in the event this cash is needed to fund domestic operations, we estimate the \$228.8 million could be repatriated resulting in a U.S. cash tax liability between \$5 million and \$15 million. Should we be required to repatriate this cash, it could limit our ability to assert permanent reinvestment of foreign earnings and invested capital in future periods.

OUTLOOK FOR 2017

Our future results of operations and other forward-looking statements contained in this Annual Report, including this MD&A, involve a number of risks and uncertainties — in particular, the statements regarding our goals and strategies, new product introductions, plans to cultivate new businesses, future economic conditions, revenue, pricing, gross profit margin and costs, capital spending, expected cost savings from our realignment programs, depreciation and amortization, research and development expenses, potential impairment of investments, tax rate and pending tax and legal proceedings. Our future results of operations may also be affected by employee incentive compensation including our annual program and the amount, type and valuation of share-based awards granted, as well as the amount of awards forfeited due to employee turnover. In addition to the various important factors discussed above, a number of other factors could cause actual results to differ materially from our expectations. See the risks described in "Item 1A. Risk Factors" of this Annual Report.

Our bookings were \$3,760.4 million during 2016. Because a booking represents a contract that can be, in certain circumstances, modified or canceled, and can include varying lengths between the time of booking and the time of revenue recognition, there is no guarantee that bookings will result in comparable revenues or otherwise be indicative of future results.

We believe lower oil prices that began in the fourth quarter of 2014 will continue to negatively impact oil and gas upstream investment most acutely and impact mid-stream and downstream investment to a lesser extent. In addition, a reduction in the overall level of spending by oil and gas companies could continue to decrease demand for our products and services. However, we believe the long-term fundamentals for this industry remain solid in spite of the current down cycle as the industry works through current excess supply with projected depletion rates of existing fields and forecasted long-term demand growth. With our long-standing reputation in providing successful solutions for upstream, mid-stream and downstream applications, along with the advancements in our portfolio of offerings, we believe that we continue to be well-positioned to assist our customers in this challenging environment.

We expect a continued competitive economic environment in 2017. Continued execution of our Realignment Programs and investments in broad-based employee incentive compensation, while providing long-term benefits, will pressure operating margins in 2017. We anticipate benefits from the continuation of our end-user strategies, the

strength of our high margin aftermarket business, continued disciplined cost management, our diverse customer base, our broad product portfolio and our unified operating platform. Similar to prior years, we expect our results will be weighted towards the second half of the year. While we believe that our primary markets continue to provide opportunities, we remain cautious in our outlook for 2017 given the continuing uncertainty of capital spending in many of our markets and global economic conditions. Accordingly,

43

due to the decrease in backlog at December 31, 2016 as compared with the prior year and a continued competitive environment we expect that sales will decline between 6% to 11% in 2017. For additional discussion on our markets and our opportunities, see the "Business Overview — Our Markets" section of this MD&A.

On December 31, 2016, we had \$1,313.1 million of fixed-rate Senior Notes outstanding and \$224.3 million of variable-rate debt under our Term Loan Facility. As of December 31, 2016, we had no variable to fixed interest rate derivative contracts. However, because a portion of our debt carries a variable rate of interest, our debt is subject to volatility in rates, which could impact interest expense. We expect our interest expense in 2017 will be relatively consistent with amounts incurred in 2016. Our results of operations may also be impacted by unfavorable foreign currency exchange rate movements. See "Item 7A. Quantitative and Qualitative Disclosures about Market Risk" of this Annual Report.

We expect to generate sufficient cash from operations and have sufficient capacity under our Revolving Credit Facility to fund our working capital, capital expenditures, dividend payments, share repurchases, debt payments and pension plan contributions in 2017. The amount of cash generated or consumed by working capital is dependent on our level of revenues, customer cash advances, backlog, customer-driven delays and other factors. We seek to improve our working capital utilization, with a particular focus on improving the management of accounts receivable and inventory. In 2017, our cash flows for investing activities will be focused on strategic initiatives to pursue new markets, geographic expansion, information technology infrastructure and cost reduction opportunities and we currently estimate capital expenditures to be between \$80 million and \$90 million, before consideration of any acquisition activity. We have \$60.0 million in scheduled principal repayments in 2017 under our Term Loan Facility, and we expect to comply with the covenants under our Senior Credit Facility in 2017. See Note 10 to our consolidated financial statements included in Item 8 of this Annual Report for further discussion of our debt covenants.

