

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, 2020**

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

Commission file number 1-13179

FLOWERVE CORPORATION

(Exact name of registrant as specified in its charter)



New York

(State or other jurisdiction of incorporation or organization)

31-0267900

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

5215 N. O'Connor Boulevard Suite 2300, Irving, Texas

(Address of principal executive offices)

75039

(Zip Code)

(972) 443-6500

(Registrant's telephone number, including area code)

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

| Title of Each Class | Trading Symbol | Name of Each Exchange on Which Registered |
|--------------------------------|----------------|---|
| Common Stock, \$1.25 Par Value | FLS | New York Stock Exchange |
| 1.25% Senior Notes due 2022 | FLS22A | 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 every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. Yes ☒ No ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). 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, 2020 (the last business day of the registrant's most recently completed second fiscal quarter), was approximately \$3,069,855,077. 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 17, 2021 was 130,276,070.

DOCUMENTS INCORPORATED BY REFERENCE

Certain information contained in the definitive proxy statement for the registrant's 2021 Annual Meeting of Shareholders scheduled to be held on May 20, 2021 is incorporated by reference into Part III hereof.

FLOWSERVE CORPORATION
FORM 10-K

TABLE OF CONTENTS

| | <u>Page</u> |
|---|----------------------------|
| <u>PART I</u> | |
| <u>Item 1. Business</u> | <u>1</u> |
| <u>Item 1A. Risk Factors</u> | <u>13</u> |
| <u>Item 1B. Unresolved Staff Comments</u> | <u>25</u> |
| <u>Item 2. Properties</u> | <u>25</u> |
| <u>Item 3. Legal Proceedings</u> | <u>26</u> |
| <u>Item 4. Mine Safety Disclosures</u> | <u>26</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>26</u> |
| <u>Item 6. Selected Financial Data</u> | <u>29</u> |
| <u>Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations</u> | <u>30</u> |
| <u>Item 7A. Quantitative and Qualitative Disclosures About Market Risk</u> | <u>55</u> |
| <u>Item 8. Financial Statements and Supplementary Data</u> | <u>56</u> |
| <u>Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u> | <u>116</u> |
| <u>Item 9A. Controls and Procedures</u> | <u>116</u> |
| <u>Item 9B. Other Information</u> | <u>117</u> |
| <u>PART III</u> | |
| <u>Item 10. Directors, Executive Officers and Corporate Governance</u> | <u>117</u> |
| <u>Item 11. Executive Compensation</u> | <u>118</u> |
| <u>Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u> | <u>118</u> |
| <u>Item 13. Certain Relationships and Related Transactions, and Director Independence</u> | <u>118</u> |
| <u>Item 14. Principal Accountant Fees and Services</u> | <u>118</u> |
| <u>PART IV</u> | |
| <u>Item 15. Exhibits and Financial Statement Schedules</u> | <u>118</u> |
| <u>Item 16. Form 10-K Summary</u> | <u>122</u> |
| <u>Signatures</u> | <u>123</u> |

PART I

ITEM 1. BUSINESS

OVERVIEW

Flowserve Corporation is a world leading manufacturer and aftermarket service provider of comprehensive flow control systems. 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. Under the name of a predecessor entity, we were incorporated in the State of New York on May 1, 1912, but some of our heritage product brand names date back to our founding in 1790. Over the years, we have evolved through organic growth and strategic acquisitions, and our over 225-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 2020 and 2019 consisted of:

| | 2020 | 2019 |
|-------------------------|------|------|
| • oil and gas | 34 % | 41 % |
| • general industries(1) | 26 % | 22 % |
| • chemical(2) | 24 % | 22 % |
| • power generation | 13 % | 11 % |
| • water management | 3 % | 4 % |

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

(2) Chemical industry is comprised of chemical-based and pharmaceutical products.

Demand for most of our products depends on the level of new capital investment as well as 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 products that rely on oil and gas, chemicals, power generation and water resource 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 two 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 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.

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, 2020 ("Annual Report"). For information on our sales and long-lived assets by geographic areas, see Note 20 to our consolidated financial statements included in "Item 8. Financial Statements and Supplementary Data" ("Item 8") of this Annual Report.

Our 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. 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 Executive 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 in shareholder value.

Strategies

Our overarching objectives are to be a leader in each of the market segments we serve and become the employer of choice in the flow control industry. Additionally, we seek to be recognized by our customers as the most trusted brand of flow control technology in terms of reliability and quality, which we believe will help maximize shareholder value.

In pursuit of these objectives, we maintain a rolling, five-year strategic plan that takes a balanced approach to integrating both short-term and long-term initiatives in four key areas: People, Process & Technology, Customer and Finance.

People

With the goal of developing and maintaining a people-first culture, we focus on several elements in our strategic efforts to continuously enhance our organizational capability, including: (i) fully committing to providing a safe work environment for our associates, worldwide, (ii) upholding a high-performance workforce, that is empowered, accountable and flexible, (iii) becoming an employer of choice by fostering a people-first culture and (iv) recruiting, developing and retaining a global and diverse workforce.

Process and Technology

With the goal of improving our productivity and delivering a continuous stream of innovative solutions to our customers, we focus on select strategies relating to: (i) developing and maintaining an enterprise-first business approach across all operating units and functional organizations, (ii) simplifying our business processes and optimizing corporate structural costs, (iii) significantly reducing our product cost and rationalizing our product portfolio and (iv) becoming the technical leader in the flow control industry.

Customer

With the goal of achieving the highest level of customer satisfaction amongst our peers, we focus on select strategies related to rigorous and disciplined selection of target markets and customers, while maintaining competitive lead times and emphasizing the highest levels of on-time delivery and quality. We seek to provide an outstanding experience for our customers over the entire product lifecycle by providing unique, integrated flow-control solutions that solve real-world application problems in our customers' facilities.

Finance

With the goal of growing the value of our enterprise, we focus on select strategies we believe will increase our revenue above the rate of market growth, while optimizing performance in terms of gross margin, selling, general and administrative ("SG&A") expense, operating margin, cash flow and primary working capital.

Flowserve 2.0 Transformation

In 2018 we launched and committed resources to our Flowserve 2.0 Transformation ("Flowserve 2.0 Transformation"), a program designed to transform our business model to drive operational excellence, reduce complexity, accelerate growth, expand margins, increase capital efficiency and improve organizational health. The goals of the Flowserve 2.0 Transformation are to (i) accelerate revenue growth, (ii) drive margin expansion, (iii) increase capital efficiency and (iv) improve organizational health. The Flowserve 2.0 Transformation consists of individual projects spread over six workstreams (operations, commercial, growth, aftermarket, cost structure and working capital). The projects include elements of organizational design, business process definition, process automation and metrics, and operational footprint optimization. Individual projects vary in terms of time to execute, ranging from one year for simple quick-fix efforts to five years for more complex infrastructure efforts. Structured processes are created to ensure that each project followed common milestones and delivered value over its lifecycle, with a governance process that oversaw the portfolio to ensure that time-phased trade-offs between cost and benefits are proactively managed. For further discussion of the Flowserve 2.0 Transformation program refer to Note 22 to our consolidated financial statements included in Item 8 of this Annual Report.

Seasonality

Our financial results are traditionally seasonal during the year as we typically experience lower earnings in the first quarter of the year, with lower sales, coupled with fixed operating expenses, impacting our earnings and cash flows. We typically have higher sales, earnings and cash flows in the second half of the year with the fourth quarter being the strongest. Given that certain of our operating expenses are fixed, fluctuations in sales volumes from quarter to quarter may affect operating income for the respective quarters.

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. We expect pricing for original equipment orders to continue to be a particularly influential competitive factor. The unique competitive environments in our business segments are discussed in more detail under the "Business Segments" heading below.

In the aftermarket portion of our business, we compete against other 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.

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 do not have sales to any individual customer that represent 10% or more of consolidated 2020 revenues. Customer information relating to each of our 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. While we do provide cancellation policies through our contractual relationships, we generally do not provide rights of product return for our customers. We manage inventory more stringently and intensively during challenging cycles by actively managing and applying discrete measures to reduce inventory levels based on current demand and visibility of shipments, with the overall target at improving our operational effectiveness and reduce our overall working capital needs.

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 where it is more 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. In limited circumstances, we have entered into agreements to license intellectual property. The operational and financial terms of these agreements are not material. 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.

Human Capital Management

Our associates worldwide are critical to delivering on our purpose to create extraordinary flow control solutions. As a global manufacturer, our values start with our people - we strive to create a collaborative team environment that enables us to develop each other, embrace our differences and respect one another.

As of December 31, 2020, we have approximately 16,000 employees ("associates") globally and a footprint of manufacturing facilities and Quick Response Centers in more than 50 countries. Of our global associates, there are approximately 3,500 in the Flowserve Pump Division ("FPD"), 3,500 in the Flow Control Division ("FCD") and 4,500 supporting the aftermarket sales and services business across both divisions. The remaining 4,500 associates support core business functions including legal, human resources, information technology, finance, commercial operations and sales, global engineering operations and marketing and technology operations. Regionally, approximately 5,000 of our associates are in North America, approximately 1,600 of our associates are in Latin America, approximately 5,900 of our associates are in Europe, the Middle East and Africa, and approximately 3,500 of our associates are in Asia Pacific. Our workforce is made up of approximately 9,000 salaried employees and 7,000 hourly employees.

We are committed to achieving business success with integrity at the forefront. All of our associates and our Board of Directors are governed by our Code of Conduct as we continuously work together to improve our operations by fostering a work environment that supports employee health, safety, training, development, diversity, equity and inclusion. In order to create that environment, members of management work together to identify areas of opportunity and develop and implement various policies, procedures, and initiatives in these key areas. Members of management also provide quarterly (or more frequent, as needed) updates to our Board of Directors, who provide additional input and guidance to management. Additionally, we conduct annual employee engagement surveys to solicit feedback and input directly from our associates. In 2020, more than 80% of our associates participated in our employee engagement survey. Based on the results of our surveys, management and our Board of Directors work together to create additional action plans as appropriate.

Workplace Health and Safety: We strive to create and maintain a safe working environment, empowering our employees to identify and report safety concerns and act to correct hazards. Our focus on safety and environmental protection has led to meaningful reductions in workplace safety incidents, emissions to the environment, and solid waste and hazardous waste generation at our facilities worldwide.

Compensation and Benefits: We maintain a market-based compensation strategy that provides a competitive total target compensation opportunity for our associates. We also value the health and well-being of our associates and offer competitive overall benefits, health and wellness programs tailored to the specific localized needs of our employees. We offer a global employee assistance program to support the mental health and wellness needs our employees, as well as physical health incentives aimed at creating healthy lives for our employees and their families.

Training, Development and Ethics: Developing our people is an essential aspect of the Flowserve journey. Flowserve believes that development is a continuous process. We offer developmental opportunities to help our associates build the skills needed to reach their short-term and long-term career goals, including but not limited to on-the-job training, online learning, rotational programs, professional memberships, language learning and leadership and management training. To help our associates see how their work contributes to overall Company objectives and successes, management utilize a robust performance management system and provide regular feedback in order to develop talent and foster engagement.

Recognizing that our associates are our most valuable resource in achieving operational excellence, we have instituted broad Continuous Improvement Process ("CIP") training initiatives, certifying or training our employees as

"black belts" or "green belts" and deploying them to CIP led projects throughout the Company. As a result, we have developed and implemented processes to shorten engineering and manufacturing cycle times, improve on-time delivery and service response time, lower inventory levels and otherwise reduce costs. To date, over 800 of our employees are CIP certified.

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 four Superfund sites. The sites are in various stages of evaluation by government authorities. Our total projected "fair share" cost allocation at these four 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 \$264.6 million in 2020, \$300.9 million in 2019 and \$234.3 million in 2018.

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

We report a two operating segment structure, consisting of our Flowserve Pumps Division and our Flow Control Division. In addition to the business segment information presented below, Note 20 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 2020, 2019 and 2018.

FLOWSERVE PUMP DIVISION

Our largest business segment is FPD, through which we design, manufacture, pre-test, distribute and service specialty and highly-engineered custom and pre-configured pumps and pump systems, mechanical seals, auxiliary systems, replacement parts and upgrades and related aftermarket services (collectively referred to as "aftermarket"). FPD products and services are primarily used by companies that operate in the oil and gas, petrochemical, chemical, power generation, 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 other original equipment manufacturers for incorporation into their rotating equipment requiring mechanical seals.

Our pump products are manufactured in a wide range of metal alloys and with a variety of configurations to reliably meet the operating requirements 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 in 39 manufacturing facilities worldwide, 13 of which are located in Europe, 12 in North America, eight in Asia Pacific and six in Latin America, and we have 137 QRCs, including those co-located in manufacturing facilities and/or shared with FCD.

We also conduct business through strategic foreign joint ventures. We have six unconsolidated joint ventures that are located in Chile, China, India, 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 best-cost sourcing initiatives and balance capacity demands for other markets.

FPD 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 FPD product types and globally recognized brands:

FPD Product Types

Single and Multistage Between Bearings Pumps

- Single Case — Axially Split
- Single Case — Radially Split
- Double Case

Overhung Pumps

- Chemical Process ASME and ISO
- Industrial Process
- Slurry and Solids Handling
- Metallic & Lined Magnetic Drive Process

Positive Displacement Pumps

- Rotary Multiphase
- Rotary Screw

Vertical Pumps

- Deepwell Submersible
- Slurry and Solids Handling
- Sump & Cantilever
- Vertical Inline
- Vertical Line Shaft
- Vertical Canned Shaft
- Wet Pit, Double Case API & Double

Positive Displacement Pumps

- Gear

Single Stage Overhung Pumps

- API Process

Between Bearings Pumps

- Single Case — Radially Split
- Side Channel Multistage
- Split Case — Axially Split
- Split Case — Radially Split

Mechanical Seals and Seal Support Systems

- Dry-Running Seals
- Barrier Fluids and Lubricants
- Bearing Isolators
- Compressor Seals
- Gas Barrier Seals
- Mixer Seals
- Standard Cartridge Seals
- Seal Support Systems

Vacuum Systems

- Liquid Ring
- LR Systems
- Dry Systems

Specialty Products

- Ag Chem
- Barge Pumps
- Cryogenic Pumps
- Concrete Volute Pumps
- Ebullator Recycle Pumps
- Geothermal Deepwell Pumps
- Molten Salt Pumps
- Nuclear Pumps
- Nuclear Seals
- Submersible Pumps
- Solids Handling Submersible
- Wireless Transmitters
- Power Recovery — DWEER
- Power Recovery — Hydro Turbine
- Energy Recovery Devices
- Hydraulic Decoking Systems
- API Slurry Pumps

FPD Brand Names

- BW Seals
- Byron Jackson
- Calder Energy Recovery Devices
- Durametalllic
- Durco
- Five Star Seal
- Flowserve
- GASPAC™
- Halberg
- IDP
- Innomag
- Interseal
- Lawrence
- LifeCycle Advantage
- Labour
- Meregalli
- Niigata Worthington
- QRC™
- Pacific
- Pacific Weitz
- Pac-Seal
- ReadySeal
- Scienco
- SIHI
- TKL
- United Centrifugal
- Western Land Roller
- Worthington
- Worthington-Simpson

FPD Services

We market our pump products through our worldwide sales force, regional service and repair centers, independent distributors and sales representatives. We also provide engineered aftermarket services through our global network of 137 QRCs, some of which are co-located in manufacturing facilities, in 48 countries. Our FPD service personnel provide a comprehensive set of equipment services for flow management control systems, including installation, commissioning services, seal systems spare parts, repairs, advanced diagnostics, re-rate and upgrade solutions 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 FPD's service work is performed on a quick response basis, and we offer 24-hour service in all of our major markets.

FPD 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 and power) and under more extreme conditions (i.e., erosive, corrosive and temperature) beyond the level of traditional technology. We will invest in our product platform to expand and enhance our products offered to the global chemical industry. We continue to develop innovations that improve our competitive position in the engineered equipment industry, specifically upstream, offshore and downstream applications for the oil and gas market. Continued engagement with our end users is exemplified through the completion of advancements that significantly improve energy efficiency, reduce total cost-of-ownership and enhance safety.

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 coal fired, combined cycle, small modular nuclear and concentrated solar power generation plant.

We continue to address our core products with design enhancements that improve performance, reduce costs, extend operating life between required maintenance periods and reduce the lead times in which we can deliver our products. 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.

We continue to advance our capabilities and technology position in the rapidly developing segment known as the Industrial Internet of Things ("IIoT"). Over the past few years we have continued to both invest and partner in this space to build remote monitoring solutions, as well as advanced equipment diagnostics in order to provide remote asset management and related services capabilities for our end-user customers. These technologies include delivering intelligent "edge" devices, advanced networking infrastructure and secure communication and security protocols, secure data management, and remote monitoring and reporting for our customers. In addition, we have moved beyond exploring new additive manufacturing capabilities, such as 3D printing and fast casting methods, and are looking for ways to economically scale these techniques as another means of manufacturing our products to both reduce lead time and lower our production costs.

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.

FPD Customers

Our customer mix is diversified and includes leading EPC firms, major national oil companies, international oil companies, equipment end users in our served markets, other 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, petrochemical, chemical, power generation, water management and general industries.

FPD Competition

The pump and mechanical seal industry is highly fragmented, with thousands of competitors globally. We compete, however, primarily with a limited number of large companies operating on a global scale. There are also a number of smaller, newer entrants in some of our emerging markets. Competition among our closest competitors is generally driven by delivery times, application knowledge, experience, 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; Weir Group Plc.; ITT Industries; and KSB SE & Co. KGaA.

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, petrochemical, chemical and power generation industries, our large installed base of products, our strong customer relationships, our high technology, our more than 225 years of 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.

FPD Backlog

FPD's backlog of orders as of December 31, 2020 was \$1,236.9 million, compared with \$1,560.9 million as of December 31, 2019. We expect to recognize revenue on approximately 90% of December 31, 2020 backlog during 2021.

FLOW CONTROL DIVISION

FCD designs, manufactures, distributes and services a broad portfolio of flow control solutions, including engineered and industrial valve and automation systems, isolation and control valves, actuation, controls and related equipment. 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, gases and multi-phase fluids, and are a critical part of any flow control system. Our valve and automation products are based on flexible architecture that can be customized or engineered to perform specific functions within each customer's unique flow control environment or objective.

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 21 principal manufacturing facilities, five of which are located in the U.S., 10 located in Europe, five located in Asia Pacific and one located in Latin America. We deliver our services through our global network of 27 QRCs worldwide, including five sites in Europe and Africa, nine in North America, three in the Middle East, eight in Asia Pacific and two in Latin America, including those co-located in manufacturing facilities.

FCD Products

Our valve, automation and controls product and solutions portfolio represent 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 actuation 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, including utilizing 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 controls and communication technologies in order to provide complete integrated automation solutions that optimize flow control performance and enhance digital end-user experience.

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

FCD Product Types

- Ball Valves
- Butterfly Valves
- Check Valves
- Control Valves
- Diagnostic Software
- Diaphragm Actuators
- Digital Communications
- Digital Positioners
- Direct Gas and Gas-over-Oil Actuators
- Electric/Electronic Actuators
- Electro Pneumatic Positioners
- Gate Valves
- Globe Valves
- Hydraulic Actuators
- Integrated Valve Controllers
- Intelligent Positioners
- Isolation Valves
- Limit Switches
- Linear Actuators
- Lined Ball Valves
- Lined Plug Valves
- Lubricated Plug Valves
- Non-Lubricated Plug Valves
- On-Off Valves
- Pneumatic Actuators
- Pneumatic Positioners
- Rotary Actuators
- Valve Automation Systems
- Valve and Automation Repair Services

FCD Brand Names

- Accord
- Anchor/Darling
- Argus
- Atomac
- Automax
- Durco
- Edward
- Flowserve
- Kammer
- Limitorque
- Logix
- McCANNA/MARPAC
- NAF
- Noble Alloy
- Norbro
- Nordstrom
- PMV
- Serck Audco
- Valbart
- Valtek
- 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 enhance end-user experience and advance our technological leadership by creating compelling value propositions for our customers, and lasting competitive advantage of our products and services in the market. In that respect, our investments have been focusing in four critical areas – (1) significantly enhancing the digital integration and interoperability of automation products (e.g., positioners, actuators, limit switches and associated accessories) with Distributed Control Systems ("DCS") and Asset Management Systems ("AMS"); (2) developing and deploying next-generation hardware and software solutions that leverage our in-depth domain knowledge, big data and artificial intelligence, to further flow control diagnostics and bring insights that increase performance and efficiency of end-user processes; (3) advancing material science and processing technologies in order to further increase products' capabilities in severe and critical services – including but not limited to noise and cavitation reduction; and (4) investing in our talents and processes that adopt modern R&D project management tools (such as lean startup, SCRUM, agile and hybrid portfolio management, etc.) that enable effective risk mitigation and shorter commercialization cycles. 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 end markets, including the chemical, power generation, oil and gas, water management, pulp and paper, mining and other general industries. We are especially active in providing solutions for emerging applications that supports sustainability (such as concentrated solar power, hydrogen economy, carbon capture, desalination, etc.) or increases energy productivity (such as LNG, Ethylene cracking, Hydrocracking, etc.). Our product offerings include original equipment, aftermarket parts, and a portfolio of services and solutions. Contracts and transactions are conducted through a variety of channels depending on customer requirements, including direct end-users, EPC firms, distributors, 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 Emerson Electric Co., Cameron International Corp. (a Schlumberger company), Baker Hughes, Rotork plc, Neles and Crane Co.

Our market research and assessments indicate that the top 10 global valve manufacturers collectively comprise less than 15% of the total valve market. Based on independent industry sources, we believe that FCD is the second largest industrial valve supplier in the world. We believe that our strongest sources of competitive advantage rest with our comprehensive portfolio of valve and automation products and services, our ability to provide complementary pump and rotating equipment products and services, our focus on execution, our expertise in severe corrosion and erosion applications, and strategic partnerships purposely built to advance market adoption of new technologies and digital tools.

FCD Backlog

FCD's backlog of orders as of December 31, 2020 was \$623.1 million, compared with \$600.0 million as of December 31, 2019. We expect to recognize revenue on approximately 89% of December 31, 2020 backlog during 2021.

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"). Reports, proxy statements and other information filed or furnished with the SEC are also available at www.sec.gov.

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 and Risk, 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

Please carefully consider the following discussion of material factors, events, and uncertainties that make an investment in our securities risky. When the factors, events and contingencies discussed below or elsewhere in this Annual Report materialize, our business, financial condition, results of operations, cash flows, reputation or prospects 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 materially adversely affect our business, financial condition, results of operations, cash flows, reputation, prospects or stock price. Because of the risk factors discussed below and elsewhere in this Annual Report and in other filings we make with the SEC, as well as other variables affecting our operating results, past financial performance may not be a reliable indicator of future performance, historical trends should not be used to anticipate results or trends in future periods and actual results could differ materially from those projected in the forward-looking statements contained in this Annual Report.

Business and Operating Risks

Our business depends on our customers' levels of capital investment and maintenance expenditures, which in turn are affected by numerous factors, including changes in the state of domestic and global economies, global energy demand and the liquidity cyclicality and condition of global credit and capital markets, which have impacted and which could continue to impact the ability or willingness of our customers to invest in our products and services and adversely affect our financial condition, results of operations and cash flow.

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 is also 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, tend 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, have caused, and may in the future cause, our customers to be more conservative in their capital planning, reducing 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 has in the past and may continue in the future to also erode average selling prices in our industry. Any of these results could continue to adversely affect our business, financial condition, results of operations and cash flows.

The novel coronavirus ("COVID-19", "Pandemic") pandemic, and the volatile regional and global economic conditions stemming from the pandemic, have precipitated or aggravated many of the factors described above, and we expect that these factors will continue to adversely impact our operations and financial performance as well as those of many of our customers and suppliers. For further discussion of the risks presented by the ongoing pandemic, see the discussion below under the heading "The outbreak and global spread of the novel coronavirus (COVID-19) are having an adverse impact on our operations and financial performance, as well as on the operations and financial performance of many of our customers and suppliers. We are unable to predict the full extent to which the COVID-19 pandemic will continue to adversely impact our operations, financial performance, results of operations, financial condition, cash flows and/or stock price."

Additionally, our customers sometimes 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 impacts investments in large capital projects, including necessary maintenance and upgrades. In addition, the liquidity and financial position of our customers impacts 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 have in the past prompted and may in the future 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.

Our inability to deliver our backlog on time could affect our revenues, future sales and profitability and our relationships with customers.

At December 31, 2020, our backlog was \$1.9 billion. In 2021, 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. Our manufacturing plant operations, capacity and supply chain are subject to disruption as a result of equipment failure, severe weather conditions and other natural or manmade disasters, including power outages, fires, explosions, terrorism, cyber-based attacks, conflicts or unrest, epidemics or pandemics (including the ongoing global COVID-19 pandemic), labor disputes, acts of God, or other reasons. We may also encounter capacity limitations due to changes in demand despite our forecasting efforts. Many of the contracts we enter into with our customers require long manufacturing lead times and contain penalty clauses related to late delivery. Failure to deliver in accordance with contract terms and customer expectations could subject us to financial penalties, damage existing customer relationships, increase our costs, reduce our sales and have a material adverse effect on our business, financial condition, results of operations and cash flows.

Failure to successfully execute and realize the expected financial benefits from our transformation and strategic realignment and other cost-saving initiatives could adversely affect our business.

In the second quarter of 2018, we launched and committed resources to our Flowserve 2.0 Transformation, a program designed to transform our business model to drive operational excellence, reduce complexity, accelerate growth, improve organizational health and better leverage our existing global platform. Additionally, in the second quarter of 2020, we identified and initiated certain realignment activities resulting from our Flowserve 2.0 Transformation to right-size our organizational operations based on the current business environment, with the overall objective to reduce our workforce costs.

While we have experienced significant financial benefits from our Flowserve 2.0 Transformation, 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 transformation and 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 transformation and realignment programs is 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 transformation and realignment plans in excess of what is currently anticipated. Further, transformation and 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 transformation and realignment efforts prove ineffective.

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, project management, proximity to service centers, 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, technology, 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. In addition, negative publicity or other organized campaigns critical of us, through social media or otherwise, could negatively affect our reputation and competitive position. If we do not compete successfully, our business, financial condition, results of operations and cash flows could be materially adversely affected.

Failure to successfully develop and introduce new products could limit our ability to grow and maintain our competitive position and adversely affect our financial condition, results of operations and cash flow.

The success of new and improved products and services depends on their initial and continued acceptance by our customers. Our businesses are affected by varying degrees of technological change and corresponding shifts in customer demand, which result in unpredictable product transitions, shortened life cycles and increased importance of being first to market with new products and services. Difficulties or delays in the research, development, production and/or marketing of new products and services may negatively impact our operating results and prevent us from recouping or realizing a return on the investments required to continue to bring these products and services to market.

Our inability to obtain raw materials at favorable prices may adversely affect our operating margins and results of operations.

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 Continuous Improvement Process 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.

The outbreak and global spread of the novel coronavirus (COVID-19) are having an adverse impact on our operations and financial performance, as well as on the operations and financial performance of many of our customers and suppliers. We are unable to predict the full extent to which the COVID-19 pandemic will continue to adversely impact our operations, financial performance, results of operations, financial condition, cash flows and/or stock price.

The COVID-19 pandemic has curtailed the movement of people, goods and services worldwide, including in most of the regions in which we conduct our operations. As part of intensifying efforts to contain the spread of COVID-19, a number of local, state and national governments have imposed various restrictions on the conduct of business and travel, such as stay-at-home orders and quarantines, that have led to a significant number of business slowdowns and closures. The COVID-19 pandemic has resulted in, and is expected to continue to result in, a substantial curtailment of business activities (including the decrease in demand for a broad variety of goods and services), weakened economic conditions, supply chain disruptions, significant economic uncertainty and volatility in the financial and commodity markets, including the reduction in global demand for oil and gas combined with excessive supply due to disagreements between OPEC, both in the United States and abroad.

The COVID-19 pandemic is adversely impacting, and is expected to continue to adversely impact, our operations and financial performance, and has had an adverse impact on the operations and financial performance of many of our customers and suppliers. These impacts have included, and may continue to include: adverse revenue and income effects; disruptions to our global operations; customer shutdowns; customer reductions in capital expenditures, particularly for large projects; disruptions and delays in our supply chain; employee impacts from illness, shelter-in-place orders and other community response measures; modifications to business practices, such as mandatory work-from-home policies, restrictions on travel (including, in some cases, restrictions on travel to customer facilities); increased operational expenses and underutilized manufacturing capacity; and increased sanitation and hygiene practices in our facilities; and temporary closures of our facilities or the facilities of our customers and suppliers.

Because the severity, magnitude and duration of the COVID-19 pandemic and its economic consequences are uncertain, rapidly changing and difficult to predict, the pandemic's impact on our operations and financial performance remains uncertain and difficult to predict. Further, the ultimate impact of the COVID-19 pandemic on our operations and financial performance depends on many factors that are not within our control, including, but not limited, to: governmental, business and individuals' actions that have been and continue to be taken in response to the pandemic (including restrictions on travel and transport, workforce pressures and social distancing and shelter-in-place orders); the impact of the pandemic and actions taken in response on global and regional economies, travel and economic activity; general economic uncertainty in key global markets and financial market volatility; the effect of the pandemic on the credit-worthiness of our customers; national or global supply chain challenges or disruption; facility closures; commodity cost volatility (including the time it takes for oil prices and demand to stabilize after the pandemic subsides); global economic conditions and levels of economic growth; and the pace of recovery when the COVID-19 pandemic subsides, as well as response to a potential reoccurrence.

Further, the COVID-19 pandemic, and the volatile regional and global economic conditions stemming from the pandemic, could also precipitate or aggravate the other risk factors that we identify herein, which could adversely affect our operations, financial condition, results of operations and/or stock price. Further, COVID-19 may also affect our operating and financial results in a manner that is not presently known to us or that we currently do not consider to present material risks to our operations.

Terrorist acts, conflicts, wars, natural or manmade disasters, epidemics or pandemics, acts of God and other such events around the world at times materially adversely affect our business, financial condition and results of operations and 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, among other things, terrorist acts, conflicts, wars, severe weather conditions and other natural or manmade disasters, including power outages, fires, explosions, cyber-based attacks, epidemics or pandemics (including the ongoing COVID-19 pandemic), labor disputes, and acts of God wherever located around the world. The potential for future such events, the national and international responses to such events 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, which at times adversely affect 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, 2020, we had approximately 16,000 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, Japan, Mexico, The Netherlands, South Africa, Spain, Sweden 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 successfully negotiate new and acceptable agreements when the existing agreements with employees covered by collective bargaining expire could result in business disruptions or increased costs.

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.

In addition, our policies prohibit harassment or discrimination in the workplace. Notwithstanding our conducting training and taking disciplinary action or other actions against or in response to alleged violations, we may encounter additional costs from claims made and/or legal proceedings brought against us, and we could suffer reputational harm.

Our growth strategy depends on our ability to continue to expand our market presence through acquisitions, and any future acquisitions may present unforeseen integration difficulties or costs which could materially affect our business.

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 or may require equity financing, resulting in ownership dilution to existing shareholders. In addition, acquisitions sometimes 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.

When we acquire another business, the process of integrating acquired operations into our existing operations creates operating challenges and requires 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, and have experienced in the past, 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.

A significant data breach or disruption to our information technology infrastructure could adversely affect our business operations.

Our information technology networks and related systems and devices and those technology systems under control of third parties with whom we do business are critical to the operation of our business and essential to our ability to successfully perform day-to-day operations. These information technology networks and related systems and devices are susceptible to damage, disruptions or shutdowns due to programming errors, defects or other vulnerabilities, power outages, hardware failures, computer viruses, cyber-attacks, malware attacks, ransomware attacks, theft, misconduct by employees or other insiders, misuse, human errors or other events. If any of the aforementioned breaches or disruptions occur and our business continuity plans do not effectively resolve the issues in a timely manner, our business, financial condition, results of operations, and liquidity could be materially adversely affected.

In addition, any of the aforementioned breaches or disruptions could expose us to a risk of loss, disclosure, misuse, corruption, or interruption of sensitive and critical data, information and functions, including our proprietary and confidential information and information related to our customers, suppliers and employees. It is also possible a security breach could result in theft of material trade secrets or other material intellectual property. 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, or avoid or limit a material adverse impact on our systems after such incidents or attacks occur. The potential consequences of a material cybersecurity incident include reputational damage, loss of customers, litigation with third parties, regulatory actions and fines, theft of intellectual property, disruption of manufacturing plant operations and increased cybersecurity protection and remediation costs. If we are unable to prevent, anticipate, detect or adequately respond to security breaches, our operations could be disrupted and our business could be materially and adversely affected.

Developments in the applicable legal standards for the handling of personal data require changes to our business practices, penalties, increased cost of operations, or otherwise harm our business. To conduct our operations, we regularly move data across national borders and must comply with increasingly complex and rigorous regulatory standards enacted to protect business and personal data in the U.S. and elsewhere. For example, the E.U. recently adopted the General Data Protection Regulation (the “GDPR”). The GDPR imposes additional obligations on companies regarding the handling of personal data and provides certain individual privacy rights to persons whose data is stored. Compliance with existing, proposed and recently enacted laws and regulations can be costly; any failure to comply with these regulatory standards could subject us to legal and reputational risks, including proceedings against the Company by governmental entities or others, fines and penalties, damage to our reputation and credibility and could have a negative impact on our business and results of operations.

Related to International Operations

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 source certain of our manufacturing and engineering functions, 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 Latin America, and political conditions in Russia, the Middle East, Asia, North Africa, Latin America and other emerging markets;
- trade protection measures, such as tariff increases, and import and export licensing and control requirements;
- political, financial market or economic instability relating to Brexit;
- political, financial market or economic instability relating to epidemics or pandemics (including the ongoing COVID-19 pandemic);
- uncertainties related to any geopolitical, economic and regulatory effects or changes due to recent or upcoming domestic and international elections;
- the imposition of governmental economic sanctions on countries in which we do business, including Russia and Venezuela;

- 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 negatively impact the demand for our products from customers in affected countries and other customers, such as U.S. oil refineries, that are affected by the resulting disruption in the supply of crude oil. Similarly, military conflicts in Russia, the Middle East, Asia and North Africa could soften the level of capital investment and demand for our products and services. The COVID-19 pandemic, and the volatile regional and global economic conditions stemming from the pandemic, have precipitated or aggravated many of the factors described above, and we expect that these factors will continue to adversely impact our operations and financial performance as well as those of many of our customers and suppliers. For further discussion of the risks presented by the ongoing COVID-19 pandemic, see the discussion above under the heading “The outbreak and global spread of the novel coronavirus (COVID-19) are having an adverse impact on our operations and financial performance, as well as on the operations and financial performance of many of our customers and suppliers. We are unable to predict the full extent to which the COVID-19 pandemic will continue to adversely impact our operations, financial performance, results of operations, financial condition, cash flows and/or stock price.”

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. In addition, emerging markets pose other uncertainties, including challenges to our ability to protect our intellectual property, pressure on the pricing of our products and increased risk of political instability, and may prefer local suppliers because of existing relationships, local restrictions or incentives. 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 operations may be impacted by the United Kingdom’s exit from the European Union.

The United Kingdom’s June 2016 referendum in which voters approved an exit from the European Union (commonly referred to as “Brexit”) and subsequent developments related to the referendum have caused and may continue to cause volatility in the global stock markets, currency exchange rate fluctuations and global economic uncertainty, which could adversely affect our customers’ ability to invest in capital expenditures, which may in turn reduce demand for our products and services. The United Kingdom’s membership in the European Union single market ended on December 31, 2020. On December 24, 2020, the United Kingdom and the European Union announced that they had struck a new bilateral trade and cooperation deal governing the future relationship between the United Kingdom and the European Union (the “EU-UK Trade and Cooperation Agreement”), which is expected to be formally ratified by the EU parliament during the first quarter of 2021. The EU-UK Trade and Cooperation Agreement provides some clarity in respect of the intended shape of the future relationship between the United Kingdom and the European Union and some detailed matters of trade and cooperation. However, there remain unavoidable uncertainties related to Brexit and the new relationship between the United Kingdom and the European Union.

The United Kingdom's withdrawal from the European Union may result in adverse effects on the tax, tax treaty, currency, operational, legal and regulatory regimes to which our businesses in the region are subject. Brexit could also, among other potential outcomes, disrupt the free movement of goods, services and people between the United Kingdom and the European Union, significantly disrupt trade between the United Kingdom and the European Union and other parties, and result in greater restrictions on imports and exports between the United Kingdom and other European Union countries, among other regulatory complexities. These potential and unknown outcomes and uncertainties related to Brexit and its impact on the global economic climate could have a material adverse effect on our operations, financial condition, results of operations and cash flows.

Implementation of new tariffs and changes to or uncertainties related to tariffs and trade agreements could adversely affect our business.

The U.S. has recently implemented certain tariffs on steel and aluminum imported into the country. In response, certain foreign governments have implemented or reportedly considered implementing additional tariffs on U.S. goods. In addition, there have been recent changes to trade agreements, like the U.S. withdrawal from the Trans-Pacific Partnership and the replacement of the North American Free Trade Agreement with the United States-Mexico-Canada Agreement. Under the new U.S. Presidential administration, U.S. policy with respect to tariffs and international trade agreements may be rolled back or modified in other ways. Uncertainties with respect to tariffs, trade agreements, or any potential trade wars negatively impact the global economic markets and could affect our customers' ability to invest in capital expenditures, which may in turn result in reduced demand for our products and services, and could have a material adverse effect on our financial condition, results of operations and cash flows. Changes in tariffs could also result in changes in supply and demand of our raw material needs, affect our manufacturing capabilities and lead to increased prices that we may not be able to effectively pass on to customers, each of which could materially adversely affect our operating margins, results of operations and cash flows.

Our international operations expose us to fluctuations in foreign currency exchange rates which could adversely affect our business.

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 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. Violation of the FCPA or other similar anti-bribery laws or regulations, whether due to our or others' actions or inadvertence, could subject us 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.

Regulatory and Legal Risks

Our operations are subject to a variety of complex and continually changing laws, regulations and policies, both internationally and domestically, which could adversely affect our business.

Due to the international scope of our operations, the system of laws, regulations and policies 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, regulations or policies. 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. Compliance with laws and any new laws or regulations may increase our operations costs or require significant capital expenditures. Any failure to comply with applicable laws, regulations or policies in the U.S. or in any other country in which we operate could result in substantial fines and penalties, which could adversely affect our business.

In particular, there is uncertainty related to the new U.S. Presidential administration's plans for new or existing treaty and trade relationships with other countries, including with respect to the January 2017 U.S. withdrawal from the Trans-Pacific Partnership, which may affect restrictions or tariffs imposed on products we buy or sell. These factors, together with other key global events during 2020 (such as the global economic impact of the COVID-19 pandemic, continuing uncertainty arising from the Brexit transition, 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. For further discussion of the impact of tariffs and trade agreements on our business, please see the discussion above under the heading "Implementation of new tariffs and changes to or uncertainties related to tariffs and trade agreements could adversely affect our business."

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 four 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 exposed to certain regulatory and financial risks related to climate change, which could adversely affect our financial condition, results of operations and cash flows.

Emissions of carbon dioxide and other greenhouse gases and their role in climate change are receiving ever increasing attention worldwide, which has led to significant legislative and regulatory efforts to limit greenhouse gas emissions. Existing or future legislation and regulations related to greenhouse gas emissions and climate change by the U.S. Congress, state and foreign legislatures and federal, state, local and foreign governmental agencies could adversely affect our business. Additionally, it is uncertain whether, when and in what form mandatory carbon dioxide emissions reduction programs may be adopted. Similarly, certain countries have adopted the Paris Climate Agreement and these and other existing international initiatives or those under consideration affect our operations.

