PARK OHIO HOLDINGS CORP
Form 10-K
March 05, 2019
Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K
(Mark One)
þ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2018
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: 000-03134
PARK-OHIO HOLDINGS CORP.
(Exact name of registrant as specified in its charter)

Ohio	34-1867219
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
6065 Parkland Boulevard, Cleveland, Ohio	44124
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code (440) 947-2000

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

Title of each class	Name of each exchange on which registered
Common Stock, Par Value $1.00 Per Share	The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act:
None
Park-Ohio Holdings Corp. is a successor issuer to Park-Ohio Industries, Inc.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ¨ No þ
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 þ
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 þ 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 þ No ¨
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ¨

Table of Contents

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or 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	þ
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 accountings standards provided pursuant to Section 13(a) of the Exchange Act. ¨

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

Aggregate market value of the registrant’s Common Stock held by non-affiliates of the registrant: Approximately $328,048,000 based on the closing price of $37.30 per share of the registrant’s Common Stock on June 29, 2018.

Number of shares outstanding of registrant’s Common Stock, par value $1.00 per share, as of February 28, 2019: 12,660,922.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant’s definitive proxy statement for the Annual Meeting of Shareholders to be held on or about May 9, 2019 are incorporated by reference into Part III of this Form 10-K.

Table of Contents

PARK-OHIO HOLDINGS CORP.
FORM 10-K ANNUAL REPORT
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2018
TABLE OF CONTENTS

Table of Contents

Part I

Item 1. Business

Overview

Park-Ohio Holdings Corp. (“Holdings” or “ParkOhio”), incorporated in Ohio since 1998, is a diversified international company providing world-class customers with a supply chain management outsourcing service, capital equipment used on their production lines, and manufactured components used to assemble their products.

References herein to “we” or “the Company” include, where applicable, Holdings and Park-Ohio Industries, Inc. and Holdings’ other direct and indirect subsidiaries.

The Company operates through three reportable segments: Supply Technologies, Assembly Components and Engineered Products. As of December 31, 2018, we employed approximately 7,300 people.

The following table summarizes the key attributes of each of our business segments:

	Supply Technologies	Assembly Components	Engineered Products
NET SALES FOR 2018	$636.8 million	$578.3 million	$443.0 million
SELECTED PRODUCTS	Sourcing, planning and procurement of over 245,000 production components, including: • Fasteners • Pins • Valves • Hoses • Wire harnesses • Clamps and fittings • Rubber and plastic components • Other Class C and MRO products	• Fuel filler assemblies • Gasoline direct injection systems • Extruded and molded rubber and thermoplastic products • Control arms • Knuckles • Engine cradles and brackets • Oil pans	• Induction heating and melting systems • Pipe threading systems • Industrial oven systems • Forging presses • Forged steel and machined products
SELECTED INDUSTRIES SERVED	• Heavy-duty truck • Power sports and recreational equipment • Aerospace and defense • Semiconductor equipment • Electrical distribution and controls • Consumer electronics • Bus and coaches • Automotive • Agricultural and construction equipment • HVAC • Lawn and garden • Plumbing • Medical	• Automotive and light vehicle • Agricultural equipment • Construction equipment • Heavy-duty truck • Marine equipment • Bus	• Ferrous and non-ferrous metals • Coatings • Forging • Foundry • Heavy-duty truck • Construction equipment • Automotive • Oil and gas • Rail • Aerospace and defense • Power generation

Table of Contents

The Company consists of the following segments:

Supply Technologies

Our Supply Technologies business provides our customers with Total Supply Management™, a proactive solutions approach that manages the efficiencies of every aspect of supplying production parts and materials to our customers' manufacturing floor, from strategic planning to program implementation. Total Supply Management™ includes engineering and design support, part usage and cost analysis, supplier selection, quality assurance, bar coding, product packaging and tracking, just-in-time and point-of-use delivery, electronic billing services and ongoing technical support. We operate more than 60 logistics service centers in the United States, Mexico, Canada, Czech Republic, Puerto Rico, Scotland, Hungary, China, Taiwan, Singapore, India, England, France, Spain, Poland, Malaysia, Northern Ireland and Ireland, as well as production sourcing and support centers in the United States and Asia. Through our supply chain management programs, we supply more than 245,000 globally-sourced production components, many of which are specialized and customized to meet individual customers' needs.