We currently anticipate that our minimum contribution to our qualified U.S. pension plan will be approximately \$20 million, excluding direct benefits paid, in 2017 in order to maintain fully-funded status as defined by applicable law. We currently anticipate that our contributions to our non-U.S. pension plans will be approximately \$6 million in 2017, excluding direct benefits paid.

CONTRACTUAL OBLIGATIONS AND COMMERCIAL COMMITMENTS

The following table presents a summary of our contractual obligations at December 31, 2016:

	Payments Due By Period				Total
	Within 1 Year	1-3 Years	3-5 Years	Beyond 5 Years	
	(Amounts in millions)				
Term Loan Facility and Senior Notes	\$60.0	\$ 119.3	\$ 45.0	\$1,313.1	\$1,537.4
Fixed interest payments(1)	36.1	72.2	72.2	36.3	216.8
Variable interest payments(2)	4.9	7.0	0.8	—	12.7
Other debt and capital lease obligations	25.4	7.9	—	—	33.3
Operating leases	48.6	67.4	42.9	65.3	224.2
Purchase obligations:(3)					
Inventory	320.1	13.9	—	—	334.0
Non-inventory	45.4	0.5	—	—	45.9
Pension and postretirement benefits(4)	58.6	115.7	121.8	299.6	595.7
Total	\$599.1	\$ 403.9	\$ 282.7	\$1,714.3	\$3,000.0

(1) Fixed interest payments represent interest payments on the Senior Notes and Term Loan Facility as defined in Note 10 to our consolidated financial statements included in Item 8 of this Annual Report.

(2) Variable interest payments under our Term Loan Facility were estimated using a base rate of three-month LIBOR as of December 31, 2016.

(3) Purchase obligations are presented at the face value of the purchase order, excluding the effects of early termination provisions. Actual payments could be less than amounts presented herein.

Retirement and postretirement benefits represent estimated benefit payments for our U.S. and non-U.S. defined (4)benefit plans and our postretirement medical plans, as more fully described below and in Note 11 to our consolidated financial statements included in Item 8 of this Annual Report.

As of December 31, 2016, the gross liability for uncertain tax positions was \$59.3 million. We do not expect a material payment related to these obligations to be made within the next twelve months. We are unable to provide a reasonably reliable estimate of the timing of future payments relating to the uncertain tax positions.

The following table presents a summary of our commercial commitments at December 31, 2016:

	Commitment Expiration By Period				Total
	Within 1 Year	1-3 Years	3-5 Years	Beyond 5 Years	
	(Amounts in millions)				
Letters of credit	\$287.2	\$ 162.2	\$ 43.6	\$ 30.4	\$523.4
Surety bonds	71.9	4.1	0.2	—	76.2
Total	\$359.1	\$ 166.3	\$ 43.8	\$ 30.4	\$599.6

We expect to satisfy these commitments through performance under our contracts.

PENSION AND POSTRETIREMENT BENEFITS OBLIGATIONS

Plan Descriptions

We and certain of our subsidiaries have defined benefit pension plans and defined contribution plans for full-time and part-time employees. Approximately 65% of total defined benefit pension plan assets and approximately 54% of defined benefit pension obligations are related to the U.S. qualified plan as of December 31, 2016. The assets for the U.S. qualified plan are held in a single trust with a common asset allocation. Unless specified otherwise, the references in this section are to all of our U.S. and non-U.S. plans. None of our common stock is directly held by these plans.

Our U.S. defined benefit plan assets consist of a balanced portfolio of primarily U.S. equity and fixed income securities. Our non-U.S. defined benefit plan assets include a significant concentration of United Kingdom ("U.K.") fixed income securities, as discussed in Note 11 to our consolidated financial statements included in Item 8 of this Annual Report. We monitor investment allocations and manage plan assets to maintain acceptable levels of risk. At December 31, 2016, the estimated fair market value of U.S. and non-U.S. plan assets for our defined benefit pension plans increased to \$642.3 million from \$639.0 million at December 31, 2015. Assets were allocated as follows:

Asset category	U.S. Plan	
	2016	2015
U.S. Large Cap	20%	19%
U.S. Small Cap	4%	4%
International Large Cap	14%	14%
Emerging Markets	5%	5%
World Equity	8%	8%
Equity securities	51%	50%
Liability Driven Investment	39%	39%
Long-Term Government/Credit	10%	11%
Fixed income	49%	50%