When our customers, particularly those involved in the oil and gas, power generation, petrochemical processing or petroleum refining industries, are subject to any of these or other similar proposed or newly enacted laws and regulations, we are exposed to risks that the additional costs by customers to comply with such laws and regulations could impact their

ability or desire to continue to operate at similar levels in certain jurisdictions as historically seen or as currently anticipated, which could negatively impact their demand for our products and services. In addition, new laws and regulations that might favor the increased use of non-fossil fuels, including nuclear, wind, solar and bio-fuels or that are designed to increase energy efficiency, could dampen demand for oil and gas production or power generation resulting in lower spending by customers for our products and services. These actions could also increase costs associated with our operations, including costs for raw materials and transportation. There is also increased focus, including by governmental and non-governmental organizations, environmental advocacy groups, investors and other stakeholders on these and other sustainability matters, and adverse publicity in the global marketplace about the levels of greenhouse gas emissions by companies in the manufacturing and energy industry could reduce customer demand for our products and services or harm our reputation. Because it is uncertain what laws will be enacted, we cannot predict the potential impact of such laws on our future financial condition, results of operations and cash flows, but such new or additional laws could adversely affect our business.

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.

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 are 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. Resorting to litigation to protect our intellectual property rights is burdensome and costly, and we may not always prevail. Further, adequate remedies are not always available in the event of an unauthorized use or disclosure of our trade secrets and manufacturing expertise. Failure to successfully enforce our intellectual property rights could harm our competitive position, business, financial condition, results of operations and cash flows.

Increased costs as a result of product liability and warranty claims could adversely affect our financial condition, results of operations and cash flows.

From time to time, we are exposed to product liability and warranty claims when 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. Some of our products are designed to support the most critical, severe service applications in the markets that we serve and any failure of such products could result in significant product liability and warranty claims, as well as damage to our reputation in the marketplace. 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 that are not reimbursable, which could adversely affect our financial condition, results of operations and cash flows.

Financial and Accounting Risks

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 funded defined benefit pension plans that are either currently funded in accordance with local requirements in the U.S., Belgium, Canada, The Netherlands, Switzerland and the U.K., or above funded requirements in India and Mexico, and defined benefit plans that are not required to be funded and are not funded in Austria, France, Germany, Italy, 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.

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 adversely 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 \$153 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.

Under certain events of default, mandatory repayments on our outstanding indebtedness, which requires 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 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, we may need new or additional financing in the future to expand our business or refinance our existing indebtedness. Our current senior credit facility matures on July 16, 2024 and our senior notes are due in 2022, 2023 and 2030. For additional information regarding our current indebtedness refer to Note 13 to our consolidated financial statements included in Item 8 of this Annual Report. Our inability to timely access capital on satisfactory terms, including as a result of market disruptions, could limit our ability to expand our business as desired and refinance our indebtedness.

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; fully utilize the capacity under the senior credit facility; pay dividends and make other distributions; repurchase shares of our common stock in certain circumstances; 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 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.

Goodwill impairment could negatively impact our net income and shareholders' 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 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 our Pump reporting unit has 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 Pump reporting unit as of December 31, 2020, 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.

Ineffective internal controls could impact the accuracy and timely reporting of our business and financial results.

Our internal control over financial reporting has not always prevented or detected misstatements because of its inherent limitations, including the possibility of human error, the circumvention or overriding of controls or fraud. We have in the past discovered, and may in the future discover, areas of our internal controls that need improvement, including material weaknesses in internal controls. We have devoted significant resources to remediate and improve our internal controls and to monitor the effectiveness of these remediated measures. There can be no assurance that these measures will ensure that we maintain at all times effective internal controls over our financial processes and reporting in the future. Even effective internal controls can provide only reasonable assurance with respect to the preparation and fair presentation of financial statements. Failure to maintain the adequacy of our internal controls, including any failure to implement required new or improved controls, or difficulties in their implementation, could harm our business and financial results and we could fail to meet our financial reporting obligations.

General Risks

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.

Changes in accounting principles and guidance could result in unfavorable accounting charges or effects.

We prepare our consolidated financial statements in conformity with accounting principles generally accepted in the U.S. A change in these principles can have a significant effect on our reported financial position and financial results. The adoption of new or revised accounting principles may require us to make changes to our systems, processes and internal controls, which could have a significant effect on our reported financial results and internal controls, cause unexpected financial reporting fluctuations, retroactively affect previously reported results or require us to make costly changes to our operational processes and accounting systems upon our following the adoption of these standards.

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 and expectations, plans and objectives of management for future operations, industry conditions, market conditions and indebtedness covenant compliance are forward-looking statements. Forward-looking statements may include, among others, statements about 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 assets, tax rate and pending tax and legal proceedings. 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," "seeks" 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 material 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 December 2018, we extended our original lease term an additional 10 years to December 2030. We have the option to renew the current lease for two additional five-year periods. We currently occupy approximately 151,000 square feet at this facility.

Our major manufacturing facilities (those with 50,000 or more square feet of manufacturing capacity) operating at December 31, 2020 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 Aggregate Square Footage |
|------------|-------------------------|--|
| FPD | | |
| U.S. | 7 | 1,198,000 |
| Non-U.S. | 20 | 3,742,000 |
| FCD | | |
| U.S. | 5 | 1,109,000 |
| Non-U.S. | 13 | 2,063,000 |

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 5 to our consolidated financial statements included in Item 8 of this Annual Report for additional information regarding our lease obligations.

ITEM 3. *LEGAL PROCEEDINGS*

We are party to the legal proceedings that are described in Note 16 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.

PART II

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

Market Information

Our common stock is traded on the New York Stock Exchange ("NYSE") under the symbol "FLS" and our CUSIP number is 34354P105. On February 11, 2021, our records showed 963 shareholders of record. We have historically paid quarterly dividends based on a dividend date-of-record in the last month of each quarter with the dividend paid the following month. Any subsequent dividends will be reviewed by our Board of Directors and declared in its discretion.

Issuer Purchases of Equity Securities

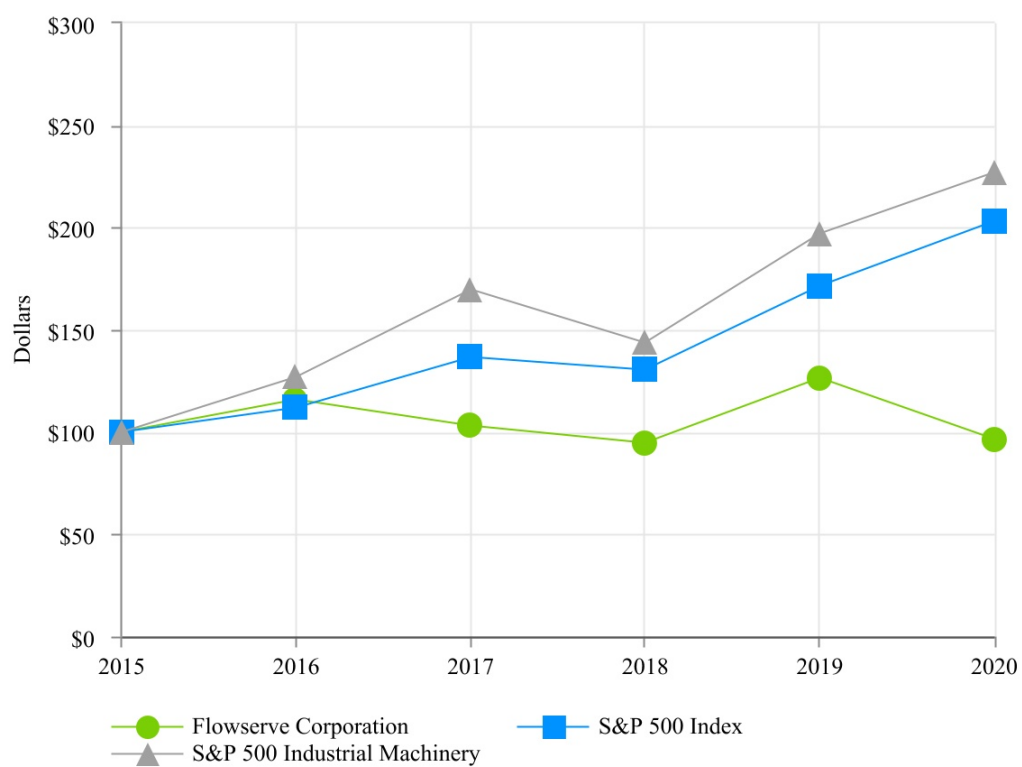
During the quarter ended December 31, 2020, we had no repurchases of our common stock shares as part of publicly announced plans. As of December 31, 2020, we have \$113.6 million of remaining capacity under our current share repurchase program. The following table sets forth the repurchase data for each of the three months during the quarter ended December 31, 2020:

| Period | Total Number of Shares Purchased | Average Price Paid per Share | Total Number of Shares Purchased as Part of Publicly Announced Plan (3)(4) | Approximate Dollar Value That May Yet Be Purchased Under the Plan (In millions) |
|-----------------|-------------------------------------|---------------------------------|--|--|
| October 1 - 31 | 1,317 (1) | \$ 27.90 | — | \$ 113.6 |
| November 1 - 30 | 1,916 (2) | 33.51 | — | 113.6 |
| December 1 - 31 | 1,140 (1) | 36.61 | — | 113.6 |
| Total | 4,373 | \$ 32.63 | — | |

- (1) Shares tendered by employees to satisfy minimum tax withholding amounts for Restricted Shares.
- (2) Includes 12 shares that were tendered by employees to satisfy minimum tax withholding amounts for Restricted Shares at an average price per share of \$30.02 and 1,904 shares purchased at a price of \$33.53 per share by a rabbi 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.
- (3) On November 13, 2014, our Board of Directors approved a \$500.0 million share repurchase authorization. Our share repurchase program does not have an expiration date, and we reserve the right to limit or terminate the repurchase program at any time without notice.
- (4) Note 18 to our consolidated financial statements included in Item 8 of this Annual Report provides additional information regarding our share repurchase activity.

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, 2015, 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.



| | Base Period | December 31, | | | | |
|------------------------------|-------------|--------------|----------|---------|----------|---------|
| Company/Index | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Flowserve Corporation | \$100.00 | \$116.01 | \$103.04 | \$94.59 | \$126.44 | \$96.25 |
| S&P 500 Index | 100.00 | 111.95 | 136.38 | 130.39 | 171.45 | 202.98 |
| S&P 500 Industrial Machinery | 100.00 | 126.94 | 169.42 | 143.78 | 196.79 | 227.05 |

ITEM 6. SELECTED FINANCIAL DATA

| | Year Ended December 31, | | | | |
|---|-------------------------|--------------|--------------|--------------|--------------|
| | 2020(a) | 2019(b)(j) | 2018(c)(j) | 2017(d)(j) | 2016(e)(j) |
| (Amounts in thousands, except per share data and ratios) | | | | | |
| RESULTS OF OPERATIONS | | | | | |
| Sales ⁽¹⁾ | \$ 3,728,134 | \$ 3,939,697 | \$ 3,835,699 | \$ 3,660,831 | \$ 3,990,487 |
| Gross profit ⁽¹⁾ | 1,116,769 | 1,289,343 | 1,190,869 | 1,088,953 | 1,236,798 |
| Selling, general and administrative expense ⁽¹⁾ | (878,245) | (913,203) | (966,584) | (918,718) | (973,277) |
| Loss (gain) on sale of businesses | — | — | (7,727) | 141,317 | (7,664) |
| Operating income ⁽¹⁾ | 250,277 | 386,623 | 227,701 | 324,143 | 268,784 |
| Interest expense ⁽¹⁾ | (57,386) | (54,980) | (58,160) | (59,730) | (60,137) |
| Provision for income taxes(f) ⁽¹⁾ | (60,031) | (75,493) | (46,550) | (254,573) | (74,433) |
| Net earnings (loss) attributable to Flowserve Corporation ⁽¹⁾ | 116,326 | 238,828 | 104,508 | (10,234) | 127,502 |
| Net earnings (loss) per share of Flowserve Corporation common shareholders (basic) ⁽¹⁾ | 0.89 | 1.82 | 0.80 | (0.08) | 0.98 |
| Net earnings (loss) per share of Flowserve Corporation common shareholders (diluted) ⁽¹⁾ | 0.89 | 1.81 | 0.80 | (0.08) | 0.97 |
| Cash flows from operating activities ⁽¹⁾ | 310,537 | 324,097 | 190,831 | 311,066 | 240,476 |
| Cash dividends declared per share | 0.80 | 0.76 | 0.76 | 0.76 | 0.76 |
| FINANCIAL CONDITION | | | | | |
| Working capital ⁽¹⁾ | \$ 1,762,700 | \$ 1,389,305 | \$ 1,303,134 | \$ 1,315,837 | \$ 1,119,251 |
| Total assets(g) ⁽¹⁾ | 5,314,677 | 4,938,277 | 4,649,369 | 4,948,829 | 4,753,441 |
| Total debt | 1,726,906 | 1,377,249 | 1,483,047 | 1,575,257 | 1,570,623 |
| Retirement obligations and other liabilities(g) ⁽¹⁾ | 692,333 | 682,517 | 519,319 | 547,735 | 451,897 |
| Total equity ⁽¹⁾ | 1,762,800 | 1,772,341 | 1,632,002 | 1,658,528 | 1,637,848 |
| FINANCIAL RATIOS | | | | | |
| Return on average net assets(g)(h) ⁽¹⁾ | 5.2% | 9.2% | 4.8% | (0.3)% | 4.9% |
| Net debt to net capital ratio(i) ⁽¹⁾ | 26.4% | 28.5% | 34.6% | 42.4% | 42.4% |

- (a) Results of operations in 2020 include costs of \$104.8 million resulting from realignment and transformation initiatives, resulting in a reduction of after tax net earnings of \$86.9 million.
- (b) Results of operations in 2019 include costs of \$36.0 million resulting from realignment and transformation initiatives, resulting in a reduction of after tax net earnings of \$21.7 million.
- (c) Results of operations in 2018 include costs of \$95.1 million resulting from realignment and transformation initiatives, resulting in a reduction of after tax net earnings of \$72.4 million.
- (d) Results of operations in 2017 include costs of \$71.3 million resulting from realignment initiatives, resulting in a reduction of after tax net earnings of \$54.3 million.
- (e) 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.
- (f) Provision for income taxes in 2017 was impacted by the Tax Reform Act. See Note 19 to our consolidated financial statements included in Item 8 of this Annual Report.
- (g) Total assets for 2019 impacted by our adoption of ASC 842, Leases (Topic 842) ("New Lease Standard") effective January 1, 2019.
- (h) Calculated as adjusted net income divided by adjusted net assets, where (i) adjusted net income is the sum of earnings before income taxes, plus interest expense, multiplied by one minus our effective tax rate, and (ii) 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.

- (i) Calculated as total debt minus cash and cash equivalents divided by the sum of total debt and shareholders' equity minus cash and cash equivalents.
- (j) The financial information in the table above has been revised to reflect adjustments to previously reported amounts. The revision adjustments in 2019, 2018, 2017 and 2016 primarily related to the recognition of incurred but not reported claims associated with unasserted asbestos claims against the Company and the resulting impact on insurance recoveries. The impacts of the revision on the 2019 consolidated financial statements and 2018 consolidated statement of operations are described in Note 2 to the consolidated financial statements. Previously reported amounts for other periods were impacted as follows: net earnings attributable to Flowserve Corporation was reduced by \$12.9 million and \$5.0 million for the years ended December 31, 2017 and 2016, respectively, with a corresponding decreases in earnings (loss) per share, basic and diluted, of \$0.10 and \$0.04, respectively. The net impact to 2018, 2017 and 2016 financial condition was a reduction of total equity of \$28.8 million and \$12.4 million as of December 31, 2018 and 2017, respectively, and an increase to total equity as of December 31, 2016 of less than \$1 million. Specific line items impacted by the revisions are designated with a (1) in the above tables.

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 section titled "Forward-Looking Information is Subject to Risk and Uncertainty" included in this Annual Report on Form 10-K for the year ended December 31, 2020 ("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 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 QRCs, we offer a broad array of aftermarket equipment services, such as installation, advanced diagnostics, repair and retrofitting. As of December 31, 2020, we have approximately 16,000 employees ("associates") globally and a footprint of manufacturing facilities and Quick Response Centers 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. 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 163 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 two business segments that are referenced throughout this Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A"):

- Flowserve Pump Division ("FPD") for custom, highly-engineered pumps, pre-configured industrial pumps, pump systems, mechanical seals, auxiliary systems and replacement parts and related 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 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, our

economies of scale in reducing administrative and overhead costs to serve customers more cost effectively and shared 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, Argus, Edward, Valbart and Durametallic, 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, we continuously improve our global operations. Despite recent headwinds caused by the COVID-19 pandemic, we continue to enhance our global supply chain capability to increase our ability to meet global customer demands and improve the quality and timely delivery of our products over the long-term. 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 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.

COVID-19 Update

The COVID-19 pandemic continues to have an impact on human health, the global economy and society at large. The pandemic is expected to continue to adversely impact, for its duration, our operations and financial performance. In response, we continue to actively monitor the impacts of the COVID-19 pandemic on all aspects of our business and geographies. Our cross-functional crisis management team established during the first quarter of 2020 has continued monitoring and making recommendations to management to help us continue operating as an essential business across jurisdictions, while also protecting the health and safety of our associates.

Despite our evolving response, the COVID-19 pandemic has had an adverse effect on our performance during the year, and we expect the impact will continue through at least the second quarter of 2021. While we cannot reasonably estimate with certainty the ongoing duration and severity of the COVID-19 pandemic, including the effects of any vaccine, or its ultimate impact on the global economy, our business or our financial condition and results, we nonetheless remain committed to providing the critical support, products and services that our customers rely on, and currently believe that we will emerge from these events well positioned for long-term growth.

Health and Safety of Our Associates

The health and safety of our associates, suppliers and customers around the world continues to be our first priority as we continue to navigate the COVID-19 pandemic, including recent spikes in cases and returning work-from-home restrictions in various geographies in which we operate. We are incredibly proud of the great teamwork exhibited by our global workforce who have demonstrated strong resilience in adapting to continually evolving health and safety guidelines while addressing these challenging times and providing products and services to our customers.

We have implemented policies and practices to help protect our workforce so they can safely and effectively carry out their vital work, and we have continued to revise those policies and practices in light of guidance received from local and regional health authorities where appropriate. We instituted global restrictions on non-essential travel in March 2020 and the work-from-home policy for all non-essential employees who are able to do so has continued in effect in locations where health officials have advised such policies, including for our global headquarters in Irving, Texas, which will maintain its work-from-home policy at least through the second quarter of 2021. In those locations where employees are going to work in our facilities, we have continued taking steps, in light of guidelines from local and global health experts to protect our employees so that we can continue to manufacture critical technologies and equipment, including providing face coverings and other personal protective equipment, enhanced cleaning of sites and implemented social distancing protocols.

Our employees and facilities have a key role in keeping essential infrastructure and industries operating, including oil and gas, water, chemical, power generation and other essential industries, such as food and beverage and healthcare. While some of our facilities have experienced periods of temporary closures during 2020 in accordance with decrees, orders and laws in their respective countries and geographies, as of February 18, 2021, all of our facilities are open and operational,

and are running close to pre-COVID-19 levels as we continue to make essential products and provide services for our customers. However, the measures described above, combined with continued employee costs and under-absorption of manufacturing costs as a result of temporary closures and work-from-home policies, have had and are expected to continue having an adverse impact on our financial performance throughout the remainder of the pandemic.

Customer Demand

During 2020 and into 2021 the reduction in global demand for oil and gas driven by the COVID-19 pandemic, coupled with excessive supply due to disagreements between the Organization of Petroleum Exporting Countries ("OPEC") and other oil producing nations in the first half of 2020, led to extreme volatility in global markets and in oil prices. These conditions have adversely impacted our customers, particularly in the oil and gas markets. For example, in the first half of 2020, these conditions drove a significant and broad-based decrease in customer planned capital spending, leading many of our large customers to announce double-digit capital expenditure budget decreases for the remainder of 2020. As a result, we saw overall bookings decline by approximately 20% during 2020 as compared to the same period in 2019, resulting in a lower sequential backlog, though we have not seen a significant increase in the levels of customer cancellations in our existing backlog.

Additionally, the rapidly evolving impacts of the COVID-19 pandemic during 2020 and into 2021 have caused reduced activity levels in our aftermarket business due to deferred spending of our customers' repair and maintenance budgets, including the impact of restricted access to our customers' facilities. While we expect that these repair and maintenance projects will ultimately need to be completed, the timing will largely depend on the duration of the COVID-19 pandemic and how the virus and any variants continue to spread in our customers' various geographies.

These trends are likely to continue during the duration of the COVID-19 pandemic as various actions implemented to combat the pandemic will continue to reduce demand for oil and gas. As a result, we have experienced decreased bookings, sales and financial performance and anticipate this continuing throughout the remainder of the pandemic. Additionally, we expect the headwinds in the oil and gas markets that have resulted in, and are likely to continue to result in, reduced capital expenditures and bookings for oil and gas customers to continue at least until oil demand and prices stabilize, which may not occur until after the pandemic subsides.

Supply Chain Impact

Since the onset of the pandemic, many of our suppliers have also experienced varying lengths of production and shipping conditions related to the COVID-19 pandemic, some of which continue to exist in highly affected countries. These conditions have had an adverse effect on the speed at which we can manufacture and ship our products to customers, and have also led to an increase in logistics, transportation and freight costs, requiring that we diversify our supply chain and, in some instances, source materials from new suppliers. Additionally, these conditions have in some cases impacted our ability to deliver products to customers on time, which has in turn led to an increase in backlog at some of our manufacturing sites. Though some of these issues have abated in the second half of 2020 and into 2021 certain disruptions in our supply chain and their effects have continued through the year, and we expect they will continue as the COVID-19 pandemic continues.

Operational Impacts

We have also engaged in a number of cost savings measures in order to help mitigate certain of the adverse effects of the COVID-19 pandemic on our financial results, including certain realignment activities (further described below under "RESULTS OF OPERATIONS"), a freeze on all non-essential open employment requisitions, cancellation of merit-based payroll increases for 2020, reduction of capital expenditures to approximately \$60 million and cuts in other discretionary spending. Together, we planned for approximately \$100 million of cost reductions, excluding realignment charges, in 2020 as compared to 2019, due in large part to our response to the effects of COVID-19, which partially offsets the increased costs and operational impacts of the safety protocols and procedures that we have implemented as described above under the heading "-Health and Safety of Our Associates." We continue to evaluate additional cost savings measures and will continue to implement such measures in the near term in order to reduce the impact of the COVID-19 pandemic on our financial results.

We continue to monitor and assess the spread of COVID-19, including in areas that have seen recent increases in cases, and we will continue to adapt our operations to respond the changing conditions as needed. As we continue to manage our business through this unprecedented time of uncertainty and market volatility, we will remain focused on the

health and safety of our associates, suppliers, customers, and will continue to provide essential products and services to our customers.

Our Markets

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

Oil and Gas

The oil and gas industry, which represented approximately 34% and 41% of our bookings in 2020 and 2019, respectively, experienced a material decrease in capital spending in 2020 compared to the previous year. The decrease was primarily due to decreased project activity and short cycle investment resulting from the pandemic's negative impact on demand for refined products. Aftermarket opportunities in this industry also experienced a material decrease in 2020 due to deferred spending of our customers' repair and maintenance budgets and pandemic related challenges accessing our customers' facilities.

The outlook for the oil and gas industry is heavily dependent on the duration of the pandemic and its impact on fuel demand, demand growth from both mature markets and developing geographies as well as changes in the regulatory environment. In the short-term, we believe that the pandemic will continue to negatively impact our customers' capital investment and maintenance budgets. We further believe improved and stable oil prices provide support for increased demand for our aftermarket products and services. We believe the medium and long-term fundamentals for this industry remain attractive and see a stabilized environment with expected increased fuel demand on improved pandemic management, and as the industry works through current excess supply. In addition, we believe projected depletion rates of existing fields and forecasted long-term demand growth will require additional investments. 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 improving environment.

Chemical

The chemical industry represented approximately 24% and 22% of our bookings in 2020 and 2019, respectively. The chemical industry is comprised of petrochemical, specialty chemical and pharmaceutical products. Capital spending in 2020 decreased materially primarily due to the pandemic's negative impact on demand for chemical products. The aftermarket opportunities also materially decreased in 2020 due to deferred spending of our customers' repair and maintenance budgets and pandemic related challenges accessing our customers' facilities.

The outlook for the chemical industry remains heavily dependent on global economic conditions. As global economies and unemployment conditions improve, a rise in consumer spending should follow. An increase in spending would drive greater demand for petrochemical, specialty chemical and pharmaceutical products supporting improved levels of capital investment. We believe the chemical industry 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 13% and 11% of our bookings in 2020 and 2019, respectively. In 2020, the power generation industry continued to experience softness in thermal power generation capital spending in the mature and key developing markets. China continued to curtail the construction of new coal-fired power generation over the last year, while in India and southeast Asia capital investment remained in place driven by increased demand forecasts.

Natural gas-fired combined cycle ("NGCC") plants increased their share of the energy mix, driven by market prices for gas remaining low and stable (partially due to the increasing global availability of liquefied natural gas ("LNG")), low capital expenditures, and the ability of NGCC to stabilize unpredictable renewable sources. With the potential of unconventional sources of gas, the global power generation industry is forecasting an increased use of this form of fuel for power generation plants.

Despite fewer new nuclear plants being constructed in recent years, nuclear power remains an important contributor to the global energy mix. We continue to support our significant installed base in the global nuclear fleet by providing aftermarket and life extension products and services. Due to our extensive history, we believe we are well positioned to take advantage of this ongoing source of aftermarket and new construction opportunities.

Political efforts to limit the emissions of carbon dioxide may have some adverse effect on thermal power investment plans depending on the potential requirements imposed and the timing of compliance by country. However, many proposed methods of capturing and limiting carbon dioxide emissions offer business opportunities for our products and services. At the same time, we continue to take advantage of new investments in concentrated solar power generating capacity, where our pumps, valves, and seals are uniquely positioned for both molten salt applications as well as the traditional steam cycle.

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, growth of urbanization in developing markets and the increased use of electricity driven transportation. 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 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 3% and 4% of our bookings in 2020 and 2019, respectively. Water management industry activity levels decreased in 2020 primarily due to the pandemic's negative impact on government budgets across the globe. Worldwide demand for fresh water, water treatment and re-use, desalination and flood control are expected to create requirements for new facilities or for upgrades of existing systems, many of which require products that we offer, particularly pumps. With improved management of the pandemic, we expect capital and aftermarket spending to rise in developed and emerging markets with governments and private industry providing funding for critical projects when their priorities shift away from pandemic-management.

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 26% and 22% of our bookings in 2020 and 2019, respectively. General industries comprise a variety of different businesses, including mining and ore processing, pulp and paper, food and beverage and other smaller applications, none of which individually represented more than 5% of total bookings in 2020 and 2019. General industries also include sales to distributors, whose end customers operate in the industries we primarily serve. Sales to distributors in 2020 were negatively impacted by decreased upstream oil and gas activity in North America.

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.

Outlook for 2021

As the headwinds experienced during the year continue to impact our business, we experienced approximately a 20% decline in bookings as compared to the same period in 2019, with less of an impact on revenue, which declined approximately 5% as compared to the same period in 2019. We anticipate further pressure on revenue with a year over year decline of approximately 4% to 7% in 2021 as a result of lower bookings in 2020, resulting in lower customer backlog as we enter 2021. Despite these effects, however, we expect to maintain adequate liquidity over the next 12 months as we manage through the current market environment. We will continue to actively monitor the potential impacts of COVID-19 and related events on the credit markets in order to maintain sufficient liquidity and access to capital throughout 2021.

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 transformation and realignment programs, global economic and political risk, depreciation and amortization, research and development expenses, potential impairment of assets, 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" as well as the section titled "Forward-Looking Information is Subject to Risk and Uncertainty" of this Annual Report.

Our bookings were \$3,411.6 million during 2020. 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.

On December 31, 2020, we had \$1,701.5 million of fixed-rate Senior Notes outstanding. We expect our interest expense in 2021 will be modestly higher compared with amounts incurred in 2020. 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 Senior Credit Facility to fund our working capital, capital expenditures, dividend payments, share repurchases, debt payments and pension plan contributions in 2021. 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 will seek to improve our working capital utilization, with a particular focus on improving the management of accounts receivable and inventory. In 2021, our cash flows for investing activities will be focused on strategic initiatives, information technology infrastructure, general upgrades and cost reduction opportunities and we currently estimate capital expenditures to be between \$70 million and \$80 million, before consideration of any acquisition activity.

We currently anticipate that our minimum contribution to our qualified U.S. pension plan will be approximately \$20 million, excluding direct benefits paid, in 2021 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 \$2 million in 2021, excluding direct benefits paid.

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 October 2020, we entered into a settlement agreement with two insurance companies providing coverage for one of our heritage companies. Given the size of the settlement, and as part of the third quarter close process, we re-evaluated our accounting for asbestos-related matters and evaluated the amount of receivables that were currently recorded. We made certain adjustments primarily related to an incurred but not reported ("IBNR") liability associated with unasserted asbestos claims, but also included adjustments related to the associated receivables for expected insurance proceeds for asbestos settlement and defense costs from insurance coverage and the recognition as an expense the related legal fees that were previously estimated to be recoverable from insurance carriers for which coverage is not currently sufficient following the recognition of the IBNR for periods beginning with the year ended December 31, 2014 through the second quarter of 2020 and to correct certain other previously identified immaterial errors. These errors, individually and in the aggregate, are not material to any prior annual or interim period. However, the aggregate amount of the prior period errors would have been material to our quarterly results for the period ended September 30, 2020 and the results for the year ended December 31, 2020 and therefore we have revised our previously issued financial statements for the fiscal years ended December 31, 2019 and 2018. Refer to Note 2 to our consolidated financial statements included in this Annual Report for more information.

Realignment Activity

In the second quarter of 2018, we launched and committed resources to our Flowserve 2.0 Transformation, a program designed to transform our business model to drive operational excellence, reduce complexity, accelerate growth,

improve organizational health and better leverage our existing global platform, which is further discussed in Note 22 to our consolidated financial statements included in Item 8 of this Annual Report. We anticipate that the Flowserve 2.0 Transformation will result in further restructuring charges, non-restructuring charges and other related transformation expenses. The Flowserve 2.0 Transformation expenses incurred primarily consist of professional services, project management and related travel costs recorded in SG&A expenses. For the year ended December 31, 2020 and 2019, we incurred Flowserve 2.0 Transformation related expenses of \$22.7 million and \$28.0 million, respectively.

In the second quarter of 2020, we identified and initiated certain realignment activities resulting from our Flowserve 2.0 Transformation Program to right-size our organizational operations based on the current business environment, with the overall objective to reduce our workforce costs. We anticipate a total investment in 2020 Realignment Program activities of approximately \$80 million and that the majority of the charges were incurred in 2020 with the remainder to be incurred in early 2021. Based on actions initiated in 2020, we estimate that we have achieved cost savings of approximately \$41 million as of December 31, 2020, with approximately \$16 million of those savings in COS and approximately \$25 million SG&A. Upon completion of the 2020 Realignment Program activities, we expect full year run-rate cost savings of approximately \$100 million. Actual savings could vary from expected savings, which represent management's best estimate to date. There are certain other realignment activities that are currently being evaluated, but have not yet been finalized. The realignment programs initiated in 2015 ("2015 Realignment Programs"), which consisted of both restructuring and non-restructuring charges, were substantially complete as of March 31, 2020, resulting in \$362.4 million of total charges incurred through the completion of the programs.

The total charges incurred in 2020 related to our 2020 Realignment Program activities and Flowserve 2.0 Transformation by segment and the charges incurred in 2019 related to our 2015 Realignment Programs and Flowserve 2.0 Transformation by segment are presented in the following tables:

| December 31, 2020 | | | | | |
|---|------------------|------------------|-------------------------------------|------------------|-----------------------|
| (Amounts in thousands) | FPD | FCD | Subtotal– Reportable Segments | All Other | Consolidated Total |
| Total Realignment and Transformation Program Charges | | | | | |
| COS | \$ 38,838 | \$ 8,407 | \$ 47,245 | \$ 52 | \$ 47,297 |
| SG&A | 11,322 | 4,940 | 16,262 | 41,230 | 57,492 |
| Total | <u>\$ 50,160</u> | <u>\$ 13,347</u> | <u>\$ 63,507</u> | <u>\$ 41,282</u> | <u>\$ 104,789</u> |

| December 31, 2019 | | | | | |
|---|-------------------|-----------------|-------------------------------------|------------------|-----------------------|
| (Amounts in thousands) | FPD | FCD | Subtotal– Reportable Segments | All Other | Consolidated Total |
| Total Realignment and Transformation Program Charges | | | | | |
| COS | \$ 12,587 | \$ 4,395 | \$ 16,982 | \$ 255 | \$ 17,237 |
| SG&A(1) | (14,506) | 774 | (13,732) | 32,467 | 18,735 |
| Income tax expense(2) | (4,000) | — | (4,000) | — | (4,000) |
| Total | <u>\$ (5,919)</u> | <u>\$ 5,169</u> | <u>\$ (750)</u> | <u>\$ 32,722</u> | <u>\$ 31,972</u> |

(1) Includes gains from the sales of non-strategic manufacturing facilities that are included in our Realignment Programs.

(2) Income tax expense (benefit) includes exit taxes.

Bookings and Backlog

| | 2020 | 2019 | 2018 |
|-------------------------|-----------------------|------------|------------|
| | (Amounts in millions) | | |
| Bookings | \$ 3,411.6 | \$ 4,238.3 | \$ 4,019.8 |
| Backlog (at period end) | 1,854.9 | 2,157.0 | 1,891.6 |

We define a booking as the receipt of a customer order that contractually engages us to perform activities on behalf of our customer in regard 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 reported bookings. Bookings of \$3.4 billion in 2020 decreased by \$826.7 million, or 19.5%, as compared with 2019. The decrease included negative currency effects of approximately \$24 million. The decrease was driven by lower bookings in the oil and gas, chemical, general, power generation and water management industries. Customer bookings were down significantly in both aftermarket and original equipment, which have decreased in light of the impacts of COVID-19 on customer spending and distressed oil prices on these industries.

Bookings of \$4.2 billion in 2019 increased by \$218.5 million, or 5.4%, as compared with 2018. The increase included negative currency effects of approximately \$108 million. The increase was primarily driven by customer original equipment bookings. The increase was driven by higher bookings in the oil and gas, power generation, chemical and water management industries, partially offset by decreased bookings in the general industries. Bookings in 2018 included approximately \$31 million related to the two FPD locations and associated product lines that were divested in the third quarter of 2018.

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, 2020 decreased by \$302.1 million, or 14.0%, as compared with December 31, 2019. Currency effects provided an increase of approximately \$54 million (currency effects on backlog are calculated using the change in period end exchange rates). Backlog related to aftermarket orders was approximately 36% and 33% of the backlog at December 31, 2020 and 2019, respectively. We expect to recognize revenue on approximately 90% of December 31, 2020 backlog during 2021. Backlog includes our unsatisfied (or partially unsatisfied) performance obligations related to contracts having an original expected duration in excess of one year of approximately \$541 million as discussed in Note 3 to our consolidated financial statements included in Item 8 of this Annual Report.

Backlog of \$2.2 billion at December 31, 2019 increased by \$265.4 million, or 14.0%, as compared with December 31, 2018. Currency effects provided an increase of less than \$1 million (currency effects on backlog are calculated using the change in period end exchange rates). Backlog related to aftermarket orders was approximately 33% and 36% of the backlog at December 31, 2019 and 2018, respectively. We expected to recognize revenue on approximately 88% of December 31, 2019 backlog during 2020.

Sales

| | 2020 | 2019 | 2018 |
|-------|-----------------------|------------|------------|
| | (Amounts in millions) | | |
| Sales | \$ 3,728.1 | \$ 3,939.7 | \$ 3,835.7 |

Sales in 2020 decreased by \$211.6 million, or 5.4%, as compared with 2019. The decrease included negative currency effects of approximately \$17 million. The decrease in sales was primarily driven by aftermarket sales, with decreased sales into North America, Europe, Africa, Latin America and Asia Pacific, partially offset by increased sales into the Middle East.

Sales in 2019 increased by \$104.0 million, or 2.7%, as compared with 2018. The increase included negative currency effects of approximately \$94 million. The increase was more heavily-weighted to aftermarket sales, with increased sales into North America, Europe and Asia Pacific, partially offset by decreased sales into Latin America, Africa and the Middle East. Sales in 2018 included approximately \$30 million related to the two FPD locations and associated product lines that were divested in the third quarter of 2018.

Sales to international customers, including export sales from the U.S., were approximately 65% of total sales in 2020 and 63% in both 2019 and 2018. Sales into Europe, the Middle East and Africa ("EMA") were approximately 33% of total sales in 2020, 32% in both 2019 and 2018. Sales into Asia Pacific were approximately 22% of total sales for 2020, 21% for 2019 and 20% for 2018. Sales into Latin America were approximately 6% of total sales in 2020, 2019 and 2018.

Gross Profit and Gross Profit Margin

| | 2020 | 2019 | 2018 |
|---------------------|---|------------|------------|
| | (Amounts in millions, except percentages) | | |
| Gross profit | \$ 1,116.8 | \$ 1,289.3 | \$ 1,190.9 |
| Gross profit margin | 30.0 % | 32.7 % | 31.0 % |

Gross profit in 2020 decreased by \$172.5 million, or 13.4%, as compared with 2019. Gross profit margin in 2020 of 30.0% decreased from 32.7% in 2019. The decrease in gross profit margin was primarily due to a sales mix shift to lower margin original equipment sales, revenue recognized on lower margin original equipment orders as compared to the same period in 2019, increased realignment charges associated with our 2020 Realignment Program and the unfavorable impact of underutilized capacity from the COVID-19 pandemic resulting in \$15.0 million of manufacturing costs being expensed and other related costs, partially offset by increased savings related to our 2020 Realignment Program. Aftermarket sales represented approximately 49% of total sales, as compared with approximately 50% of total sales for the same period in 2019.

Gross profit in 2019 increased by \$98.4 million, or 8.3%, as compared with 2018. Gross profit margin in 2019 of 32.7% increased from 31.0% in 2018. The increase in gross profit margin was primarily attributed to the favorable impact of revenue recognized on higher margin projects, lower realignment charges associated with our Realignment Programs, improvements in operational efficiency and a \$7.7 million charge related to the write-down of inventory in the second quarter of 2018 that did not recur. Aftermarket sales represented approximately 50% of total sales in both 2019 and 2018.

SG&A

| | 2020 | 2019 | 2018 |
|-------------------------------|---|----------|----------|
| | (Amounts in millions, except percentages) | | |
| SG&A | \$ 878.2 | \$ 913.2 | \$ 966.6 |
| SG&A as a percentage of sales | 23.6 % | 23.2 % | 25.2 % |

SG&A in 2020 decreased by \$35.0 million, or 3.8%, as compared with 2019. Currency effects yielded a decrease of approximately \$1 million. In 2020, SG&A as a percentage of sales increased 40 basis points as compared with the same period in 2019. The decrease in in SG&A, including currency, was due to a decrease in travel and selling-related expenses and increased savings related to our 2020 Realignment Program, partially offset by increased charges related to our 2020 Realignment Program as compared to the same period in 2019 and an \$8.5 million write-down of accounts receivables and contract assets related to a contract with an oil and gas customer in Latin America during the first quarter of 2020.