Total Supply Management™ provides our customers with an expert partner in strategic planning, global sourcing, technical services, parts and materials, logistics, distribution and inventory management of production components. Some production components are characterized by low per unit supplier prices relative to the indirect costs of supplier management, quality assurance, inventory management and delivery to the production line. In addition, Supply Technologies delivers an increasingly broad range of higher-value production components including valves, fuel hose assemblies, electro-mechanical hardware, labels, fittings, steering components and many others. Applications engineering specialists and the direct sales force work closely with the engineering staff of OEM customers to recommend the appropriate production components for a new product or to suggest alternative components that reduce overall production costs, streamline assembly or enhance the appearance or performance of the end product. Supply Technologies also provides spare parts and aftermarket products to end users of its customers' products.

Total Supply Management™ is typically provided to customers pursuant to sole-source arrangements. We believe our approach distinguishes us from traditional buy/sell distributors, as well as manufacturers who supply products directly to customers, because we provide the supply chain management of our customers' high-volume production components. We administer the processes customized to each customer's needs by replacing numerous current suppliers with a sole-source relationship with Supply Technologies. Our highly-developed, customized information systems provide global transparency and flexibility through the complete supply chain. This enables our customers to: (1) significantly reduce the direct and indirect cost of production component processes by outsourcing internal purchasing, quality assurance and inventory fulfillment responsibilities; (2) reduce the amount of working capital invested in inventory and floor space; (3) reduce component costs through purchasing efficiencies, including bulk buying and supplier consolidation; and (4) receive technical expertise in production component selection, design and engineering. Our sole-source arrangements foster long-term, entrenched supply relationships with our customers and, as a result, the average tenure of service for our top 50 Supply Technologies clients exceeds ten years. Supply Technologies also supplies wholesale industrial products to other manufacturers and distributors pursuant to master or authorized distributor relationships.

The Supply Technologies segment also engineers and manufactures precision cold-formed and cold-extruded fasteners and other products, including locknuts, SPAC® nuts, SPAC® bolts and wheel hardware, which are principally used in applications where controlled tightening is required due to high vibration. Supply Technologies produces both standard items and specialty products to customer specifications, which are used in large volumes by customers in the automotive, heavy-duty truck and rail industries.

In 2018, the Company made two acquisitions in this segment totaling a cash purchase price of $3.5 million. Both acquired companies distribute products into the aerospace and defense end markets.

Markets and Customers. For the year ended December 31, 2018, approximately 66% of Supply Technologies' net sales were to domestic customers. Remaining sales were primarily to manufacturing facilities of large, multinational customers located in Europe, Mexico, Asia and Canada. Total Supply Management™ is used extensively in a variety of industries, and demand is generally related to the state of the economy and to the overall level of manufacturing activity.

Supply Technologies markets and sells its approach to over 8,700 customers domestically and internationally. The five largest customers, to which Supply Technologies sells through sole-source contracts to multiple operating divisions or

Table of Contents

locations, accounted for approximately 30% of the sales of Supply Technologies in 2018 and 2017. The loss of any two or more of its top five customers could have a material adverse effect on the results of operations and financial condition of this segment.

Competition. A limited number of companies compete with Supply Technologies to provide supply management services for production parts and materials. Supply Technologies competes primarily on the basis of its Total Supply Management™ approach, including engineering and design support, part usage and cost analysis, supplier selection, quality assurance, bar coding, product packaging and tracking, just-in-time and point-of-use delivery, electronic billing services and ongoing technical support, and its geographic reach, extensive product selection, price and reputation for high service levels. Numerous U.S. and foreign companies compete with Supply Technologies in manufacturing cold-formed and cold-extruded products.

Assembly Components

Assembly Components manufactures products oriented towards fuel efficiency and reduced emission standards. Assembly Components designs, develops and manufactures: aluminum products; highly efficient, high pressure direct fuel injection fuel rails and pipes; fuel filler pipes that route fuel from the gas cap to the gas tank; and flexible multi-layer plastic and rubber assemblies used to transport fuel from the vehicle's gas tank and then, at extreme high pressure, to the engine's fuel injector nozzles. These advanced products, coupled with Turbo Enabled engines, make up large and growing engine architecture for all worldwide car manufacturers. Assembly Components also designs and manufactures Turbo Charging hoses along with Turbo Coolant hoses that will be required as engines get downsized to 3 or 4 cylinders from 6 or 8 cylinders. This engine downsizing increases efficiency, while dramatically decreasing pollution levels. In addition, our Assembly Components segment operates what we believe is one of the few aluminum component suppliers that have the capability to provide a wide range of high-volume, high-quality products utilizing a broad range of processes including gravity and low pressure permanent mold, die-cast and lost-foam, as well as emerging alternative casting technologies. We also provide machining to our aluminum products customers.