Asset category	Non-U.S. Plans	
	2016	2015
North American Companies	7 %	6 %
U.K. Companies	— %	8 %
European Companies	— %	3 %
Asian Pacific Companies	— %	2 %
Global Equity	8 %	8 %
Equity securities	15 %	27 %
U.K. Government Gilt Index	31 %	27 %
U.K. Corporate Bond Index	1 %	19 %
Global Fixed Income Bond	2 %	18 %
Liability Driven Investment	11 %	— %
Fixed income	45 %	64 %
Multi-asset	25 %	— %
Buy-in Contract	9 %	— %
Other	6 %	9 %
Other Types	40 %	9 %

The projected benefit obligation ("Benefit Obligation") for our defined benefit pension plans was \$833.5 million and \$812.4 million as of December 31, 2016 and 2015, respectively. Benefits under our defined benefit pension plans are based primarily on participants' compensation and years of credited service.

The estimated prior service cost and the estimated actuarial net loss for the defined benefit pension plans that will be amortized from accumulated other comprehensive loss into net pension expense in 2017 is approximately \$0.1 million and \$9.5 million, respectively. We amortize estimated prior service costs and estimated net losses over the remaining expected service period or over the remaining expected lifetime for plans with only inactive participants.

We sponsor defined benefit postretirement medical plans covering certain current retirees and a limited number of future retirees in the U.S. These plans provide for medical and dental benefits and are administered through insurance companies. We fund the plans as benefits are paid, such that the plans hold no assets in any period presented.

Accordingly, we have no investment strategy or targeted allocations for plan assets. The benefits under the plans are not available to new employees or most existing employees.

The Benefit Obligation for our defined benefit postretirement medical plans was \$27.3 million and \$28.6 million as of December 31, 2016 and 2015, respectively. The estimated actuarial net loss for the defined benefit postretirement medical plans that will be amortized from accumulated other comprehensive loss into net pension expense in 2017 is \$0.1 million. The estimated prior service cost that is expected to be amortized from accumulated other comprehensive loss into pension expense in 2017 is \$0.1 million. We amortize any estimated net loss over the remaining expected service period of approximately three years.

Accrual Accounting and Significant Assumptions

We account for pension benefits using the accrual method, recognizing pension expense before the payment of benefits to retirees. The accrual method of accounting for pension benefits requires actuarial assumptions concerning future events that will determine the amount and timing of the benefit payments.

Our key assumptions used in calculating our cost of pension benefits are the discount rate, the rate of compensation increase and the expected long-term rate of return on plan assets. We, in consultation with our actuaries, evaluate the key actuarial assumptions and other assumptions used in calculating the cost of pension and postretirement benefits, such as discount rates, expected return on plan assets for funded plans, mortality rates, retirement rates and assumed rate of compensation increases, and determine such assumptions as of December 31 of each year to calculate liability information as of that date and pension and postretirement expense for the following year. See discussion of our accounting for and assumptions related to pension and postretirement benefits in the "Our Critical Accounting Estimates" section of this MD&A.

In 2016, net pension expense for our defined benefit pension plans included in operating income was \$37.5 million compared with \$40.1 million in 2015 and \$45.5 million in 2014.

Edgar Filing: FLOWSERVE CORP - Form 10-K

The following are assumptions related to our defined benefit pension plans as of December 31, 2016:

	U.S. Plan	Non-U.S. Plans
Weighted average assumptions used to determine Benefit Obligation:		
Discount rate	4.00%	2.34 %
Rate of increase in compensation levels	4.00	3.22
Weighted average assumptions used to determine 2016 net pension expense:		
Long-term rate of return on assets	6.00%	4.68 %
Discount rate	4.75	3.13
Rate of increase in compensation levels	4.00	3.61

The following provides a sensitivity analysis of alternative assumptions on the U.S. qualified and aggregate non-U.S. pension plans and U.S. postretirement plans.