SG&A in 2019 increased by \$53.4 million, or 5.5%, as compared with 2018. Currency effects yielded a decrease of approximately \$18 million. In 2019, SG&A as a percentage of sales decreased 200 basis points as compared with the same period in 2018 primarily due to lower charges related to our Flowserve 2.0 Transformation and Realignment Programs, decreased broad-based annual incentive compensation expense, gains from the sales of non-strategic manufacturing facilities during the year, favorable impacts resulting from the 2018 divestiture of two FPD locations and a \$9.7 million impairment charge related to long-lived assets in the second quarter of 2018 that did not recur.

Loss on Sale of Business

| | 2020 | 2019 | 2018 |
|--------------------------|-----------------------|------|----------|
| | (Amounts in millions) | | |
| Loss on sale of business | \$ — | \$ — | \$ (7.7) |

The loss on sale of business in 2018 of \$7.7 million resulted from the divestiture of two FPD locations and related product lines. See Note 4 to our consolidated financial statements included in Item 8 of this Annual Report for additional information on this sale.

Net Earnings from Affiliates

| | 2020 | 2019 | 2018 |
|------------------------------|-----------------------|---------|---------|
| | (Amounts in millions) | | |
| Net earnings from affiliates | \$ 11.8 | \$ 10.5 | \$ 11.1 |

Net earnings from affiliates represents our net income from investments in six joint ventures (one located in each of Chile, China, India, Saudi Arabia, South Korea and the United Arab Emirates) that are accounted for using the equity method of accounting. Net earnings from affiliates in 2020 increased by \$1.3 million, or 12.4%, as compared to the prior year, primarily as a result of increased earnings of our FPD joint venture in South Korea. Net earnings from affiliates in 2019 decreased by \$0.6 million, or 5.4%, as compared to the prior year, primarily as a result of decreased earnings of our FPD joint venture in India.

Operating Income

| | 2020 | 2019 | 2018 |
|---|---|----------|----------|
| | (Amounts in millions, except percentages) | | |
| Operating income | \$ 250.3 | \$ 386.6 | \$ 227.7 |
| Operating income as a percentage of sales | 6.7 % | 9.8 % | 5.9 % |

Operating income in 2020 decreased by \$136.3 million, or 35.3%, as compared with 2019. The decrease included negative currency effects of approximately \$9 million. The decrease was primarily a result of the \$172.5 million decrease in gross profit, partially offset by the \$35.0 million decrease in SG&A.

Operating income in 2019 increased by \$158.9 million, or 69.8%, as compared with 2018. The increase included negative currency effects of approximately \$12 million. The increase was primarily as result of the \$98.4 million increase in gross profit driven primarily by reduced demand and other impacts of the pandemic, as well as reduced oil prices, the \$53.4 million decrease in SG&A and the loss of \$7.7 million from the divestiture of two FPD locations and related product lines in the third quarter of 2018 that did not recur.

Interest Expense and Interest Income

| | 2020 | 2019 | 2018 |
|------------------|-----------------------|-----------|-----------|
| | (Amounts in millions) | | |
| Interest expense | \$ (57.4) | \$ (55.0) | \$ (58.2) |
| Interest income | 4.2 | 8.4 | 6.5 |

Interest expense in 2020 increased by \$2.4 million as compared with 2019. The increase was primarily attributable to interest expense associated with the senior notes issued in the third quarter of 2020, partially offset by the net impact of our partial tender of our 1.250% EUR Senior Notes due 2022 ("2022 Euro Senior Notes"). Interest income in 2020 decreased by \$4.2 million as compared to 2019. The decrease in interest income was partially due to lower interest rates on our average cash balances compared with same period in 2019.

Interest expense in 2019 decreased by \$3.2 million as compared with 2018. The decrease was primarily attributable to lower borrowings in 2019 and currency impacts on interest expense associated with our outstanding Euro-denominated senior notes, as compared to the same period in 2018. Interest income in 2019 increased by \$1.9 million as compared to 2018. The increase in interest income was primarily attributed to higher average cash balances compared with same period in 2018.

Other Income (Expense), net

| | 2020 | 2019 | 2018 |
|-----------------------------|-----------------------|-----------|-----------|
| | (Amounts in millions) | | |
| Other income (expense), net | \$ (10.3) | \$ (17.6) | \$ (19.6) |

Other expense, net decreased \$7.3 million as compared to 2019, due to a \$12.4 million increase in gains from transactions in currencies other than our sites' functional currencies, partially offset by a \$3.8 million increase in losses from foreign exchange contracts. The net change was primarily due to the foreign currency exchange rate movements in the Canadian dollar, Mexican peso, Euro and Brazilian real in relation to the U.S. dollar during the year ended December 31, 2020, as compared with the same period in 2019.

Other expense, net decreased \$2.0 million in 2019, due to a \$7.6 million decrease in losses from transactions in currencies other than our sites' functional currencies, partially offset by a \$3.3 million increase in losses from foreign exchange contracts. The net change was primarily due to the foreign currency exchange rate movements in the Euro, Indian rupee, Singapore dollar and Mexican peso in relation to the U.S. dollar during the year ended December 31, 2019, as compared with the same period in 2018.

Tax Expense and Tax Rate

| | 2020 | 2019 | 2018 |
|----------------------------|---|---------|---------|
| | (Amounts in millions, except percentages) | | |
| Provision for income taxes | \$ 60.0 | \$ 75.5 | \$ 46.6 |
| Effective tax rate | 32.1 % | 23.4 % | 29.8 % |

Our effective tax rate of 32.1% for the year ended December 31, 2020 increased from 23.4% in 2019 primarily due to the establishment of a valuation allowance against certain deferred tax assets given the current and anticipated impact to the Company's operations resulting from the COVID-19 pandemic and the distressed oil prices. The 2020 effective tax rate differed from the federal statutory rate of 21% primarily due to the establishment of a valuation allowance described above. The 2019 effective tax rate differed from the federal statutory rate of 21% primarily due to state tax and foreign audit assessments, partially offset by the net impact of foreign operations. The 2018 effective tax rate differed from the federal statutory rate of 21% primarily due to the net impact of foreign operations, including losses in certain foreign jurisdictions for which no tax benefit was provided.

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, 2020, we have foreign tax credits of \$35.9 million, expiring in 2026 and 2028-2030 tax years, against which we recorded a valuation allowance of \$35.9 million. Additionally, we have recorded other net deferred tax assets of \$30.5 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

| | 2020 | 2019 | 2018 |
|--|---|----------|----------|
| | (Amounts in millions, except per share amounts) | | |
| Net earnings attributable to Flowserve Corporation | \$ 116.3 | \$ 238.8 | \$ 104.5 |
| Net earnings per share — diluted | \$ 0.89 | \$ 1.81 | \$ 0.80 |
| Average diluted shares | 131.1 | 131.7 | 131.3 |

Net earnings in 2020 decreased by \$122.5 million to \$116.3 million, or to \$0.89 per diluted share, as compared with 2019. The decrease was primarily attributable to a decrease in operating income of \$136.3 million and a \$6.6 million increase in interest expense, net, partially offset by a \$7.3 million decrease in other expense, net and a \$15.5 million decrease in tax expense.

Net earnings in 2019 increased by \$134.3 million to \$238.8 million, or to \$1.81 per diluted share, as compared with 2018. The increase was primarily attributable to an increase in operating income of \$158.9 million, a \$2.0 million decrease in other expense, net and a \$5.1 million decrease in interest expense, net, partially offset by a \$28.9 million increase in tax expense.

Other Comprehensive Income (Loss)

| | 2020 | 2019 | 2018 |
|-----------------------------------|-----------------------|----------|-----------|
| | (Amounts in millions) | | |
| Other comprehensive income (loss) | \$ (9.0) | \$ (9.8) | \$ (67.8) |

Other comprehensive income (loss) in 2020 decreased by \$0.8 million from a loss of \$9.8 million in 2019. The decreased loss was primarily due to foreign currency translation adjustments resulting primarily from exchange rate movements of the Euro, Chinese yuan, British pound and Canadian dollar versus the U.S. dollar at December 31, 2020 as compared with 2019.

Other comprehensive income (loss) in 2019 decreased by \$58.0 million as compared with 2018. The decreased loss was primarily due to foreign currency translation adjustments resulting primarily from exchange rate movements of the Euro, British pound, Chinese yuan and Indian rupee versus the U.S. dollar at December 31, 2019 as compared with 2018.

Business Segments

We conduct our operations through two 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 20 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 two business segments, FPD and FCD, are discussed below.

Flowserve Pump Division Segment Results

Our largest business segment is FPD, through which we design, manufacture, pre-test, distribute and service specialty and highly-engineered custom and pre-configured pumps and pump systems, mechanical seals and auxiliary systems (collectively referred to as "original equipment"). FPD includes longer lead time, highly-engineered pump products and mechanical seals that are generally manufactured within shorter lead times. FPD also manufactures replacement parts and related equipment and provides aftermarket services. FPD primarily operates in the oil and gas, petrochemical, chemical, power generation, water management and general industries. FPD operates in 48 countries with 39 manufacturing facilities worldwide, 13 of which are located in Europe, 12 in North America, eight in Asia Pacific and six in Latin America, and we have 137 QRCs, including those co-located in manufacturing facilities and/or shared with FCD.

| | FPD | | |
|---|---|------------|------------|
| | 2020 | 2019 | 2018 |
| | (Amounts in millions, except percentages) | | |
| Bookings | \$ 2,358.4 | \$ 3,007.9 | \$ 2,753.5 |
| Sales | 2,675.7 | 2,706.3 | 2,623.3 |
| Gross profit | 811.4 | 899.3 | 775.7 |
| Gross profit margin | 30.3 % | 33.2 % | 29.6 % |
| SG&A | 552.2 | 566.3 | 578.9 |
| Loss on sale of business | — | — | (7.7) |
| Segment operating income | 271.0 | 343.5 | 201.0 |
| Segment operating income as a percentage of sales | 10.1 % | 12.7 % | 7.7 % |
| Backlog (at period end) | 1,236.9 | 1,560.9 | 1,286.2 |

Bookings in 2020 decreased by \$649.5 million, or 21.6%, as compared with 2019. The decrease included negative currency effects of approximately \$20 million. The decrease in customer bookings was driven by decreased orders in the oil and gas, chemical, power generation and general industries. Decreased customer bookings of \$288.0 million into North America, \$146.8 million into the Middle East, \$79.9 million into Asia Pacific, \$68.1 million into Europe, \$39.1 million into Africa and \$21.6 million into Latin America. The decrease in customer bookings was primarily driven by customer original equipment bookings which have decreased in light of the impacts of COVID-19 on customer spending and distressed oil prices on these industries. Interdivision bookings (which are eliminated and are not included in consolidated

bookings as disclosed above) increased \$3.1 million. Of the \$2.4 billion of bookings in 2020, approximately 37% were from oil and gas, 27% from general industries, 20% from chemical, 12% from power generation and 4% from water management.

Bookings in 2019 increased by \$254.4 million, or 9.2%, as compared with 2018. The increase included negative currency effects of approximately \$79 million. Bookings in 2018 included approximately \$31 million related to the two FPD locations and associated product lines that were divested in the third quarter of 2018. The increase in customer bookings was primarily driven by the oil and gas, chemical and power generation industries, partially offset by decreased bookings in the general industries. Increased customer bookings of \$100.4 million into North America, \$78.1 million into the Middle East, \$72.1 million into Asia Pacific, \$18.6 million in Latin America and \$11.5 million into Africa, were partially offset by decreased customer bookings of \$49.9 million into Europe. The increase was primarily driven by customer original equipment bookings. Of the \$3.0 billion of bookings in 2019, approximately 44% were from oil and gas, 22% from general industries, 19% from chemical, 10% from power generation and 5% from water management.

Sales in 2020 decreased \$30.6 million, or 1.1%, as compared with 2019. The decrease included negative currency effects of approximately \$19 million. The decrease was driven by aftermarket sales, resulting from decreased customer sales of \$43.6 million into North America, \$16.3 million into Africa, \$13.5 million into Europe and \$10.2 million into Latin America, partially offset by increased sales of \$39.4 million into Asia Pacific and \$20.7 million into the Middle East.

Sales in 2019 increased \$83.0 million, or 3.2%, as compared with 2018. The increase included negative currency effects of approximately \$66 million. Sales in 2018 included approximately \$30 million related to the two FPD locations and associated product lines that were divested in the third quarter of 2018. The increase was primarily driven by aftermarket sales, resulting from increased customer sales of \$45.3 million into North America, \$28.6 million into Europe, \$16.8 million into the Middle East and \$8.8 million into Africa, partially offset by decreased sales of \$17.8 million into Latin America and \$4.0 million into Asia Pacific.

Gross profit in 2020 decreased by \$87.9 million, or 9.8%, as compared with 2019. Gross profit margin in 2020 of 30.3% decreased from 33.2% in 2019. The decrease in gross profit margin was primarily due to a sales mix shift to lower margin original equipment sales as compared to the same period in 2019, the increased charges related to our 2020 Realignment Program and the unfavorable impact of underutilized capacity from the COVID-19 pandemic resulting in \$9.2 million of manufacturing costs being expensed and other related costs, partially offset by increased savings related to our 2020 Realignment Program.

Gross profit in 2019 increased by \$123.6 million, or 15.9%, as compared with 2018. Gross profit margin in 2019 of 33.2% increased from 29.6% in 2018. The increase in gross profit margin was primarily attributable to revenue recognized on higher margin projects, lower realignment charges associated with our Realignment Programs, sales mix shift to higher margin aftermarket sales, improvements in operational efficiency and a \$7.7 million charge related to the write-down of inventory in the second quarter of 2018 that did not recur.

SG&A in 2020 decreased by \$14.1 million, or 2.5%, as compared with 2019. Currency effects provided a decrease of approximately \$1 million. The decrease in SG&A, including currency, was due to favorable impacts on SG&A due to a decrease in travel and selling-related expenses, increased savings related to our 2020 Realignment Program as compared to the same period in 2019 and the favorable impacts resulting from gains from the sales of non-strategic manufacturing facilities in the first quarter of 2019 that did not recur, partially offset by an \$8.5 million write-down of accounts receivables and contract assets related to a contract with an oil and gas customer in Latin America during the first quarter of 2020.

SG&A in 2019 decreased by \$12.6 million, or 2.2%, as compared with 2018. Currency effects provided a decrease of approximately \$13 million. The decrease in SG&A, including currency, was due to favorable impacts on SG&A due to gains from the sales of non-strategic manufacturing facilities during the year, the 2018 divestiture of two FPD locations and a \$9.7 million impairment charge related to the long-lived assets in the second quarter of 2018 that did not recur, partially offset by an increase in selling-related expenses and collections of previously reserved bad debts in 2018 that did not recur.

The loss on sale of business in 2018 of \$7.7 million resulted from the divestiture of two FPD locations and related product lines. See Note 4 to our consolidated financial statements included in Item 8 of this Annual Report for additional information on this sale.

Operating income in 2020 decreased by \$72.5 million, or 21.1%, as compared with 2019. The decrease included negative currency effects of approximately \$9 million. The decrease was due to the \$87.9 million decrease in gross profit, partially offset by the \$14.1 million decrease in SG&A.

Operating income in 2019 increased by \$142.5 million, or 70.9%, as compared with 2018. The increase included negative currency effects of approximately \$10 million. The increase was due to the \$123.6 million increase in gross profit, the \$12.6 million decrease in SG&A and the \$7.7 million loss from the divestiture of two FPD locations and related product lines in the third quarter of 2018 that did not recur.

Backlog of \$1.2 billion at December 31, 2020 decreased by \$324.0 million, or 20.8%, as compared with December 31, 2019. Currency effects provided an increase of approximately \$36 million. Backlog of \$1.6 billion at December 31, 2019 increased by \$274.7 million, or 21.4%, as compared with December 31, 2018. Currency effects provided an increase of approximately \$5 million.

Flow Control Division Segment Results

FCD designs, manufactures, distributes and services a broad portfolio of engineered and industrial valve and automation solutions, including isolation and control valves, actuation, controls and related equipment. 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 has a total of 48 manufacturing facilities and QRCs in 22 countries around the world, with five of its 21 manufacturing operations located in the U.S., 10 located in Europe, five located in Asia Pacific and one located in Latin America. We believe that FCD is the second largest industrial valve supplier in the world.

| | FCD | | |
|---|---|------------|------------|
| | 2020 | 2019 | 2018 |
| | (Amounts in millions, except percentages) | | |
| Bookings | \$ 1,065.8 | \$ 1,240.9 | \$ 1,274.3 |
| Sales | 1,057.5 | 1,238.9 | 1,218.8 |
| Gross profit | 321.9 | 405.5 | 419.9 |
| Gross profit margin | 30.4 % | 32.7 % | 34.5 % |
| SG&A | 196.3 | 213.6 | 215.0 |
| Segment operating income | 125.6 | 191.9 | 204.2 |
| Segment operating income as a percentage of sales | 11.9 % | 15.5 % | 16.8 % |
| Backlog (at period end) | 623.1 | 600.0 | 608.4 |

Bookings in 2020 decreased \$175.1 million, or 14.1%, as compared with 2019. The decrease included negative currency effects of approximately \$3.4 million. The decrease was driven by lower bookings in the oil and gas, general, chemical and power generation industries. Decreased customer bookings of \$140.9 million into North America, \$33.4 million into Europe, \$20.4 million into the Middle East and \$9.0 million into Africa, were partially offset by increased bookings of \$17.5 million into Asia Pacific and \$6.7 million into Latin America. The decrease was more heavily weighted towards original equipment bookings. Of the \$1.1 billion of bookings in 2020, approximately 31% were from chemical, 29% were from oil and gas, 25% from general industries and 15% from power generation.

Bookings in 2019 decreased \$33.4 million, or 2.6%, as compared with 2018. The decrease included negative currency effects of approximately \$29 million. The decrease in customer bookings in the general and chemical industries were partially offset by increases in the power generation, oil and gas and water management industries. Decreased customer bookings of \$27.3 million into North America, \$8.2 million into Asia Pacific and \$2.6 million into Europe were partially offset by increased bookings of \$24.1 million into the Middle East. The decrease was more heavily weighted towards customer aftermarket bookings. Of the \$1.2 billion of bookings in 2019, approximately 34% were from oil and gas, 29% from chemical, 24% from general industries and 13% from power generation.

Sales in 2020 decreased by \$181.4 million, or 14.6%, as compared with 2019. The decrease included currency benefits of approximately \$1 million and was primarily driven by decreased customer original equipment sales. Sales decreased \$113.9 million into North America, \$45.9 million into Asia Pacific, \$32.0 million into Europe and \$2.6 million into Latin America and were partially offset by increased customer sales of \$8.8 million into the Middle East and \$2.7 million into Africa.

Sales in 2019 increased by \$20.1 million, or 1.6%, as compared with 2018. The increase included negative currency effects of approximately \$28 million and was driven by increased customer original equipment sales. Sales increased \$40.2

million into Asia Pacific, \$17.6 million into Europe, \$6.5 million into Latin America and \$3.5 million into North America and were partially offset by decreased customer sales of \$23.5 million into the Middle East and \$15.9 million into Africa.

Gross profit in 2020 decreased by \$83.6 million, or 20.6%, as compared with 2019. Gross profit margin in 2020 of 30.4% decreased from 32.7% in 2019. The decrease in gross profit margin was primarily due to lower sales volume and revenue recognized on lower margin original equipment orders as compared to the same period in 2019, increased charges related to our 2020 Realignment Program and the unfavorable impact of underutilized capacity from the COVID-19 pandemic resulting in \$5.8 million of manufacturing costs and other related costs being expensed, partially offset by increased savings related to our 2020 Realignment Program.

Gross profit in 2019 decreased by \$14.4 million, or 3.4%, as compared with 2018. Gross profit margin in 2019 of 32.7% decreased from 34.5% in 2018. The decrease in gross profit margin was primarily attributed to a mix shift to more original equipment sales and revenue recognized on lower margin original equipment orders as compared to the same period in 2018.

SG&A in 2020 decreased by \$17.3 million, or 8.1% as compared with 2019. Currency effects provided a decrease of less than \$1 million. The decrease in SG&A was primarily due to increased savings related to our 2020 Realignment Program as compared to the same period in 2019 and a decrease in travel and selling-related expenses from our cost saving initiatives in response to COVID-19.

SG&A in 2019 decreased by \$1.4 million, or 0.7% as compared with 2018. Currency effects provided a decrease of approximately \$4 million. The decrease in SG&A was primarily due to currency effects as compared to 2018.

Operating income in 2020 decreased by \$66.3 million, or 34.5%, as compared with 2019. The decrease included negative currency effects of less than \$1 million. The decrease was primarily due to the \$83.6 million decrease in gross profit, partially offset by the decrease in SG&A of \$17.3 million.

Operating income in 2019 decreased by \$12.3 million, or 6.0%, as compared with 2018. The decrease included negative currency effects of approximately \$3 million. The decrease was primarily due to the \$14.4 million decrease in gross profit, partially offset by the decrease in SG&A of \$1.4 million.

Backlog of \$623.1 million at December 31, 2020 increased by \$23.1 million, or 3.9%, as compared with December 31, 2019. Currency effects provided an increase of approximately \$19 million. Backlog of \$600.0 million at December 31, 2019 decreased by \$8.4 million, or 1.4%, as compared with December 31, 2018. Currency effects provided a decrease of approximately \$5 million.

LIQUIDITY AND CAPITAL RESOURCES

Cash Flow Analysis

| | 2020 | 2019 | 2018 |
|--|-----------------------|----------|----------|
| | (Amounts in millions) | | |
| Net cash flows provided (used) by operating activities | \$ 310.5 | \$ 324.1 | \$ 190.8 |
| Net cash flows provided (used) by investing activities | (41.7) | (33.4) | (81.5) |
| Net cash flows provided (used) by financing activities | 147.6 | (231.5) | (173.3) |

Existing cash, cash generated by operations and borrowings available under our senior 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, 2020 was \$1,095.3 million, compared with \$671.0 million at December 31, 2019 and \$619.7 million at December 31, 2018.

Our cash provided by operating activities was \$310.5 million, \$324.1 million and \$190.8 million in 2020, 2019 and 2018, respectively, which provided cash to support short-term working capital needs. Cash flow provided by working capital increased in 2020 due primarily to cash provided by lower accounts receivable of \$45.6 million, higher accrued liabilities and income taxes payable of \$50.2 million, lower inventory of \$15.3 million and lower contract assets, net of \$4.3 million, partially offset by cash used by lower accounts payable of \$22.6 million and lower contract liabilities of \$34.1

million. Cash flow used by working capital increased in 2019 due primarily to cash used by higher contract assets of \$45.2 million, higher inventory of \$31.1 million, lower accounts receivables of \$2.9 million and lower accrued liabilities and income taxes payable of \$12.4 million, partially offset by cash provided by higher contract liabilities of \$19.7 million. During 2020, we contributed \$15.9 million to our defined benefit pension plans as compared to \$37.3 million in 2019.

Decreases in accounts receivable provided \$45.6 million and \$2.9 million of cash flow in 2020 and 2019, respectively, as compared with cash flow used of \$25.4 million in 2018. For the fourth quarter of 2020 our days' sales outstanding ("DSO") was 69 days as compared to 67 days for 2019 and 72 days for 2018. We have not experienced a significant increase in customer payment defaults in 2020.

Decreases in inventory provided \$15.3 million of cash flow in 2020, as compared with cash used of \$31.1 million and \$29.3 million in 2019 and 2018, respectively. The cash used from inventory in 2019 was due to an increase in raw materials and work in process. Inventory turns were 4.1 times at December 31, 2020, as compared with 4.3 times for 2019 and 4.2 times for 2018. Our calculation of inventory turns does not reflect the impact of advanced cash received from our customers.

Decreases in contract assets provided \$4.3 million of cash flow and decreases in contract liabilities used \$34.1 million of cash flow in 2020. Increases in contract assets used \$45.2 million of cash flow and increases in contract liabilities provided \$19.7 million of cash flow in 2019.

Decreases in accounts payable used \$22.6 million of cash flow in 2020 compared with cash provided of \$24.7 million and \$7.6 million in 2019 and 2018, respectively. Increases in accrued liabilities and income taxes payable provided \$50.2 million of cash flow in 2020 compared to \$12.4 million 2019 and cash used of \$15.2 million in 2018.

Cash used by investing activities were \$41.7 million in 2020, as compared to \$33.4 million and \$81.5 million in 2019 and 2018, respectively. The increase of cash used in 2020 was primarily due to lower proceeds provided from the disposal of assets during the year of \$13.8 million, compared to \$42.3 million in 2019. Capital expenditures were \$57.4 million, \$75.7 million and \$84.0 million in 2020, 2019 and 2018, respectively. In 2021, we currently estimate capital expenditures to be between \$70 million and \$80 million, before consideration of any acquisition activity.

Cash provided by financing activities were \$147.6 million in 2020 compared to cash flow used of \$231.5 million and \$173.3 million in 2019 and 2018, respectively. Cash inflows during 2020 resulted primarily from the \$498.3 million in net proceeds from the issuance of the senior notes due October 1, 2030 ("2030 Senior Notes"), partially offset by a \$191.3 million in payments on long-term debt resulting from our partial tender offer of our 2022 Euro Senior Notes, \$104.2 million of dividend payments and the repurchase of \$15.0 million of our common stock. Cash outflows during 2019 resulted primarily from \$105.0 million in payments on long-term debt and \$99.6 million of dividend payments. Cash outflows during 2018 resulted primarily from \$99.4 million of dividend payments and \$60.0 million in payments on long-term debt. On February 17, 2021, we announced that we will redeem the outstanding balance of our 2022 Euro Senior Notes on March 19, 2021. We will use the remaining net proceeds from the public offering of the 2030 Senior Notes for the redemption.

In 2020 we repurchased 1,057,115 shares of our outstanding common stock for \$32.1 million. As of December 31, 2020, we had \$113.6 million of remaining capacity under our share repurchase plan previously approved by the Board of Directors.

Our cash needs for the next 12 months, including for our estimated 2021 capital expenditures described above, are expected to be lower than those of 2020 due to anticipated benefits from working capital reductions and savings from 2020 Realignment Program, discussed in Note 22 to our consolidated financial statements included in Item 8 of this Annual Report. We believe cash flows from operating activities, combined with availability under our senior 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 continued 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 4 to our consolidated financial statements included in Item 8 of this Annual Report contains a discussion of our disposition activity.

Financing

Our credit agreement provides for a \$800.0 million unsecured senior credit facility with a maturity date of July 16, 2024 ("Senior Credit Facility"). The Senior Credit Facility includes a \$750.0 million sublimit for the issuance of letters of credit and a \$30.0 million sublimit for swing line loans. We have the right to increase the amount of the Senior Credit Facility by an aggregate amount not to exceed \$400.0 million, subject to certain conditions, including the approval of the lenders under our Senior Credit Facility of any such increase.

The interest rates per annum applicable to the Senior Credit Facility (other than with respect to swing line loans) are LIBOR plus between 1.000% to 1.750%, depending on our debt rating by either Moody's Investors Service, Inc. or Standard & Poor's ("S&P") Ratings, or, at our option, the Base Rate (as defined in the Senior Credit Agreement) plus between 0.000% to 0.750% depending on our debt rating by either Moody's Investors Service, Inc. or S&P Global Ratings. At December 31, 2020 the interest rate on the Senior Credit Facility was LIBOR plus 1.375% in the case of LIBOR loans and the Base Rate plus 0.375% in the case of Base Rate loans. In addition, a commitment fee is payable quarterly in arrears on the daily unused portions of the Senior Credit Facility. The commitment fee will be between 0.090% and 0.300% of unused amounts under the Senior Credit Facility depending on our debt rating by either Moody's Investors Service, Inc. or S&P Global Ratings. 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. Such provisions are referred to as "cross default" provisions. A discussion of our debt and related covenants is included in Note 13 to our consolidated financial statements included in Item 8 of this Annual Report. We were in compliance with the covenants as of December 31, 2020.

Liquidity Analysis

Our cash balance increased by \$424.3 million to \$1,095.3 million as of December 31, 2020 as compared with December 31, 2019. The cash increase included \$310.5 million in operating cash inflows, \$498.3 million in net proceeds from the issuance of the senior notes due October 1, 2030 ("2030 Senior Notes") and \$13.8 million from the sale of non-strategic manufacturing facilities that are included in our Realignment Programs, partially offset by \$191.3 million in payments on long-term debt, \$104.2 million in dividend payments, \$57.4 million in capital expenditures and the repurchase of \$32.1 million of our common stock. Proceeds received during 2019 included \$42.3 million of proceeds from the sale of non-strategic manufacturing facilities that were included in our 2015 Realignment Programs.

At December 31, 2020 and 2019, as a result of the 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 funded status, we elected to make no contributions attributable to the U.S. pension plan in 2020. As of December 31, 2020 direct benefits paid by the U.S. pension plan were less than \$1.0 million. We continue to maintain an asset allocation consistent with our strategy to maximize total return, while reducing portfolio risks through asset class diversification.

COVID-19 Liquidity Update

As of December 31, 2020, we had approximately \$1,837 million of liquidity, consisting of cash and cash equivalents of \$1,095 million and \$742 million of borrowings available under our Senior Credit Facility. In light of the liquidity currently available to us, and the costs savings measures planned and already in place, we expect to be able to maintain adequate liquidity over the next 12 months as we manage through the current market environment. We will continue to actively monitor the potential impacts of COVID-19 and related events on the credit markets in order to maintain sufficient liquidity and access to capital throughout 2020.

CONTRACTUAL OBLIGATIONS AND COMMERCIAL COMMITMENTS

The following table presents a summary of our contractual obligations at December 31, 2020:

| | Payments Due By Period | | | | |
|--|------------------------|------------|-----------|----------------|------------|
| | Within 1 Year | 1-3 Years | 3-5 Years | Beyond 5 Years | Total |
| | (Amounts in millions) | | | | |
| Senior Notes | \$ — | \$ 1,207.7 | \$ — | \$ 493.9 | \$ 1,701.6 |
| Fixed interest payments(1) | 52.1 | 70.9 | 35.0 | 83.2 | 241.2 |
| Other debt | 9.0 | 16.4 | — | — | 25.4 |
| Leases: | | | | | |
| Operating | 42.6 | 93.4 | 21.0 | 95.0 | 252.0 |
| Finance | 5.5 | 9.0 | 0.9 | 5.3 | 20.7 |
| Purchase obligations:(2) | | | | | |
| Inventory | 407.9 | 10.7 | 0.3 | — | 418.9 |
| Non-inventory | 35.9 | 0.5 | 0.3 | — | 36.7 |
| Pension and postretirement benefits(3) | 63.3 | 125.4 | 124.8 | 302.7 | 616.2 |
| Total | \$ 616.3 | \$ 1,534.0 | \$ 182.3 | \$ 980.1 | \$ 3,312.7 |

- (1) Fixed interest payments represent interest payments on the Senior Notes as defined in Note 13 to our consolidated financial statements included in Item 8 of this Annual Report.
- (2) 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.
- (3) Retirement and postretirement benefits represent estimated benefit payments for our U.S. and non-U.S. defined benefit plans and our postretirement medical plans, as more fully described below and in Note 14 to our consolidated financial statements included in Item 8 of this Annual Report.

As of December 31, 2020, the gross liability for uncertain tax positions was \$54.8 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, 2020:

| | Commitment Expiration By Period | | | | |
|-------------------|---------------------------------|-----------|-----------|----------------|------------|
| | Within 1 Year | 1-3 Years | 3-5 Years | Beyond 5 Years | Total |
| | (Amounts in millions) | | | | |
| Letters of credit | \$ 482.0 | \$ 120.9 | \$ 27.0 | \$ 27.4 | \$ 657.3 |
| Surety bonds | 341.5 | 10.8 | 0.8 | — | 353.1 |
| Total | \$ 823.5 | \$ 131.7 | \$ 27.8 | \$ 27.4 | \$ 1,010.4 |

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 62% of total defined benefit pension plan assets and approximately 51% of defined benefit pension obligations are related to the U.S. qualified plan as of December 31, 2020. 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 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 14 to our consolidated financial statements included in Item 8 of this Annual Report. We monitor investment allocations and manage plan assets to maintain an acceptable level of risk. At December 31, 2020, the estimated fair market value of U.S. and non-U.S. plan assets for our defined benefit pension plans increased to \$765.0 million from \$745.1 million at December 31, 2019. Assets were allocated as follows:

| <u>Asset category</u> | U.S. Plan | |
|-----------------------------|-----------|------|
| | 2020 | 2019 |
| Cash and Cash Equivalents | 1 % | 1 % |
| Global Equity | 30 % | 28 % |
| Global Real Assets | 13 % | 12 % |
| Equity securities | 43 % | 40 % |
| Diversified Credit | 14 % | 12 % |
| Liability-Driven Investment | 42 % | 47 % |
| Fixed income | 56 % | 59 % |

| <u>Asset category</u> | Non-U.S. Plans | |
|-----------------------------|----------------|------|
| | 2020 | 2019 |
| Cash and Cash Equivalents | 1 % | 2 % |
| North American Companies | 1 % | 1 % |
| Global Equity | 1 % | 1 % |
| Equity securities | 2 % | 2 % |
| U.K. Government Gilt Index | 39 % | 43 % |
| Liability-Driven Investment | 12 % | 7 % |
| Fixed income | 51 % | 50 % |
| Multi-asset | 20 % | 19 % |
| Buy-in Contract | 20 % | 21 % |
| Other | 6 % | 6 % |
| Other types | 46 % | 46 % |

The projected benefit obligation ("Benefit Obligation") for our defined benefit pension plans was \$957.4 million and \$897.1 million as of December 31, 2020 and 2019, respectively. Benefits under our defined benefit pension plans are based primarily on participants' compensation and years of credited service.

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 \$18.6 million and \$18.9 million as of December 31, 2020 and 2019, respectively.

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 2020, the service cost component of the pension expense for our defined benefit pension plans included in operating income was \$32.9 million compared with \$29.0 million in 2019 and \$29.4 million in 2018. The non-service cost portion of net pension expense (e.g., interest cost, actuarial gains and losses and expected return on plan assets) for our defined benefit pension plans included in other income (expense), net was \$4.0 million, compared to \$1.8 million in 2019 and a benefit of \$1.2 million in 2018.

The following are assumptions related to our defined benefit pension plans as of December 31, 2020:

| | U.S. Plan | Non-U.S. Plans |
|---|-----------|----------------|
| Weighted average assumptions used to determine Benefit Obligation: | | |
| Discount rate | 2.62 % | 1.23 % |
| Rate of increase in compensation levels | 3.63 | 3.11 |
| Weighted average assumptions used to determine 2020 net pension expense: | | |
| Long-term rate of return on assets | 6.00 % | 2.37 % |
| Discount rate | 3.41 | 1.61 |
| Rate of increase in compensation levels | 3.56 | 3.12 |
| Weighted-average interest crediting rates | 3.79 % | 1.00 % |

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 |
|---|-----------------------|---------------|
| | (Amounts in millions) | |
| U.S. defined benefit pension plan: | | |
| Effect on net pension expense | \$ (2.1) | \$ 2.1 |
| Effect on Benefit Obligation | (20.7) | 22.6 |
| Non-U.S. defined benefit pension plans: | | |
| Effect on net pension expense | (0.6) | 0.9 |
| Effect on Benefit Obligation | (36.2) | 41.2 |
| U.S. Postretirement medical plans: | | |
| Effect on Benefit Obligation | (0.6) | 0.6 |

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 | \$ (2.1) | \$ 2.1 |
| Non-U.S. defined benefit pension plans: | | |
| Effect on net pension expense | (1.0) | 1.0 |

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 or over the remaining expected lifetime for plans with only inactive participants.

At December 31, 2020, as compared with December 31, 2019, we decreased our discount rate for the U.S. plan from 3.41% to 2.62% 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 1.61% to 1.23% 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 increased to 3.63% for the U.S. plan and decreased to 3.11% from 3.12% for our non-U.S. plans. To determine the 2020 pension expense, the expected rate of return on U.S. plan assets remained constant at 6.00% and we decreased our average rate of return on non-U.S. plan assets from 3.37% to 2.37%, 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 fluctuations do not significantly impact the rate. For all U.S. plans, we adopted the Pri-2012 mortality tables and the MP-2020 improvement scale published in October 2020. We applied the Pri-2012 tables based on the constituency of our plan population for union and non-union participants. We adjusted the improvement scale to utilize the Proxy SSA Long Term Improvement Rates ("LTIR"), 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 \$3.3 million lower in 2021 than the \$37.0 million in 2020, primarily due to a decrease in interest costs and expected return on assets with no anticipated special events. We have used discount rates of 2.62%, 1.23% and 2.32% at December 31, 2020, in calculating our estimated 2021 net pension expense for the 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 7.0% for 2020, 7.5% for 2019 and 7% for 2018, with a gradual decrease to 5.0% for 2029 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 \$15.9 million, \$37.3 million and \$48.1 million to our defined benefit plans in 2020, 2019 and 2018, 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 2021 will be approximately \$20 million, excluding direct benefits paid. We expect to contribute approximately \$2 million to our non-U.S. pension plans in 2021, excluding direct benefits paid.

For further discussion of our pension and postretirement benefits, see Note 14 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

We recognize revenue when (or as) we satisfy a performance obligation by transferring control to a customer. Transfer of control is evaluated based on the customer's ability to direct the use of and obtain substantially all of the benefits of a performance obligation. Revenue is recognized either over time or at a point in time, depending on the specific facts and circumstances for each contract, including the terms and conditions of the contract as agreed with the customer and the nature of the products or services to be provided.

Our primary method for recognizing revenue over time is the percentage of completion ("POC") method, whereby progress towards completion is measured by applying an input measure based on costs incurred to date relative to total estimated costs at completion. If control of the products and/or services does not transfer over time, then control transfers at a point in time. We determine the point in time that control transfers to a customer based on the evaluation of specific indicators, such as title transfer, risk of loss transfer, customer acceptance and physical possession. For a discussion related to revenue recognition refer to Note 3 included in Item 8 of this Annual Report.

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 and adjust the amount of the valuation 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 outcomes 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

We are a defendant in a 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 heritage companies of the Company. We have estimated that the liability for pending and future claims not yet asserted, and which are probable and estimable, could be experienced through 2049, which represents the expected end of our asbestos liability exposure with no further ongoing claims expected beyond that date. This estimate is based on the Company's historical claim experience and estimates of the number and resolution cost of potential future claims that may be filed based on anticipated levels of unique plaintiff asbestos-related claims in the U.S. tort system against all defendants, the diminished volatility and consistency of observable claims data, the period of time that has elapsed since we stopped manufacturing products that contained encapsulated asbestos and an expected downward trend in claims due to the average age of our claimants. This estimate is not discounted to present value. In light of the uncertainties and variables inherent in the long-term projection of the total asbestos liability, as part of our ongoing review of asbestos claims, each year we will reassess the projected liability of unasserted asbestos claims to be filed through 2049, and we will continually reassess the time horizon over which a reasonable estimate of unasserted claims can be projected.