In October 2018, the Company acquired Hydrapower Dynamics Limited (“Hydrapower”) for $7.8 million in cash. Headquartered in Birmingham, England, Hydrapower is a manufacturer of fluid handling systems incorporating hoses, manipulated tubes and fabricated assemblies for the bus and truck, automotive, agricultural and construction end markets. Hydrapower is included in our Assembly Components segment results from the date of acquisition.

Assembly Components operates more than 25 manufacturing facilities and two technical offices in the United States, Mexico, China, England and the Czech Republic. In addition, we also provide value-added services such as design engineering, machining and parts assembly.

Markets and Customers. For the year ended December 31, 2018, approximately 71% of Assembly Components’ net sales were to domestic customers. The five largest customers of Assembly Components accounted for approximately 51% of segment sales for 2018 and 2017. These sales, across multiple operating divisions, are through sole-source contracts. The loss of any one of these customers could have a material adverse effect on the results of operations and financial condition of this segment.

Competition. Assembly Components competes principally on the basis of its ability to: (1) engineer and manufacture high-quality, cost-effective assemblies utilizing multiple technologies in large volumes; (2) provide timely delivery; and (3) retain the manufacturing flexibility necessary to quickly adjust to the needs of its customers. There are few domestic companies with the capabilities to meet customers’ stringent quality and service standards and lean manufacturing techniques. As one of these suppliers, Assembly Components is well-positioned to benefit as customers continue to consolidate their supplier base.

Table of Contents

Engineered Products

Our Engineered Products segment operates a diverse group of niche manufacturing businesses that design and manufacture a broad range of highly-engineered products, including induction heating and melting systems, pipe threading systems and forged and machined products. We manufacture these products in more than 10 domestic facilities throughout the United States and more than 20 international facilities in Canada, Mexico, the United Kingdom, Belgium, Germany, China, Italy, India, Japan, Spain and Brazil.

Our induction heating and melting business utilizes proprietary technology and specializes in the engineering, construction, service and repair of induction heating and melting systems, primarily for the ferrous and non-ferrous metals, silicon, coatings, forging, foundry, automotive and construction equipment industries. Our induction heating and melting systems are engineered and built to customer specifications and are used primarily for melting, heating, and surface hardening of metals and curing of coatings. Approximately 43% of our induction heating and melting systems' revenues are derived from the sale of replacement parts and provision of field service, primarily for the installed base of our own products. Our pipe threading business serves the oil and gas industry. We also engineer and install mechanical forging presses, sell spare parts and provide field service for the large existing base of mechanical forging presses and hammers in North America. We machine, induction harden and surface finish crankshafts and camshafts, used primarily in locomotives. We forge aerospace and defense structural components such as landing gears and struts, as well as rail products such as railcar center plates and draft lugs.

In February 2018, the Company completed the acquisition of Canton Drop Forge, Inc. ("CDF") for $35.6 million in cash. CDF manufactures forgings for high-performance applications in the global aerospace, oil and gas, and other markets. CDF is included in our Engineered Products segment results from the date of acquisition.

Markets and Customers. For the year ended December 31, 2018, approximately 57% of Engineered Products' net sales were to domestic customers. We sell induction heating and other capital equipment to component manufacturers and OEMs in the ferrous and non-ferrous metals, silicon, coatings, forging, foundry, automotive, truck, construction equipment and oil and gas industries. We sell forged and machined products to locomotive manufacturers, machining companies and sub-assemblers who finish aerospace and defense products for OEMs, and railcar builders and maintenance providers.

Competition. We compete with small-to medium-sized domestic and international equipment manufacturers on the basis of service capability, ability to meet customer specifications, delivery performance and engineering expertise. We compete domestically and internationally with small-to medium-sized forging and machining businesses on the basis of product quality and precision.