Effect of Discount Rate Changes and Constancy of Other Assumptions:

	0.5% Increase	0.5% Decrease
U.S. defined benefit pension plan:		
Effect on net pension expense	\$(1.3)	\$ 1.3
Effect on Benefit Obligation	(16.8)	18.2
Non-U.S. defined benefit pension plans:		
Effect on net pension expense	(2.5)	2.6
Effect on Benefit Obligation	(26.9)	30.6
U.S. Postretirement medical plans:		
Effect on postretirement medical expense	(0.1)	—
Effect on Benefit Obligation	(0.9)	0.9

Effect of Changes in the Expected Return on Assets and Constancy of Other Assumptions:

	0.5% Increase	0.5% Decrease
(Amounts in millions)		

U.S. defined benefit pension plan:		
Effect on net pension expense	\$ (2.0)	\$ 2.0

Non-U.S. defined benefit pension plans:		
Effect on net pension expense	(1.1)	1.1

As discussed below, accounting principles generally accepted in the U.S. ("U.S. GAAP") provide that differences between expected and actual returns are recognized over the average future service of employees.

At December 31, 2016, as compared with December 31, 2015, we decreased our discount rate for the U.S. plan from 4.75% to 4.00% based on an analysis of publicly-traded investment grade U.S. corporate bonds, which had lower yields due to current market conditions. The average discount rate for the non-U.S. plans decreased from 3.13% to 2.34% based on analysis of bonds and other publicly-traded instruments, by country, which had lower yields due to

market conditions. The average assumed rate of compensation remained relatively constant at approximately 4.00% for the U.S. plan and decreased to 3.22% from 3.61% for our non-U.S. plans. To determine the 2016 pension expense, the expected rate of return on U.S. plan assets decreased to 6.00% from 6.25% and we decreased our average rate of return on non-U.S. plan assets from 5.03% to 4.68%, primarily based on our target allocations and expected long-term asset returns. As the expected rate of return on plan assets is long-term in nature, short-term market changes do not significantly impact the rate. For all U.S. plans, we adopted the RP-2006 mortality tables and the MP-2016 improvement scale published in October 2016. We applied the RP-2006 tables based on the constituency of our plan population for union and non-union participants. We adjusted the improvement scale to utilize 75% of the ultimate improvement rate, consistent with assumptions adopted by the Social Security Administration trustees, based on long-term historical experience. Currently, we believe this approach provides the best estimate of our future obligation. Most plan participants elect to receive plan benefits as a lump sum at the end of service, rather than an annuity. As such, the updated mortality tables had an immaterial effect on our pension obligation.

We expect that the net pension expense for our defined benefit pension plans included in earnings before income taxes will be approximately \$3.5 million lower in 2017 than the \$37.5 million in 2016, primarily due to the reduction in the amortization of the actuarial net loss. We have used discount rates of 4.00%, 2.34% and 3.75% at December 31, 2016, in calculating our estimated 2017 net pension expense for U.S. pension plans, non-U.S. pension plans and postretirement medical plans, respectively.

The assumed ranges for the annual rates of increase in health care costs were 7.5% for 2016, 2015 and 2014, with a gradual decrease to 5.0% for 2025 and future years. If actual costs are higher than those assumed, this will likely put modest upward pressure on our expense for retiree health care.

Plan Funding

Our funding policy for defined benefit plans is to contribute at least the amounts required under applicable laws and local customs. We contributed \$42.5 million, \$43.8 million and \$43.5 million to our defined benefit plans in 2016, 2015 and 2014, respectively. After consideration of our intent to remain fully-funded based on standards set by law, we currently anticipate that our contribution to our U.S. pension plan in 2017 will be approximately \$20 million, excluding direct benefits paid. We expect to contribute approximately \$6 million to our non-U.S. pension plans in 2017, excluding direct benefits paid.

For further discussion of our pension and postretirement benefits, see Note 11 to our consolidated financial statements included in Item 8 of this Annual Report.

OUR CRITICAL ACCOUNTING ESTIMATES

The process of preparing financial statements in conformity with U.S. GAAP requires the use of estimates and assumptions to determine reported amounts of certain assets, liabilities, revenues and expenses and the disclosure of related contingent assets and liabilities. These estimates and assumptions are based upon information available at the time of the estimates or assumptions, including our historical experience, where relevant. The most significant estimates made by management include: timing and amount of revenue recognition; deferred taxes, tax valuation allowances and tax reserves; reserves for contingent loss; pension and postretirement benefits; and valuation of goodwill, indefinite-lived intangible assets and other long-lived assets. The significant estimates are reviewed at least annually if not quarterly by management. Because of the uncertainty of factors surrounding the estimates, assumptions and judgments used in the preparation of our financial statements, actual results may differ from the estimates, and the difference may be material.