We assess the sufficiency of the estimated liability for pending and future claims on an ongoing basis by evaluating actual experience regarding claims filed, settled and dismissed, and amounts paid in settlements. In addition to claims and settlement experience, we consider additional quantitative and qualitative factors such as changes in legislation, the legal

environment and the Company's defense strategy. In connection with our ongoing review of asbestos-related claims, we have also reviewed the amount of potential insurance coverage for such claims, taking into account the remaining limits of such coverage, the number and amount of claims on our insurance from co-insured parties, ongoing litigation against the Company's insurers, potential remaining recoveries from insolvent insurers, the impact of previous insurance settlements and coverage available from solvent insurers not party to the coverage litigation. Continuously, we review ongoing insurance coverage available for a significant amount of the potential future asbestos-related claims and in the future could secure additional insurance coverage as deemed necessary.

The study from the Company's actuary, based on data as of September 30, 2020, provided for a range of possible future liability from approximately \$80.1 million to \$131.7 million. The Company does not believe any amount within the range of potential outcomes represents a better estimate than another given the many factors and assumptions inherent in the projections and therefore the Company has recorded the liability at the actuarial central estimate of approximately \$99.5 million as of December 31, 2020. In addition, the Company has recorded estimated insurance receivables of approximately \$69.5 million as of December 31, 2020. The amounts recorded for the asbestos-related liability and the related insurance receivables are based on facts known at the time and a number of assumptions. However, projecting future events, such as the number of new claims to be filed each year, the length of time it takes to defend, resolve, or otherwise dispose of such claims, coverage issues among insurers and the continuing solvency of various insurance companies, as well as the numerous uncertainties surrounding asbestos litigation in the United States, could cause the actual liability and insurance recoveries for us to be higher or lower than those projected or recorded. Additionally, we have claims pending against certain insurers that, if resolved more favorably than reflected in the recorded receivables, would result in discrete gains in the applicable year. Changes recorded in the estimated liability and estimated insurance recovery based on projections of asbestos litigation and corresponding insurance coverage, result in the recognition of additional expense or income. For a discussion pertaining to the activity related to asbestos claims refer to Note 16 included in Item 8 of this Annual Report.

Liabilities are recorded for various non-asbestos contingencies arising in the normal course of business when it is both probable that a loss has been incurred and such loss is reasonably 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.

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 14 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 three 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.

Accounting Standards Codification ("ASC") 350 allows an optional qualitative assessment, prior to a quantitative assessment test, to determine whether it is more likely than not that the fair value of a reporting unit exceeds its carrying amount. We generally do not attempt a qualitative assessment and proceed directly to the quantitative test. If the carrying value of a reporting unit exceeds its fair value, the goodwill of that reporting unit is impaired and an impairment loss is recorded equal to the excess of the carrying value over its fair 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, business plans, economic projections, anticipated future cash flows and market participants.

We did not record an impairment of goodwill in 2020, 2019 or 2018; however, the estimated fair value of our Pump reporting unit has reduced moderately during the year due to decreased broad-based capital spending resulting from the ongoing COVID-19 pandemic and to a lesser extent the heightened pricing pressure experienced in the oil and gas markets, both of which are anticipated to continue in the near to mid-term. The Pump reporting unit is a component of EPD reporting segment and is primarily focused on highly engineered custom and pre-configured pump products and systems. As of December 31, 2020, our Pump reporting unit had approximately \$482.7 million of goodwill and an estimated fair value that exceeded its carrying value by approximately 46% as compared to approximately \$468.8 million of goodwill and an estimated fair value that exceeded its carrying value by approximately 131% as of December 31, 2019. The key factors considered in determining the estimated fair value of our reporting units included the annual operating plan and forecasted operating results, successful execution of our current continuous improvement and identified strategic initiatives, a constant cost of capital, continued 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. Although we have concluded that there is no impairment on the goodwill associated with our Pump reporting unit as of December 31, 2020, we will continue to closely monitor their performance and related market conditions for future indicators of potential impairment and reassess accordingly.

We also considered our market capitalization in our evaluation of the fair value of our goodwill. Our market capitalization decreased as compared with 2019, however this did not indicate a potential impairment of our goodwill as of December 31, 2020.

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 unit discussed above. We did not record a material impairment of our trademarks in 2020, 2019 or 2018.

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 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 the counterparties will continue to meet their obligations given their current creditworthiness.

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, Hungarian forint, 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. We have designated €336.3 million of our 1.25% EUR Senior Notes due 2022 as a net investment hedge of our investments in certain of our international subsidiaries that use the Euro as their functional currency. On September 22, 2020, as a means of managing the volatility of foreign currency exposure with the Euro/U.S. dollar exchange rate, we entered into a swap associated with our Euro investment in certain of our international subsidiaries and was designated as a net investment hedge. As of December 31, 2020, the notional value of the swap was €163.2 million. Routinely, we review 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 gains (losses) associated with foreign currency translation of \$0.4 million, \$6.6 million and \$(63.1) million for the years ended December 31, 2020, 2019 and 2018, respectively, which are included in other comprehensive income (loss). The net gain in 2020 was primarily driven by the strengthening of the Euro, Chinese yuan, British pound and Canadian dollar versus the U.S. dollar at December 31, 2020 as compared with December 31, 2019.

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. As of December 31, 2020, we had a U.S. dollar equivalent of \$388.1 million in aggregate notional amount outstanding in foreign exchange contracts with third parties, compared with \$398.5 million at December 31, 2019. Transactional currency gains and losses arising from transactions outside of our sites' functional currencies and changes in fair value of foreign exchange contracts are included in our consolidated results of operations. We recognized foreign currency net losses of \$5.9 million, \$14.5 million and \$18.7 million for the years ended December 31, 2020, 2019 and 2018, respectively, which are included in other income (expense), net in the accompanying consolidated statements of income.

Based on a sensitivity analysis at December 31, 2020, a 10% change in the foreign currency exchange rates for the year ended December 31, 2020 would have impacted our net earnings by approximately \$15 million. At December 31, 2019, a 10% change in the foreign currency exchange rates for the year ended December 31, 2019 would have impacted our net earnings by approximately \$17 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.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of Flowserve Corporation

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Flowserve Corporation and its subsidiaries (the “Company”) as of December 31, 2020 and 2019, and the related consolidated statements of income, of comprehensive income, of shareholders' equity and of cash flows for each of the three years in the period ended December 31, 2020, including the related notes and the financial statement schedule listed in the index appearing under Item 15(a)(2) (collectively referred to as the “consolidated financial statements”). We also have audited the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control - Integrated Framework (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for sales from contracts with customers in 2018.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

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

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

procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Goodwill Impairment Test – Pump Reporting Unit

As described in Notes 1 and 6 to the consolidated financial statements, the Company's consolidated goodwill balance was \$1,224.9 million as of December 31, 2020, and the goodwill associated with the Pump reporting unit was \$482.7 million. The value of goodwill is tested for impairment as of December 31 each year or whenever events or circumstances indicate goodwill may be impaired. If the carrying value of a reporting unit exceeds its fair value, the goodwill of that reporting unit is impaired and an impairment loss is recorded equal to the excess of the carrying value over its fair value. Fair value is estimated using a discounted cash flow analysis, which requires management to make various judgmental assumptions about future sales, operating margins, growth rates and discount rates.

The principal considerations for our determination that performing procedures relating to the goodwill impairment assessment of the Pump reporting unit is a critical audit matter are (i) the significant judgment by management when estimating the fair value of the reporting unit; (ii) a high degree of auditor judgment, subjectivity and effort in performing procedures and evaluating management's significant assumptions related to the operating margins, growth rate and discount rate; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's goodwill impairment test, including controls over the valuation of the Company's reporting units. These procedures also included, among others (i) testing management's process for estimating the fair value of the Pump reporting unit, (ii) evaluating the appropriateness of the discounted cash flow analysis, (iii) testing the completeness and accuracy of underlying data used in the analysis, and (iv) evaluating the significant assumptions used by management related to the operating margins, growth rate and discount rate. Evaluating management's assumptions related to the operating margins and growth rate involved evaluating whether the assumptions were reasonable considering (i) current and past performance of the reporting unit and (ii) whether the assumptions were consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in the evaluation of the Company's discounted cash flow analysis and assumption related to the discount rate.

/s/ PricewaterhouseCoopers LLP

Dallas, Texas

February 23, 2021

We have served as the Company's auditor since 2000.

FLOWSERVE CORPORATION
CONSOLIDATED BALANCE SHEETS

| | December 31, | |
|---|---|--------------|
| | 2020 | 2019 |
| | (Amounts in thousands, except per share data) | |
| ASSETS | | |
| Current assets: | | |
| Cash and cash equivalents | \$ 1,095,274 | \$ 670,980 |
| Accounts receivable, net | 753,462 | 795,538 |
| Contract assets, net | 277,734 | 272,914 |
| Inventories, net | 667,228 | 660,837 |
| Prepaid expenses and other | 110,635 | 106,478 |
| Total current assets | 2,904,333 | 2,506,747 |
| Property, plant and equipment, net | 556,873 | 563,564 |
| Operating lease right-of-use assets, net | 208,125 | 186,218 |
| Goodwill | 1,224,886 | 1,193,010 |
| Deferred taxes | 30,538 | 54,879 |
| Other intangible assets, net | 168,496 | 180,805 |
| Other assets, net | 221,426 | 253,054 |
| Total assets | \$ 5,314,677 | \$ 4,938,277 |
| LIABILITIES AND EQUITY | | |
| Current liabilities: | | |
| Accounts payable | \$ 440,199 | \$ 447,582 |
| Accrued liabilities | 463,222 | 401,385 |
| Contract liabilities | 194,227 | 221,095 |
| Debt due within one year | 8,995 | 11,272 |
| Operating lease liabilities | 34,990 | 36,108 |
| Total current liabilities | 1,141,633 | 1,117,442 |
| Long-term debt due after one year | 1,717,911 | 1,365,977 |
| Operating lease liabilities | 176,246 | 151,523 |
| Retirement obligations and other liabilities | 516,087 | 530,994 |
| Commitments and contingencies (See Note 16) | | |
| Shareholders' equity: | | |
| Common shares, \$1.25 par value | 220,991 | 220,991 |
| Shares authorized — 305,000 | | |
| Shares issued — 176,793 and 176,793, respectively | | |
| Capital in excess of par value | 502,227 | 501,045 |
| Retained earnings | 3,656,449 | 3,652,244 |
| Treasury shares, at cost — 46,768 and 46,262 shares, respectively | (2,059,309) | (2,051,583) |
| Deferred compensation obligation | 6,164 | 8,334 |
| Accumulated other comprehensive loss | (594,052) | (584,292) |
| Total Flowserve Corporation shareholders' equity | 1,732,470 | 1,746,739 |
| Noncontrolling interests | 30,330 | 25,602 |
| Total equity | 1,762,800 | 1,772,341 |
| Total liabilities and equity | \$ 5,314,677 | \$ 4,938,277 |

See accompanying notes to consolidated financial statements.

FLOWSERVE CORPORATION
CONSOLIDATED STATEMENTS OF INCOME

| | Year Ended December 31, | | |
|---|---|--------------|--------------|
| | 2020 | 2019 | 2018 |
| | (Amounts in thousands, except per share data) | | |
| Sales | \$ 3,728,134 | \$ 3,939,697 | \$ 3,835,699 |
| Cost of sales | (2,611,365) | (2,650,354) | (2,644,830) |
| Gross profit | 1,116,769 | 1,289,343 | 1,190,869 |
| Selling, general and administrative expense | (878,245) | (913,203) | (966,584) |
| Loss on sale of business | — | — | (7,727) |
| Net earnings from affiliates | 11,753 | 10,483 | 11,143 |
| Operating income | 250,277 | 386,623 | 227,701 |
| Interest expense | (57,386) | (54,980) | (58,160) |
| Interest income | 4,175 | 8,409 | 6,465 |
| Other income (expense), net | (10,254) | (17,619) | (19,569) |
| Earnings before income taxes | 186,812 | 322,433 | 156,437 |
| Provision for income taxes | (60,031) | (75,493) | (46,550) |
| Net earnings, including noncontrolling interests | 126,781 | 246,940 | 109,887 |
| Less: Net earnings attributable to noncontrolling interests | (10,455) | (8,112) | (5,379) |
| Net earnings attributable to Flowserve Corporation | \$ 116,326 | \$ 238,828 | \$ 104,508 |
| Net earnings per share attributable to Flowserve Corporation common shareholders: | | | |
| Basic | \$ 0.89 | \$ 1.82 | \$ 0.80 |
| Diluted | 0.89 | 1.81 | 0.80 |

See accompanying notes to consolidated financial statements.

FLOWSERVE CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

| | Year Ended December 31, | | |
|---|-------------------------|-------------------|------------------|
| | 2020 | 2019 | 2018 |
| | (Amounts in thousands) | | |
| Net earnings, including noncontrolling interests | \$ 126,781 | \$ 246,940 | \$ 109,887 |
| Other comprehensive income (loss): | | | |
| Foreign currency translation adjustments, net of deferred taxes of \$11,104, \$(740) and \$(490) in 2020, 2019 and 2018, respectively | 388 | 6,561 | (63,146) |
| Pension and other postretirement effects, net of deferred taxes of \$(311), \$(598) and \$3,103 in 2020, 2019 and 2018, respectively | (9,562) | (16,514) | (4,892) |
| Cash flow hedging activity, net | 183 | 187 | 232 |
| Other comprehensive income (loss) | (8,991) | (9,766) | (67,806) |
| Comprehensive income, including noncontrolling interests | 117,790 | 237,174 | 42,081 |
| Comprehensive income attributable to noncontrolling interests | (11,225) | (8,691) | (6,047) |
| Comprehensive income attributable to Flowserve Corporation | <u>\$ 106,565</u> | <u>\$ 228,483</u> | <u>\$ 36,034</u> |

See accompanying notes to consolidated financial statements.

FLOWERVE CORPORAION
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

| Total Flowserve Corporation Shareholders' Equity | | | | | | | | | | |
|---|--------------|------------|--------------------------------------|----------------------|----------------|----------------|--|---|-----------------------------|--------------|
| | Common Stock | | Capital in Excess of Par Value | Retained Earnings | Treasury Stock | | Deferred Compensation Obligation | Accumulated Other Comprehensive Loss | Noncontrolling Interests | Total Equity |
| | Shares | Amount | | | Shares | Amount | | | | |
| (Amounts in thousands) | | | | | | | | | | |
| Balance — January 1, 2018 | 176,793 | \$ 220,991 | \$ 488,326 | \$ 3,491,524 | (46,471) | \$ (2,059,558) | \$ 6,354 | \$ (505,473) | \$ 16,367 | \$ 1,658,531 |
| ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606) | — | — | — | 18,450 | — | — | — | — | — | 18,450 |
| Stock activity under stock plans | — | — | (13,687) | — | 234 | 10,154 | — | — | — | (3,533) |
| Stock-based compensation | — | — | 19,912 | — | — | — | — | — | — | 19,912 |
| Tax benefit associated with stock-based compensation | — | — | — | — | — | — | — | — | — | — |
| Net earnings | — | — | — | 104,508 | — | — | — | — | 5,379 | 109,887 |
| Cash dividends declared | — | — | — | (100,253) | — | — | — | — | — | (100,253) |
| Other comprehensive loss, net of tax | — | — | — | — | — | — | — | (68,474) | 668 | (67,806) |
| Other, net | — | — | — | — | — | — | 763 | — | (3,948) | (3,185) |
| Balance — December 31, 2018 | 176,793 | \$ 220,991 | \$ 494,551 | \$ 3,514,229 | (46,237) | \$ (2,049,404) | \$ 7,117 | \$ (573,947) | \$ 18,466 | \$ 1,632,003 |
| Stock activity under stock plans | — | — | (17,388) | — | 300 | 12,821 | 1,217 | — | — | (3,350) |
| Stock-based compensation | — | — | 23,882 | — | — | — | — | — | — | 23,882 |
| Net earnings | — | — | — | 238,828 | — | — | — | — | 8,112 | 246,940 |
| Cash dividends declared | — | — | — | (100,813) | — | — | — | — | — | (100,813) |
| Repurchases of common shares | — | — | — | — | (325) | (15,000) | — | — | — | (15,000) |
| Other comprehensive loss, net of tax | — | — | — | — | — | — | — | (10,345) | 579 | (9,766) |
| Other, net | — | — | — | — | — | — | — | — | (1,555) | (1,555) |
| Balance — December 31, 2019 | 176,793 | \$ 220,991 | \$ 501,045 | \$ 3,652,244 | (46,262) | \$ (2,051,583) | \$ 8,334 | \$ (584,292) | \$ 25,602 | \$ 1,772,341 |
| ASU No. 2016-13 - Measurement of Credit Losses on Financial Instruments (Topic 326) | — | — | — | (7,291) | — | — | — | — | — | (7,291) |
| Stock activity under stock plans | — | — | (26,070) | — | 551 | 24,386 | (2,170) | — | — | (3,854) |
| Stock-based compensation | — | — | 27,252 | — | — | — | — | — | — | 27,252 |
| Net earnings | — | — | — | 116,326 | — | — | — | — | 10,455 | 126,781 |
| Cash dividends declared | — | — | — | (104,830) | — | — | — | — | — | (104,830) |
| Repurchases of common shares | — | — | — | — | (1,057) | (32,112) | — | — | — | (32,112) |
| Other comprehensive loss, net of tax | — | — | — | — | — | — | — | (9,760) | 769 | (8,991) |
| Other, net | — | — | — | — | — | — | — | — | (6,496) | (6,496) |
| Balance — December 31, 2020 | 176,793 | \$ 220,991 | \$ 502,227 | \$ 3,656,449 | (46,768) | \$ (2,059,309) | \$ 6,164 | \$ (594,052) | \$ 30,330 | \$ 1,762,800 |

See accompanying notes to consolidated financial statements.

FLOWERVE CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

| | Year Ended December 31, | | |
|--|-------------------------|------------|------------|
| | 2020 | 2019 | 2018 |
| | (Amounts in thousands) | | |
| Cash flows — Operating activities: | | | |
| Net earnings, including noncontrolling interests | \$ 126,781 | \$ 246,940 | \$ 109,887 |
| Adjustments to reconcile net earnings to net cash provided (used) by operating activities: | | | |
| Depreciation | 86,175 | 92,042 | 95,820 |
| Amortization of intangible and other assets | 14,578 | 13,862 | 16,653 |
| Loss on disposition of business | — | — | 7,727 |
| Stock-based compensation | 27,252 | 23,882 | 19,912 |
| Provision for U.S. Tax Cuts and Jobs Act of 2017 | — | — | (5,654) |
| Foreign currency, asset impairment and other non-cash adjustments | 21,051 | (11,724) | 36,052 |
| Change in assets and liabilities: | | | |
| Accounts receivable, net | 45,648 | 2,883 | (25,448) |
| Inventories, net | 15,306 | (31,058) | (29,314) |
| Contract assets, net | 4,258 | (45,220) | (24,411) |
| Prepaid expenses and other assets, net | 34,262 | (9,455) | (15,491) |
| Contract liabilities | (34,066) | 19,699 | 32,955 |
| Accounts payable | (22,571) | 24,678 | 7,589 |
| Accrued liabilities and income taxes payable | 50,203 | 12,418 | (15,248) |
| Retirement obligations and other | 3,636 | (3,357) | (26,595) |
| Net deferred taxes | (61,976) | (11,493) | 6,397 |
| Net cash flows provided (used) by operating activities | 310,537 | 324,097 | 190,831 |
| Cash flows — Investing activities: | | | |
| Capital expenditures | (57,405) | (75,716) | (83,993) |
| Proceeds from disposal of assets | 15,705 | 42,333 | 6,190 |
| Payments for disposition of business | — | — | (3,663) |
| Net cash flows provided (used) by investing activities | (41,700) | (33,383) | (81,466) |
| Cash flows — Financing activities: | | | |
| Payments on long-term debt | (191,258) | (105,000) | (60,000) |
| Proceeds from issuance of senior notes | 498,280 | — | — |
| Payments of deferred loan costs | (4,572) | — | — |
| Proceeds from short-term financing | — | 75,000 | — |
| Payments on short-term financing | — | (75,000) | — |
| Proceeds under other financing arrangements | 2,285 | 3,404 | 3,377 |
| Payments under other financing arrangements | (9,792) | (9,856) | (9,853) |
| Payments related to tax withholding for stock-based compensation | (4,607) | (3,900) | (3,061) |
| Repurchases of common shares | (32,112) | (15,000) | — |
| Payments of dividends | (104,159) | (99,557) | (99,416) |
| Other | (6,478) | (1,555) | (4,331) |
| Net cash flows provided (used) by financing activities | 147,587 | (231,464) | (173,284) |
| Effect of exchange rate changes on cash | 7,870 | (7,953) | (19,843) |
| Net change in cash and cash equivalents | 424,294 | 51,297 | (83,762) |
| Cash and cash equivalents at beginning of year | 670,980 | 619,683 | 703,445 |
| Cash and cash equivalents at end of year | \$ 1,095,274 | \$ 670,980 | \$ 619,683 |
| Income taxes paid (net of refunds) | \$ 75,342 | \$ 66,372 | \$ 87,009 |
| Interest paid | 57,041 | 53,607 | 54,576 |
| See accompanying notes to consolidated financial statements. | | | |

FLOWERVE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
AS OF DECEMBER 31, 2020 AND 2019 AND FOR THE
THREE YEARS ENDED DECEMBER 31, 2020

1. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING DEVELOPMENTS

We are principally engaged in the worldwide design, manufacture, distribution and service of industrial flow management equipment. We provide long lead time, custom and other highly-engineered pumps; standardized, general-purpose pumps; mechanical seals; engineered and industrial valves; related automation products; and services and solutions primarily for oil and gas, chemical, power generation, water management and other general industries requiring flow management products and services. Equipment manufactured and serviced by us is predominantly used in industries that deal with difficult-to-handle and corrosive fluids, as well as environments with extreme temperatures, pressure, horsepower and speed. Our business is affected by economic conditions in the United States ("U.S.") and other countries where our products are sold and serviced, by the cyclical nature and competitive environment of our industries served, by the relationship of the U.S. dollar to other currencies and by the demand for and pricing of our customers' end products.

Revision to Previously Reported Financial Information — In conjunction with our close process for the third quarter of 2020, we identified accounting errors related to the recognition of a liability for unasserted asbestos claims. The adjustments primarily related to an incurred but not reported ("IBNR") liability associated with unasserted asbestos claims, but also included adjustments related to the associated receivables for expected insurance proceeds for asbestos settlement and defense costs from insurance coverage and the recognition as an expense the related legal fees that were previously estimated to be recoverable from insurance carriers for which coverage is not currently sufficient following the recognition of the IBNR for periods beginning with the year ended December 31, 2014 through the second quarter of 2020 and to correct certain other previously identified immaterial errors.

We have assessed these errors, individually and in the aggregate, and concluded that they were not material to any prior periods. However, the aggregate amount of the prior period errors would have been material to our consolidated statements of income and full year results and therefore, we have revised our previously issued audited consolidated financial information for the fiscal years ended December 31, 2019 and 2018. Interim periods for the three-months ended March 31, 2020 and the three and six-months ended June 30, 2020 will be revised in connection with the corresponding 2021 interim filings. Refer to Note 2 to our consolidated financial statements included in this Annual Report for additional information.

Coronavirus Pandemic ("COVID-19") and Oil and Gas Market — Over the past year, we have been challenged by macroeconomics and global economic impacts based on the disruption and uncertainties caused by COVID-19 and the emanating impacts of the pandemic on pricing and dampened demand for oil, further resulting in instability and volatility in oil commodity prices. To date, the COVID-19 pandemic has had widespread implications worldwide and has caused substantial economic uncertainty and challenging operational conditions. For example, during the year, these conditions drove the announcement of significant and broad-based decreases in customer planned capital spending. As a result, many of our large customers have announced and executed on double-digit capital expenditure budget decreases for 2020, resulting in lower bookings during 2020 as compared to the prior year.

Principles of Consolidation — The consolidated financial statements include the accounts of our company and our wholly and majority-owned subsidiaries. In addition, we would consolidate any variable interest entities for which we are deemed to be the primary beneficiary. Noncontrolling interests of non-affiliated parties have been recognized for all majority-owned consolidated subsidiaries. Intercompany profits/losses, transactions and balances among consolidated entities have been eliminated from our consolidated financial statements.

In the ordinary course of our operations worldwide, we have entered into joint ventures and interests (collectively referred to as "affiliates") to provide greater flexibility in delivering our products and services, gain access to markets and geographical locations and reduce exposure and diversify risk. Investments in affiliate companies with a noncontrolling ownership interests between 20% and 50%, are unconsolidated and are accounted for using the equity method, which approximates our equity interest in their underlying equivalent net book value under accounting principles generally accepted in the U.S. ("U.S. GAAP"). All equity method investments are reviewed for impairment whenever events and conditions indicate that a decrease in the value of an investment has occurred that is other than temporary. If impaired, an

impairment loss representing the difference between our carrying value and fair value is recorded and the investment is written down to a new carrying value. Investment in affiliate companies where we own less than 20% are accounted for by the cost method, whereby income is only recognized in the event of dividend receipt. Investments accounted for by the cost method are tested for impairment if an impairment indicator is present.

Use of Estimates — The process of preparing financial statements in conformity with U.S. GAAP requires us to make estimates and assumptions that affect reported amounts of certain assets, liabilities, revenues and expenses. We believe our estimates and assumptions are reasonable; however, actual results may differ materially from such estimates. The full extent to which the COVID-19 pandemic directly or indirectly impacts our business, results of operations and financial condition, including sales, expenses, our allowance for expected credit losses, stock based compensation, the carrying value of our goodwill and other long-lived assets, financial assets, and valuation allowances for tax assets, will depend on future developments that are highly uncertain, including as a result of new information that may emerge concerning COVID-19 and the actions taken to contain it or treat it, as well as the economic impact on local, regional, national and international customers, suppliers and markets. We have made estimates of the impact of COVID-19 within our financial statements and there may be changes to those estimates in the near to mid-term as new information becomes available. The most significant estimates and assumptions are used in determining:

- 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.

Argentina Highly Inflationary — Effective July 1, 2018, Argentina was designated as hyperinflationary, and as a result, we began using the U.S. dollar as our functional currency in Argentina. Our Argentinian subsidiary's sales and assets for the year ended December 31, 2020 represented approximately 1% of consolidated sales and total consolidated assets at December 31, 2020. Assets primarily consisted of U.S. dollar-denominated monetary assets and Argentinian peso-denominated non-monetary assets at December 31, 2020. In addition, certain of our operations in other countries sell equipment and parts that are typically denominated in U.S. dollars directly to Argentinian customers.

Revenue Recognition — We adopted Accounting Standards Update ("ASU") No. 2014-09, "Revenue from Contracts with Customers (Topic 606)" ("New Revenue Standard") on January 1, 2018, using the modified retrospective method for transition, which resulted in a cumulative adjustment to opening retained earnings as of January 1, 2018.

The majority of our revenues relate to customer orders that typically contain a single commitment of goods or services which have lead times under a year. Longer lead time, more complex contracts with our customers typically have multiple commitments of goods and services, including any combination of designing, developing, manufacturing, modifying, installing and commissioning of flow management equipment and providing services and parts related to the performance of such products. We recognize revenue when (or as) we satisfy a performance obligation by transferring control to a customer. Transfer of control is evaluated based on the customer's ability to direct the use of and obtain substantially all of the benefits of a performance obligation. Revenue is recognized either over time or at a point in time, depending on the specific facts and circumstances for each contract, including the terms and conditions of the contract as agreed with the customer and the nature of the products or services to be provided.

Our primary method for recognizing revenue over time is the percentage of completion ("POC") method, whereby progress towards completion is measured by applying an input measure based on costs incurred to date relative to total estimated costs at completion. If control of the products and/or services does not transfer over time, then control transfers at a point in time. We determine the point in time that control transfers to a customer based on the evaluation of specific indicators, such as title transfer, risk of loss transfer, customer acceptance and physical possession. For a detailed discussion related to revenue recognition refer to Note 3.

Cash and Cash Equivalents — We place temporary cash investments with financial institutions and, by policy, invest in those institutions and instruments that have minimal credit risk and market risk. These investments, with an original maturity of three months or less when purchased, are classified as cash equivalents. They are highly liquid and principal values are not subject to significant risk of change due to interest rate fluctuations.

Accounts Receivable, Allowance for Doubtful Accounts and Credit Risk — Trade accounts receivables are recorded at the invoiced amount and do not bear interest. We establish an allowance for expected credit losses on an aging schedule and according to historical losses as determined from our billings and collections history. Additionally, we consider factors that are specific to our customers' credit risk such as financial difficulties, liquidity issues, insolvency, and country and political risk. We also consider both the current and forecasted direction of macroeconomic conditions at the reporting date in estimating expected credit losses. Receivables are written off against the allowance in the period when the receivable is deemed to be uncollectible. Subsequent recoveries of amounts previously written off are reflected as a reduction to credit impairment losses in the income statement.

Credit risks are mitigated by the diversity of our customer base across many different geographic regions and industries and by performing creditworthiness analyses on our customers. Additionally, we mitigate credit risk through letters of credit and advance payments received from our customers. We do not believe that we have any other significant concentrations of credit risk.

Inventories and Related Reserves — Inventories are stated at the lower of cost and net realizable value. Cost is determined by the first-in, first-out method. Reserves for excess and obsolete inventories are based upon our assessment of market conditions for our products determined by historical usage and estimated future demand. Due to the long life cycles of our products, we carry spare parts inventories that have historically low usage rates and provide reserves for such inventory based on demonstrated usage and aging criteria.

Income Taxes, Deferred Taxes, Tax Valuation Allowances and Tax Reserves — We account for income taxes under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are calculated using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the period that includes the enactment date. We record valuation allowances to reduce the carrying value of deferred tax assets to amounts that we expect are more likely than not to be realized. We assess existing deferred tax assets, net operating losses and tax credits by jurisdiction and expectations of our ability to utilize these tax attributes through a review of past, current and estimated future taxable income and establishment of tax planning strategies.

We provide deferred taxes for the temporary differences associated with our investment in foreign subsidiaries that have a financial reporting basis that exceeds tax basis, unless we can assert permanent reinvestment in foreign jurisdictions. Financial reporting basis and tax basis differences in investments in foreign subsidiaries consist of both unremitted earnings and losses, as well as foreign currency translation adjustments.

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. 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.

We recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities. The determination is based on the technical merits of the position and presumes that each uncertain tax position will be examined by the relevant taxing authority that has full knowledge of all relevant information. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate settlement.

Legal and Environmental Contingencies — Legal and environmental reserves are recorded based upon a case-by-case analysis of the relevant facts and circumstances and an assessment of potential legal obligations and costs. Amounts relating to legal and environmental liabilities are recorded when it is probable that a loss has been incurred and such loss is reasonably estimable. Assessments of legal and environmental costs are based on information obtained from our independent and in-house experts and our loss experience in similar situations. Estimates are updated as applicable when new information regarding the facts and circumstances of each matter becomes available. Legal fees associated with legal and environmental liabilities are expensed as incurred.

We are a defendant in a 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 heritage companies of the Company. We have estimated that the liability for pending and future claims not yet asserted, and which are probable and estimable,

could be experienced through 2049, which represents the expected end of our asbestos liability exposure with no further ongoing claims expected beyond that date. This estimate is based on the Company's historical claim experience and estimates of the number and resolution cost of potential future claims that may be filed based on anticipated levels of unique plaintiff asbestos-related claims in the U.S. tort system against all defendants, the diminished volatility and consistency of observable claims data, the period of time that has elapsed since we stopped manufacturing products that contained encapsulated asbestos and an expected downward trend in claims due to the average age of our claimants. This estimate is not discounted to present value. In light of the uncertainties and variables inherent in the long-term projection of the total asbestos liability, as part of our ongoing review of asbestos claims, each year we will reassess the projected liability of unasserted asbestos claims to be filed through 2049, and we will continually reassess the time horizon over which a reasonable estimate of unasserted claims can be projected.

We assess the sufficiency of the estimated liability for pending and future claims on an ongoing basis by evaluating actual experience regarding claims filed, settled and dismissed, and amounts paid in settlements. In addition to claims and settlement experience, we consider additional quantitative and qualitative factors such as changes in legislation, the legal environment and the Company's defense strategy. In connection with our ongoing review of asbestos-related claims, we have also reviewed the amount of potential insurance coverage for such claims, taking into account the remaining limits of such coverage, the number and amount of claims on our insurance from co-insured parties, ongoing litigation against the Company's insurers, potential remaining recoveries from insolvent insurers, the impact of previous insurance settlements and coverage available from solvent insurers not party to the coverage litigation. Continuously, we review ongoing insurance coverage available for a significant amount of the potential future asbestos-related claims and in the future could secure additional insurance coverage as deemed necessary.

The study from the Company's actuary, based on data as of September 30, 2020, provided for a range of possible future liability from approximately \$80.1 million to \$131.7 million. The Company does not believe any amount within the range of potential outcomes represents a better estimate than another given the many factors and assumptions inherent in the projections and therefore the Company has recorded the liability at the actuarial central estimate of approximately \$99.5 million as of December 31, 2020. In addition, the Company has recorded estimated insurance receivables of approximately \$69.5 million as of December 31, 2020. The amounts recorded for the asbestos-related liability and the related insurance receivables are based on facts known at the time and a number of assumptions. However, projecting future events, such as the number of new claims to be filed each year, the length of time it takes to defend, resolve, or otherwise dispose of such claims, coverage issues among insurers and the continuing solvency of various insurance companies, as well as the numerous uncertainties surrounding asbestos litigation in the United States, could cause the actual liability and insurance recoveries for us to be higher or lower than those projected or recorded. Additionally, we have claims pending against certain insurers that, if resolved more favorably than reflected in the recorded receivables, would result in discrete gains in the applicable year. Changes recorded in the estimated liability and estimated insurance recovery based on projections of asbestos litigation and corresponding insurance coverage, result in the recognition of additional expense or income. For a discussion pertaining to the activity related to asbestos claims refer to Note 16.

Warranty Accruals — Warranty obligations are based upon product failure rates, materials usage, service delivery costs, an analysis of all identified or expected claims and an estimate of the cost to resolve such claims. The estimates of expected claims are generally a factor of historical claims and known product issues. Warranty obligations based on these factors are adjusted based on historical sales trends for the preceding 24 months.

Insurance Accruals — Insurance accruals are recorded for wholly or partially self-insured risks such as medical benefits and workers' compensation and are based upon an analysis of our claim loss history, insurance deductibles, policy limits and other relevant factors that are updated annually and are included in accrued liabilities in our consolidated balance sheets. The estimates are based upon information received from actuaries, insurance company adjusters, independent claims administrators or other independent sources. Receivables from insurance carriers 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. Estimated receivables are included in accounts receivable, net and other assets, net, as applicable, in our consolidated balance sheets.

Pension and Postretirement Obligations — Determination of pension and postretirement benefits obligations is based on estimates made by management in consultation with independent actuaries and investment advisors. Inherent in these valuations are assumptions including discount rates, expected rates of return on plan assets, retirement rates, mortality rates and rates of compensation increase and other factors all of which are reviewed annually and updated if necessary.

Current market conditions, including changes in rates of return, interest rates and medical inflation rates, are considered in selecting these assumptions.

Actuarial gains and losses and prior service costs are recognized in accumulated other comprehensive loss as they arise and we amortize these costs into net pension expense over the remaining expected service period.

Property, Plant and Equipment and Depreciation — Property, plant and equipment are stated at historical cost, less accumulated depreciation. If asset retirement obligations exist, they are capitalized as part of the carrying amount of the asset and depreciated over the remaining useful life of the asset. The useful lives of leasehold improvements are the lesser of the remaining lease term or the useful life of the improvement. When assets are retired or otherwise disposed of, their costs and related accumulated depreciation are removed from the accounts and any resulting gains or losses are included in income from operations for the period. Depreciation is computed by the straight-line method based on the estimated useful lives of the depreciable assets, or in the case of assets under finance leases, over the related lease term. Generally, the estimated useful lives of the assets are:

| | |
|--|----------------|
| Buildings and improvements | 10 to 40 years |
| Machinery, equipment and tooling | 3 to 14 years |
| Software, furniture and fixtures and other | 3 to 7 years |

Costs related to routine repairs and maintenance are expensed as incurred.

Leases — We have operating and finance leases for certain manufacturing facilities, offices, service and quick response centers, machinery, equipment and automobiles. Our leases have remaining lease terms of up to 33 years. The terms and conditions of our leases may include options to extend or terminate the lease which are considered and included in the lease term when these options are reasonably certain of exercise.

We determine if a contract is (or contains) a lease at inception by evaluating whether the contract conveys the right to control the use of an identified asset. For all classes of leased assets, we account for any non-lease components in the contract together with the related lease component in the same unit of account. For lease contracts containing more than one lease component, we allocate the contract consideration to each of the lease components on the basis of relative standalone prices in order to identify the lease payments for each lease component.

Right-of-use ("ROU") assets and lease liabilities are recognized in our consolidated balance sheets at the commencement date based on the present value of remaining lease payments over the lease term. Additionally, ROU assets include any lease payments made at or before the commencement date, as well as any initial direct costs incurred, and are reduced by any lease incentives received. For a detailed discussion related to leases refer to Note 5.

Internally Developed Software — We capitalize certain costs associated with the development of internal-use software. Generally, these costs are related to significant software development projects and are amortized over their estimated useful life, typically three to five years, upon implementation of the software. We also capitalize certain costs incurred during the application development stage of implementation of cloud computing arrangements. Amounts capitalized for cloud arrangements are amortized on a straight-line basis over a period of three to seven years and are reported as a component of other long-term assets.

Intangible Assets — Intangible assets, excluding trademarks (which are considered to have an indefinite life), consist primarily of engineering drawings, patents, existing customer relationships, software, distribution networks and other items that are being amortized over their estimated useful lives generally ranging from four to 40 years. These assets are reviewed for impairment whenever events and circumstances indicate impairment may have occurred.

Valuation of Goodwill, Indefinite-Lived Intangible Assets and Other Long-Lived Assets — The value of goodwill and indefinite-lived intangible assets is tested for impairment as of December 31 each year or whenever events or circumstances indicate such assets may be impaired. 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 three 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.

Accounting Standards Codification ("ASC") 350 allows an optional qualitative assessment, prior to a quantitative assessment test, to determine whether it is more likely than not that the fair value of a reporting unit exceeds its carrying amount. We generally do not attempt a qualitative assessment and proceed directly to the quantitative test. If the carrying value of a reporting unit exceeds its fair value, the goodwill of that reporting unit is impaired and an impairment loss is recorded equal to the excess of the carrying value over its fair 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, business plans, economic projections, anticipated future cash flows and market participants.

We did not record an impairment of goodwill in 2020, 2019 or 2018; however, the estimated fair value of our Pump reporting unit has reduced moderately during the year due to decreased broad-based capital spending resulting from the ongoing COVID-19 pandemic and to a lesser extent the heightened pricing pressure experienced in the oil and gas markets, both of which are anticipated to continue in the near to mid-term. The Pump reporting unit is a component of EPD reporting segment and is primarily focused on highly engineered custom and pre-configured pump products and systems. As of December 31, 2020, our Pump reporting unit had approximately \$482.7 million of goodwill and an estimated fair value that exceeded its carrying value by approximately 46% as compared to approximately \$468.8 million of goodwill and an estimated fair value that exceeded its carrying value by approximately 131% as of December 31, 2019. The key factors considered in determining the estimated fair value of our reporting units included the annual operating plan and forecasted operating results, successful execution of our current continuous improvement and identified strategic initiatives, a constant cost of capital, continued 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. Although we have concluded that there is no impairment on the goodwill associated with our Pump reporting unit as of December 31, 2020, we will continue to closely monitor their performance and related market conditions for future indicators of potential impairment and reassess accordingly.