Sales and Marketing

Supply Technologies markets its products and services in the United States, Mexico, Canada, Europe and Asia primarily through its direct sales force, which is assisted by applications engineers who provide the technical expertise necessary to assist the engineering staff of OEM customers in designing new products and improving existing products. Assembly Components primarily markets and sells its products in North America through internal sales personnel and independent sales representatives. Engineered Products primarily markets and sells its products in North America through both internal sales personnel and independent sales representatives. Induction heating and pipe threading equipment is also marketed and sold in Europe, Asia, Latin America and Africa through both internal sales personnel and independent sales representatives. In some instances, the internal engineering staff assists in the sales and marketing effort through joint design and applications-engineering efforts with major customers.

Raw Materials and Suppliers

Supply Technologies purchases substantially all of its production components from third-party suppliers. Supply Technologies has multiple sources of supply for its components. An increasing portion of Supply Technologies' production components are purchased from suppliers in foreign countries, primarily Canada, Taiwan, China, South Korea, Singapore, India and multiple European countries. Supply Technologies is dependent upon the ability of such suppliers to meet stringent quality and performance standards and to conform to delivery schedules. Assembly Components and Engineered Products purchase substantially all of their raw materials, principally metals and certain component parts incorporated into their products, from third-party suppliers and manufacturers. Most raw materials required by Assembly Components and Engineered Products are

Table of Contents

commodity products available from several domestic suppliers. Management believes that raw materials and component parts other than certain specialty products are available from alternative sources.

Our suppliers of raw materials and component parts may significantly and quickly increase their prices in response to increases in costs of the raw materials, such as steel, that they use to manufacture our raw materials and component parts. While we generally attempt to pass along increased raw material prices to our customers in the form of price increases, there may be a time delay between the increased raw material prices and our ability to increase the price of our products, or we may be unable to increase the prices of our products due to various factors. See the discussion of risks associated with raw material supply and costs in Item 1A "Risk Factors".

Backlog

Management believes that backlog is not a meaningful measure for Supply Technologies, as a majority of Supply Technologies' customers require just-in-time delivery of production components. Management believes that Assembly Components' backlog is not a meaningful measure, as a significant portion of sales are on a release or firm order basis. The backlog of Engineered Products' orders believed to be firm as of December 31, 2018 was $226.1 million, compared with $173.2 million as of December 31, 2017. Nearly all of Engineered Products' backlog as of December 31, 2018 is scheduled to be shipped in 2019.

Environmental, Health and Safety Regulations

We are subject to numerous federal, state and local laws and regulations designed to protect public health and the environment, particularly with regard to discharges and emissions, as well as handling, storage, treatment and disposal of various substances and wastes. Failure to comply with applicable environmental laws and regulations and permit requirements could result in civil and criminal fines or penalties or enforcement actions, including regulatory or judicial orders enjoining or curtailing operations or requiring corrective measures. Pursuant to certain environmental laws, owners or operators of facilities may be liable for the costs of response or other corrective actions for contamination identified at or emanating from current or former locations, without regard to whether the owner or operator knew of, or was responsible for, the presence of any such contamination, and for related damages to natural resources. Additionally, persons who arrange for the disposal or treatment of hazardous substances or materials may be liable for costs of response at sites where they are located, whether or not the site is owned or operated by such person.

From time to time, we have incurred, and are presently incurring, costs and obligations for correcting environmental noncompliance and remediating environmental conditions at certain of our properties. In general, we have not experienced difficulty in complying with environmental laws in the past, and compliance with environmental laws has not had a material adverse effect on our financial condition, liquidity and results of operations. Our capital expenditures on environmental control facilities were not material during the past five years and such expenditures are not expected to be material to us in the foreseeable future.

We are currently, and may in the future be, required to incur costs relating to the investigation or remediation of property, including property where we have disposed of our waste, and for addressing environmental conditions. For instance, we have been identified as a potentially responsible party at third-party sites under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, or comparable state laws, which provide for strict and, under certain circumstances, joint and several liability. We are participating in the cost of certain clean-up efforts at several of these sites. The availability of third-party payments or insurance for environmental remediation activities is subject to risks associated with the willingness and ability of the third party to make payments. However, our share of such costs has not been material and, based on available information, we do not expect our exposure at any of these locations to have a material adverse effect on our results of operations, liquidity or financial condition.

Available Information

We file Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, Proxy Statements and other information with the Securities and Exchange Commission ("SEC"). The public can obtain copies of these materials by visiting the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549, by calling the SEC at 1-800-SEC-0330, or by accessing the SEC's website at http://www.sec.gov. In addition, as soon as reasonably practicable after

such materials are filed with or furnished to the SEC, we make such materials available on our website free of charge at http://www.pkoh.com. The information on our website is not a part of this Annual Report on Form 10-K.