Our critical accounting policies are those policies that are both most important to our financial condition and results of operations and require the most difficult, subjective or complex judgments on the part of management in their application, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. We believe that the following represent our critical accounting policies. For a summary of all of our significant accounting policies, see Note 1 to our consolidated financial statements included in Item 8 of this Annual Report. Management and our external auditors have discussed our critical accounting estimates and policies with the Audit Committee of our Board of Directors.

Revenue Recognition

Revenues for product sales are recognized when the risks and rewards of ownership are transferred to the customers, which is typically based on the contractual delivery terms agreed to with the customer and fulfillment of all but inconsequential or perfunctory actions. In addition, our policy requires persuasive evidence of an arrangement, a fixed or determinable sales price and reasonable assurance of collectibility. We defer the recognition of revenue when advance payments are received from customers before performance obligations have been completed and/or services have been performed. Freight charges billed to customers are included in sales and the related shipping costs are included in cost of sales in our consolidated statements of income. Our contracts typically include cancellation provisions that require customers to reimburse us for costs incurred up to the date of cancellation, as well as any contractual cancellation penalties.

We enter into certain agreements with multiple deliverables that may include any combination of designing, developing, manufacturing, modifying, installing and commissioning of flow management equipment and providing services related to the performance of such products. Delivery of these products and services typically occurs within a one to two-year period, although many arrangements, such as "short-cycle" type orders, have a shorter timeframe for

delivery. We separate deliverables into units of accounting based on whether the deliverable(s) have standalone value to the customer (impact of general rights of return is immaterial). Contract value is allocated ratably to the units of accounting in the arrangement based on their relative selling prices determined as if the deliverables were sold separately.

Revenues for long-term contracts that exceed certain internal thresholds regarding the size and duration of the project and provide for the receipt of progress billings from the customer are recorded on the percentage of completion method with

progress measured on a cost-to-cost basis. Percentage of completion revenue represents less than 7% of our consolidated sales for each year presented.

Revenue on service and repair contracts is recognized after services have been agreed to by the customer and rendered. Revenues generated under fixed fee service and repair contracts are recognized on a ratable basis over the term of the contract. These contracts can range in duration, but generally extend for up to five years. Fixed fee service contracts represent approximately 1% of consolidated sales for each year presented.

In certain instances, we provide guaranteed completion dates under the terms of our contracts. Failure to meet contractual delivery dates can result in late delivery penalties or non-recoverable costs. In instances where the payment of such costs are deemed to be probable, we perform a project profitability analysis, accounting for such costs as a reduction of realizable revenues, which could potentially cause estimated total project costs to exceed projected total revenues realized from the project. In such instances, we would record reserves to cover such excesses in the period they are determined. In circumstances where the total projected revenues still exceed total projected costs, the incurrence of penalties or non-recoverable costs generally reduces profitability of the project at the time of subsequent revenue recognition. Our reported results would change if different estimates were used for contract costs or if different estimates were used for contractual contingencies.

Deferred Taxes, Tax Valuation Allowances and Tax Reserves

We recognize valuation allowances to reduce the carrying value of deferred tax assets to amounts that we expect are more likely than not to be realized. Our valuation allowances primarily relate to the deferred tax assets established for certain tax credit carryforwards and net operating loss carryforwards for non-U.S. subsidiaries, and we evaluate the realizability of our deferred tax assets by assessing the related valuation allowance and by adjusting the amount of these allowances, if necessary. We assess such factors as our forecast of future taxable income and available tax planning strategies that could be implemented to realize the net deferred tax assets in determining the sufficiency of our valuation allowances. Failure to achieve forecasted taxable income in the applicable tax jurisdictions could affect the ultimate realization of deferred tax assets and could result in an increase in our effective tax rate on future earnings. Implementation of different tax structures in certain jurisdictions could, if successful, result in future reductions of certain valuation allowances.

The amount of income taxes we pay is subject to ongoing audits by federal, state and foreign tax authorities, which often result in proposed assessments. Significant judgment is required in determining income tax provisions and evaluating tax positions. We establish reserves for open tax years for uncertain tax positions that may be subject to challenge by various tax authorities. The consolidated tax provision and related accruals include the impact of such reasonably estimable losses and related interest and penalties as deemed appropriate. Tax benefits recognized in the financial statements from uncertain tax positions are measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate settlement.

While we believe we have adequately provided for any reasonably foreseeable outcome related to these matters, our future results may include favorable or unfavorable adjustments to our estimated tax liabilities. To the extent that the expected tax outcome of these matters changes, such changes in estimate will impact the income tax provision in the period in which such determination is made.