We also considered our market capitalization in our evaluation of the fair value of our goodwill. Our market capitalization decreased as compared with 2019, however this did not indicate a potential impairment of our goodwill as of December 31, 2020.

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 unit discussed above. We did not record a material impairment of our trademarks in 2020, 2019 or 2018.

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.

Deferred Loan Costs — Deferred loan costs, consisting of fees and other expenses associated with debt financing, are amortized over the term of the associated debt using the effective interest method. Additional amortization is recorded in periods where optional prepayments on debt are made.

Fair Values of Financial Instruments — Our financial instruments are presented at fair value in our consolidated balance sheets, with the exception of our long-term debt. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Where available, fair value is based on observable market prices or parameters or derived from such prices or parameters. Where observable prices or inputs are not available, valuation models may be applied.

Assets and liabilities recorded at fair value in our consolidated balance sheets are categorized based upon the level of judgment associated with the inputs used to measure their fair values. Hierarchical levels, as defined by ASC 820, "Fair

Value Measurements and Disclosures," are directly related to the amount of subjectivity associated with the inputs to fair valuation of these assets and liabilities. An asset or a liability's categorization within the fair value hierarchy is based on the lowest level of significant input to its valuation. Hierarchical levels are as follows:

Level I — Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date.

Level II — Inputs (other than quoted prices included in Level I) are either directly or indirectly observable for the asset or liability through correlation with market data at the measurement date and for the duration of the instrument's anticipated life.

Level III — Inputs reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date. Consideration is given to the risk inherent in the valuation technique and the risk inherent in the inputs to the model.

Recurring fair value measurements are limited to investments in derivative instruments and certain equity securities. The fair value measurements of our derivative instruments are determined using models that maximize the use of the observable market inputs including interest rate curves and both forward and spot prices for currencies, and are classified as Level II under the fair value hierarchy. The fair values of our derivative instruments are included in Note 9. The fair value measurements of our investments in equity securities are determined using quoted market prices and are classified as Level I. The fair values of our investments in equity securities, and changes thereto, are immaterial to our consolidated financial position and results of operations.

Derivatives and Hedging Activities — We have a foreign currency derivatives and hedging policy outlining the conditions under which we can enter into financial derivative transactions. We do not use derivative instruments for trading or speculative purposes. All derivative instruments are recognized on the balance sheet at their fair values.

We employ a foreign currency economic hedging strategy to mitigate certain financial risks resulting from foreign currency exchange rate movements that impact foreign currency denominated receivables and payables, firm committed transactions and forecasted sales and purchases. The changes in the fair values are recognized immediately in other income (expense), net in the consolidated statements of income. See Note 9 for further discussion of forward exchange contracts.

We are exposed to risk from credit-related losses resulting from nonperformance by counterparties to our financial instruments. We perform credit evaluations of our counterparties under forward exchange contracts and expect all counterparties to meet their obligations. If necessary, we would adjust the values of our derivative contracts for our or our counterparties' credit risks.

Foreign Currency Translation — Assets and liabilities of our foreign subsidiaries are translated to U.S. dollars at exchange rates prevailing at the balance sheet date, while income and expenses are translated at average rates for each month. Translation gains and losses are reported as a component of accumulated other comprehensive loss. Transactional currency gains and losses arising from transactions in currencies other than our sites' functional currencies are included in our consolidated results of operations.

Transaction and translation gains and losses arising from intercompany balances are reported as a component of accumulated other comprehensive loss when the underlying transaction stems from a long-term equity investment or from debt designated as not due in the foreseeable future. Otherwise, we recognize transaction gains and losses arising from intercompany transactions as a component of income. Where intercompany balances are not long-term investment related or not designated as due beyond the foreseeable future, we may mitigate risk associated with foreign currency fluctuations by entering into forward exchange contracts.

Stock-Based Compensation — Stock-based compensation is measured at the grant-date fair value. The exercise price of stock option awards and the value of restricted share, restricted share unit and performance-based unit awards (collectively referred to as "Restricted Shares") are set at the closing price of our common stock on the New York Stock Exchange on the date of grant, which is the date such grants are authorized by our Board of Directors. Restricted share units and performance-based units refer to restricted awards that do not have voting rights and accrue dividends, and are forfeited if vesting does not occur.

The intrinsic value of Restricted Shares, which is typically the product of share price at the date of grant and the number of Restricted Shares granted, is amortized on a straight-line basis to compensation expense over the periods in which the restrictions lapse based on the expected number of shares that will vest. We account for forfeitures as they occur resulting in the reversal of cumulative expense previously recognized.

Earnings Per Share — We use the two-class method of calculating Earnings Per Share ("EPS"), which determines earnings per share for each class of common stock and participating security as if all earnings for the period had been distributed. Unvested restricted share awards that earn non-forfeitable dividend rights qualify as participating securities and, accordingly, are included in the basic computation as such. Our unvested Restricted Shares participate on an equal basis with common shares; therefore, there is no difference in undistributed earnings allocated to each participating security.

Research and Development Expense — Research and development costs are charged to expense when incurred. Aggregate research and development costs included in SG&A were \$36.1 million, \$42.0 million and \$39.6 million in 2020, 2019 and 2018, respectively. Costs incurred for research and development primarily include salaries and benefits and consumable supplies, as well as rent, professional fees, utilities and the depreciation of property and equipment used in research and development activities.

Accounting Developments

Pronouncements Implemented

In June 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2016-13, "Financial Instruments-Credit Losses (Topic 326), Measurement of Credit Losses on Financial Instruments" ("CECL"). The ASU requires, among other things, the use of a new current expected credit loss model in order to determine an allowance for expected credit losses with respect to financial assets and instruments held. The CECL model requires that we estimate the lifetime of an expected credit loss for financial assets held at the reporting date based on historical experience, current conditions and reasonable and supportable forecasts. On January 1, 2020, we adopted the ASU on a prospective basis to determine our allowance for credit losses in accordance with the requirements of Topic 326, and we modified our accounting policy and processes to facilitate this approach. As a result of the adoption of the ASU, we recorded a noncash cumulative effect after-tax adjustment to retained earnings of \$7.3 million on our opening consolidated balance sheet.

Our primary exposure to financial assets that are within the scope of CECL are trade receivables and contract assets. For these financial assets, we record an allowance for expected credit losses that, when deducted from the gross asset balance, presents the net amount expected to be collected. We estimate the allowance based on an aging schedule and according to historical losses as determined from our billings and collections history. Additionally, we adjust the allowance for factors that are specific to our customers' credit risk such as financial difficulties, liquidity issues, insolvency, and country and political risk. We also consider both the current and forecasted direction of macroeconomic conditions at the reporting date. The CECL model requires consideration of reasonable and supportable forecasts of future economic conditions in the estimate of expected credit losses.

We adjust the allowance and recognize adjustments in the income statement each period. Trade receivables are written off against the allowance in the period when the receivable is deemed to be uncollectible. Subsequent recoveries of amounts previously written off are reflected as a reduction to credit impairment losses in the income statement.

Our allowance for expected credit losses for short-term receivables as of December 31, 2020, was \$75.2 million, compared to \$53.4 million as of December 31, 2019. The 2020 activity included \$6.9 million for the adoption of the CECL model at January 1, 2020 and \$14.9 million for current period adjustments.

Our long-term receivables, included in other assets, net, represent receivables with collection periods longer than 12 months and the balance primarily consists of amounts to be collected from insurance companies and fully-reserved receivables associated with the national oil company in Venezuela. As of December 31, 2020, we had \$105.3 million of long-term receivables, compared to \$140.0 million as of December 31, 2019. Our allowance for expected credit losses for long-term receivables as of December 31, 2020 was \$96.1 million, compared to \$101.4 million as of December 31, 2019.

We have exposure to credit losses from off-balance sheet exposures, such as financial guarantees and standby letters of credit, where we believe the risk of loss is immaterial to our financial statements as of December 31, 2020.

In January 2017, the FASB issued ASU No. 2017-04, "Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment." The amendments in this ASU allow companies to apply a one-step quantitative test and record the amount of goodwill impairment as the excess of a reporting unit's carrying amount over its fair value, not to exceed the total amount of goodwill allocated to the reporting unit. The amendments of the ASU are effective for annual or interim goodwill impairment tests in fiscal years beginning after December 15, 2019. Our adoption of ASU No. 2017-04 effective January 1, 2020 did not have an impact on our consolidated financial condition and results of operations.

In August 2018, the FASB issued ASU No. 2018-13, "Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement." The amendments of the ASU modify the disclosure requirements for fair value measurements by removing, modifying, or adding certain disclosure requirements for assets and liabilities measured at fair value in the statement of financial position or disclosed in the notes to the financial statements. The ASU is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019, with early adoption permitted for the removed disclosures and delayed adoption until fiscal year 2020 permitted for the new disclosures. The removed and modified disclosures were adopted on a retrospective basis and the new disclosures were adopted on a prospective basis. Our adoption of ASU No. 2018-13 effective January 1, 2020 did not have an impact on our disclosures.

In August 2018, the FASB issued ASU No. 2018-14, "Compensation-Retirement Benefits-Defined Benefit Plans-General (Subtopic 715-20): Disclosure Framework-Changes to the Disclosure Requirements for Defined Benefit Plans." The ASU amends the disclosure requirements by adding, clarifying, or removing certain disclosures for sponsor defined benefit pension or other postretirement plans. The amendments are effective for fiscal years ending after December 15, 2020 and the amendments should be applied retrospectively to all periods presented. We have adopted the standard and the required disclosure are reflected on our annual disclosures of the Company's noncontributory defined benefit pension plans.

In August 2018, the FASB issued ASU No. 2018-15, "Intangibles-Goodwill and Other-Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract." The ASU addresses how entities should account for costs associated with implementing a cloud computing arrangement that is considered a service contract. Per the amendments of the ASU, implementation costs incurred in a cloud computing arrangement that is a service contract should be accounted for in the same manner as implementation costs incurred to develop or obtain software for internal use as prescribed by guidance in ASC 350-40. The ASU requires that implementation costs incurred in a cloud computing arrangement be capitalized rather than expensed. Further, the ASU specifies the method for the amortization of costs incurred during implementation, and the manner in which the unamortized portion of these capitalized implementation costs should be evaluated for impairment. The ASU also provides guidance on how to present such implementation costs in the financial statements and also creates additional disclosure requirements. The amendments are effective for fiscal years beginning after December 15, 2019. The amendments in this ASU can be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption. Our adoption of ASU No. 2018-15 effective January 1, 2020 on a prospective basis did not have a material impact on our consolidated financial condition and results of operations.

In October 2018, the FASB issued ASU No. 2018-17, "Consolidation (Topic 810): Targeted Improvements to Related Party Guidance for Variable Interest Entities ("VIEs")." The standard reduces the cost and complexity of financial reporting associated with VIEs. The new standard amends the guidance for determining whether a decision-making fee is a VIE. The amendments require organizations to consider indirect interests held through related parties under common control on a proportional basis rather than as the equivalent of a direct interest in its entirety as currently required in U.S. Generally Accepted Accounting Principles ("GAAP"). The amendments of this ASU are effective for fiscal years beginning after December 15, 2019. Our adoption of ASU No. 2018-17 effective January 1, 2020 did not have an impact on our consolidated financial condition and results of operations.

In November 2018, the FASB issued ASU No. 2018-18, "Collaborative Arrangements (Topic 808): Clarifying the Interaction Between Topic 808 and Topic 606." The ASU clarifies the interaction between the guidance for certain collaborative arrangements and ASU No. 2014-09, "Revenue from Contracts with Customers (Topic 606)," which we adopted January 1, 2018. The amendments of the ASU provide guidance on how to assess whether certain transactions between collaborative arrangement participants should be accounted for within ASU No. 2014-09. The ASU also provides more comparability in the presentation of revenue for certain transactions between collaborative arrangement participants. Parts of the collaborative arrangement that are not in the purview of the revenue recognition standard should be presented separately. The amendments are effective for fiscal years beginning after December 15, 2019. Our adoption of ASU No. 2018-18 effective January 1, 2020 did not have an impact on our consolidated financial condition and results of operations.

In December 2019, the FASB issued ASU No. 2019-12, "Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes." The ASU intends to simplify various aspects related to accounting for income taxes and removes certain exceptions to the general principles in the standard. Additionally, the ASU clarifies and amends existing guidance to improve consistent application of its requirements. We early adopted ASU No. 2019-12 effective January 1, 2020 on a prospective basis and the adoption did not have an impact on our consolidated financial condition and results of operations.

Pronouncements Not Yet Implemented

In March of 2020, the FASB issued ASU No. 2020-04, "Reference Rate Reform (Topic 848): Facilitation of The Effects of Reference Rate Reform on Financial Reporting." The ASU provides guidance designed to enable the process for migrating away from reference rates such as the London Interbank Offered Rate ("LIBOR") and others to new reference rates. Further, the amendments of the ASU provides optional expedients and exceptions for applying U.S. GAAP to contract modifications and hedging relationships, subject to meeting certain criteria, that reference LIBOR or another reference rate expected to be discontinued. The amendments are effective as of March 12, 2020 through December 31, 2022 and should be applied prospectively to all periods presented. We have evaluated the impact of ASU No. 2020-04 and other related ASUs, and we anticipate that our adoption of these ASUs will not have a material impact on our consolidated financial condition and results of operations.

In October 2020, the FASB issued ASU No. 2020-10, "Codification Improvements: Amendments to the FASB Accounting Standards Codification." The amendments in this ASU do not change GAAP and, therefore, are not expected to result in a significant change in practice. Rather, the amendments are intended to improve codification guidance and disclosure requirements in Company's financial statements and notes to the financial statements. The amendments are effective for annual periods beginning after December 15, 2020 and the amendments should be applied retrospectively to all periods presented. We are currently evaluating the impact of ASU 2020-10 and we anticipate that our adoption of this ASU will not have a material impact on our consolidated financial condition, results of operations or net cash flows.

2. REVISION TO PREVIOUSLY REPORTED FINANCIAL INFORMATION

In conjunction with our close process for the third quarter of 2020, we identified accounting errors related to the recognition of a liability for unasserted asbestos claims. The adjustments primarily relate to an incurred but not reported (“IBNR”) liability associated with unasserted asbestos claims, but also include adjustments related to the associated receivables for expected insurance proceeds for asbestos settlement and defense costs from insurance coverage and the recognition as an expense the related legal fees that were previously estimated to be recoverable from insurance carriers for which coverage is not currently sufficient following the recognition of the IBNR and to correct certain other previously identified immaterial misstatements. Prior periods not presented herein will be revised, as applicable, in future filings.

The following table presents the impact of correcting the errors previously discussed on the affected line items of our consolidated balance sheet as of December 31, 2019:

| (Amounts in thousands) | December 31, 2019 | | |
|--|-------------------|-------------|--------------|
| | As Reported | Adjustments | As Revised |
| Prepaid expenses and other | 105,101 | 1,377 | 106,478 |
| Total current assets | 2,505,370 | 1,377 | 2,506,747 |
| Property, plant and equipment, net of accumulated depreciation (1) | 572,175 | (8,611) | 563,564 |
| Other assets, net of allowance for expected credit losses (2) | 227,185 | 25,869 | 253,054 |
| Total assets | 4,919,642 | 18,635 | 4,938,277 |
| Contract liabilities (3) | 216,541 | 4,554 | 221,095 |
| Total current liabilities | 1,112,888 | 4,554 | 1,117,442 |
| Retirement obligations and other liabilities (4) | 473,295 | 57,699 | 530,994 |
| Retained earnings (5) | 3,695,862 | (43,618) | 3,652,244 |
| Total Flowserve Corporation shareholders’ equity | 1,790,357 | (43,618) | 1,746,739 |
| Total equity | 1,815,959 | (43,618) | 1,772,341 |
| Total liabilities and equity | \$ 4,919,642 | \$ 18,635 | \$ 4,938,277 |

(1) Adjustment related to the misclassification of Software as a Service arrangements as property, plant and equipment rather than other assets, net, as prescribed by ASU 2018-15.

(2) Adjustment related to the associated receivables for expected insurance proceeds for asbestos settlements and defense costs.

(3) Adjustment related to one of our sites for correction in contract position caused by errors in estimated costs under the over time revenue recognition model.

(4) Adjustment primarily relates to IBNR reserves associated with unasserted asbestos claims.

(5) The adjustments to retained earnings represents the cumulative effect of the immaterial errors that were corrected in periods prior to and through December 31, 2019.

The following table presents the impact of correcting the errors previously discussed on the affected line items of our consolidated statement of income for the year ended December 31, 2019:

(Amounts in thousands)

| | Year Ended December 31, 2019 | | |
|---|------------------------------|-------------|--------------|
| | As Reported | Adjustments | As Revised |
| Sales (1) | \$ 3,944,850 | \$ (5,153) | \$ 3,939,697 |
| Cost of sales | (2,649,480) | (874) | (2,650,354) |
| Gross profit | 1,295,370 | (6,027) | 1,289,343 |
| Selling, general and administrative expense (2) | (899,813) | (13,390) | (913,203) |
| Operating income | 406,040 | (19,417) | 386,623 |
| Earnings before income taxes | 341,850 | (19,417) | 322,433 |
| Provision for income taxes (3) | (80,070) | 4,577 | (75,493) |
| Net earnings, including noncontrolling interests | 261,780 | (14,840) | 246,940 |
| Net earnings attributable to Flowserve Corporation | \$ 253,668 | \$ (14,840) | \$ 238,828 |
| Net earnings per share attributable to Flowserve Corporation common shareholders: | | | |
| Basic | \$ 1.94 | \$ (0.12) | \$ 1.82 |
| Diluted | 1.93 | (0.12) | 1.81 |

(1) Adjustment related to one of our sites related to errors in estimated costs under the over time revenue recognition model.

(2) Adjustment primarily related to asbestos settlement and defense costs from insurance coverage and expense for related legal fees.

(3) Adjustment related to tax impacts of the matters described in notes (1) and (2), above.

The following table presents the impact of correcting the errors previously discussed on the affected line items of our consolidated statement of income for the year ended December 31, 2018:

(Amounts in thousands)

| | Year Ended December 31, 2018 | | |
|---|------------------------------|-------------|--------------|
| | As Reported | Adjustments | As Revised |
| Sales (1) | \$ 3,832,666 | \$ 3,033 | \$ 3,835,699 |
| Gross profit | 1,187,836 | 3,033 | 1,190,869 |
| Selling, general and administrative expense (2) | (943,714) | (22,870) | (966,584) |
| Operating income | 247,538 | (19,837) | 227,701 |
| Earnings before income taxes | 176,274 | (19,837) | 156,437 |
| Provision for income taxes (3) | (51,224) | 4,674 | (46,550) |
| Net earnings, including noncontrolling interests | 125,050 | (15,163) | 109,887 |
| Net earnings attributable to Flowserve Corporation | \$ 119,671 | (15,163) | \$ 104,508 |
| Net earnings per share attributable to Flowserve Corporation common shareholders: | | | |
| Basic | \$ 0.91 | (0.11) | \$ 0.80 |
| Diluted | 0.91 | (0.11) | 0.80 |

(1) Adjustment related to one of our sites related to errors in estimated costs under the over time revenue recognition model.

(2) Adjustment primarily related to asbestos settlement and defense costs from insurance coverage and expense for related legal fees and broad-based annual incentive compensation.

(3) Adjustment related to tax impacts of the matters described in notes (1) and (2), above.

The consolidated statements of shareholders' equity and the consolidated statements of comprehensive income for the periods ending December 31, 2020, 2019 and 2018 have also been revised to reflect the impacts to net earnings. The impact of errors arising in periods commencing prior to January 1, 2018 has been reflected as a reduction to opening retained earnings in the amount of \$28.8 million in the consolidated statement of shareholders' equity.

Except for as described below in (1), the effect of the adjustments to the consolidated statements of cash flows for the period ended December 31, 2019 primarily related to net earnings, including noncontrolling interests, for the change in net earnings in the table above and were offset primarily by impacts to changes in operating assets and liabilities. The following table presents the impact of correcting the errors previously discussed on the affected line items of our consolidated statement of cash flows for the years ended December 31, 2019 and 2018:

| (Amounts in thousands) | Year Ended December 31, 2019 | | |
|--|------------------------------|-------------|------------|
| | As Reported | Adjustments | As Revised |
| Net cash flows provided (used) by operating activities (1) | \$ 312,741 | \$ 11,356 | \$ 324,097 |
| Net cash flows provided (used) by investing activities (1) | (23,837) | (9,546) | (33,383) |
| Net cash flows provided (used) by financing activities | (229,654) | (1,810) | (231,464) |
| Cash and cash equivalents at end of period (1) | 670,980 | — | 670,980 |

(1) Primarily related to adjustments resulting from the misclassification of Software as a Service arrangements as property, plant and equipment rather than other assets, net, as prescribed by ASU 2018-15, and adjustments related to our international operations' exposure to fluctuations in foreign currency exchange rates, resulting from our Argentinian subsidiary's change in using the U.S. dollar as our functional currency in Argentina.

The effects of the prior period revisions on the consolidated statements of cash flows for the year ended December 31, 2018 were primarily to the change in net earnings, as well as the changes in net cash flows provided (used) by operating activities, limited to prepaid expenses and other assets, net, accounts payable, accrued liabilities and income taxes payable, retirement obligations and other and deferred tax movements. Accordingly, there were no changes to any subtotals within the 2018 consolidated statement of cash flows.

The impacts of the revisions have been reflected throughout the financial statements, including the applicable footnotes, as appropriate.

3. REVENUE RECOGNITION

The majority of our revenues relate to customer orders that typically contain a single commitment of goods or services which have lead times under a year. Longer lead time, more complex contracts with our customers typically have multiple commitments of goods and services, including any combination of designing, developing, manufacturing, modifying, installing and commissioning of flow management equipment and providing services and parts related to the performance of such products. Control transfers over time when the customer is able to direct the use of and obtain substantially all of the benefits of our work as we perform.

Our primary method for recognizing revenue over time is the percentage of completion ("POC") method. Revenue from products and services transferred to customers over time accounted for approximately 22%, 19% and 22% of total revenue for the years ended December 31, 2020, 2019 and 2018, respectively. If control does not transfer over time, then control transfers at a point in time. We recognize revenue at a point in time at the level of each performance obligation based on the evaluation of certain indicators of control transfer, such as title transfer, risk of loss transfer, customer acceptance and physical possession. Revenue from products and services transferred to customers at a point in time accounted for approximately 78%, 81% and 78% of total revenue for the years ended December 31, 2020, 2019 and 2018, respectively.

Disaggregated Revenue

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

- Flowserve Pump Division ("FPD") for custom, highly-engineered pumps, pre-configured industrial pumps, pump systems, mechanical seals, auxiliary systems and replacement parts and related services; and
- Flow Control Division ("FCD") for engineered and industrial valves, control valves, actuators and controls and related services.

Our revenue sources are derived from our original equipment manufacturing and our aftermarket sales and services. Our original equipment revenues are generally related to originally designed, manufactured, distributed and installed equipment that can range from pre-configured, short-cycle products to more customized, highly-engineered equipment ("Original Equipment"). Our aftermarket sales and services are derived from sales of replacement equipment, as well as maintenance, advanced diagnostic, repair and retrofitting services ("Aftermarket"). Each of our two business segments generate Original Equipment and Aftermarket revenues.

The following table presents our customer revenues disaggregated by revenue source:

| | | December 31, 2020 | | |
|------------------------|----|-------------------|--------------|--------------|
| (Amounts in thousands) | | FPD | FCD | Total |
| Original Equipment | \$ | 1,091,906 | \$ 808,585 | \$ 1,900,491 |
| Aftermarket | | 1,581,799 | 245,844 | 1,827,643 |
| | \$ | 2,673,705 | \$ 1,054,429 | \$ 3,728,134 |

| | | December 31, 2019 | | |
|------------------------|----|-------------------|--------------|--------------|
| (Amounts in thousands) | | FPD | FCD | Total |
| Original Equipment | \$ | 994,719 | \$ 967,271 | \$ 1,961,990 |
| Aftermarket | | 1,709,726 | 267,981 | 1,977,707 |
| | \$ | 2,704,445 | \$ 1,235,252 | \$ 3,939,697 |

| | | December 31, 2018 | | |
|------------------------|----|-------------------|--------------|--------------|
| (Amounts in thousands) | | FPD | FCD | Total |
| Original Equipment | \$ | 992,162 | \$ 946,926 | \$ 1,939,088 |
| Aftermarket | | 1,628,326 | 268,285 | 1,896,611 |
| | \$ | 2,620,488 | \$ 1,215,211 | \$ 3,835,699 |

Our customer sales are diversified geographically. The following table presents our revenues disaggregated by geography, based on the shipping addresses of our customers:

| December 31, 2020 | | | |
|------------------------|---------------------|---------------------|---------------------|
| (Amounts in thousands) | FPD | FCD | Total |
| North America(1) | \$ 1,039,285 | \$ 429,572 | \$ 1,468,857 |
| Latin America(1) | 191,517 | 26,393 | 217,910 |
| Middle East and Africa | 359,403 | 110,539 | 469,942 |
| Asia Pacific | 537,792 | 270,238 | 808,030 |
| Europe | 545,708 | 217,687 | 763,395 |
| | <u>\$ 2,673,705</u> | <u>\$ 1,054,429</u> | <u>\$ 3,728,134</u> |
| December 31, 2019 | | | |
| (Amounts in thousands) | FPD | FCD | Total |
| North America(1) | \$ 1,085,627 | \$ 542,182 | \$ 1,627,809 |
| Latin America(1) | 202,247 | 28,899 | 231,146 |
| Middle East and Africa | 355,937 | 98,959 | 454,896 |
| Asia Pacific | 499,932 | 315,886 | 815,818 |
| Europe | 560,702 | 249,326 | 810,028 |
| | <u>\$ 2,704,445</u> | <u>\$ 1,235,252</u> | <u>\$ 3,939,697</u> |
| December 31, 2018 | | | |
| (Amounts in thousands) | FPD | FCD | Total |
| North America(1) | \$ 1,037,637 | \$ 541,378 | \$ 1,579,015 |
| Latin America(1) | 219,376 | 22,405 | 241,781 |
| Middle East and Africa | 329,484 | 138,240 | 467,724 |
| Asia Pacific | 502,559 | 281,080 | 783,639 |
| Europe | 531,432 | 232,108 | 763,540 |
| | <u>\$ 2,620,488</u> | <u>\$ 1,215,211</u> | <u>\$ 3,835,699</u> |

(1) North America represents United States and Canada; Latin America includes Mexico.

On December 31, 2020, the aggregate transaction price allocated to unsatisfied (or partially unsatisfied) performance obligations related to contracts having an original expected duration in excess of one year was approximately \$541 million. We estimate recognition of approximately \$412 million of this amount as revenue in 2021 and an additional \$129 million in 2022 and thereafter.

Contract Balances

We receive payment from customers based on a contractual billing schedule and specific performance requirements as established in our contracts. We record billings as accounts receivable when an unconditional right to consideration exists. A contract asset represents revenue recognized in advance of our right to bill the customer under the terms of a contract. A contract liability represents our contractual billings in advance of revenue recognized for a contract.

The following table presents opening and closing balances of contract assets and contract liabilities, current and long-term, for the years ended December 31, 2020 and 2019:

| (Amounts in thousands) | Contract Assets, net (Current) | Long-term Contract Assets, net(1) | Contract Liabilities (Current) | Long-term Contract Liabilities(2) |
|---|-----------------------------------|---|-----------------------------------|---|
| Balance — January 1, 2019 | \$ 229,297 | \$ 10,967 | \$ 201,702 | \$ 1,370 |
| Revenue recognized that was included in contract liabilities at the beginning of the period | — | — | (125,257) | — |
| Increase due to revenue recognized in the period in excess of billings | 835,147 | — | — | — |
| Increase due to billings arising during the period in excess of revenue recognized | — | — | 135,679 | 290 |
| Amounts transferred from contract assets to receivables | (785,279) | (1,747) | — | — |
| Currency effects and other, net | (6,251) | 60 | 8,971 | (8) |
| Balance — December 31, 2019 | <u>\$ 272,914</u> | <u>\$ 9,280</u> | <u>\$ 221,095</u> | <u>\$ 1,652</u> |
| Revenue recognized that was included in contract liabilities at the beginning of the period | — | — | (180,522) | — |
| Increase due to revenue recognized in the period in excess of billings | 925,244 | — | — | — |
| Increase due to billings arising during the period in excess of revenue recognized | — | — | 140,391 | — |
| Amounts transferred from contract assets to receivables | (917,885) | (1,666) | — | — |
| Currency effects and other, net | (2,539) | (6,475) | 13,263 | (830) |
| Balance — December 31, 2020 | <u>\$ 277,734</u> | <u>\$ 1,139</u> | <u>\$ 194,227</u> | <u>\$ 822</u> |

(1) Included in other assets, net.

(2) Included in retirement obligations and other liabilities.

4. DISPOSITIONS

FPD Business Divestiture

On June 29, 2018, pursuant to a plan of sale approved by management, we executed an agreement to divest two FPD locations and associated product lines, including the related assets and liabilities. This transaction did not meet the criteria for classification of assets held for sale as of June 30, 2018 due to a contingency that could have potentially impacted the final terms and/or timing of the divestiture. The sale transaction was completed on August 9, 2018. During the twelve months ended December 31, 2018, we recorded a pre-tax charge of \$25.1 million, including a pre-tax charge of \$17.4 million in the second quarter of 2018 and a loss on sale of the business of \$7.7 million in the third quarter of 2018. The second quarter of 2018 pre-tax charge related to write-downs of inventory and long-lived assets to their estimated fair value, of which \$7.7 million was recorded in COS and \$9.7 million was recorded in SG&A. The third quarter of 2018 pre-tax charge primarily related to working capital changes since the second quarter of 2018 and net cash transferred at the closing date of \$3.7 million. The sale included a manufacturing facility in Germany and a related assembly facility in France.

5. LEASES

We have operating and finance leases for certain manufacturing facilities, offices, service and quick response centers, machinery, equipment and automobiles. Our leases have remaining lease terms of up to 33 years. The terms and conditions of our leases may include options to extend or terminate the lease which are considered and included in the lease term when these options are reasonably certain of exercise.

We determine if a contract is (or contains) a lease at inception by evaluating whether the contract conveys the right to control the use of an identified asset. For all classes of leased assets, we have elected the practical expedient to account for any non-lease components in the contract together with the related lease component in the same unit of account. For lease contracts containing more than one lease component, we allocate the contract consideration to each of the lease components on the basis of relative standalone prices in order to identify the lease payments for each lease component.

ROU assets and lease liabilities are recognized in our consolidated balance sheets at the commencement date based on the present value of remaining lease payments over the lease term. Additionally, ROU assets include any lease payments made at or before the commencement date, as well as any initial direct costs incurred, and are reduced by any lease incentives received. As most of our operating leases do not provide an implicit rate, we apply our incremental country-specific borrowing rate to determine the present value of remaining lease payments. Our incremental borrowing country-specific rate is determined based on information available at the commencement date of the lease.

Operating leases are included in operating lease right-of-use assets, net and operating lease liabilities in our consolidated balance sheets. Finance leases are included in property plant and equipment, debt due within one year and long-term debt due after one year in our consolidated balance sheets.

For all classes of leased assets, we have applied an accounting policy election to exclude short-term leases from recognition in our consolidated balance sheets. A short-term lease has a lease term of 12 months or less at the commencement date and does not include a purchase option that is reasonably certain of exercise. We recognize short-term lease expense in our consolidated income statements on a straight-line basis over the lease term. Our short-term lease expense and short-term lease commitments as of December 31, 2020 are immaterial.

We have certain lease contracts with terms and conditions that provide for variability in the payment amount based on changes in facts or circumstances occurring after the commencement date. These variable lease payments are recognized in our consolidated income statements as the obligation is incurred.

We have certain lease contracts where we provide a guarantee to the lessor that the value of an underlying asset will be at least a specified amount at the end of the lease. Estimated amounts expected to be paid for residual value guarantees are included in lease liabilities and ROU assets.

We had \$0.4 million and \$34.7 million of legally binding minimum lease payments for operating leases signed but not yet commenced as of December 31, 2020 and 2019. We did not have material subleases, leases that imposed significant restrictions or covenants, material related party leases or sale-leaseback arrangements.

Other information related to our leases is as follows:

| (Amounts in thousands) | December 31, | |
|---|--------------|-----------|
| | 2020 | 2019 |
| Finance Leases: | | |
| ROU assets recorded under finance leases | \$ 27,624 | \$ 19,606 |
| Accumulated depreciation associated with finance leases | (9,463) | (7,551) |
| Total finance leases ROU assets, net(1) | \$ 18,161 | \$ 12,055 |
| Total finance leases liabilities(2) | \$ 18,287 | \$ 11,788 |

The costs components of operating and finance leases are as follows:

| (Amounts in thousands) | December 31, | |
|---|--------------|-----------|
| | 2020 | 2019 |
| Operating Lease Costs: | | |
| Fixed lease expense(3) | \$ 57,050 | \$ 57,450 |
| Variable lease expense(3) | 7,299 | 6,492 |
| Total operating lease expense | \$ 64,349 | \$ 63,942 |
| Finance Lease Costs: | | |
| Depreciation of finance lease ROU assets(3) | \$ 5,392 | \$ 4,729 |
| Interest on lease liabilities(4) | 646 | 352 |
| Total finance lease expense | \$ 6,038 | \$ 5,081 |

(1) Included in property plant and equipment, net

(2) Included in debt due within one year and long-term debt due after one year, accordingly

(3) Included in cost of sales and selling, general and administrative expense, accordingly

(4) Included in interest expense

Supplemental cash flows information related to our leases is as follows:

| | December 31, | |
|---|--------------|-----------|
| | 2020 | 2019 |
| (Amounts in thousands, except lease term and discount rate) | | |
| Cash paid for amounts included in the measurement of lease liabilities: | | |
| Operating cash flows from operating leases(1) | \$ 66,478 | \$ 64,725 |
| Financing cash flows from finance leases(2) | 4,704 | 4,465 |
| ROU assets obtained in exchange for lease obligations: | | |
| Operating leases | \$ 62,425 | \$ 14,569 |
| Finance leases | 13,124 | 10,615 |
| Weighted average remaining lease term (in years) | | |
| Operating leases | 9 years | 9 years |
| Finance leases | 7 years | 3 years |
| Weighted average discount rate (percent) | | |
| Operating leases | 4.2 % | 4.5 % |
| Finance leases | 3.5 % | 3.6 % |

(1) Included in our consolidated statement of cash flows, operating activities, prepaid expenses and other assets, net and retirement obligations and other

(2) Included in our consolidated statement of cash flows, financing activities, payments under other financing arrangements

Future undiscounted lease payments under operating and finance leases as of December 31, 2020, were as follows (amounts in thousands):

| Year ending December 31, | Operating Leases | Finance Leases |
|-------------------------------------|------------------|----------------|
| 2021 | 42,570 | 5,539 |
| 2022 | 36,596 | 4,522 |
| 2023 | 30,458 | 2,996 |
| 2024 | 26,334 | 1,521 |
| 2025 | 20,977 | 939 |
| Thereafter | 94,991 | 5,265 |
| Total future minimum lease payments | \$ 251,926 | \$ 20,782 |
| Less: Imputed interest | (40,690) | (2,495) |
| Total | \$ 211,236 | \$ 18,287 |
| Other current liabilities | \$ 34,990 | \$ — |
| Operating lease liabilities | 176,246 | — |
| Debt due within one year | — | 5,354 |
| Long-term debt due after one year | — | 12,933 |
| Total | \$ 211,236 | \$ 18,287 |

6. GOODWILL AND OTHER INTANGIBLE ASSETS

The changes in the carrying amount of goodwill for the years ended December 31, 2020 and 2019 are as follows:

| | FPD | FCD | Total |
|--|------------------------|-------------------|---------------------|
| | (Amounts in thousands) | | |
| Balance as of December 31, 2018 | \$ 790,139 | \$ 407,501 | \$ 1,197,640 |
| Currency translation and other | (3,509) | (1,121) | (4,630) |
| Balance as of December 31, 2019 | \$ 786,630 | \$ 406,380 | \$ 1,193,010 |
| Currency translation and other | 18,425 | 13,451 | 31,876 |
| Balance as of December 31, 2020 | <u>\$ 805,055</u> | <u>\$ 419,831</u> | <u>\$ 1,224,886</u> |

The following table provides information about our intangible assets for the years ended December 31, 2020 and 2019:

| | | December 31, 2020 | | December 31, 2019 | |
|---------------------------------------|---------------------|---------------------|--------------------------|---------------------|--------------------------|
| | Useful Life (Years) | Ending Gross Amount | Accumulated Amortization | Ending Gross Amount | Accumulated Amortization |
| (Amounts in thousands, except years) | | | | | |
| Finite-lived intangible assets: | | | | | |
| Engineering drawings(1) | 10-22 | \$ 90,638 | \$ (83,620) | \$ 89,490 | \$ (78,854) |
| Existing customer relationships(2) | 5-10 | 85,214 | (62,796) | 81,844 | (53,468) |
| Patents | 9-16 | 27,015 | (27,015) | 26,132 | (26,132) |
| Other | 4-40 | 93,923 | (43,633) | 92,920 | (40,149) |
| | | <u>\$ 296,790</u> | <u>\$ (217,064)</u> | <u>\$ 290,386</u> | <u>\$ (198,603)</u> |
| Indefinite-lived intangible assets(3) | | <u>\$ 90,355</u> | <u>\$ (1,585)</u> | <u>\$ 90,607</u> | <u>\$ (1,585)</u> |

- (1) Engineering drawings represent the estimated fair value associated with specific acquired product and component schematics.
- (2) Existing customer relationships acquired prior to 2011 had a useful life of five years.
- (3) Accumulated amortization for indefinite-lived intangible assets relates to amounts recorded prior to the implementation date of guidance issued in ASC 350.

The following schedule outlines actual amortization expense recognized during 2020 and an estimate of future amortization based upon the finite-lived intangible assets owned at December 31, 2020:

| | Amortization Expense |
|--|------------------------|
| | (Amounts in thousands) |
| Actual for year ended December 31, 2020 | \$ 13,645 |
| Estimated for year ended December 31, 2021 | 14,313 |
| Estimated for year ended December 31, 2022 | 12,298 |
| Estimated for year ended December 31, 2023 | 9,283 |
| Estimated for year ended December 31, 2024 | 4,286 |
| Estimated for year ended December 31, 2025 | 2,338 |
| Thereafter | 37,208 |

Amortization expense for finite-lived intangible assets was \$13.8 million in 2019 and \$14.1 million in 2018.

7. INVENTORIES

Inventories, net consisted of the following:

| | December 31, | |
|-----------------------------------|------------------------|-------------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Raw materials | \$ 321,600 | \$ 328,080 |
| Work in process | 210,174 | 192,993 |
| Finished goods | 221,532 | 218,408 |
| Less: Excess and obsolete reserve | (86,078) | (78,644) |
| Inventories, net | <u>\$ 667,228</u> | <u>\$ 660,837</u> |

During 2020, 2019 and 2018, we recognized expenses of \$14.9 million, \$17.1 million and \$16.2 million, respectively, for excess and obsolete inventory. These expenses are included in COS in our consolidated statements of income.