Executive Officers of the Registrant

Information with respect to our executive officers as of March 5, 2019, is as follows:

Name	Age	Position
Matthew V. Crawford	49	Chairman of the Board, Chief Executive Officer and Director
Edward F. Crawford	80	President and Director
Patrick W. Fogarty	57	Vice President and Chief Financial Officer
Robert D. Vilsack	58	Secretary and Chief Legal Officer

Mr. M. Crawford was elected Chairman of the Board and Chief Executive Officer in 2018. Prior to that, he served as President and Chief Operating Officer since 2003. Mr. M. Crawford became one of our directors in August 1997 and has served as President of Crawford Group, Inc. since 1995. Mr. M. Crawford is the son of Mr. E. Crawford.

Mr. E. Crawford was named President and Director in 2018. Prior to that, he served as a director and Chairman of the Board and Chief Executive Officer since 1992. He has also served as the Chairman of Crawford Group, Inc., a management company for a group of manufacturing companies, since 1964.

Mr. Fogarty has been Vice President and Chief Financial Officer since 2015. Prior to that, Mr. Fogarty was Director of Corporate Development since 1997 and served as Director of Finance from 1995 to 1997.

Mr. Vilsack has been Secretary and Chief Legal Officer since joining us in 2002.

Item 1A. Risk Factors

The following are certain risk factors that could affect our business, results of operations and financial condition. These risks are not the only ones we face. If any of the following risks occur, our business, results of operations or financial condition could be adversely affected.

The industries in which we operate are cyclical and are affected by the economy in general.

We sell products to customers in industries that experience cyclicality (expectancy of recurring periods of economic growth and slowdown) in demand for products and may experience substantial increases and decreases in business volume throughout economic cycles. Industries we serve, including the automotive and vehicle parts, heavy-duty truck, industrial equipment, steel, rail, oil and gas, electrical distribution and controls, aerospace and defense, recreational equipment, HVAC, electrical components, appliance and semiconductor equipment industries, are affected by consumer spending, general economic conditions and the impact of international trade. A downturn in any of the industries we serve could have a material adverse effect on our financial condition, liquidity and results of operations.

Adverse credit market conditions may significantly affect our access to capital, cost of capital and ability to meet liquidity needs.

Disruptions, uncertainty or volatility in the credit markets may adversely impact our ability to access credit already arranged and the availability and cost of credit to us in the future. These market conditions may limit our ability to replace, in a timely manner, maturing liabilities and access the capital necessary to grow and maintain our business. Accordingly, we may be forced to delay raising capital or pay unattractive interest rates, which could increase our interest expense, decrease our profitability and significantly reduce our financial flexibility. Longer-term disruptions in the capital and credit markets as a result of uncertainty, changing or increased regulation, reduced alternatives or failures of significant financial institutions could adversely affect our access to liquidity needed for our business. Any disruption could require us to take measures to conserve cash until the markets stabilize or until alternative credit arrangements or other funding for our business needs can be arranged. Such measures could include deferring capital expenditures and reducing or eliminating future share repurchases or other

Table of Contents

discretionary uses of cash. Overall, our results of operations, financial condition and cash flows could be materially adversely affected by disruptions in the credit markets.

Adverse global economic conditions may have significant effects on our customers and suppliers that could result in material adverse effects on our business and operating results.

Significant reductions in available capital and liquidity from banks and other providers of credit, substantial reductions and fluctuations in equity and currency values worldwide, volatility in commodity prices for such items as crude oil, and concerns that the worldwide economy may enter into a prolonged recessionary period, may materially adversely affect our customers' access to capital or willingness to spend capital on our products or their ability to pay for products that they will order or have already ordered from us. In addition, unfavorable global economic conditions may materially adversely affect our suppliers' access to capital and liquidity with which they maintain their inventories, production levels and product quality, which could cause them to raise prices or lower production levels. These potential effects of adverse global economic conditions are difficult to forecast and mitigate. As a consequence, our operating results for a particular period are difficult to predict, and, therefore, prior results are not necessarily indicative of results to be expected in future periods. Any of the foregoing effects could have a material adverse effect on our business, results of operations and financial condition.

Adverse global economic conditions may have significant effects on our customers that would result in our inability to borrow or to meet our debt service coverage ratio in our revolving credit facility.