Reserves for Contingent Loss

Liabilities are recorded for various contingencies arising in the normal course of business when it is both probable that a loss has been incurred and such loss is estimable. Assessments of reserves are based on information obtained from our independent and in-house experts, including recent legal decisions and loss experience in similar situations. The recorded legal reserves are susceptible to changes due to new developments regarding the facts and circumstances of each matter, changes in political environments, legal venue and other factors. Recorded environmental reserves could change based on further analysis of our properties, technological innovation and regulatory environment changes.

Estimates of liabilities for unsettled asbestos-related claims are based on known claims and on our experience during the preceding two years for claims filed, settled and dismissed, with adjustments for events deemed unusual and unlikely to recur. A substantial majority of our asbestos-related claims are covered by insurance or indemnities.

Estimated indemnities and receivables from insurance carriers for unsettled claims and receivables for settlements and legal fees paid by us for asbestos-related claims are estimated using our historical experience with insurance recovery rates and estimates of future recoveries, which include estimates of coverage and financial viability of our insurance

carriers. We have claims pending against certain insurers that, if resolved more favorably than estimated future recoveries, would result in discrete gains in the applicable quarter. We are currently unable to estimate the impact, if any, of unasserted asbestos-related claims, although future claims would also be subject to existing indemnities and insurance coverage. Changes in claims filed, settled and

dismissed and differences between actual and estimated settlement costs and insurance or indemnity recoveries could impact future expense.

Pension and Postretirement Benefits

We provide pension and postretirement benefits to certain of our employees, including former employees, and their beneficiaries. The assets, liabilities and expenses we recognize and disclosures we make about plan actuarial and financial information are dependent on the assumptions and estimates used in calculating such amounts. The assumptions include factors such as discount rates, health care cost trend rates, inflation, expected rates of return on plan assets, retirement rates, mortality rates, turnover, rates of compensation increases and other factors. The assumptions utilized to compute expense and benefit obligations are shown in Note 11 to our consolidated financial statements included in Item 8 of this Annual Report. These assumptions are assessed annually in consultation with independent actuaries and investment advisors as of December 31 and adjustments are made as needed. We evaluate prevailing market conditions and local laws and requirements in countries where plans are maintained, including appropriate rates of return, interest rates and medical inflation (health care cost trend) rates. We ensure that our significant assumptions are within the reasonable range relative to market data. The methodology to set our significant assumptions includes:

- Discount rates are estimated using high quality debt securities based on corporate or government bond yields with a duration matching the expected benefit payments. For the U.S. the discount rate is obtained from an analysis of publicly-traded investment-grade corporate bonds to establish a weighted average discount rate. For plans in the U.K. and the Eurozone we use the discount rate obtained from an analysis of AA-graded corporate bonds used to generate a yield curve. For other countries or regions without a corporate AA bond market, government bond rates are used. Our discount rate assumptions are impacted by changes in general economic and market conditions that affect interest rates on long-term high-quality debt securities, as well as the duration of our plans' liabilities.

The expected rates of return on plan assets are derived from reviews of asset allocation strategies, expected long-term performance of asset classes, risks and other factors adjusted for our specific investment strategy. These rates are impacted by changes in general market conditions, but because they are long-term in nature, short-term market changes do not significantly impact the rates. Changes to our target asset allocation also impact these rates.

The expected rates of compensation increase reflect estimates of the change in future compensation levels due to general price levels, seniority, age and other factors.

Depending on the assumptions used, the pension and postretirement expense could vary within a range of outcomes and have a material effect on reported earnings. In addition, the assumptions can materially affect benefit obligations and future cash funding. Actual results in any given year may differ from those estimated because of economic and other factors.

We evaluate the funded status of each retirement plan using current assumptions and determine the appropriate funding level considering applicable regulatory requirements, tax deductibility, reporting considerations, cash flow requirements and other factors. We discuss our funding assumptions with the Finance Committee of our Board of Directors.

Valuation of Goodwill, Indefinite-Lived Intangible Assets and Other Long-Lived Assets

The initial recording of goodwill and intangible assets requires subjective judgments concerning estimates of the fair value of the acquired assets. We test the value of goodwill and indefinite-lived intangible assets for impairment as of December 31 each year or whenever events or circumstances indicate such assets may be impaired.