8. STOCK-BASED COMPENSATION PLANS

Effective January 1, 2020, our shareholders approved the Flowserve Corporation 2020 Long-Term Incentive Plan ("2020 Plan"). The 2020 Plan replaces and supersedes the Flowserve Corporation Equity and Incentive Compensation Plan ("2010 Plan") in its entirety. The 2020 Plan authorizes the issuance of 12,500,000 shares of our common stock in the form of restricted shares, restricted share units and performance-based units (collectively referred to as "Restricted Shares"), incentive stock options, non-statutory stock options, stock appreciation rights and bonus stock, in addition to any shares available for issuance or subject to forfeiture under the 2010 Plan as of its expiration on December 31, 2019. Of the shares of common stock authorized under the 2020 Plan and remaining shares under the 2010 Plan, 13,606,725 were available for issuance as of December 31, 2020. Restricted Shares primarily vest over a three year period. Restricted Shares granted to employees who retire and have achieved at least 55 years of age and 10 years of service to continue to vest over the original vesting period ("55/10 Provision").

Stock Options — Options granted to officers, other employees and directors allow for the purchase of common shares at the market value of our stock on the date the options are granted. Options generally become exercisable after three years. Options generally expire ten years from the date of the grant or within a short period of time following the termination of employment or cessation of services by an option holder. As of December 31, 2020, 114,943 stock options were outstanding and exercisable, with a grant date fair value of \$2.0 million recognized over three years and a weighted average exercise price of \$48.63. As of December 31, 2020, compensation associated with these stock options was fully earned. Using the Black-Scholes option pricing model to estimate the fair value of each option award, as of December 31, 2020 the total fair value of stock options vested was \$2.0 million. No stock option were exercisable during the years ended December 31, 2019 and 2018. No stock options were granted, canceled or vested during years ended December 31, 2020, 2019 or 2018. The weighted average remaining contractual life of options outstanding at December 31, 2020, 2019 and 2018 was 6.3 years, 7.3 years and 8.3 years, respectively.

Restricted Shares — Generally, the restrictions on Restricted Shares do not expire for a minimum of one year and a maximum of three years, and shares are subject to forfeiture during the restriction period. Most typically, Restricted Share grants have staggered vesting periods over one to three years from grant date. The intrinsic value of the Restricted Shares, which is typically the product of share price at the date of grant and the number of Restricted Shares granted, is amortized on a straight-line basis to compensation expense over the periods in which the restrictions lapse.

Awards of Restricted Shares are valued at the closing market price of our common stock on the date of grant. The unearned compensation is amortized to compensation expense over the vesting period of the Restricted Shares, except for awards related to the 55/10 Provision which are expensed when granted. As of December 31, 2020 and 2019, we had \$18.7 million and \$23.4 million, respectively, of unearned compensation cost related to unvested Restricted Shares, which is expected to be recognized over a weighted-average period of approximately one year. The total fair value of Restricted Shares vested during the years ended December 31, 2020, 2019 and 2018 was \$26.4 million, \$16.8 million and \$14.3 million, respectively.

We recorded stock-based compensation for Restricted Shares as follows:

| | Year Ended December 31, | | |
|--------------------------------------|-------------------------|----------------|----------------|
| | 2020 | 2019 | 2018 |
| | (Amounts in millions) | | |
| Stock-based compensation expense | \$ 27.3 | \$ 23.9 | \$ 19.9 |
| Related income tax benefit | (6.2) | (5.4) | (4.5) |
| Net stock-based compensation expense | <u>\$ 21.1</u> | <u>\$ 18.5</u> | <u>\$ 15.4</u> |

The following table summarizes information regarding Restricted Shares:

| | Year Ended December 31, 2020 | |
|---------------------------------------|------------------------------|--|
| | Shares | Weighted Average Grant-Date Fair Value |
| Number of unvested Restricted Shares: | | |
| Outstanding — beginning of year | 1,690,600 | \$ 46.71 |
| Granted | 730,065 | 46.56 |
| Vested | (587,301) | 45.02 |
| Canceled | (459,707) | 48.47 |
| Outstanding — ending of year | <u>1,373,657</u> | <u>\$ 46.76</u> |

Unvested Restricted Shares outstanding as of December 31, 2020, includes approximately 539,000 units with performance-based vesting provisions. Performance-based units are issuable in common stock and vest upon the achievement of pre-defined performance targets. Performance-based units have performance targets based on our average return on invested capital and our total shareholder return ("TSR") over a three-year period. Most unvested units were granted in three annual grants since January 1, 2018 and have a vesting percentage between 0% and 200% depending on the achievement of the specific performance targets. Except for shares granted under the 55/10 Provision, compensation expense is recognized ratably over a cliff-vesting period of 36 months, based on the fair value of our common stock on the date of grant, as adjusted for actual forfeitures. During the performance period, earned and unearned compensation expense is adjusted based on changes in the expected achievement of the performance targets for all performance-based units granted except for the TSR-based units. Vesting provisions range from 0 to approximately 1,078,000 shares based on performance targets. As of December 31, 2020, we estimate vesting of approximately 537,000 shares based on expected achievement of performance targets.

9. DERIVATIVES AND HEDGING ACTIVITIES

Our risk management and foreign currency derivatives and hedging policy specifies the conditions under which we may enter into derivative contracts. See Note 1 for additional information on our purpose for entering into derivatives and our overall risk management strategies. We enter into foreign exchange forward contracts to hedge our cash flow risks associated with transactions denominated in currencies other than the local currency of the operation engaging in the transaction.

Foreign exchange contracts had notional values of \$388.1 million and \$398.5 million at December 31, 2020 and 2019, respectively. At December 31, 2020, the length of foreign exchange contracts currently in place ranged from 15 days to 20 months.

We are exposed to risk from credit-related losses resulting from nonperformance by counterparties to our financial instruments. We perform credit evaluations of our counterparties under forward exchange contracts and expect all counterparties to meet their obligations. We have not experienced credit losses from our counterparties.

The fair values of foreign exchange contracts are summarized below:

| | Year Ended December 31, | |
|-----------------------------------|-------------------------|--------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Current derivative assets | \$ 2,857 | \$ 892 |
| Noncurrent derivative assets | 249 | 15 |
| Current derivative liabilities | 682 | 3,418 |
| Noncurrent derivative liabilities | — | 8 |

Current and noncurrent derivative assets are reported in our consolidated balance sheets in prepaid expenses and other and other assets, net, respectively. Current and noncurrent derivative liabilities are reported in our consolidated balance sheets in accrued liabilities and retirement obligations and other liabilities, respectively.

The impact of net changes in the fair values of foreign exchange contracts are summarized below:

| | Year Ended December 31, | | |
|---------------------------|-------------------------|------------|------------|
| | 2020 | 2019 | 2018 |
| | (Amounts in thousands) | | |
| Loss recognized in income | \$ (10,294) | \$ (6,495) | \$ (3,154) |

Gains and losses recognized in our consolidated statements of income for foreign exchange contracts are classified as other income (expense), net.

On September 22, 2020, as a means of managing the volatility of foreign currency exposure with the Euro/U.S. dollar exchange rate, we entered into a cross-currency swap ("Swap") associated with our Euro investment in certain of our international subsidiaries and was designated as a net investment hedge. We exclude the interest accruals on the swap from the assessment of hedge effectiveness and recognize the interest accruals in earnings within interest expense. For each reporting period, the change in the fair value of the swap attributable to changes in the spot rate and differences between the change in the fair value of the excluded components and the amounts recognized in earnings under the swap accrual process are reported in accumulated other comprehensive loss on our consolidated balance sheet. As of December 31, 2020, the notional value of the Swap was €163.2 million and has an early termination date of September 2025. The swap is included in retirement obligations and other liabilities in our consolidated balance sheet as of December 31, 2020, with a fair value of \$18.1 million and is classified as Level II under the fair value hierarchy. For the period ending December 31, 2020, an interest accrual of \$(0.6) million was recognized as other income (expense), net, in our consolidated statements of income.

The cumulative net investment hedge loss, net of deferred taxes, under cross-currency swap recorded in accumulated other comprehensive loss ("AOCL") on our consolidated balance sheet are summarized below:

| | Year Ended December 31, | | |
|-------------------------|-------------------------|------|------|
| | 2020 | 2019 | 2018 |
| | (Amounts in thousands) | | |
| Loss recognized in AOCL | \$ (13,836) | \$ — | \$ — |

In March 2015, we designated €255.7 million of our 1.25% EUR Senior Notes due 2022 ("2022 Euro Senior Notes") discussed in Note 13 as a net investment hedge of our Euro investment in certain of our international subsidiaries. On September 22, 2020, we increased the designated hedged value on the 2022 Euro Senior Notes to €336.3 million, which reflects the remaining balance of the 2022 Euro Senior Notes following the closing of the previously announced tender offer for the 2022 Euro Senior Notes on the same date. For each reporting period, the change in the carrying value due to the remeasurement of the effective portion is reported in accumulated other comprehensive loss on our consolidated balance sheet and the remaining change in the carrying value of the ineffective portion, if any, is recognized in other income (expense), net in our consolidated statement of income.

The cumulative impact recorded in AOCL on our consolidated balance sheet from the change in carrying value due to the remeasurement of the effective portion of the net investment hedge are summarized below:

| | Year Ended December 31, | | |
|-----------------------|-------------------------|----------|----------|
| | 2020 | 2019 | 2018 |
| | (Amounts in thousands) | | |
| Loss recorded in AOCL | (34,973) | (12,084) | (17,164) |

We use the spot method to measure the effectiveness of both of the net investment hedges and evaluate the effectiveness on a prospective basis at the beginning of each quarter. We did not record any ineffectiveness for the years ended December 31, 2020, 2019 or 2018.

10. FAIR VALUE OF FINANCIAL INSTRUMENTS

Our financial instruments are presented at fair value in our consolidated balance sheets. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Where available, fair value is based on observable market prices or parameters or derived from such prices or parameters. Where observable prices or inputs are not available, valuation models may be applied. Assets and liabilities recorded at fair value in our consolidated balance sheets are categorized based upon the level of judgment associated with the inputs used to measure their fair values. Recurring fair value measurements are limited to investments in derivative instruments and some equity securities. The fair value measurements of our derivative instruments are determined using models that maximize the use of the observable market inputs including interest rate curves and both forward and spot prices for currencies, and are classified as Level II under the fair value hierarchy. The fair values of our derivatives are included above in Note 9. The fair value measurements of our investments in equity securities are determined using quoted market prices and are classified as Level I. The fair values of our investments in equity securities, and changes thereto, are immaterial to our consolidated financial position and results of operations.

The carrying value of our debt is included in Note 13 and, except for the Senior Notes, approximates fair value. The estimated fair value of the Senior Notes is based on Level I quoted market rates. The estimated fair value of our Senior Notes at December 31, 2020 was \$1,778.4 million compared to the carrying value of \$1,701.5 million. The carrying amounts of our other financial instruments (i.e., cash and cash equivalents, accounts receivable, net and accounts payable) approximated fair value due to their short-term nature at December 31, 2020 and December 31, 2019.

11. DETAILS OF CERTAIN CONSOLIDATED BALANCE SHEET CAPTIONS

The following tables present financial information of certain consolidated balance sheet captions.

Accounts Receivable, net — Accounts receivable, net were:

| | December 31, | |
|---------------------------------------|------------------------|-------------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Trade accounts receivables | \$ 808,459 | \$ 830,919 |
| Less: allowance for doubtful accounts | (59,280) | (47,269) |
| Other short-term receivables | 20,179 | 18,031 |
| Less: allowance for doubtful accounts | (15,896) | (6,143) |
| Accounts receivable, net | <u>\$ 753,462</u> | <u>\$ 795,538</u> |

Property, Plant and Equipment, net — Property, plant and equipment, net were:

| | December 31, | |
|--|------------------------|-------------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Land | \$ 65,894 | \$ 64,778 |
| Buildings and improvements | 446,008 | 419,454 |
| Machinery, equipment and tooling | 699,256 | 666,376 |
| Software, furniture and fixtures and other | 439,063 | 427,866 |
| Gross property, plant and equipment | 1,650,221 | 1,578,474 |
| Less: accumulated depreciation | (1,093,348) | (1,014,910) |
| Property, plant and equipment, net | <u>\$ 556,873</u> | <u>\$ 563,564</u> |

Accrued Liabilities — Accrued liabilities were:

| | December 31, | |
|--|------------------------|-------------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Wages, compensation and other benefits | \$ 225,133 | \$ 192,354 |
| Commissions and royalties | 22,847 | 23,027 |
| Warranty costs and late delivery penalties | 27,757 | 30,625 |
| Sales and use tax | 29,067 | 18,146 |
| Income tax | 31,378 | 20,018 |
| Other | 127,040 | 117,215 |
| Accrued liabilities | <u>\$ 463,222</u> | <u>\$ 401,385</u> |

"Other" accrued liabilities include professional fees, lease obligations, insurance, interest, freight, accrued cash dividends payable, legal and environmental matters, derivative liabilities, restructuring reserves and other items, none of which individually exceed 5% of current liabilities.

Retirement Obligations and Other Liabilities — Retirement obligations and other liabilities were:

| | December 31, | |
|---|------------------------|-------------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Pension and postretirement benefits | \$ 225,994 | \$ 199,603 |
| Deferred taxes | 84,345 | 149,633 |
| Operating lease liabilities | 176,246 | 151,523 |
| Legal and environmental | 101,203 | 99,744 |
| Uncertain tax positions and other tax liabilities | 50,259 | 42,086 |
| Other | 54,286 | 39,928 |
| Retirement obligations and other liabilities | <u>\$ 692,333</u> | <u>\$ 682,517</u> |

12. EQUITY METHOD INVESTMENTS

We occasionally enter into joint venture arrangements with local country partners as our preferred means of entry into countries where barriers to entry may exist. Similar to our consolidated subsidiaries, these unconsolidated joint ventures generally operate within our primary businesses of designing, manufacturing, assembling and distributing fluid motion and control products and services. We have agreements with certain of these joint ventures that restrict us from otherwise entering the respective market and certain joint ventures produce and/or sell our products as part of their broader product offering. Net earnings from investments in unconsolidated joint ventures is reported in net earnings from affiliates in our consolidated statements of income. Given the integrated role of the unconsolidated joint ventures in our business, net earnings from affiliates is presented as a component of operating income.

As of December 31, 2020, we had investments in six joint ventures, one located in each of Chile, China, India, Saudi Arabia, South Korea and the United Arab Emirates that were accounted for using the equity method and are immaterial for disclosure purposes.

13. DEBT AND FINANCE LEASE OBLIGATIONS

Debt, including finance lease obligations, consisted of:

| | December 31, | |
|---|------------------------|---------------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| 1.25% EUR Senior Notes due March 17, 2022, net of unamortized discount and debt issuance costs of \$1,070 and \$2,653 at December 31, 2020 and 2019, respectively | \$ 410,243 | \$ 557,847 |
| 3.50% USD Senior Notes due September 15, 2022, net of unamortized discount and debt issuance costs of \$1,235 and \$1,924 at December 31, 2020 and 2019, respectively | 498,765 | 498,076 |
| 4.00% USD Senior Notes due November 15, 2023, net of unamortized discount and debt issuance costs of \$1,345 and \$1,777 at December 31, 2020 and 2019, respectively | 298,655 | 298,223 |
| 3.50% USD Senior Notes due October 1, 2030, net of unamortized discount and debt issuance costs of \$6,147 of December 31, 2020 | 493,853 | — |
| Finance lease obligations and other borrowings | 25,390 | 23,103 |
| Debt and finance lease obligations | 1,726,906 | 1,377,249 |
| Less amounts due within one year | 8,995 | 11,272 |
| Total debt due after one year | <u>\$ 1,717,911</u> | <u>\$ 1,365,977</u> |

Scheduled maturities of our Senior Notes and other debt, are (amounts in thousands):

| | |
|------------|---------------------|
| 2021 | \$ 8,995 |
| 2022 | 925,403 |
| 2023 | 298,655 |
| Thereafter | 493,853 |
| Total | <u>\$ 1,726,906</u> |

Senior Notes

On September 14, 2020, we completed a public offering of \$500.0 million in aggregate principal amount of senior notes due October 1, 2030 ("2030 Senior Notes"). The 2030 Senior Notes bear an interest rate of 3.50% per year, payable on April 1 and October 1 of each year, commencing on April 1, 2021. The 2030 Senior Notes were priced at 99.656% of par value, reflecting a discount to the aggregate principal amount. We used a portion of the net proceeds of the 2030 Senior Notes offering to fund a partial tender offer of our 2022 Euro Senior Notes. During the third quarter of 2020 we had tendered \$191.4 million of our 2022 Euro Senior Notes and have recorded in interest expense an early extinguishment loss of \$1.2 million. On February 17, 2021, we announced that we will redeem the outstanding balance of our 2022 Euro Senior Notes on March 19, 2021. We will use the remaining net proceeds from the public offering of the 2030 Senior Notes for the redemption.

On March 17, 2015, we completed a public offering of €500.0 million of Euro senior notes in aggregate principal amount due March 17, 2022. The 2022 Euro Senior Notes bear an interest rate of 1.25% per year, payable each year on March 17. The 2022 Euro Senior Notes were priced at 99.336% of par value, reflecting a discount to the aggregate principal amount.

On November 1, 2013 we completed the public offering of \$300.0 million in aggregate principal amount of senior notes due November 15, 2023 ("2023 Senior Notes"). The 2023 Senior Notes bear an interest rate of 4.00% per year, payable on May 15 and November 15 of each year. The 2023 Senior Notes were priced at 99.532% of par value, reflecting a discount to the aggregate principal amount.

On September 11, 2012, we completed the public offering of \$500.0 million in aggregate principal amount of senior notes due September 15, 2022 ("2022 Senior Notes"). The 2022 Senior Notes bear an interest rate of 3.50% per year, payable on March 15 and September 15 of each year. The 2022 Senior Notes were priced at 99.615% of par value, reflecting a discount to the aggregate principal amount.

We have the right to redeem the 2022 Senior Notes, 2023 Senior Notes and 2030 Senior notes at any time prior to June 15, 2022, August 15, 2023 and July 1, 2030, respectively, in whole or in part, at our option, at a redemption price equal to the greater of: (1) 100% of the principal amount of the senior notes being redeemed; or (2) the sum of the present values of the remaining scheduled payments of principal and interest in respect of the Senior Notes being redeemed discounted to the redemption date on a semi-annual basis, at the applicable Treasury Rate plus 30 basis points for the 2022 Senior Notes, plus 25 basis points for the 2023 Senior Notes and plus 45 basis points for the 2030 Senior Notes. In addition, at any time on or after June 15, 2022 for the 2022 Senior Notes, August 15, 2023 for the 2023 Senior Notes and July 1 2030 for the 2030 Senior Notes, we may redeem the Senior Notes at a redemption price equal to 100% of the principal amount of the Senior Notes being redeemed. In each case, we will also pay the accrued and unpaid interest on the principal amount being redeemed to the redemption date.

We have the right to redeem the 2022 Euro Senior Notes at any time prior to December 17, 2021, in whole or in part, at our option, at a redemption price equal to the greater of: (1) 100% of the principal amount of the senior notes being redeemed; or (2) the sum of the present values of the remaining scheduled payments of principal and interest in respect of the Senior Notes being redeemed (exclusive of interest accrued to, but excluding, the date of redemption) discounted to the redemption date on an annual basis, at the Comparable German Government Bond Rate plus 25 basis points. At any time on or after December 17, 2021, we may redeem the 2022 Euro Senior Notes, in whole or in part from time to time, at our option, at a redemption price equal to 100% of the principal amount of the notes to be redeemed.

Senior Credit Facility

On September 4, 2020, we amended our credit agreement with Bank of America, N.A., as administrative agent, and the other lenders party thereto ("Amended Credit Agreement") to provide greater flexibility in maintaining adequate liquidity in the event we have the need to access available borrowings under our Senior Credit Facility ("Credit Facility"). The Credit Agreement provides for a \$800.0 million unsecured senior credit facility with a maturity date of July 16, 2024 ("Senior Credit Facility"). The Senior Credit Facility includes a \$750.0 million sublimit for the issuance of letters of credit and a \$30.0 million sublimit for swing line loans. We have the right to increase the amount of the Senior Credit Facility by an aggregate amount not to exceed \$400.0 million, subject to certain conditions, including each Lender's approval providing any increase.

The Amended Credit Agreement, among other things, (i) replaces the existing leverage ratio financial covenant (the "Existing Leverage Covenant") with a leverage ratio financial covenant that requires the Company's ratio of consolidated

funded indebtedness, minus the amount of all cash and cash equivalents on our balance sheet in excess of \$250.0 million, to the Company's Consolidated EBITDA, not to exceed 4.00 to 1.00 as of the last day of any quarter through and including December 31, 2021 (the "Covenant Relief Period"), (ii) amends the Existing Leverage Covenant to provide that it will not be tested until the quarter ending March 31, 2022, (iii) provides that the Existing Leverage Covenant, beginning March 31, 2022, cannot exceed 4.00 to 1.00 (or as increased to 4.50 to 1.00 in connection with certain acquisitions) and (iv) limits the Company's ability to pay dividends and repurchase its shares of common stock, par value \$1.25, during the Covenant Relief Period, to an amount not to exceed 115% of the total amount of dividends and share repurchases we made during the period commencing January 1, 2019 through and including June 30, 2020.

The interest rates per annum applicable to the Senior Credit Facility (other than with respect to swing line loans) are LIBOR plus between 1.000% to 1.750%, depending on our debt rating by either Moody's Investors Service, Inc. or Standard & Poor's Financial Services LLC ("S&P") Ratings, or, at our option, the Base Rate (as defined in the Senior Credit Agreement) plus between 0.000% to 0.750% depending on our debt rating by either Moody's Investors Service, Inc. or S&P Global Ratings. As of December 31, 2020, the interest rate on the Senior Credit Facility was LIBOR plus 1.375% in the case of LIBOR loans and the Base Rate plus 0.375% in the case of Base Rate loans. In addition, a commitment fee is payable quarterly in arrears on the daily unused portions of the Senior Credit Facility. The commitment fee will be between 0.090% and 0.300% of unused amounts under the Senior Credit Facility depending on our debt rating by either Moody's Investors Service, Inc. or S&P Global Ratings. The commitment fee was 0.20% (per annum) during the period ended December 31, 2020.

As of December 31, 2020, and December 31, 2019, we had no revolving loans outstanding under the Senior Credit Facility. We had outstanding letters of credit of \$58.1 million and \$88.5 million at December 31, 2020, and December 31, 2019, respectively. The amount available for borrowings under our Senior Credit Facility was \$741.9 million, compared to \$711.5 million at December 31, 2019.

Financial Covenants — Our compliance with the financial covenants under the Senior Notes and Senior Credit Facility are tested quarterly. We were in compliance with all covenants as of December 31, 2020.

14. PENSION AND POSTRETIREMENT BENEFITS

We sponsor several noncontributory defined benefit pension plans, covering substantially all U.S. employees and certain non-U.S. employees, which provide benefits based on years of service, age, job grade levels and type of compensation. Retirement benefits for all other covered employees are provided through contributory pension plans, cash balance pension plans and government-sponsored retirement programs. All funded defined benefit pension plans receive funding based on independent actuarial valuations to provide for current service and an amount sufficient to amortize unfunded prior service over periods not to exceed 30 years, with funding falling within the legal limits prescribed by prevailing regulation. We also maintain unfunded defined benefit plans that, as permitted by local regulations, receive funding only when benefits become due.

Our defined benefit plan strategy is to ensure that current and future benefit obligations are adequately funded in a cost-effective manner. Additionally, our investing objective is to achieve the highest level of investment performance that is compatible with our risk tolerance and prudent investment practices. Because of the long-term nature of our defined benefit plan liabilities, our funding strategy is based on a long-term perspective for formulating and implementing investment policies and evaluating their investment performance.

The asset allocation of our defined benefit plans reflects our decision about the proportion of the investment in equity and fixed income securities, and, where appropriate, the various sub-asset classes of each. At least annually, we complete a comprehensive review of our asset allocation policy and the underlying assumptions, which includes our long-term capital markets rate of return assumptions and our risk tolerances relative to our defined benefit plan liabilities.

The expected rates of return on defined benefit plan assets are derived from review of the asset allocation strategy, 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.

Our U.S. defined benefit plan assets consist of a balanced portfolio of 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. We monitor investment allocations and manage plan assets to maintain acceptable levels of risk.

For all periods presented, we used a measurement date of December 31 for each of our U.S. pension plans, non-U.S. pension plans and postretirement medical plans.

U.S. Defined Benefit Plans

We maintain qualified and non-qualified defined benefit pension plans in the U.S. The qualified plan provides coverage for substantially all full-time U.S. employees who receive benefits, up to an earnings threshold specified by the U.S. Department of Labor. The non-qualified plans primarily cover a small number of employees including current and former members of senior management, providing them with benefit levels equivalent to other participants, but that are otherwise limited by U.S. Department of Labor rules. The U.S. plans are designed to operate as "cash balance" arrangements, under which the employee has the option to take a lump sum payment at the end of their service. The difference between total accumulated benefit obligation and total projected benefit obligation ("Benefit Obligation") is immaterial.

The following are assumptions related to the U.S. defined benefit pension plans:

| | Year Ended December 31, | | |
|---|-------------------------|--------|--------|
| | 2020 | 2019 | 2018 |
| Weighted average assumptions used to determine Benefit Obligations: | | | |
| Discount rate | 2.62 % | 3.41 % | 4.34 % |
| Rate of increase in compensation levels | 3.63 | 3.50 | 3.50 |
| Weighted average assumptions used to determine net pension expense: | | | |
| Long-term rate of return on assets | 6.00 % | 6.00 % | 6.00 % |
| Discount rate | 3.41 | 4.34 | 3.63 |
| Rate of increase in compensation levels | 3.56 | 3.50 | 4.01 |
| Weighted-average interest crediting rates | 3.79 % | 3.79 % | 3.79 % |

At December 31, 2020 as compared with December 31, 2019, we decreased our discount rate from 3.41% to 2.62% based on an analysis of publicly-traded investment grade U.S. corporate bonds, which had a lower yield due to current market conditions. In determining 2020 expense, the expected rate of return on U.S. plan assets remained constant at 6.00%, primarily based on our target allocations and expected long-term asset returns. The long-term rate of return assumption is calculated using a quantitative approach that utilizes unadjusted historical returns and asset allocation as inputs for the calculation. For all U.S. plans, we adopted the Pri-2012 mortality tables and the MP-2020 improvement scale published in October 2020. We applied the Pri-2012 tables based on the constituency of our plan population for union and non-union participants. We adjusted the improvement scale to utilize the Proxy SSA Long Term Improvement Rates ("LTIR"), 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.

Net pension expense for the U.S. defined benefit pension plans (including both qualified and non-qualified plans) was:

| | Year Ended December 31, | | |
|---|-------------------------|------------------|------------------|
| | 2020 | 2019 | 2018 |
| | (Amounts in thousands) | | |
| Service cost | \$ 25,893 | \$ 23,245 | \$ 22,195 |
| Interest cost | 15,100 | 17,584 | 15,789 |
| Expected return on plan assets | (25,794) | (25,645) | (25,704) |
| Settlement loss (gain) | 128 | — | (462) |
| Amortization of unrecognized prior service cost | 184 | 164 | 164 |
| Amortization of unrecognized net loss | 6,977 | 3,675 | 5,514 |
| U.S. net pension expense | <u>\$ 22,488</u> | <u>\$ 19,023</u> | <u>\$ 17,496</u> |

The following summarizes the net pension (liability) asset for U.S. plans:

| | December 31, | |
|----------------------------|------------------------|------------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Plan assets, at fair value | \$ 477,680 | \$ 482,553 |
| Benefit Obligation | (487,418) | (471,462) |
| Funded status | <u>\$ (9,738)</u> | <u>\$ 11,091</u> |

The following summarizes amounts recognized in the balance sheet for U.S. plans:

| | December 31, | |
|------------------------|------------------------|------------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Noncurrent assets | \$ — | \$ 16,396 |
| Current liabilities | (233) | (348) |
| Noncurrent liabilities | (9,505) | (4,957) |
| Funded status | <u>\$ (9,738)</u> | <u>\$ 11,091</u> |

The following is a summary of the changes in the U.S. defined benefit plans' pension obligations:

| | December 31, | |
|--|------------------------|-------------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Balance — January 1 | \$ 471,462 | \$ 432,595 |
| Service cost | 25,893 | 23,245 |
| Interest cost | 15,100 | 17,584 |
| Plan amendments and settlements | (953) | 276 |
| Actuarial losses (1) | 29,166 | 31,214 |
| Benefits paid | (53,250) | (33,452) |
| Balance — December 31 | <u>\$ 487,418</u> | <u>\$ 471,462</u> |
| Accumulated benefit obligations at December 31 | <u>\$ 486,501</u> | <u>\$ 470,643</u> |

(1) The actuarial losses in 2020 and 2019 primarily reflect the impact of changes in the discount rate.

The following table summarizes the expected cash benefit payments for the U.S. defined benefit pension plans in the future (amounts in millions):

| | |
|-----------|---------|
| 2021 | \$ 43.3 |
| 2022 | 42.2 |
| 2023 | 42.8 |
| 2024 | 41.2 |
| 2025 | 42.4 |
| 2026-2030 | 196.3 |

The following table shows the change in accumulated other comprehensive loss attributable to the components of the net cost and the change in Benefit Obligations for U.S. plans, net of tax:

| | December 31, | |
|--|------------------------|--------------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Balance — January 1 | \$ (49,510) | \$ (62,018) |
| Amortization of net loss | 5,336 | 2,809 |
| Amortization of prior service cost | 140 | 125 |
| Net (loss) gain arising during the year | (5,328) | 9,785 |
| Settlement gain | 98 | — |
| Prior service cost arising during the year | (57) | (211) |
| Balance — December 31 | <u>\$ (49,321)</u> | <u>\$ (49,510)</u> |

Amounts recorded in accumulated other comprehensive loss consist of:

| | December 31, | |
|--|------------------------|--------------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Unrecognized net loss | \$ (48,460) | \$ (48,578) |
| Unrecognized prior service cost | (861) | (932) |
| Accumulated other comprehensive loss, net of tax | <u>\$ (49,321)</u> | <u>\$ (49,510)</u> |

The following is a reconciliation of the U.S. defined benefit pension plans' assets:

| | December 31, | |
|-----------------------|------------------------|-------------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Balance — January 1 | \$ 482,553 | \$ 425,792 |
| Return on plan assets | 47,992 | 69,663 |
| Company contributions | 1,412 | 20,552 |
| Benefits paid | (53,250) | (33,454) |
| Settlements | (1,027) | — |
| Balance — December 31 | <u>\$ 477,680</u> | <u>\$ 482,553</u> |

We contributed \$1.4 million and \$20.6 million to the U.S. defined benefit pension plans during 2020 and 2019, respectively. These payments exceeded the minimum funding requirements mandated by the U.S. Department of Labor rules. Our estimated contribution in 2021 is expected to be approximately \$20 million, excluding direct benefits paid.

All U.S. defined benefit plan assets are held by the qualified plan. The asset allocations for the qualified plan at the end of 2020 and 2019 by asset category, are as follows:

| Asset category | Target Allocation at December 31, | | Percentage of Actual Plan Assets at December 31, | |
|-----------------------------|--------------------------------------|------|---|------|
| | 2020 | 2019 | 2020 | 2019 |
| Cash and cash equivalents | — % | — % | 1 % | 1 % |
| Cash and cash equivalents | — % | — % | 1 % | 1 % |
| Global Equity | 31 % | 31 % | 30 % | 28 % |
| Global Real Assets | 12 % | 12 % | 13 % | 12 % |
| Equity securities | 43 % | 43 % | 43 % | 40 % |
| Diversified Credit | 12 % | 12 % | 14 % | 12 % |
| Liability-Driven Investment | 45 % | 45 % | 42 % | 47 % |
| Fixed income | 57 % | 57 % | 56 % | 59 % |

None of our common stock is directly held by our qualified plan. Our investment strategy is to earn a long-term rate of return consistent with an acceptable degree of risk and minimize our cash contributions over the life of the plan, while taking into account the liquidity needs of the plan. We preserve capital through diversified investments in high quality securities. Our current allocation target is to invest approximately 43% of plan assets in equity securities and 57% in fixed income securities. Within each investment category, assets are allocated to various investment strategies. Professional money management firms manage our assets, and we engage a consultant to assist in evaluating these activities. We periodically review the allocation target, generally in conjunction with an asset and liability study and in consideration of our future cash flow needs. We regularly rebalance the actual allocation to our target investment allocation.

Plan assets are invested in commingled funds. Our "Pension and Investment Committee" is responsible for setting the investment strategy and the target asset allocation for the plan's assets. As the qualified plan approached fully funded status, we implemented a Liability-Driven Investing ("LDI") strategy, which more closely aligns the duration of the plan's assets with the duration of its liabilities. The LDI strategy results in an asset portfolio that more closely matches the behavior of the liability, thereby reducing the volatility of the plan's funded status.

The plan's financial instruments, shown below, are presented at fair value. See Note 1 for further discussion on how the hierarchical levels of the fair values of the Plan's investments are determined. The fair values of our U.S. defined benefit plan assets were:

| | At December 31, 2020 | | | | At December 31, 2019 | | | |
|--------------------------------|------------------------|---------------------|-------------------|-------------|------------------------|---------------------|-------------------|-------------|
| | Total | Hierarchical Levels | | | Total | Hierarchical Levels | | |
| | | I | II | III | | I | II | III |
| | (Amounts in thousands) | | | | (Amounts in thousands) | | | |
| Cash and cash equivalents | \$ 5,986 | \$ 5,986 | \$ — | \$ — | \$ 4,994 | \$ 4,994 | \$ — | \$ — |
| Commingled Funds: | | | | | | | | |
| Equity securities | | | | | | | | |
| Global Equity(a) | 142,401 | — | 142,401 | — | 135,350 | — | 135,350 | — |
| Global Real Assets(b) | 61,604 | — | 61,604 | — | 60,523 | — | 60,523 | — |
| Fixed income securities | | | | | | | | |
| Diversified Credit(c) | 66,995 | — | 66,995 | — | 56,375 | — | 56,375 | — |
| Liability-Driven Investment(d) | 200,694 | — | 200,694 | — | 225,311 | — | 225,311 | — |
| | <u>\$ 477,680</u> | <u>\$ 5,986</u> | <u>\$ 471,694</u> | <u>\$ —</u> | <u>\$ 482,553</u> | <u>\$ 4,994</u> | <u>\$ 477,559</u> | <u>\$ —</u> |

(a) Global Equity fund seeks to closely track the performance of the MSCI All Country World Index.

(b) Global Real Asset funds seek to provide exposure to the listed global real estate investment trusts (REITs) and infrastructure markets.

(c) Diversified Credit funds seek to provide exposure to the high yield, emerging markets, bank loans and securitized credit markets.

(d) Liability-Driven Investment ("LDI") funds seek to invest in high quality fixed income securities that collectively closely match those found in discount curves used to value the plan's liabilities.

Non-U.S. Defined Benefit Plans

We maintain defined benefit pension plans, which cover some or all of our employees in the following countries: Austria, Belgium, Canada, France, Germany, India, Italy, Japan, Mexico, The Netherlands, Sweden, Switzerland and the U.K. The assets of the plans in the U.K. (two plans), The Netherlands and Canada represent 94% of the total non-U.S. plan assets ("non-U.S. assets"). Details of other countries' plan assets have not been provided due to immateriality.

The following are assumptions related to the non-U.S. defined benefit pension plans:

| | Year Ended December 31, | | |
|---|-------------------------|--------|--------|
| | 2020 | 2019 | 2018 |
| Weighted average assumptions used to determine Benefit Obligations: | | | |
| Discount rate | 1.23 % | 1.61 % | 2.42 % |
| Rate of increase in compensation levels | 3.11 | 3.12 | 3.28 |
| Weighted average assumptions used to determine net pension expense: | | | |
| Long-term rate of return on assets | 2.37 % | 3.37 % | 3.62 % |
| Discount rate | 1.61 | 2.42 | 2.25 |
| Rate of increase in compensation levels | 3.12 | 3.28 | 3.25 |
| Weighted-average interest crediting rates | 1.00 % | 1.00 % | 1.00 % |

At December 31, 2020, as compared with December 31, 2019, we decreased our average discount rate for non-U.S. plans from 1.61% to 1.23% based on analysis of bonds and other publicly-traded instruments, by country, which had lower yields due to market conditions. To determine 2020 pension expense, we decreased our average expected rate of

return on plan assets from 3.37% at December 31, 2019 to 2.37% at December 31, 2020, 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 fluctuations do not significantly impact the rate.

Many of our non-U.S. defined benefit plans are unfunded, as permitted by local regulation. The expected long-term rate of return on assets for funded plans was determined by assessing the rates of return for each asset class and is calculated using a quantitative approach that utilizes unadjusted historical returns and asset allocation as inputs for the calculation. We work with our actuaries to determine the reasonableness of our long-term rate of return assumptions by looking at several factors including historical returns, expected future returns, asset allocation, risks by asset class and other items.

Net pension expense for non-U.S. defined benefit pension plans was:

| | Year Ended December 31, | | |
|---|-------------------------|------------------|------------------|
| | 2020 | 2019 | 2018 |
| | (Amounts in thousands) | | |
| Service cost | \$ 7,052 | \$ 5,728 | \$ 7,208 |
| Interest cost | 6,572 | 8,867 | 8,970 |
| Expected return on plan assets | (5,018) | (7,535) | (8,747) |
| Amortization of unrecognized net loss | 4,315 | 2,933 | 3,626 |
| Amortization of unrecognized prior service cost (benefit) | 262 | 265 | 33 |
| Settlement loss (gain) and other | 708 | 859 | (521) |
| Non-U.S. net pension expense | <u>\$ 13,891</u> | <u>\$ 11,117</u> | <u>\$ 10,569</u> |

The following summarizes the net pension liability for non-U.S. plans:

| | December 31, | |
|----------------------------|------------------------|---------------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Plan assets, at fair value | \$ 287,308 | \$ 262,559 |
| Benefit Obligation | (469,998) | (425,617) |
| Funded status | <u>\$ (182,690)</u> | <u>\$ (163,058)</u> |

The following summarizes amounts recognized in the balance sheet for non-U.S. plans:

| | December 31, | |
|------------------------|------------------------|---------------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Noncurrent assets | \$ 18,910 | \$ 16,379 |
| Current liabilities | (8,121) | (7,609) |
| Noncurrent liabilities | (193,479) | (171,828) |
| Funded status | <u>\$ (182,690)</u> | <u>\$ (163,058)</u> |

The following is a reconciliation of the non-U.S. plans' defined benefit pension obligations:

| | December 31, | |
|--|------------------------|-------------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Balance — January 1 | \$ 425,617 | \$ 376,649 |
| Service cost | 7,052 | 5,728 |
| Interest cost | 6,572 | 8,867 |
| Employee contributions | 80 | 78 |
| Settlements and other | (2,701) | (3,713) |
| Actuarial losses (1) | 23,781 | 48,888 |
| Net benefits and expenses paid | (15,700) | (14,526) |
| Currency translation impact(2) | 25,297 | 3,646 |
| Balance — December 31 | <u>\$ 469,998</u> | <u>\$ 425,617</u> |
| Accumulated benefit obligations at December 31 | <u>\$ 446,097</u> | <u>\$ 404,035</u> |

(1) The 2019 actuarial loss primarily reflects the decrease in the discount rates for all plans.

(2) In 2020, the currency translation loss reflects the weakening of the U.S. dollar against the Euro and the British pound, while in 2019 the currency translation loss reflects the weakening of the U.S. dollar against the British pound, partially offset by the strengthening of the U.S. dollar against the Euro.