As of December 31, 2018, we were in compliance with our debt service coverage ratio covenant and other covenants contained in our revolving credit facility. While we expect to remain in compliance throughout 2019, declines in demand in the automotive industry and in sales volumes could adversely impact our ability to remain in compliance with certain of these financial covenants. Additionally, to the extent our customers are adversely affected by a decline in the economy in general, they may not be able to pay their accounts payable to us on a timely basis or at all, which would make the accounts receivable ineligible for purposes of the revolving credit facility and could reduce our borrowing base and our ability to borrow.

Because a significant portion of our sales is to the automotive and heavy-duty truck industries, a decrease in the demand of these industries or the loss of any of our major customers in these industries could adversely affect our financial health.

Demand for certain of our products is affected by, among other things, the relative strength or weakness of the automotive and heavy-duty truck industries. The domestic automotive and heavy-duty truck industries are highly cyclical and may be adversely affected by international competition. In addition, the automotive and heavy-duty truck industries are significantly unionized and subject to work slowdowns and stoppages resulting from labor disputes. We derived 37% and 8% of our net sales during the year ended December 31, 2018 from the automotive and heavy-duty truck industries, respectively.

The loss of a portion of business to any of our major automotive or heavy-duty truck customers could have a material adverse effect on our financial condition, cash flow and results of operations. We cannot assure you that we will maintain or improve our relationships in these industries or that we will continue to supply these customers at current levels.

Our Supply Technologies customers are generally not contractually obligated to purchase products and services from us.

We supply products and services to our Supply Technologies customers generally under purchase orders as opposed to long-term contracts. When we do enter into long-term contracts with our Supply Technologies customers, many of them only establish pricing terms and do not obligate our customers to buy required minimum amounts from us or to buy from us exclusively. Accordingly, many of our Supply Technologies customers may decrease the amount of products and services that they purchase from us or even stop purchasing from us altogether, either of which could have a material adverse effect on our net sales and profitability.

We are dependent on key customers.

We rely on several key customers. For the year ended December 31, 2018, our ten largest customers accounted for approximately 32% of our net sales. Many of our customers place orders for products on an as-needed basis and operate in cyclical industries and, as a result, their order levels have varied from period to period in the past and may vary significantly in

8

Table of Contents

the future. Due to competitive issues, we have lost key customers in the past and may again in the future. Customer orders are dependent upon their markets and may be subject to delays or cancellations. As a result of dependence on our key customers, we could experience a material adverse effect on our business and results of operations if any of the following were to occur:

- the loss of any key customer, in whole or in part;
- the insolvency or bankruptcy of any key customer;
- a declining market in which customers reduce orders or demand reduced prices; or
- a strike or work stoppage at a key customer facility, which could affect both their suppliers and customers.

If any of our key customers become insolvent or file for bankruptcy, our ability to recover accounts receivable from that customer would be adversely affected and any payments we received in the preference period prior to a bankruptcy filing may be potentially forfeitable, which could adversely impact our results of operations.

We operate in highly competitive industries.

The markets in which all three of our segments sell their products are highly competitive. Some of our competitors are large companies that have greater financial resources than we have. We believe that the principal competitive factors for our Supply Technologies segment are an approach reflecting long-term business partnership and reliability, sourced product quality and conformity to customer specifications, timeliness of delivery, price and design and engineering capabilities. We believe that the principal competitive factors for our Assembly Components and Engineered Products segments are product quality and conformity to customer specifications, design and engineering capabilities, product development, timeliness of delivery and price. The rapidly evolving nature of the markets in which we compete may attract new entrants as they perceive opportunities, and our competitors may foresee the course of market development more accurately than we do. In addition, our competitors may develop products that are superior to our products or may adapt more quickly than we do to new technologies or evolving customer requirements.

We expect competitive pressures in our markets to remain strong. These pressures arise from existing competitors, other companies that may enter our existing or future markets and, in some cases, our customers, which may decide to internally produce items we sell. We cannot assure you that we will be able to compete successfully with our competitors. Failure to compete successfully could have a material adverse effect on our financial condition, liquidity and results of operations.

The loss of key executives could adversely impact us.