The test for goodwill impairment involves significant judgment in estimating projections of fair value generated through future performance of each of the reporting units. The identification of our reporting units began at the operating segment level and considered whether components one level below the operating segment levels should be identified as reporting units for purpose of testing goodwill for impairment based on certain conditions. These conditions included, among other factors, (i) the extent to which a component represents a business and (ii) the aggregation of economically similar components within the operating segments and resulted in five reporting units. Other factors that were considered in determining whether the aggregation of components was appropriate included the similarity of the nature of the products and services, the nature of the production processes, the methods of distribution and the types of industries served.

An impairment loss for goodwill is recognized if the implied fair value of goodwill is less than the carrying value. We estimate the fair value of our reporting units based on an income approach, whereby we calculate the fair value of a reporting unit based on the present value of estimated future cash flows. A discounted cash flow analysis requires us to make various judgmental assumptions about future sales, operating margins, growth rates and discount rates, which are based on our budgets,

50

business plans, economic projections, anticipated future cash flows and market participants. Assumptions are also made for varying perpetual growth rates for periods beyond the long-term business plan period.

We did not record an impairment of goodwill in 2016, 2015 or 2014; however the estimated fair value of our Engineered Product Operations ("EPO") and IPD reporting units reduced significantly due to broad-based capital spending declines and heightened pricing pressure experienced in the oil and gas markets which are anticipated to continue in the near to mid-term. The EPO reporting unit is a component of our EPD reporting segment and is primarily focused on long lead time, custom and other highly-engineered pumps and pump systems. As of December 31, 2016 our EPO reporting unit had approximately \$156 million of goodwill and its estimated fair value exceeded its carrying value by approximately 45%. In addition, our IPD reporting unit, which is primarily focused on pre-configured industrial pumps and pump systems had approximately \$298 million of goodwill and its fair value exceeded its carrying value by approximately 70%. Key assumptions used in determining the estimated fair value of our EPO and IPD reporting units included the annual operating plan and forecasted operating results, successful execution of our current realignment programs and identified strategic initiatives, a constant cost of capital, a short-term stabilization and mid to long-term improvement of the macro-economic conditions of the oil and gas market, and a relatively stable global gross domestic product. A 100 basis point increase in our cost of capital would reduce the estimated fair values of both EPO and IPD reporting units by approximately 13%, which coupled with a prolonged down cycle of the oil and gas markets, could potentially put both reporting units' goodwill at risk of a future impairment. Although we have concluded that there is no impairment on the goodwill associated with our EPO and IPD reporting units as of December 31, 2016, we will continue to closely monitor their performance and related market conditions for future indicators of potential impairment and reassess accordingly.

We also consider our market capitalization in our evaluation of the fair value of our goodwill. Our market capitalization increased as compared with 2015 and did not indicate a potential impairment of our goodwill as of December 31, 2016.

Impairment losses for indefinite-lived intangible assets are recognized whenever the estimated fair value is less than the carrying value. Fair values are calculated for trademarks using a "relief from royalty" method, which estimates the fair value of a trademark by determining the present value of estimated royalty payments that are avoided as a result of owning the trademark. This method includes judgmental assumptions about sales growth and discount rates that have a significant impact on the fair value and are substantially consistent with the assumptions used to determine the fair value of our reporting units discussed above. We did not record a material impairment of our trademarks in 2016, 2015 or 2014.

The recoverable value of other long-lived assets, including property, plant and equipment and finite-lived intangible assets, is reviewed when indicators of potential impairments are present. The recoverable value is based upon an assessment of the estimated future cash flows related to those assets, utilizing assumptions similar to those for goodwill. Additional considerations related to our long-lived assets include expected maintenance and improvements, changes in expected uses and ongoing operating performance and utilization.

Due to uncertain market conditions and potential changes in strategy and product portfolio, it is possible that forecasts used to support asset carrying values may change in the future, which could result in non-cash charges that would adversely affect our financial condition and results of operations.

ACCOUNTING DEVELOPMENTS

We have presented the information about accounting pronouncements not yet implemented in Note 1 to our consolidated financial statements included in Item 8 of this Annual Report.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We have market risk exposure arising from changes in interest rates and foreign currency exchange rate movements. We are exposed to credit-related losses in the event of non-performance by counterparties to financial instruments, but we currently expect all counterparties will continue to meet their obligations given their current creditworthiness.