The following table summarizes the expected cash benefit payments for the non-U.S. defined benefit plans in the future (amounts in millions):

| | |
|-----------|---------|
| 2021 | \$ 17.6 |
| 2022 | 18.1 |
| 2023 | 18.1 |
| 2024 | 19.1 |
| 2025 | 18.7 |
| 2026-2030 | 100.3 |

The following table shows the change in accumulated other comprehensive loss attributable to the components of the net cost and the change in Benefit Obligations for non-U.S. plans, net of tax:

| | December 31, | |
|--|------------------------|--------------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Balance — January 1 | \$ (89,337) | \$ (62,088) |
| Amortization of net loss | 4,410 | 2,946 |
| Net losses arising during the year | (7,432) | (29,910) |
| Settlement losses | 681 | 746 |
| Prior service cost arising during the year | (467) | — |
| Currency translation impact and other | (5,101) | (1,031) |
| Balance — December 31 | <u>\$ (97,246)</u> | <u>\$ (89,337)</u> |

Amounts recorded in accumulated other comprehensive loss consist of:

| | December 31, | |
|--|------------------------|--------------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Unrecognized net loss | \$ (93,417) | \$ (85,891) |
| Unrecognized prior service cost | (3,829) | (3,446) |
| Accumulated other comprehensive loss, net of tax | <u>\$ (97,246)</u> | <u>\$ (89,337)</u> |

The following is a reconciliation of the non-U.S. plans' defined benefit pension assets:

| | December 31, | |
|---------------------------------------|------------------------|-------------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Balance — January 1 | \$ 262,559 | \$ 232,175 |
| Return on plan assets | 21,897 | 23,793 |
| Employee contributions | 80 | 78 |
| Company contributions | 11,279 | 16,782 |
| Settlements | (2,939) | (3,688) |
| Currency translation impact and other | 10,132 | 7,945 |
| Net benefits and expenses paid | (15,700) | (14,526) |
| Balance — December 31 | <u>\$ 287,308</u> | <u>\$ 262,559</u> |

The 2020 and 2019 increase in the non-US plan assets is due to strong asset returns for UK assets. Our contributions to non-U.S. defined benefit pension plans in 2021 are expected to be approximately \$2 million, excluding direct benefits paid.

The asset allocations for the non-U.S. defined benefit pension plans at the end of 2020 and 2019 are as follows:

| Asset category | Target Allocation at December 31, | | Percentage of Actual Plan Assets at December 31, | |
|-----------------------------|--------------------------------------|------|---|------|
| | 2020 | 2019 | 2020 | 2019 |
| Cash and cash equivalents | 1 % | 2 % | 1 % | 2 % |
| Cash and cash equivalents | 1 % | 2 % | 1 % | 2 % |
| North American Companies | 1 % | 1 % | 1 % | 1 % |
| Global Equity | 1 % | 1 % | 1 % | 1 % |
| Equity securities | 2 % | 2 % | 2 % | 2 % |
| U.K. Government Gilt Index | 39 % | 43 % | 39 % | 43 % |
| Liability-Driven Investment | 12 % | 7 % | 12 % | 7 % |
| Fixed income | 51 % | 50 % | 51 % | 50 % |
| Multi-asset | 20 % | 19 % | 20 % | 19 % |
| Buy-in Contracts | 20 % | 21 % | 20 % | 21 % |
| Other | 6 % | 6 % | 6 % | 6 % |
| Other types | 46 % | 46 % | 46 % | 46 % |

None of our common stock is held directly by these plans. In all cases, our investment strategy for these plans is to earn a long-term rate of return consistent with an acceptable degree of risk and minimize our cash contributions over the life of the plan, while taking into account the liquidity needs of the plan and the legal requirements of the particular country. We preserve capital through diversified investments in high quality securities.

Asset allocation differs by plan based upon the plan's benefit obligation to participants, as well as the results of asset and liability studies that are conducted for each plan and in consideration of our future cash flow needs. Professional money management firms manage plan assets and we engage a consultant in the U.K. to assist in evaluation of these activities. The assets of the U.K. plans are overseen by a group of Trustees who review the investment strategy, asset allocation and fund selection. These assets are passively managed as they are invested in index funds that attempt to match the performance of the specified benchmark index.

The fair values of the non-U.S. assets were:

| | At December 31, 2020 | | | | At December 31, 2019 | | | |
|--------------------------------|------------------------|---------------------|-------------------|------------------|------------------------|---------------------|-------------------|------------------|
| | Total | Hierarchical Levels | | | Total | Hierarchical Levels | | |
| | | I | II | III | | I | II | III |
| | (Amounts in thousands) | | | | (Amounts in thousands) | | | |
| Cash | \$ 2,304 | \$ 2,304 | \$ — | — | \$ 5,026 | \$ 5,026 | \$ — | \$ — |
| Commingled Funds: | | | | | | | | |
| Equity securities | | | | | | | | |
| North American Companies(a) | 2,555 | — | 2,555 | — | 2,501 | — | 2,501 | — |
| Global Equity(b) | 2,451 | — | 2,451 | — | 2,411 | — | 2,411 | — |
| Fixed income securities | | | | | | | | |
| U.K. Government Gilt Index(c) | 112,298 | — | 112,298 | — | 113,855 | — | 113,855 | — |
| Liability-Driven Investment(d) | 34,543 | — | 34,543 | — | 20,011 | — | 20,011 | — |
| Other Types of Investments: | | | | | | | | |
| Multi-asset(e) | 57,205 | — | 57,205 | — | 48,964 | — | 48,964 | — |
| Buy-in Contracts(f) | 59,249 | — | — | 59,249 | 54,544 | — | — | 54,544 |
| Other(g) | 16,703 | — | — | 16,703 | 15,247 | — | — | 15,247 |
| | <u>\$ 287,308</u> | <u>\$ 2,304</u> | <u>\$ 209,052</u> | <u>\$ 75,952</u> | <u>\$ 262,559</u> | <u>\$ 5,026</u> | <u>\$ 187,742</u> | <u>\$ 69,791</u> |

- (a) North American Companies represents U.S. and Canadian large cap equity funds, which are managed to track their respective benchmarks (FTSE All-World USA Index and FTSE All-World Canada Index).
- (b) Global Equity represents actively managed global equity funds, taking a top-down strategic view on the different regions by analyzing companies based on fundamentals, market-driven, thematic and quantitative factors to generate alpha.
- (c) U.K. Government Gilt Index represents U.K. government issued fixed income investments which are passively managed to track their respective benchmarks.
- (d) LDI seeks to invest in fixed income securities that collectively closely match those found in discount curves used to value the plan's liabilities.
- (e) Multi-asset seeks an attractive risk-adjusted return by investing in a diversified portfolio of strategies, including equities and fixed income.
- (f) The Buy-in Contracts ("Contract" or "Contracts") represent assets held by plans, whereby the cost of providing benefits to plan participants is funded by the Contract. The Contracts are held by the plans for the benefit of plan participants in the Netherlands and U.K. The fair value of these assets are based on the current present value of accrued benefits and will fluctuate based on changes in the obligations associated with covered plan members as well as the assumptions used in the present value calculation. The fair value of asset held in the Netherlands Contract as of January 1, 2020 was \$25.9 million, with contributions and currency adjustments resulting in a fair value of \$27.4 million at December 31, 2020. Similarly, The fair value of asset held in the U.K. plan Contract as of January 1, 2020 was \$28.6 million, with contributions and currency adjustments resulting in a fair value of \$31.8 million at December 31, 2020.
- (g) Includes assets held by plans outside the United Kingdom, the Netherlands and Canada. Details have not been provided due to immateriality.

Defined Benefit Pension Plans with Accumulated Benefit Obligations in Excess of Plan Assets

The following summarizes key pension plan information regarding U.S. and non-U.S. plans whose accumulated benefit obligations exceed the fair value of their respective plan assets.

| | December 31, | |
|--------------------------------|------------------------|------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Benefit Obligation | \$ 735,912 | \$ 229,793 |
| Accumulated benefit obligation | 716,534 | 212,906 |
| Fair value of plan assets | 526,502 | 46,718 |

Postretirement Medical Plans

We sponsor several 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 and health maintenance organizations. The plans include participant contributions, deductibles, co-insurance provisions and other limitations and are integrated with Medicare and other group plans. We fund the plans as benefits and health maintenance organization premiums 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. Benefits under our postretirement medical plans are not available to new employees or most existing employees.

The following are assumptions related to postretirement benefits:

| | Year Ended December 31, | | |
|--|-------------------------|--------|--------|
| | 2020 | 2019 | 2018 |
| Weighted average assumptions used to determine Benefit Obligation: | | | |
| Discount rate | 2.32 % | 3.27 % | 4.20 % |
| Weighted average assumptions used to determine net expense: | | | |
| Discount rate | 3.27 % | 4.20 % | 3.48 % |

The assumed ranges for the annual rates of increase in medical costs used to determine net expense were 7.0% for 2020, 7.5% for 2019 and 7% for 2018, with a gradual decrease to 5.0% for 2029 and future years.

Net postretirement benefit cost for postretirement medical plans was:

| | Year Ended December 31, | | |
|---|-------------------------|--------|--------|
| | 2020 | 2019 | 2018 |
| | (Amounts in thousands) | | |
| Interest cost | \$ 596 | \$ 754 | \$ 779 |
| Amortization of unrecognized prior service cost | 122 | 122 | 122 |
| Amortization of unrecognized net gain | (132) | (215) | (764) |
| Net postretirement benefit expense | \$ 586 | \$ 661 | \$ 137 |

The following summarizes the accrued postretirement benefits liability for the postretirement medical plans:

| | December 31, | |
|-----------------------------------|------------------------|-------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Postretirement Benefit Obligation | \$ 18,648 | \$ 18,862 |
| Funded status | \$ (18,648) | \$ (18,862) |

The following summarizes amounts recognized in the balance sheet for postretirement Benefit Obligation:

| | December 31, | |
|------------------------|------------------------|--------------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Current liabilities | \$ (2,342) | \$ (2,370) |
| Noncurrent liabilities | (16,306) | (16,492) |
| Funded status | <u>\$ (18,648)</u> | <u>\$ (18,862)</u> |

The following is a reconciliation of the postretirement Benefit Obligation:

| | December 31, | |
|--------------------------------|------------------------|------------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Balance — January 1 | \$ 18,862 | \$ 18,810 |
| Interest cost | 596 | 754 |
| Employee contributions | 916 | 964 |
| Medicare subsidies receivable | 7 | 14 |
| Actuarial losses | 2,434 | 2,222 |
| Net benefits and expenses paid | (4,167) | (3,902) |
| Balance — December 31 | <u>\$ 18,648</u> | <u>\$ 18,862</u> |

The following presents expected benefit payments for future periods (amounts in millions):

| | Expected Payments |
|-----------|-------------------|
| 2021 | \$ 2.4 |
| 2022 | 2.2 |
| 2023 | 2.0 |
| 2024 | 1.8 |
| 2025 | 1.6 |
| 2026-2030 | 6.1 |

The following table shows the change in accumulated other comprehensive loss attributable to the components of the net cost and the change in Benefit Obligations for postretirement benefits, net of tax:

| | 2020 | 2019 |
|------------------------------------|------------------------|---------------|
| | (Amounts in thousands) | |
| Balance — January 1 | \$ 656 | \$ 2,425 |
| Amortization of net gain | (101) | (164) |
| Amortization of prior service cost | 94 | 94 |
| Net losses arising during the year | (1,862) | (1,699) |
| Balance — December 31 | <u>\$ (1,213)</u> | <u>\$ 656</u> |

Amounts recorded in accumulated other comprehensive loss consist of:

| | December 31, | |
|--|------------------------|----------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Unrecognized net gain (loss) | \$ (470) | \$ 1,512 |
| Unrecognized prior service cost | (743) | (856) |
| Accumulated other comprehensive income, net of tax | \$ (1,213) | \$ 656 |

We made contributions to the postretirement medical plans to pay benefits of \$3.2 million in 2020, \$2.9 million in 2019 and \$3.2 million in 2018. Because the postretirement medical plans are unfunded, we make contributions as the covered individuals' claims are approved for payment. Accordingly, contributions during any period are directly correlated to the benefits paid.

Defined Contribution Plans

We sponsor several defined contribution plans covering substantially all U.S. and Canadian employees and certain other non-U.S. employees. Employees may contribute to these plans, and these contributions are matched in varying amounts by us, including opportunities for discretionary matching contributions by us. Defined contribution plan expense was \$20.0 million in 2020, \$20.4 million in 2019 and \$18.7 million in 2018.

15. EARNINGS PER SHARE

The following is a reconciliation of net earnings of Flowserve Corporation and weighted average shares for calculating net earnings per common share. Earnings per weighted average common share outstanding was calculated as follows:

| | Year Ended December 31, | | |
|---|---|-------------------|-------------------|
| | 2020 | 2019 | 2018 |
| | (Amounts in thousands, except per share data) | | |
| Net earnings of Flowserve Corporation | \$ 116,326 | \$ 238,828 | \$ 104,508 |
| Dividends on restricted shares not expected to vest | — | — | — |
| Earnings attributable to common and participating shareholders | <u>\$ 116,326</u> | <u>\$ 238,828</u> | <u>\$ 104,508</u> |
| Weighted average shares: | | | |
| Common stock | 130,373 | 131,012 | 130,794 |
| Participating securities | 22 | 22 | 29 |
| Denominator for basic earnings per common share | 130,395 | 131,034 | 130,823 |
| Effect of potentially dilutive securities | 655 | 685 | 448 |
| Denominator for diluted earnings per common share | <u>131,050</u> | <u>131,719</u> | <u>131,271</u> |
| Net earnings per share attributable to Flowserve Corporation common shareholders: | | | |
| Basic | \$ 0.89 | \$ 1.82 | \$ 0.80 |
| Diluted | 0.89 | 1.81 | 0.80 |

Diluted earnings per share is based upon the weighted average number of shares as determined for basic earnings per share plus shares potentially issuable in conjunction with stock options, restricted shares, restricted share units and performance share units.

For the years ended ending December 31, 2020, 2019 and 2018, unvested restricted shares of 375,203, 140,459, and 88,656, respectively, were excluded from the computation of diluted earnings per share because the effect of their exercise would be anti-dilutive.

16. LEGAL MATTERS AND CONTINGENCIES

Asbestos-Related Claims

We are a defendant in a substantial number of lawsuits that seek to recover damages for personal injury allegedly caused by exposure to asbestos-containing products manufactured and/or distributed by our heritage companies in the past. Typically, these lawsuits have been brought against multiple defendants in state and federal courts. While the overall number of asbestos-related claims in which we or our predecessors have been named has generally declined in recent years, there can be no assurance that this trend will continue, or that the average cost per claim to us will not further increase. Asbestos-containing materials incorporated into any such products were encapsulated and used as internal components of process equipment, and we do not believe that significant emission of asbestos fibers occurred during the use of this equipment.

Our practice is to vigorously contest and resolve these claims, and we have been successful in resolving a majority of claims with little or no payment, other than legal fees. Activity related to asbestos claims during the periods indicated was as follows:

| | December 31, | | |
|----------------------------|--------------|---------|---------|
| | 2020 | 2019 | 2018 |
| Beginning claims(1) | 8,345 | 8,666 | 12,447 |
| New claims | 2,140 | 2,314 | 2,766 |
| Resolved claims | (2,203) | (2,601) | (5,980) |
| Other(2) | 84 | (34) | (567) |
| Ending claims(1) | 8,366 | 8,345 | 8,666 |

(1) Beginning and ending claims data in each period excludes inactive claims, as the Company considers it unlikely that inactive cases will be pursued further by the respective plaintiffs. A claim is classified as inactive either due to inactivity over a period of time or if designated as inactive by the applicable court.

(2) Represents the net change in claims as a result of the reclassification of active cases as inactive and inactive cases as active during the period indicated. Cases moved from active to inactive status are removed from the claims count without being accounted for as a "Resolved claim", and cases moved from inactive status to active status are added back to the claims count without being accounted for as a "New claim".

The Company incurred expenses of approximately \$15.5 million, \$21.8 million and \$24.8 million during the periods ending December 31, 2020, 2019 and 2018, respectively, to defend, resolve or otherwise dispose of outstanding claims, including legal and other related expenses. These expenses are included within SG&A in the Consolidated Statements of Income.

The Company had cash (inflows)/outflows (net of insurance and/or indemnity) to defend, resolve or otherwise dispose of outstanding claims, including legal and other related expenses of approximately \$(5.5) million, \$12.2 million and \$12.6 million during the periods ending December 31, 2020, 2019 and 2018, respectively.

Historically, a high percentage of resolved claims have been covered by applicable insurance or indemnities from other companies, and we believe that a substantial majority of existing claims should continue to be covered by insurance or indemnities, in whole or in part.

We believe that our reserve for asbestos claims and the receivable for recoveries from insurance carriers that we have recorded for these claims reflects reasonable and probable estimates of these amounts. Our estimate of our ultimate exposure for asbestos claims, however, is subject to significant uncertainties, including the timing and number and types of new claims, unfavorable court rulings, judgments or settlement terms and ultimate costs to settle. Additionally, including the continued viability of carriers, may also impact the amount of probable insurance recoveries. We believe that these uncertainties could have a material adverse impact on our business, financial condition, results of operations and cash flows, though we currently believe the likelihood is remote.

Additionally, we have claims pending against certain insurers that, if in future periods are resolved more favorably than reflected in the recorded receivables, would result in discrete gains in the applicable year.

Other

We are currently involved as a potentially responsible party at four former public waste disposal sites in various stages of evaluation or remediation. The projected cost of remediation at these sites, as well as our alleged "fair share" allocation, will remain uncertain until all studies have been completed and the parties have either negotiated an amicable resolution or the matter has been judicially resolved. At each site, there are many other parties who have similarly been identified. Many of the other parties identified are financially strong and solvent companies that appear able to pay their share of the remediation costs. Based on our information about the waste disposal practices at these sites and the environmental regulatory process in general, we believe that it is likely that ultimate remediation liability costs for each site will be apportioned among all liable parties, including site owners and waste transporters, according to the volumes and/or toxicity of the wastes shown to have been disposed of at the sites. We believe that our financial exposure for existing disposal sites will not be materially in excess of accrued reserves.

We are also a defendant in a number of other lawsuits, including product liability claims, that are insured, subject to the applicable deductibles, arising in the ordinary course of business, and we are also involved in other uninsured routine litigation incidental to our business. We currently believe none of such litigation, either individually or in the aggregate, is material to our business, operations or overall financial condition. However, litigation is inherently unpredictable, and resolutions or dispositions of claims or lawsuits by settlement or otherwise could have an adverse impact on our financial position, results of operations or cash flows for the reporting period in which any such resolution or disposition occurs.

Although none of the aforementioned potential liabilities can be quantified with absolute certainty except as otherwise indicated above, we have established or adjusted reserves covering exposures relating to contingencies, to the extent believed to be reasonably estimable and probable based on past experience and available facts. While additional exposures beyond these reserves could exist, they currently cannot be estimated. We will continue to evaluate and update the reserves as necessary and appropriate.

17. WARRANTY RESERVE

We have recorded reserves for product warranty claims that are included in current liabilities. The following is a summary of the activity in the warranty reserve:

| | Year Ended December 31, | | |
|---|-------------------------|------------------|------------------|
| | 2020 | 2019 | 2018 |
| | (Amounts in thousands) | | |
| Balance — January 1 | \$ 30,854 | \$ 32,033 | \$ 33,601 |
| Accruals for warranty expense, net of adjustments | 21,701 | 26,215 | 28,454 |
| Settlements made | (24,611) | (27,394) | (30,022) |
| Balance — December 31 | <u>\$ 27,944</u> | <u>\$ 30,854</u> | <u>\$ 32,033</u> |

18. SHAREHOLDERS' EQUITY

Dividends – Generally, our dividend date-of-record is in the last month of the quarter, and the dividend is paid the following month. Any subsequent dividends will be reviewed by our Board of Directors and declared in its discretion.

Dividends declared per share were as follows:

| | Year Ended December 31, | | |
|------------------------------|-------------------------|---------|---------|
| | 2020 | 2019 | 2018 |
| Dividends declared per share | \$ 0.80 | \$ 0.76 | \$ 0.76 |

Share Repurchase Program – in 2014, our Board of Directors approved a \$500.0 million share repurchase authorization. Our share repurchase program does not have an expiration date, and we reserve the right to limit or terminate the repurchase program at any time without notice.

We repurchased 1,057,115 shares of our outstanding common stock for \$32.1 million and 324,889 shares of our outstanding common stock for \$15.0 million during the year ended December 31, 2020 and 2019, respectively. We had no repurchases of shares of our outstanding common stock for the year ended December 31, 2018. As of December 31, 2020, we have \$113.6 million of remaining capacity under our current share repurchase program.

19. INCOME TAXES

The provision for income taxes consists of the following:

| | Year Ended December 31, | | |
|-----------------|-------------------------|-----------|-----------|
| | 2020 | 2019 | 2018 |
| | (Amounts in thousands) | | |
| Current: | | | |
| U.S. federal | \$ 40,234 | \$ 22,001 | \$ 12,079 |
| Foreign | 42,487 | 61,976 | 29,968 |
| State and local | 5,894 | 4,506 | 2,647 |
| Total current | 88,615 | 88,483 | 44,694 |
| Deferred: | | | |
| U.S. federal | (50,038) | (1,644) | 6,567 |
| Foreign | 25,356 | (12,243) | (4,585) |
| State and local | (3,902) | 897 | (126) |
| Total deferred | (28,584) | (12,990) | 1,856 |
| Total provision | \$ 60,031 | \$ 75,493 | \$ 46,550 |

The provision for income taxes differs from the statutory corporate rate due to the following:

| | Year Ended December 31, | | |
|-------------------------------------|-------------------------|---------|---------|
| | 2020 | 2019 | 2018 |
| | (Amounts in millions) | | |
| Statutory federal income tax at 21% | \$ 39.2 | \$ 67.7 | \$ 32.9 |
| Foreign impact, net | (1.3) | 4.5 | (5.9) |
| Impact of U.S. Tax Reform Act | — | — | (5.7) |
| Change in valuation allowances | 26.9 | 0.3 | 15.7 |
| State and local income taxes, net | 2.0 | 5.4 | 3.7 |
| Research and development credit | (5.2) | (5.4) | — |
| Other, net | (1.6) | 3.0 | 5.9 |
| Total | \$ 60.0 | \$ 75.5 | \$ 46.6 |
| Effective tax rate | 32.1 % | 23.4 % | 29.8 % |

In response to the COVID-19 pandemic, many governments have enacted or are contemplating measures to provide aid and economic stimulus. These measures may include deferring the due dates of tax payments or other changes to their income and non-income-based tax laws. The Coronavirus Aid, Relief, and Economic Security Act (“CARES Act”), which was enacted on March 27, 2020 in the U.S., includes measures to assist companies, including temporary changes to income and non-income-based tax laws. For the year ended December 31, 2020, there were no material tax impacts to our condensed consolidated financial statements as they relate to the CARES Act or any other global COVID-19 measures. We continue to monitor additional guidance issued by the U.S. Treasury Department, the Internal Revenue Service and others.

For the years ended December 31, 2020, 2019 and 2018 we have asserted indefinite reinvestment on certain earnings of our foreign subsidiaries. As of December 31, 2020, we have not recorded approximately \$19.1 million of deferred tax liabilities associated with remaining unremitted earnings considered indefinitely reinvested, primarily related to foreign withholding taxes that would be due upon repatriation of the designated earnings to the U.S.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the consolidated deferred tax assets and liabilities were:

| | December 31, | |
|---------------------------------------|------------------------|-------------|
| | 2020 | 2019 |
| | (Amounts in thousands) | |
| Deferred tax assets related to: | | |
| Retirement benefits | \$ 29,754 | \$ 25,214 |
| Net operating loss carryforwards | 109,020 | 101,193 |
| Compensation accruals | 20,290 | 24,685 |
| Inventories | 36,402 | 34,846 |
| Credit and capital loss carryforwards | 136,956 | 131,744 |
| Warranty and accrued liabilities | 27,483 | 18,741 |
| Bad debt reserve | 17,455 | 30,884 |
| Operating lease liability | 25,446 | 27,799 |
| Other | 38,457 | 25,339 |
| Total deferred tax assets | 441,263 | 420,445 |
| Valuation allowances | (287,787) | (266,414) |
| Net deferred tax assets | 153,476 | 154,031 |
| Deferred tax liabilities related to: | | |
| Property, plant and equipment | (11,714) | (26,311) |
| Goodwill and intangibles | (101,818) | (114,122) |
| Foreign undistributed earnings | (50,332) | (67,930) |
| Operating lease right-of-use-assets | (25,799) | (27,799) |
| Other | (17,621) | (12,623) |
| Total deferred tax liabilities | (207,284) | (248,785) |
| Deferred tax liabilities, net | \$ (53,808) | \$ (94,754) |

We have \$481.7 million of U.S. and foreign net operating loss carryforwards at December 31, 2020. Of this total, \$33.1 million are state net operating losses. Net operating losses generated in the U.S., if unused, will expire in 2024 through 2026 tax years. The majority of our foreign net operating losses carry forward without expiration. Additionally, we have \$35.9 million of foreign tax credit carryforwards at December 31, 2020. The foreign tax credit carryforwards, if unused, will expire in 2026, 2028-2030 tax years.

Our valuation allowances primarily relate to the deferred tax assets established for U.S. foreign tax credit carryforwards of \$35.9 million, a foreign capital loss carryforward of \$97.8 million, and other foreign deferred tax assets of \$154.1 million. The foreign capital loss carryforward was the result of a reorganization of certain foreign subsidiaries in the current year. Due to its capital nature, it is uncertain if the loss will be utilized within its ten year carryforward period and, therefore, has a full valuation allowance.

Earnings before income taxes comprised:

| | Year Ended December 31, | | |
|---------|-------------------------|-------------------|-------------------|
| | 2020 | 2019 | 2018 |
| | (Amounts in thousands) | | |
| U.S. | \$ 73,109 | \$ 110,500 | \$ 68,838 |
| Foreign | 113,703 | 211,933 | 87,600 |
| Total | <u>\$ 186,812</u> | <u>\$ 322,433</u> | <u>\$ 156,438</u> |

A tabular reconciliation of the total gross amount of unrecognized tax benefits, excluding interest and penalties, is as follows (in millions):

| | 2020 | 2019 | 2018 |
|---|----------------|----------------|----------------|
| Balance — January 1 | \$ 40.6 | \$ 41.2 | \$ 51.5 |
| Gross amount of increase (decrease) in unrecognized tax benefits resulting from tax positions taken: | | | |
| During a prior year | 3.8 | 8.8 | (6.6) |
| During the current period | 11.1 | 6.3 | 4.0 |
| Decreases in unrecognized tax benefits relating to: | | | |
| Settlements with taxing authorities | (0.2) | (11.4) | (2.7) |
| Lapse of the applicable statute of limitations | (2.5) | (3.2) | (3.7) |
| Increase (decrease) in unrecognized tax benefits relating to foreign currency translation adjustments | 2.0 | (1.1) | (1.3) |
| Balance — December 31 | <u>\$ 54.8</u> | <u>\$ 40.6</u> | <u>\$ 41.2</u> |

The amount of gross unrecognized tax benefits at December 31, 2020, was \$73.4 million, which includes \$18.6 million of accrued interest and penalties. Of this amount \$62.3 million, if recognized, would favorably impact our effective tax rate.

With limited exception, we are no longer subject to U.S. federal income tax audits for years through 2017, state and local income tax audits for years through 2014 or foreign income tax audits for years through 2013. We are currently under examination for various years in Canada, Germany, India, Indonesia, Italy, Mexico, the Netherlands, Philippines, Saudi Arabia, the U.S., and Venezuela.

It is reasonably possible that within the next 12 months the effective tax rate will be impacted by the resolution of some or all of the matters audited by various taxing authorities. It is also reasonably possible that we will have the statute of limitations close in various taxing jurisdictions within the next 12 months. As such, we estimate we could record a reduction in our tax expense up to approximately \$8 million within the next 12 months.

20. BUSINESS SEGMENT INFORMATION

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.

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

- FPD for custom, highly-engineered pumps, pre-configured industrial pumps, pump systems, mechanical seals, auxiliary systems and replacement parts and related services; and
- FCD for engineered and industrial valves, control valves, actuators and controls and related services.

Our corporate headquarters does not constitute a separate division or business segment. Amounts classified as "Eliminations and All Other" include corporate headquarters costs and other minor entities that do not constitute separate segments. Intersegment sales and transfers are recorded at cost plus a profit margin, with the sales and related margin on such sales eliminated in consolidation.

The following is a summary of the financial information of our reportable segments as of and for the years ended December 31, 2020, 2019 and 2018 reconciled to the amounts reported in the consolidated financial statements.

| | FPD | FCD | Subtotal—Reportable Segments | Eliminations and All Other | Consolidated Total |
|--------------------------------------|------------------------|--------------|---------------------------------|-------------------------------|--------------------|
| | (Amounts in thousands) | | | | |
| Year Ended December 31, 2020: | | | | | |
| Sales to external customers | \$2,673,705 | \$ 1,054,429 | \$ 3,728,134 | \$ — | \$ 3,728,134 |
| Intersegment sales | 1,965 | 3,120 | 5,085 | (5,085) | — |
| Segment operating income (loss) | 270,960 | 125,573 | 396,533 | (146,256) | 250,277 |
| Depreciation and amortization | 52,390 | 21,949 | 74,339 | 26,414 | 100,753 |
| Identifiable assets | 3,039,069 | 1,308,136 | 4,347,205 | 967,472 | 5,314,677 |
| Capital expenditures | 21,714 | 14,043 | 35,757 | 21,648 | 57,405 |
| | FPD | FCD | Subtotal—Reportable Segments | Eliminations and All Other | Consolidated Total |
| | (Amounts in thousands) | | | | |
| Year Ended December 31, 2019: | | | | | |
| Sales to external customers | \$2,704,445 | \$ 1,235,252 | \$ 3,939,697 | \$ — | \$ 3,939,697 |
| Intersegment sales | 1,833 | 3,631 | 5,464 | (5,464) | — |
| Segment operating income (loss) | 343,514 | 191,945 | 535,459 | (148,836) | 386,623 |
| Depreciation and amortization | 50,845 | 23,577 | 74,422 | 31,482 | 105,904 |
| Identifiable assets | 2,974,161 | 1,333,926 | 4,308,087 | 630,190 | 4,938,277 |
| Capital expenditures | 26,450 | 14,449 | 40,899 | 34,817 | 75,716 |
| | FPD | FCD | Subtotal—Reportable Segments | Eliminations and All Other | Consolidated Total |
| | (Amounts in thousands) | | | | |
| Year Ended December 31, 2018: | | | | | |
| Sales to external customers | \$ 2,620,488 | \$ 1,215,211 | \$ 3,835,699 | \$ — | \$ 3,835,699 |
| Intersegment sales | 2,816 | 3,637 | 6,453 | (6,453) | — |
| Segment operating income (loss) | 200,981 | 204,250 | 405,231 | (177,530) | 227,701 |
| Depreciation and amortization | 68,148 | 26,585 | 94,733 | 17,740 | 112,473 |
| Identifiable assets | 2,768,879 | 1,269,435 | 4,038,314 | 611,055 | 4,649,369 |
| Capital expenditures | 40,648 | 14,458 | 55,106 | 28,887 | 83,993 |

Geographic Information — We attribute sales to different geographic areas based on our facilities' locations. Long-lived assets are classified based on the geographic area in which the assets are located and exclude deferred taxes, goodwill and intangible assets. Sales and long-lived assets by geographic area are as follows:

| | Year Ended December 31, 2020 | | | |
|--------------------|--|----------------|----------------------|----------------|
| | Sales | Percentage | Long-Lived Assets(a) | Percentage |
| | (Amounts in thousands, except percentages) | | | |
| United States | \$ 1,463,680 | 39.3 % | \$ 455,622 | 46.2 % |
| EMA(1) | 1,385,245 | 37.2 % | 336,577 | 34.1 % |
| Asia(2) | 535,440 | 14.4 % | 138,947 | 14.1 % |
| Other(3) | 343,769 | 9.1 % | 55,278 | 5.6 % |
| Consolidated total | <u>\$ 3,728,134</u> | <u>100.0 %</u> | <u>\$ 986,424</u> | <u>100.0 %</u> |

| | Year Ended December 31, 2019 | | | |
|--------------------|--|----------------|---------------------|----------------|
| | Sales | Percentage | Long-Lived Assets | Percentage |
| | (Amounts in thousands, except percentages) | | | |
| United States | \$ 1,632,582 | 41.4 % | \$ 481,474 | 48.0 % |
| EMA(1) | 1,397,308 | 35.5 % | 312,668 | 31.2 % |
| Asia(2) | 551,759 | 14.0 % | 143,848 | 14.3 % |
| Other(3) | 358,048 | 9.1 % | 64,846 | 6.5 % |
| Consolidated total | <u>\$ 3,939,697</u> | <u>100.0 %</u> | <u>\$ 1,002,836</u> | <u>100.0 %</u> |

| | Year Ended December 31, 2018 | | | |
|--------------------|--|----------------|-------------------|----------------|
| | Sales | Percentage | Long-Lived Assets | Percentage |
| | (Amounts in thousands, except percentages) | | | |
| United States | \$ 1,528,963 | 39.9 % | \$ 353,767 | 42.6 % |
| EMA(1) | 1,424,498 | 37.1 % | 280,549 | 33.8 % |
| Asia(2) | 539,898 | 14.1 % | 132,667 | 16.0 % |
| Other(3) | 342,340 | 8.9 % | 63,161 | 7.6 % |
| Consolidated total | <u>\$ 3,835,699</u> | <u>100.0 %</u> | <u>\$ 830,144</u> | <u>100.0 %</u> |

- (1) "EMA" includes Europe, the Middle East and Africa. Germany accounted for approximately 7% for 2020, 6% for 2019 and 7% in 2018, of consolidated long-lived assets. No other individual country within this group represents 10% or more of consolidated totals for any period presented.
- (2) "Asia" includes Asia and Australia. No individual country within this group represents 10% or more of consolidated totals for any period presented.
- (3) "Other" includes Canada and Latin America. No individual country within this group represents 10% or more of consolidated totals for any period presented.

Net sales to international customers, including export sales from the U.S., represented approximately 65% of total sales in 2020 and 63% of total sales in both 2019 and 2018.

Major Customer Information — We have a large number of customers across a large number of manufacturing and service facilities and do not have sales to any individual customer that represent 10% or more of consolidated sales for any of the years presented.

21. ACCUMULATED OTHER COMPREHENSIVE LOSS

The following presents the components of accumulated other comprehensive loss (AOCL), net of related tax effects:

| (Amounts in thousands) | 2020 | | | | 2019 | | | |
|--|---------------------------------------|---|----------------------------|---------------------|---------------------------------------|---|----------------------------|---------------------|
| | Foreign currency translation items(1) | Pension and other post-retirement effects | Cash flow hedging activity | Total(1) | Foreign currency translation items(1) | Pension and other post-retirement effects | Cash flow hedging activity | Total(1) |
| Balance - January 1 | \$ (441,364) | \$ (137,161) | \$ (671) | \$ (579,196) | \$ (447,925) | \$ (120,647) | \$ (858) | \$ (569,430) |
| Other comprehensive income (loss) before reclassifications | 388 | (18,979) | 183 | (18,408) | 6,561 | (22,523) | 187 | (15,775) |
| Amounts reclassified from AOCL | — | 9,417 | — | 9,417 | — | 6,009 | — | 6,009 |
| Net current-period other comprehensive income (loss) | 388 | (9,562) | 183 | (8,991) | 6,561 | (16,514) | 187 | (9,766) |
| Balance - December 31 | <u>\$ (440,976)</u> | <u>\$ (146,723)</u> | <u>\$ (488)</u> | <u>\$ (588,187)</u> | <u>\$ (441,364)</u> | <u>\$ (137,161)</u> | <u>\$ (671)</u> | <u>\$ (579,196)</u> |

(1) Includes foreign currency translation adjustments attributable to noncontrolling interests of \$5.9 million, \$5.1 million and \$4.5 million for December 31, 2020, 2019 and 2018, respectively. For the year ended December 31, 2020, foreign currency translation impacts primarily represented the strengthening of the Euro, Chinese yuan, British pound and Canadian dollar exchange rates versus the U.S. dollar for the period. For the year ended December 31, 2019, foreign currency translation impacts primarily represented the weakening of the Euro, British pound, Chinese yuan and Indian rupee exchange rates versus the U.S. dollar for the period. Includes net investment hedge cumulative losses of \$48.8 million and \$12.1 million, net of deferred taxes, at December 31, 2020 and 2019, respectively. Amounts in parentheses indicate debits.

The following table presents the reclassifications out of AOCL:

| (Amounts in thousands) | Affected line item in the statement of income | 2020(1) | 2019(1) |
|--|---|-------------------|-------------------|
| Pension and other postretirement effects | | | |
| Amortization of actuarial losses(2) | Other income (expense), net | \$ (11,161) | \$ (6,608) |
| Prior service costs(2) | Other income (expense), net | (568) | (429) |
| Settlements and other(2) | Other income (expense), net | (836) | (859) |
| | Tax benefit | 3,148 | 1,887 |
| | Net of tax | <u>\$ (9,417)</u> | <u>\$ (6,009)</u> |

(1) Amounts in parentheses indicate decreases to income. None of the reclassification amounts have a noncontrolling interest component.

(2) These accumulated other comprehensive loss components are included in the computation of net periodic pension cost. See Note 14 for additional details.

22. REALIGNMENT AND TRANSFORMATION PROGRAMS

In the second quarter of 2020, we identified and initiated certain realignment activities resulting from our Flowserve 2.0 Transformation Program (defined below) to right-size our organizational operations based on the current business environment, with the overall objective to reduce our workforce costs, including manufacturing optimization through the consolidation of certain facilities ("2020 Realignment Program"). The realignment activities consist of restructuring and non-restructuring charges. Restructuring charges represent costs associated with the relocation of certain business activities and facility closures and include related severance costs. Non-restructuring charges are primarily employee severance associated with the workforce reductions. Expenses are primarily reported in cost of sales ("COS") or selling, general and administrative ("SG&A"), as applicable, in our consolidated statements of income. We anticipate a total investment in these initiated realignment activities of approximately \$80 million and that the majority of the charges were incurred in 2020 with the remainder to be incurred in early 2021. There are certain other realignment activities that are currently being evaluated, but have not yet been finalized. The realignment programs initiated in 2015 ("2015 Realignment Programs"), which consisted of both restructuring and non-restructuring charges, were substantially complete as of March 31, 2020, resulting in \$362.4 million of total charges incurred through the completion of the programs.

In the second quarter of 2018, we launched and committed resources to our Flowserve 2.0 Transformation ("Flowserve 2.0 Transformation"), a program designed to transform our business model to drive operational excellence, reduce complexity, accelerate growth, improve organizational health and better leverage our existing global platform. The Flowserve 2.0 Transformation expenses incurred primarily consist of professional services, project management and related travel costs recorded in SG&A.