Our success depends upon the efforts, abilities and expertise of our executive officers and other senior managers, including Matthew Crawford, our Chairman and Chief Executive Officer, and Edward Crawford, our President, as well as the president of each of our operating units. An event of default occurs under our revolving credit facility if Messrs. M. Crawford and E. Crawford or certain of their related parties own in the aggregate less than 15% of Holdings' outstanding common stock and, if at such time, neither Mr. M. Crawford nor Mr. E. Crawford holds the office of chairman, chief executive officer or president. The loss of the services of Messrs. M. Crawford and E. Crawford, senior and executive officers, and/or other key individuals could have a material adverse effect on our financial condition, liquidity and results of operations.

We may encounter difficulty in expanding our business through targeted acquisitions.

We have pursued, and may continue to pursue, targeted acquisition opportunities that we believe would complement our business. We cannot assure you that we will be successful in consummating any acquisitions.

Any targeted acquisitions will be accompanied by the risks commonly encountered in acquisitions of businesses. We may not successfully overcome these risks or any other problems encountered in connection with any of our acquisitions, including the possible inability to integrate an acquired business' operations, information technology, services and products into our business; diversion of management's attention; the assumption of unknown liabilities; increases in our indebtedness; the failure to achieve the strategic objectives of those acquisitions; and other unanticipated problems, some or all of which could materially and adversely affect us. The process of integrating operations could cause an interruption of, or loss of momentum in, our activities. Any delays or difficulties encountered in connection with any acquisition and the integration of our operations could have a material adverse effect on our business, results of operations, financial condition or prospects of our business.

Table of Contents

Our Supply Technologies business depends upon third parties for substantially all of our component parts.

Our Supply Technologies business purchases substantially all of its component parts from third-party suppliers and manufacturers. As such, it is subject to the risk of price fluctuations and periodic delays in the delivery of component parts. Failure by suppliers to continue to supply us with these component parts on commercially reasonable terms, or at all, could have a material adverse effect on us. We depend upon the ability of these suppliers, among other things, to meet stringent performance and quality specifications and to conform to delivery schedules. Failure by third-party suppliers to comply with these and other requirements could have a material adverse effect on our financial condition, liquidity and results of operations.

The raw materials used in our production processes and by our suppliers of component parts are subject to price and supply fluctuations that could increase our costs of production and adversely affect our results of operations.

Our supply of raw materials for our Assembly Components and Engineered Products businesses could be interrupted for a variety of reasons, including availability and pricing. Prices for raw materials necessary for production have fluctuated significantly in the past and significant increases could adversely affect our results of operations and profit margins. While we generally attempt to pass along increased raw materials prices to our customers in the form of price increases, there may be a time delay between the increased raw materials prices and our ability to increase the price of our products, or we may be unable to increase the prices of our products due various factors.

Our suppliers of component parts, particularly in our Supply Technologies business, may significantly and quickly increase their prices in response to increases in costs of the raw materials, such as steel, that they use to manufacture our component parts. We may not be able to increase our prices commensurate with our increased costs. Consequently, our results of operations and financial condition may be materially adversely affected.

The energy costs involved in our production processes and transportation are subject to fluctuations that are beyond our control and could significantly increase our costs of production.

Our manufacturing process and the transportation of raw materials, components and finished goods are energy intensive. Our manufacturing processes are dependent on adequate supplies of electricity and natural gas. A substantial increase in the cost of transportation fuel, natural gas or electricity could have a material adverse effect on our margins. We may experience higher than anticipated gas costs in the future, which could adversely affect our results of operations. In addition, a disruption or curtailment in supply could have a material adverse effect on our production and sales levels.

Potential product liability risks exist from the products that we sell.

Our businesses expose us to potential product liability risks that are inherent in the design, manufacture and sale of our products and products of third-party vendors that we use or resell. While we currently maintain what we believe to be suitable and adequate product liability insurance, we cannot assure you that we will be able to maintain our insurance on acceptable terms or that our insurance will provide adequate protection against potential liabilities. In the event of a claim against us, a lack of sufficient insurance coverage could have a material adverse effect on our financial condition, liquidity and results of operations. Moreover, even if we maintain adequate insurance, any successful claim could have a material adverse effect on our financial condition, liquidity and results of operations.

Some of our employees belong to labor unions, and strikes or work stoppages could adversely affect our operations.

As of December 31, 2018, we were a party to seven collective bargaining agreements with various labor unions that covered approximately 510 full-time employees. Our inability to negotiate acceptable contracts with these unions could result in, among other things, strikes, work stoppages or other slowdowns by the affected workers and increased operating costs as a result of higher wages or benefits paid to union members. If the unionized workers were to engage in a strike, work stoppage or other slowdown, or other employees were to become unionized, we could experience a significant disruption of our operations and higher ongoing labor costs, which could have a material adverse effect on our business, financial condition and results of operations.