Interest Rate Risk

Our earnings are impacted by changes in short-term interest rates as a result of borrowings under our Senior Credit Facility, which bear interest based on floating rates. At December 31, 2016, we had \$224.3 million of variable rate debt obligations outstanding under our Senior Credit Facility with a weighted average interest rate of 2.25%. A hypothetical change

of 100 basis points in the interest rate for these borrowings, assuming constant variable rate debt levels, would have changed interest expense by \$2.2 million for the year ended December 31, 2016.

Foreign Currency Exchange Rate Risk

A substantial portion of our operations are conducted by our subsidiaries outside of the U.S. in currencies other than the U.S. dollar. The primary currencies in which we operate, in addition to the U.S. dollar, are the Argentine peso, Australian dollar, Brazilian real, British pound, Canadian dollar, Chinese yuan, Colombian peso, Euro, Indian rupee, Japanese yen, Mexican peso, Singapore dollar, Swedish krona, Russian ruble, Malaysian ringgit and Venezuelan bolivar. Almost all of our non-U.S. subsidiaries conduct their business primarily in their local currencies, which are also their functional currencies. Foreign currency exposures arise from translation of foreign-denominated assets and liabilities into U.S. dollars and from transactions, including firm commitments and anticipated transactions, denominated in a currency other than a non-U.S. subsidiary's functional currency. In March 2015, we designated €255.7 million of our €500.0 million 2022 EUR Senior Notes as a net investment hedge of our investments in certain of our international subsidiaries that use the Euro as their functional currency. Generally, we view our investments in foreign subsidiaries from a long-term perspective and use capital structuring techniques to manage our investment in foreign subsidiaries as deemed necessary. We realized net losses associated with foreign currency translation of \$72.1 million, \$174.9 million and \$148.6 million for the years ended December 31, 2016, 2015 and 2014, respectively, which are included in other comprehensive loss. The net loss in 2016 was primarily driven by the weakening of the British pound, Euro and Mexican peso versus the U.S. dollar at December 31, 2016 as compared with December 31, 2015. We employ a foreign currency risk management strategy to minimize potential changes in cash flows from unfavorable foreign currency exchange rate movements. Where available, the use of forward exchange contracts allows us to mitigate transactional exposure to exchange rate fluctuations as the gains or losses incurred on the forward exchange contracts will offset, in whole or in part, losses or gains on the underlying foreign currency exposure. Our policy allows foreign currency coverage only for identifiable foreign currency exposures, and beginning in the fourth quarter of 2013 instruments that meet certain criteria are designated for hedge accounting. As of December 31, 2016, we had a U.S. dollar equivalent of \$393.8 million in aggregate notional amount outstanding in foreign exchange contracts with third parties, compared with \$397.3 million at December 31, 2015. Transactional currency gains and losses arising from transactions outside of our sites' functional currencies and changes in fair value of non-designated foreign exchange contracts are included in our consolidated results of operations. We recognized foreign currency net gains (losses) of \$3.8 million, \$(38.7) million and \$2.8 million for the years ended December 31, 2016, 2015 and 2014, respectively, which are included in other income (expense), net in the accompanying consolidated statements of income. See discussion of the impact in 2015 of the devaluation of the Venezuelan bolivar in Note 1 to our consolidated financial statements included in Item 8 of this Annual Report.

Based on a sensitivity analysis at December 31, 2016, a 10% change in the foreign currency exchange rates for the year ended December 31, 2016 would have impacted our net earnings by approximately \$5 million. This calculation assumes that all currencies change in the same direction and proportion relative to the U.S. dollar and that there are no indirect effects, such as changes in non-U.S. dollar sales volumes or prices. This calculation does not take into account the impact of the foreign currency forward exchange contracts discussed above.

Hedging related transactions for designated foreign exchange contracts recorded to other comprehensive loss, net of deferred taxes, are summarized in Note 17 to our consolidated financial statements included in Item 8 of this Annual Report.

We expect to recognize losses of \$0.1 million, net of deferred taxes, into earnings in the next twelve months related to designated cash flow hedges based on their fair values at December 31, 2016.

ITEM 8. FINANCIAL STATEMENTS AND
SUPPLEMENTARY DATA

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To The Board of Directors and Shareholders of Flowserve Corporation:

In our opinion, the consolidated financial statements listed in the index appearing under Item 15(a)(1) present fairly, in all material respects, the financial position of Flowserve Corporation and its subsidiaries at December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the accompanying index appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statements