Generally, the aforementioned charges will be paid in cash, except for asset write-downs, which are non-cash charges. The following is a summary of total charges, net of adjustments, related to our realignment activities and Flowserve 2.0 Transformation charges. Realignment charges incurred in 2020 related to our 2020 Realignment Program and realignment charges incurred in 2019 related to our 2015 Realignment Programs:

| (Amounts in thousands) | December 31, 2020 | | | | |
|---|-------------------|------------------|-------------------------------------|------------------|--------------------|
| | FPD | FCD | Subtotal– Reportable Segments | All Other | Consolidated Total |
| Restructuring Charges | | | | | |
| COS | \$ 19,510 | \$ 1,122 | \$ 20,632 | \$ — | \$ 20,632 |
| SG&A(1) | 156 | 335 | 491 | (16) | 475 |
| | <u>\$ 19,666</u> | <u>\$ 1,457</u> | <u>\$ 21,123</u> | <u>\$ (16)</u> | <u>\$ 21,107</u> |
| Non-Restructuring Charges | | | | | |
| COS | \$ 19,328 | \$ 7,285 | \$ 26,613 | \$ 52 | \$ 26,665 |
| SG&A | 11,166 | 4,605 | 15,771 | 18,527 | 34,298 |
| | <u>\$ 30,494</u> | <u>\$ 11,890</u> | <u>\$ 42,384</u> | <u>\$ 18,579</u> | <u>\$ 60,963</u> |
| Transformation Charges | | | | | |
| SG&A | \$ — | \$ — | \$ — | \$ 22,719 | \$ 22,719 |
| | <u>\$ —</u> | <u>\$ —</u> | <u>\$ —</u> | <u>\$ 22,719</u> | <u>\$ 22,719</u> |
| Total Realignment and Transformation Charges | | | | | |
| COS | \$ 38,838 | \$ 8,407 | \$ 47,245 | \$ 52 | \$ 47,297 |
| SG&A | 11,322 | 4,940 | 16,262 | 41,230 | 57,492 |
| Total | <u>\$ 50,160</u> | <u>\$ 13,347</u> | <u>\$ 63,507</u> | <u>\$ 41,282</u> | <u>\$ 104,789</u> |

| December 31, 2019 | | | | | |
|---|--------------------|-----------------|-------------------------------------|------------------|--------------------|
| (Amounts in thousands) | FPD | FCD | Subtotal– Reportable Segments | All Other | Consolidated Total |
| Restructuring Charges | | | | | |
| COS | \$ 1,149 | \$ 2,653 | \$ 3,802 | \$ — | \$ 3,802 |
| SG&A(1) | (16,610) | 556 | (16,054) | — | (16,054) |
| Income tax expense(2) | (4,000) | — | (4,000) | — | (4,000) |
| | <u>\$ (19,461)</u> | <u>\$ 3,209</u> | <u>\$ (16,252)</u> | <u>\$ —</u> | <u>\$ (16,252)</u> |
| Non-Restructuring Charges | | | | | |
| COS | 11,438 | \$ 1,742 | \$ 13,180 | \$ 255 | \$ 13,435 |
| SG&A | 2,104 | 218 | 2,322 | 4,428 | 6,750 |
| | <u>\$ 13,542</u> | <u>\$ 1,960</u> | <u>\$ 15,502</u> | <u>\$ 4,683</u> | <u>\$ 20,185</u> |
| Transformation Charges | | | | | |
| SG&A | \$ — | \$ — | \$ — | 28,039 | \$ 28,039 |
| | <u>\$ —</u> | <u>\$ —</u> | <u>\$ —</u> | <u>\$ 28,039</u> | <u>\$ 28,039</u> |
| Total Realignment and Transformation Charges | | | | | |
| COS | \$ 12,587 | \$ 4,395 | \$ 16,982 | \$ 255 | \$ 17,237 |
| SG&A | (14,506) | 774 | (13,732) | 32,467 | 18,735 |
| Income tax expense(2) | (4,000) | — | (4,000) | — | (4,000) |
| Total | <u>\$ (5,919)</u> | <u>\$ 5,169</u> | <u>\$ (750)</u> | <u>\$ 32,722</u> | <u>\$ 31,972</u> |

(1) Includes gains from the sales of non-strategic manufacturing facilities that are included in our Realignment Programs.

(2) Income tax expense (benefit) includes exit taxes.

The following is a summary of total inception to date charges, net of adjustments, related to the 2020 Realignment Program initiated in 2020:

| 2020 Realignment Program Inception to Date | | | | | |
|--|------------------|-----------------|-------------------------------------|------------------|--------------------|
| (Amounts in thousands) | FPD | FCD | Subtotal– Reportable Segments | All Other | Consolidated Total |
| Restructuring Charges | | | | | |
| COS | \$ 17,829 | \$ 1,227 | \$ 19,056 | \$ — | \$ 19,056 |
| SG&A | 51 | 325 | 376 | — | 376 |
| | <u>\$ 17,880</u> | <u>\$ 1,552</u> | <u>\$ 19,432</u> | <u>\$ —</u> | <u>\$ 19,432</u> |
| Non-Restructuring Charges | | | | | |
| COS | \$ 19,203 | \$ (473) | \$ 18,730 | \$ 52 | \$ 18,782 |
| SG&A | 10,681 | 4,554 | 15,235 | 17,882 | 33,117 |
| | <u>\$ 29,884</u> | <u>\$ 4,081</u> | <u>\$ 33,965</u> | <u>\$ 17,934</u> | <u>\$ 51,899</u> |
| Total Realignment Charges | | | | | |
| COS | \$ 37,032 | \$ 754 | \$ 37,786 | \$ 52 | \$ 37,838 |
| SG&A | 10,732 | 4,879 | 15,611 | 17,882 | 33,493 |
| Total | <u>\$ 47,764</u> | <u>\$ 5,633</u> | <u>\$ 53,397</u> | <u>\$ 17,934</u> | <u>\$ 71,331</u> |

Restructuring charges represent costs associated with the relocation or reorganization of certain business activities and facility closures and include costs related to employee severance at closed facilities, contract termination costs, asset write-downs and other costs. Severance costs primarily include costs associated with involuntary termination benefits. Contract termination costs include costs related to the termination of operating leases or other contract termination costs. Asset write-downs include accelerated depreciation of fixed assets, accelerated amortization of intangible assets, divestiture of certain non-strategic assets and inventory write-downs. Other costs generally include costs related to employee relocation, asset relocation, vacant facility costs (i.e., taxes and insurance) and other charges.

The following is a summary of restructuring charges, net of adjustments, for our restructuring activities. Restructuring charges incurred in 2020 related to our 2020 Realignment Program and restructuring charges incurred in 2019 related to our 2015 Realignment Programs:

| December 31, 2020 | | | | | |
|------------------------|------------------|-------------------------|-----------------------|-----------------|------------------|
| (Amounts in thousands) | Severance | Contract Termination | Asset Write- Downs | Other | Total |
| COS | \$ 16,927 | \$ 52 | \$ 1,409 | \$ 2,244 | \$ 20,632 |
| SG&A | 223 | — | 11 | 241 | 475 |
| Total | <u>\$ 17,150</u> | <u>\$ 52</u> | <u>\$ 1,420</u> | <u>\$ 2,485</u> | <u>\$ 21,107</u> |

| (Amounts in thousands) | December 31, 2019 | | | | |
|------------------------|-------------------|----------------------|---------------------------|-----------------|--------------------|
| | Severance | Contract Termination | Asset Write-Downs/(Gains) | Other | Total |
| COS | \$ 2,183 | \$ 58 | \$ (1,782) | \$ 3,343 | \$ 3,802 |
| SG&A(1) | 2,211 | — | (18,429) | 164 | (16,054) |
| Income tax expense(2) | — | — | — | (4,000) | (4,000) |
| Total | <u>\$ 4,394</u> | <u>\$ 58</u> | <u>\$ (20,211)</u> | <u>\$ (493)</u> | <u>\$ (16,252)</u> |

(1) Primarily consists of gains from the sales of non-strategic manufacturing facilities that are included in our Realignment Programs.

(2) Income tax expense (benefit) includes exit taxes as well as non-deductible costs.

The following is a summary of total inception to date charges, net of adjustments, related to the 2020 Realignment Program initiated in 2020:

| (Amounts in thousands) | 2020 Realignment Program Inception to Date | | | | |
|------------------------|--|----------------------|-------------------|-----------------|------------------|
| | Severance | Contract Termination | Asset Write-Downs | Other | Total |
| COS | \$ 15,244 | \$ 52 | \$ 1,412 | \$ 2,348 | \$ 19,056 |
| SG&A | 84 | — | 14 | 278 | 376 |
| Total | <u>\$ 15,328</u> | <u>\$ 52</u> | <u>\$ 1,426</u> | <u>\$ 2,626</u> | <u>\$ 19,432</u> |

The following represents the activity, primarily severance, related to the restructuring reserve for the Realignment Programs for the years ended December 31, 2020 and 2019:

| (Amounts in thousands) | 2020 | 2019 |
|--|------------------|-----------------|
| Balance at January 1, | \$ 6,703 | \$ 11,927 |
| Charges | 19,686 | 7,958 |
| Cash expenditures | (9,146) | (12,865) |
| Other non-cash adjustments, including currency | 1,012 | (317) |
| Balance at December 31, | <u>\$ 18,255</u> | <u>\$ 6,703</u> |

23. QUARTERLY FINANCIAL DATA (UNAUDITED)

The following presents a summary of the unaudited quarterly data for 2020 and 2019 (amounts in millions, except per share data):

| Quarter | 2020 | | | |
|---|----------|----------|----------|-----------|
| | 4th | 3rd | 2nd | 1st |
| Sales | \$ 985.3 | \$ 924.3 | \$ 925.0 | \$ 893.5 |
| Gross profit | 295.4 | 285.2 | 269.7 | 266.5 |
| Earnings before income taxes | 61.3 | 72.3 | 16.7 | 36.5 |
| Net earnings (loss) attributable to Flowserve Corporation | 56.9 | 51.0 | 9.7 | (1.3) |
| Earnings (loss) per share(1): | | | | |
| Basic | \$ 0.44 | \$ 0.39 | \$ 0.07 | \$ (0.01) |
| Diluted | 0.43 | 0.39 | 0.07 | (0.01) |

| Quarter | 2019 | | | |
|--|------------|----------|----------|----------|
| | 4th | 3rd | 2nd | 1st |
| Sales | \$ 1,068.2 | \$ 995.7 | \$ 990.0 | \$ 885.8 |
| Gross profit | 349.5 | 332.9 | 317.9 | 289.0 |
| Earnings before income taxes | 90.9 | 84.4 | 77.4 | 69.7 |
| Net earnings attributable to Flowserve Corporation | 72.6 | 59.8 | 54.0 | 52.4 |
| Earnings per share(1): | | | | |
| Basic | \$ 0.55 | \$ 0.46 | \$ 0.41 | \$ 0.40 |
| Diluted | 0.55 | 0.45 | 0.41 | 0.40 |

(1) Earnings per share is computed independently for each of the quarters presented. The sum of the quarters may not equal the total year amount due to the impact of changes in weighted average quarterly shares outstanding.

We have revised our consolidated financial statements for the annual periods 2019 and 2018, herein to correct errors, as further discussed in Note 2 to the consolidated financial statements. We previously revised our consolidated financial statements as of and for the quarterly period ended September 30, 2019 in connection with filing of the Form 10-Q for the period ended September 30, 2020 as filed on November 9, 2020. Other periods above have been derived from our Quarterly Reports on Form 10-Q filed for the respective period, in each case adjusted to reflect the impact of the revisions as described in Note 2 of this Annual Report. The consolidated financial statements for the quarterly periods ended March 31, 2020 and June 30, 2020 will be revised in connection with the filing of each respective period in 2021.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) are designed to provide reasonable assurance that the information, which we are required to disclose in the reports that we file or submit under the Exchange Act, is recorded, processed, summarized and reported within the time periods specified in the U.S. SEC rules and forms, and that such information is accumulated and communicated to our management, including our Principal Executive Officer and Principal Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

In connection with the preparation of this Annual Report on Form 10-K for the year ended December 31, 2020, our management, under the supervision and with the participation of our Principal Executive Officer and our Principal Financial Officer, carried out an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2020. Based on this evaluation, our Principal Executive Officer and Principal Financial Officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of December 31, 2020.

Management's Report on Internal Control Over Financial Reporting

Our management, under the supervision and with the participation of our Principal Executive Officer and Principal Financial Officer, is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States ("U.S. GAAP"). Internal control over financial reporting includes policies and procedures that: (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. GAAP, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Under the supervision and with the participation of our Principal Executive Officer and Principal Financial Officer, our management conducted an assessment of our internal control over financial reporting as of December 31, 2020, based on the criteria established in Internal Control - Integrated Framework (2013), issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this evaluation, our management concluded our internal control over financial reporting was effective as of December 31, 2020, based on criteria in *Internal Control - Integrated Framework* (2013) issued by the COSO.

The effectiveness of our internal control over financial reporting as of December 31, 2020, has been audited by PricewaterhouseCoopers LLP, our independent registered public accounting firm, as stated in their report, which is included herein.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act) during the quarter ended December 31, 2020 that have materially affected, or are reasonably likely to materially affect our internal control over financial reporting.

Other

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

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required in this Item 10 is incorporated by reference to all information under the captions “Security Ownership of Directors and Certain Executive Officers,” “Security Ownership of Certain Beneficial Owners,” “Proposal One: Election of Directors,” “Executive Officers,” “Shareholder Proposals and Nominations,” “Delinquent Section 16(a) Reports,” to the extent applicable, and “Certain Relationships and Related Transactions” in our definitive Proxy Statement relating to our 2021 annual meeting of shareholders.

We have adopted a Code of Conduct that applies to all of our directors, officers and employees, including our Principal Executive, Principal Financial and Principal Accounting Officers, or persons performing similar functions. Our Code of Conduct is available on the Company’s website at www.flowserve.com under the “Investors - Corporate Governance” caption. We intend to disclose future amendments to certain provisions of the Code of Conduct, and waivers of the Code of Conduct granted to executive officers and directors, on the website within four business days following the date of the amendment or waiver.

ITEM 11. EXECUTIVE COMPENSATION

The information required in this Item 11 is incorporated by reference to all information under the captions “Executive Compensation,” “Proposal Two: Advisory Vote to Approve Executive Compensation,” “Delinquent Section 16(a) Reports,” to the extent applicable, “Security Ownership of Directors and Certain Executive Officers,” “Compensation Committee Interlocks and Insider Participation” and “Certain Relationships and Related Transactions” in our definitive Proxy Statement relating to our 2021 annual meeting of shareholders.

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

The information required in this Item 12 is incorporated by reference to all information under the captions “Security Ownership of Directors and Certain Executive Officers,” “Security Ownership of Certain Beneficial Owners,” “Equity Compensation Plan Information” and “Executive Compensation” in our definitive Proxy Statement relating to our 2021 annual meeting of shareholders.

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

The information required in this Item 13 is incorporated by reference to all information under the captions “Role of the Board; Corporate Governance Matters,” “Board Committees” and “Certain Relationships and Related Transactions” in our definitive Proxy Statement relating to our 2021 annual meeting of shareholders.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required in this Item 14 is incorporated by reference to all information under the caption “Other Audit Information” in our definitive Proxy Statement relating to our 2021 annual meeting of shareholders.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) Documents filed as a part of this Annual Report:

1. Consolidated Financial Statements

The following consolidated financial statements and notes thereto are filed as part of this Annual Report:

Report of Independent Registered Public Accounting Firm

Flowserve Corporation Consolidated Financial Statements:

Consolidated Balance Sheets at December 31, 2020 and 2019:

For each of the three years in the period ended December 31, 2020:

Consolidated Statements of Income

Consolidated Statements of Comprehensive Income

Consolidated Statements of Shareholders' Equity

Consolidated Statements of Cash Flows

Notes to Consolidated Financial Statements

2. Consolidated Financial Statement Schedules

The following consolidated financial statement schedule is filed as part of this Annual Report:

Schedule II — Valuation and Qualifying Accounts For each of the three years in the period ended December 31, 2020:.....

[124](#)

Financial statement schedules not included in this Annual Report have been omitted because they are not applicable or the required information is shown in the consolidated financial statements or notes thereto.

3. Exhibits

| Exhibit No. | Description |
|----------------------|---|
| 3.1 | Restated Certificate of Incorporation of Flowserve Corporation, as amended and restated effective May 26, 2020 (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-13179) dated May 26, 2020). |
| 3.2 | Flowserve Corporation By-Laws, as amended and restated effective August 12, 2020 (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-13179) dated August 12, 2020). |
| 4.1 | Senior Indenture, dated September 11, 2012, by and between Flowserve Corporation and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K (File No. 001-13179) dated September 11, 2012). |
| 4.2 | First Supplemental Indenture, dated September 11, 2012, by and among Flowserve Corporation, certain of its subsidiaries and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K (File No. 001-13179) dated September 11, 2012). |
| 4.3 | Second Supplemental Indenture, dated November 1, 2013, by and among Flowserve Corporation, certain of its subsidiaries and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K (File No. 001-13179) dated November 1, 2013). |
| 4.4 | Third Supplemental Indenture, dated March 17, 2015, by and among Flowserve Corporation, certain of its subsidiaries and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K (File No. 001-13179) dated March 17, 2015). |
| 4.5 | Fourth Supplemental Indenture, dated September 21, 2020, between Flowserve Corporation and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K dated September 22, 2020). |
| 4.6 | Description of Registrant's Securities (incorporated by reference to Exhibit 4.5 to the Registrant's Annual Report on Form 10-K (File No. 001-13179) dated February 18 2020). |
| 10.1 | Credit Agreement, dated July 16, 2019, among Flowserve Corporation, Bank of America, N.A., as swingline lender, letter of credit issuer and administrative agent and the other lenders referred to therein (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K (File No. 001-13179) dated July 16, 2019). |
| 10.2 | First Amendment to Credit Agreement, dated September 4, 2020, among Flowserve Corporation, Bank of America, N.A., as administrative agent, and the other lenders referred to therein (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K dated September 8, 2020). |

| Exhibit No. | Description |
|------------------------------|--|
| <u>10.3</u> | Amended and Restated Flowserve Corporation Director Cash Deferral Plan, effective January 1, 2009 (incorporated by reference to Exhibit 10.7 to the Registrant's Annual Report on Form 10-K (File No. 001-13179) for the year ended December 31, 2008).* |
| <u>10.4</u> | Amended and Restated Flowserve Corporation Director Stock Deferral Plan, dated effective January 1, 2009 (incorporated by reference to Exhibit 10.8 to the Registrant's Annual Report on Form 10-K (File No. 001-13179) for the year ended December 31, 2008).* |
| <u>10.5</u> | Trust for Non-Qualified Deferred Compensation Benefit Plans, dated February 11, 2011 (incorporated by reference to Exhibit 10.8 to the Registrant's Annual Report on Form 10-K (File No. 001-13179) for the year ended December 31, 2010).* |
| <u>10.6</u> | Flowserve Corporation Deferred Compensation Plan (incorporated by reference to Exhibit 10.23 to the Registrant's Annual Report on Form 10-K (File No. 001-13179) for the year ended December 31, 2000).* |
| <u>10.7</u> | Amendment No. 1 to the Flowserve Corporation Deferred Compensation Plan, as amended and restated, effective June 1, 2000 (incorporated by reference to Exhibit 10.50 to the Registrant's Annual Report on Form 10-K (File No. 001-13179) for the year ended December 31, 2002).* |
| <u>10.8</u> | Amendment to the Flowserve Corporation Deferred Compensation Plan, dated December 14, 2005 (incorporated by reference to Exhibit 10.70 to the Registrant's Annual Report on Form 10-K (File No. 001-13179) for the year ended December 31, 2004).* |
| <u>10.9</u> | Amendment No. 3 to the Flowserve Corporation Deferred Compensation Plan, as amended and restated effective June 1, 2000 (incorporated by reference to Exhibit 10.22 to the Registrant's Annual Report on Form 10-K (File No. 001-13179) for the year ended December 31, 2007).* |
| <u>10.10</u> | Flowserve Corporation Senior Management Retirement Plan, amended and restated effective November 2, 2018 (incorporated by reference to Exhibit 10.13 to the Registrant's Annual Report on Form 10-K (File No. 001-13179) for the year ended December 31, 2018).* |
| <u>10.11</u> | Flowserve Corporation Supplemental Executive Retirement Plan, amended and restated effective November 2, 2018 (incorporated by reference to Exhibit 10.14 to the Registrant's Annual Report on Form 10-K (File No. 001-13179) for the year ended December 31, 2018).* |
| <u>10.12</u> | Flowserve Corporation Equity and Incentive Compensation Plan (incorporated by reference to Appendix A to the Registrant's Proxy Statement on Schedule 14A (File No. 001-13179) dated April 3, 2009).* |
| <u>10.13</u> | Flowserve Corporation 2020 Long-Term Incentive Plan (incorporated by reference to Appendix A to the Registrant's Proxy Statement on Schedule 14A (File No. 001-13179) dated April 11, 2019).* |
| <u>10.14</u> | Form of Restrictive Covenants Agreement for Officers (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K (File No. 001-13179) dated as of March 9, 2006).* |
| <u>10.15</u> | Form of Indemnification Agreement for all Directors and Officers (incorporated by reference to Exhibit 10.47 to the Registrant's Annual Report on Form 10-K (File No. 001-13179) for the year ended December 31, 2015). |
| <u>10.16</u> | Offer Letter, dated as of February 6, 2017, by and between Flowserve Corporation and R. Scott Rowe (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K (File No. 001-13179) dated as of February 8, 2017).* |
| <u>10.17</u> | Flowserve Corporation Change In Control Severance Plan, amended and restated effective November 2, 2018 (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-13179) for the quarter ended September 30, 2018).* |
| <u>10.18</u> | Flowserve Corporation Executive Officer Severance Plan, as amended and restated effective November 2, 2018 (incorporated by reference to Exhibit 10.20 to the Registrant's Annual Report on Form 10-K (File No. 001-13179) for the year ended December 31, 2018).* |
| <u>10.19</u> | Flowserve Corporation Annual Incentive Plan, as amended and restated effective February 14, 2017 (incorporated by reference to Exhibit 10.44 to the Registrant's Annual Report on Form 10-K (File No. 001-13179) for the year ended December 31, 2016).* |
| <u>10.20</u> | Amendment to Flowserve Corporation Annual Incentive Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-13179) for the quarter ended March 31, 2020).* |
| <u>10.21</u> | Form of Restrictive Covenants Agreement for Officer (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-13179) for the quarter ended June 30, 2020).* |

| Exhibit No. | Description |
|--------------------------------|--|
| <u>10.22</u> | Form of Restricted Stock Unit Agreement for certain officers pursuant to the Flowserve Corporation 2020 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-13179) for the quarter ended June 30, 2020).* |
| <u>10.23</u> | Form of Performance Restricted Stock Unit Agreement for certain officers pursuant to the Flowserve Corporation 2020 Long-Term Incentive Plan (TSR) (incorporated by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-13179) for the quarter ended June 30, 2020).* |
| <u>10.24</u> | Form of Performance Restricted Stock Unit Agreement for certain officers pursuant to the Flowserve Corporation 2020 Long-Term Incentive Plan (ROIC) (incorporated by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-13179) for the quarter ended June 30, 2020).* |
| <u>14.1</u> | Flowserve Corporation Employee Code of Conduct (incorporated by reference to Exhibit 14.1 to the Registrant's Current Report on Form 8-K (File No. 001-13179) dated as of August 15, 2019). |
| <u>21.1</u> + | Subsidiaries of the Registrant. |
| <u>23.1</u> + | Consent of PricewaterhouseCoopers LLP. |
| <u>31.1</u> + | Certification of Principal Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. |
| <u>31.2</u> + | Certification of Principal Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. |
| <u>32.1</u> ++ | Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. |
| <u>32.2</u> ++ | Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. |
| 101.INS | Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document. |
| 101.SCH | Inline XBRL Taxonomy Extension Schema Document |
| 101.CAL | Inline XBRL Taxonomy Extension Calculation Linkbase Document |
| 101.DEF | Inline XBRL Taxonomy Extension Definition Linkbase Document |
| 101.LAB | Inline XBRL Taxonomy Extension Label Linkbase Document |
| 101.PRE | Inline XBRL Taxonomy Extension Presentation Linkbase Document |
| 104 | The cover page from the Company's Annual Report on Form 10-K for the year ended December 31, 2020, formatted in Inline XBRL (included as Exhibit 101). |

* Management contracts and compensatory plans and arrangements required to be filed as exhibits to this Annual Report on Form 10-K.
+ Filed herewith.
++ Furnished herewith.

ITEM 16. FORM 10-K SUMMARY

None

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

FLOWSERVE CORPORATION

By: /s/ R. Scott Rowe

R. Scott Rowe
President and Chief Executive Officer

Date: February 23, 2021

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

| Signature | Title | Date |
|---|---|-------------------|
| <u>/s/ Roger L. Fix</u> Roger L. Fix | Non-Executive Chairman of the Board | February 23, 2021 |
| <u>/s/ R. Scott Rowe</u> R. Scott Rowe | President, Chief Executive Officer and Director (Principal Executive Officer) | February 23, 2021 |
| <u>/s/ Amy B. Schwetz</u> Amy B. Schwetz | Senior Vice President and Chief Financial Officer (Principal Financial Officer) | February 23, 2021 |
| <u>/s/ Scott K. Vopni</u> Scott K. Vopni | Vice President and Chief Accounting Officer (Principal Accounting Officer) | February 23, 2021 |
| <u>/s/ Sujeet Chand</u> Sujeet Chand | Director | February 23, 2021 |
| <u>/s/ Ruby R. Chandy</u> Ruby R. Chandy | Director | February 23, 2021 |
| <u>/s/ Gayla J. Delly</u> Gayla J. Delly | Director | February 23, 2021 |
| <u>/s/ John R. Friedery</u> John R. Friedery | Director | February 23, 2021 |
| <u>/s/ John L. Garrison</u> John L. Garrison | Director | February 23, 2021 |
| <u>/s/ Michael C. McMurray</u> Michael C. McMurray | Director | February 23, 2021 |
| <u>/s/ David E. Roberts</u> David E. Roberts | Director | February 23, 2021 |
| <u>/s/ Carlyn R. Taylor</u> Carlyn R. Taylor | Director | February 23, 2021 |

FLOWSERVE CORPORATION
Schedule II — Valuation and Qualifying Accounts
For the Years Ended December 31, 2020, 2019 and 2018

| Description | Balance at Beginning of Year | Additions Charged to Cost and Expenses | Additions Charged to Other Accounts— Acquisitions and Related Adjustments | Deductions From Reserve | Balance at End of Year |
|--|---------------------------------|---|---|----------------------------|---------------------------|
| (Amounts in thousands) | | | | | |
| Year Ended December 31, 2020 | | | | | |
| Allowance for doubtful accounts(a): | \$ 47,269 | 18,929 | — | (6,918) | \$ 59,280 |
| Allowance for other short-term receivables | 6,144 | 9,753 | — | — | 15,897 |
| Allowance for long-term receivables | 198,957 | 3,557 | — | (15) | 202,499 |
| Deferred tax asset valuation allowance(b): | 266,414 | 50,327 | (529) | (28,425) | 287,787 |
| Year Ended December 31, 2019 | | | | | |
| Allowance for doubtful accounts(a): | 51,501 | 3,762 | — | (7,994) | 47,269 |
| Allowance for other short-term receivables | — | 6,144 | — | — | 6,144 |
| Allowance for long-term receivables | 182,872 | 16,161 | — | (76) | 198,957 |
| Deferred tax asset valuation allowance(b): | 133,929 | 145,010 | 1,832 | (14,357) | 266,414 |
| Year Ended December 31, 2018 | | | | | |
| Allowance for doubtful accounts(a): | 59,113 | 8,050 | — | (15,662) | 51,501 |
| Allowance for long-term receivables | 171,340 | 13,099 | — | (1,567) | 182,872 |
| Deferred tax asset valuation allowance(b): | 119,309 | 32,157 | (7,551) | (9,986) | 133,929 |

(a) Deductions from reserve represent accounts written off and recoveries related to trade accounts receivables.

(b) Deductions from reserve result from the expiration or utilization of net operating losses and foreign tax credits previously reserved. Additions in 2020 includes capital loss carryforward. Refer to Note 19 to our consolidated financial statements included in Item 8 of this Annual Report.

SUBSIDIARIES
FLOWSERVE CORPORATION

| NAME OF SUBSIDIARY | JURISDICTION OF INCORPORATION | PERCENTAGE OWNERSHIP |
|---|--------------------------------------|-----------------------------|
| ARABIAN SEALS COMPANY, LTD. | Saudi Arabia | 40% |
| AUDCO ITALIANA S.R.L. | Italy | 13% |
| AUDCO LIMITED | United Kingdom | 100% |
| BW/IP NEW MEXICO, INC. | United States | 100% |
| CALDER GMBH | Switzerland | 100% |
| COOPERATIE FLOWSERVE W.A. | Netherlands | 100% |
| FLOWCOM INSURANCE COMPANY, INC. | United States | 100% |
| FLOWSERVE - AL MANSOORI SERVICES COMPANY LTD. | United Arab Emirates | 49% |
| FLOWSERVE - AL RUSHAID COMPANY LTD | Saudi Arabia | 51% |
| FLOWSERVE (AUSTRIA) GMBH | Austria | 100% |
| FLOWSERVE (B) SDN. BND. | Brunei | 100% |
| FLOWSERVE (MAURITIUS) CORPORATION | Mauritius | 100% |
| FLOWSERVE (PHILIPPINES), INC. | Philippines | 100% |
| FLOWSERVE (SHANGHAI) LIMITED | China | 100% |
| FLOWSERVE (THAILAND) LIMITED | Thailand | 100% |
| FLOWSERVE / ABAHSAIN FLOW CONTROL CO. LTD. | Saudi Arabia | 60% |
| FLOWSERVE / ABAHSAIN SEAL COMPANY LIMITED | Saudi Arabia | 60% |
| FLOWSERVE AHAUS GMBH | Germany | 100% |
| FLOWSERVE AUSTRALIA PTY. LTD. | Australia | 100% |
| FLOWSERVE B.V. | Netherlands | 100% |
| FLOWSERVE BELGIUM N.V. | Belgium | 100% |
| FLOWSERVE BOLIVIA S.R.L. | Bolivia | 100% |
| FLOWSERVE CA ULC | | |
| FLOWSERVE CANADA CORP. | Canada | 100% |
| FLOWSERVE CANADA HOLDCO ULC | Canada | 100% |
| FLOWSERVE CHILE S.P.A. | Chile | 100% |
| FLOWSERVE COLOMBIA S.A.S. | Colombia | 100% |
| FLOWSERVE CONTROL VALVES GMBH | Austria | 100% |
| FLOWSERVE CORPORATION | United States | 100% |
| FLOWSERVE CV HOLDINGS LLC | United States | 100% |
| FLOWSERVE CZECH REPUBLIC, S.R.O. | Czech Republic | 100% |
| FLOWSERVE DE VENEZUELA C.C.A. | Venezuela | 100% |
| FLOWSERVE DE VENEZUELA LLC | United States | 100% |
| FLOWSERVE DO BRASIL LTDA. | Brazil | 100% |
| FLOWSERVE DORTMUND GMBH & CO. KG | Germany | 100% |
| FLOWSERVE DORTMUND VERWALTUNGS GMBH | Germany | 100% |
| FLOWSERVE ECUADOR CIA. LTDA. | Ecuador | 100% |
| FLOWSERVE EMA HOLDINGS B.V. | Netherlands | 100% |
| FLOWSERVE ESSEN GMBH | Germany | 100% |
| FLOWSERVE FINLAND OY | Finland | 100% |
| FLOWSERVE FLOW CONTROL GMBH | Germany | 100% |
| FLOWSERVE FLUID MOTION AND CONTROL (SUZHOU) CO., LTD. | China | 100% |
| FLOWSERVE FRANCE HOLDING S.A.S. | France | 100% |

| | | |
|---|----------------------|------|
| FLOWERVE FRANCE S.A.S. | France | 100% |
| FLOWERVE FSD S.A.S. | France | 100% |
| FLOWERVE GB LIMITED | United Kingdom | 100% |
| FLOWERVE GERMANY HOLDINGS BV | Netherlands | 100% |
| FLOWERVE GLOBAL HOLDINGS HUNGARY KFT | Hungary | 100% |
| FLOWERVE GULF FZE | United Arab Emirates | 100% |
| FLOWERVE HOLDINGS COOPERATIEF W.A. | Netherlands | 100% |
| FLOWERVE HOLDINGS, INC. | United States | 100% |
| FLOWERVE HUNGARY CANHOLD KFT | Hungary | 100% |
| FLOWERVE HUNGARY HOLDINGS KFT | Hungary | 100% |
| FLOWERVE HUNGARY SERVICES KFT | Hungary | 100% |
| FLOWERVE INDIA CONTROLS PVT. LTD. | India | 100% |
| FLOWERVE INTERNATIONAL B.V. | Netherlands | 100% |
| FLOWERVE INTERNATIONAL LIMITED | United Kingdom | 100% |
| FLOWERVE INTERNATIONAL MIDDLE EAST VALVES LLC | United States | 100% |
| FLOWERVE INTERNATIONAL, INC. | United States | 100% |
| FLOWERVE JAPAN CO. LTD. | Japan | 100% |
| FLOWERVE KAZAKHSTAN LLP | Kazakhstan | 100% |
| FLOWERVE KOREA LTD. | South Korea | 100% |
| FLOWERVE KSM CO. LTD. | South Korea | 40% |
| FLOWERVE LA HOLDINGS S. DE R.L. DE C.V. | Mexico | 100% |
| FLOWERVE MANAGEMENT COMPANY | United States | 100% |
| FLOWERVE MEXICO HOLDINGS LLC | United States | 100% |
| FLOWERVE MICROFINISH PUMPS PVT. LTD. | India | 76% |
| FLOWERVE MICROFINISH VALVES PVT. LTD. | India | 76% |
| FLOWERVE MOROCCO SARL AU | Morocco | 100% |
| FLOWERVE NETHERLANDS C.V. | Netherlands | 100% |
| FLOWERVE NETHERLANDS VIII C.V. | Netherlands | 100% |
| FLOWERVE NORWAY AS | Norway | 100% |
| FLOWERVE PERU S.A.C. | Peru | 100% |
| FLOWERVE POMPES S.A.S. | France | 100% |
| FLOWERVE PTE. LTD. | Singapore | 100% |
| FLOWERVE S.A. | Spain | 100% |
| FLOWERVE S.A.S. | France | 100% |
| FLOWERVE S.R.L. | Argentina | 100% |
| FLOWERVE S.R.L. | Italy | 100% |
| FLOWERVE SALES INTERNATIONAL, S.A.S. | France | 100% |
| FLOWERVE SANMAR LIMITED | India | 40% |
| FLOWERVE SERVICES & TRADING LLC | Qatar | 49% |
| FLOWERVE SIHI (BELGIUM) BVBA | Belgium | 100% |
| FLOWERVE SIHI (FRANCE) SAS | France | 100% |
| FLOWERVE SIHI (SCHWEIZ) GMBH | Switzerland | 100% |
| FLOWERVE SIHI (SPAIN) S.L. | Spain | 100% |
| FLOWERVE SIHI AUSTRIA GMBH | Austria | 100% |
| FLOWERVE SIHI BULGARIA EOOD | Bulgaria | 100% |
| FLOWERVE SIHI CZ S.R.O. | Czech Republic | 100% |
| FLOWERVE SIHI GERMANY GMBH | Germany | 100% |
| FLOWERVE SIHI HOLDING GmbH | Germany | 100% |
| FLOWERVE SIHI HUNGARY KFT | Hungary | 100% |

| | | |
|--|--------------------|------|
| FLOWSERVE SIHI ROMANIA SRL | Romania | 100% |
| FLOWSERVE SINGAPORE LLC | United States | 100% |
| FLOWSERVE SIZDIRMAZLIK COZUMLERI TICARET LTD. STI. | Turkey | 100% |
| FLOWSERVE SOLUTIONS (CHENGDU) CO. LTD. | China | 100% |
| FLOWSERVE SOLUTIONS (MALAYSIA) SDN. BHD. | Malaysia | 100% |
| FLOWSERVE SOUTH AFRICA (PROPRIETARY) LIMITED | South Africa | 100% |
| FLOWSERVE SPAIN S.L. | Spain | 100% |
| FLOWSERVE TREASURY B.V. | Netherlands | 100% |
| FLOWSERVE US HOLDINGS LLC | United States | 100% |
| FLOWSERVE US INC. | United States | 100% |
| FLOWSERVE VIETNAM CO., LLC | Vietnam | 100% |
| FLOWSERVE XD CHANGSHA PUMP CO., LTD. | China | 50% |
| FLOWSERVE, S. DE R.L. DE C.V. | Mexico | 100% |
| FLS CANADA ULC | Canada | 100% |
| HALBERG MASCHINENBAU GMBH | Germany | 100% |
| HOT TAPPING & PLUGGING C.A. | Venezuela | 100% |
| INDUSTRIAS MEDINA S.A. DE C.V. | Mexico | 37% |
| INGERSOLL-DRESSER PUMPS S.R.L. | Italy | 100% |
| INMOBILIARIA INDUSTRIAL DE LEON S.A. DE C.V. | Mexico | 37% |
| INVENSYS FLOW CONTROL AUSTRALASIA PTY. LTD. | Australia | 100% |
| KSM CO. LTD | Republic of Korea | 40% |
| LIMITORQUE INDIA LIMITED | India | 24% |
| MAQUILADORA INDUSTRIAL DE LEON S.A. DE C.V. | Mexico | 37% |
| NAF AB | Sweden | 100% |
| OOO FLOWSERVE | Russian Federation | 100% |
| PMV AUTOMATION AB | Sweden | 100% |
| PT FLOWSERVE | Indonesia | 100% |
| SIHI CHILE S.A. | Chile | 50% |
| SIHI GROUP B.V. | Netherlands | 100% |
| SIHI PUMPS & SERVICES (THAILAND) LTD. | Thailand | 100% |
| SIHI PUMPS (MALAYSIA) SDN. BHD. | Malaysia | 100% |
| SIHI PUMPS (TAIWAN) CO. LTD. | Taiwan | 100% |
| STERLING FLUID SYSTEMS (POLSKA) SP ZOO | Poland | 100% |
| STERLING INDUSTRY CONSULT GMBH | Germany | 100% |
| THOMPSONS, KELLY & LEWIS PTY. LIMITED | Australia | 100% |
| WORTHINGTON S.R.L. | Italy | 100% |
| YKV CORPORATION | Japan | 15% |

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-230796) and Form S-8 (Nos. 333-234407, 333-163251, and 333-82081) of Flowserve Corporation of our report dated February 23, 2021 relating to the financial statements and financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP
Dallas, Texas
February 23, 2021

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002**

I, R. Scott Rowe, certify that:

1. I have reviewed this Annual Report on Form 10-K for the fiscal year ended December 31, 2020 of Flowserve Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the consolidated financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ R. Scott Rowe

R. Scott Rowe

President and Chief Executive Officer
(Principal Executive Officer)

Date: February 23, 2021

**CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002**

I, Amy B. Schwetz, certify that:

1. I have reviewed this Annual Report on Form 10-K for the fiscal year ended December 31, 2020 of Flowserve Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the consolidated financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Amy B. Schwetz

/s/

B. Schwetz

Amy

Vice President and Chief Financial Officer
(Principal Financial Officer)

Senior

Date: February 23, 2021

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

I, R. Scott Rowe, President and Chief Executive Officer of Flowserve Corporation (the “Company”), certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) the Annual Report on Form 10-K of the Company for the period ended December 31, 2020, as filed with the Securities and Exchange Commission on the date hereof (the “Annual Report”), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

/s/ R. Scott Rowe

R. Scott Rowe

President and Chief Executive Officer
(Principal Executive Officer)

Date: February 23, 2021

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

I, Amy B. Schwetz, Senior Vice President and Chief Financial Officer of Flowserve Corporation (the “Company”), certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) the Annual Report on Form 10-K of the Company for the period ended December 31, 2020, as filed with the Securities and Exchange Commission on the date hereof (the “Annual Report”), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

/s/ Amy B. Schwetz

Amy B. Schwetz

Senior Vice President and Chief Financial Officer
(Principal Financial Officer)

Date: February 23, 2021