We operate and source internationally, which exposes us to the risks of doing business abroad.

Our operations are subject to the risks of doing business abroad, including the following:

Table of Contents

- fluctuations in currency exchange rates;
- limitations on ownership and on repatriation of earnings;
- transportation delays and interruptions;
- political, social and economic instability and disruptions;
- potential disruption that could be caused by the partial or complete reconfiguration of the European Union;
- government embargoes or foreign trade restrictions;
- the imposition of duties and tariffs and other trade barriers;
- import and export controls;
- labor unrest and current and changing regulatory environments;
- the potential for nationalization of enterprises;
- disadvantages of competing against companies from countries that are not subject to U.S. laws and regulations, including the U.S. Foreign Corrupt Practices Act ("FCPA");
- increasingly complex laws and regulations concerning privacy and data security, including the European Union's General Data Protection Regulation;
- difficulties in staffing and managing multinational operations;
- limitations on our ability to enforce legal rights and remedies; and
- potentially adverse tax consequences.

On June 23, 2016, the United Kingdom ("UK") held a referendum in which UK voters approved an exit from the European Union ("EU"). The June 2016 referendum result, and the subsequent commencement of the official withdrawal process by the UK government in March 2017, has created uncertainties affecting business operations in the UK and the EU. The long-term nature of the UK's relationship with the EU is unclear and there is considerable uncertainty when any relationship will be agreed and implemented. The long term effects of Brexit will depend on any agreements the UK makes to retain access to EU markets, either during a transitional period or more permanently. Given the lack of comparable precedent, it is unclear what financial, trade and legal implications the withdrawal of the UK from the EU would have and how such withdrawal would affect us. It is possible that the withdrawal could, among other things, affect the legal and regulatory environments to which our businesses are subject, impact trade between the UK and the EU through potential restrictions on the free movement of goods and labor between the UK and the EU, create economic and political uncertainty in the region, and create other impediments to our ability to transact within and between the UK and EU.

We are also exposed to risks relating to U.S. policy with respect to companies doing business in foreign jurisdictions. Changes in tax policy, trade regulations or trade agreements, such as the disallowance of tax deductions on imported merchandise or the imposition of new tariffs on imported products, could have a material adverse effect on our business and results of operations.

In addition, we could be adversely affected by violations of the FCPA and similar worldwide anti-bribery laws. The FCPA and similar anti-bribery laws in other jurisdictions generally prohibit companies and their intermediaries from making improper payments to non-U.S. officials for the purpose of obtaining or retaining business. Our policies mandate compliance with these anti-bribery laws. We operate in many parts of the world that have experienced governmental corruption to some degree and, in certain circumstances, strict compliance with anti-bribery laws may conflict with local customs and practices. We cannot assure you that our internal controls and procedures always will protect us from the reckless or criminal acts committed by our employees or agents. For example, in connection with responding to a subpoena from the staff of the SEC, regarding a third party, we disclosed to the staff that the third party participated in a payment on our behalf to a foreign tax official that implicates the FCPA. If we are found to be liable for FCPA violations (either due to our own acts or our inadvertence or due to the acts or inadvertence of others), we could suffer from criminal or civil penalties or other sanctions, which could have a material adverse effect on our business.

Any of the events enumerated above could have an adverse effect on our operations in the future by reducing the demand for our products and services, decreasing the prices at which we can sell our products or otherwise having an adverse effect on our business, financial condition or results of operations. We cannot assure you that we will continue to operate in compliance with applicable customs, currency exchange control regulations, transfer pricing regulations or any other laws or regulations to which we may be subject. We also cannot assure you that these laws will not be modified.

U.S. federal income tax reform could adversely affect us.

On December 22, 2017, U.S. federal tax legislation, commonly referred to as the Tax Cuts and Jobs Act (the "TCJA"), was signed into law, significantly reforming the U.S. Internal Revenue Code. The TCJA, among other things, includes changes to U.S. federal tax rates, imposes significant additional limitations on the deductibility of interest, allows for the expensing of capital expenditures, creates a new minimum tax on certain foreign-sourced earnings and modifies or repeals many business deductions and credits. The TCJA contains many provisions which continue to be clarified through new regulations and we continue to examine the impact the TCJA may have on our business.

We are subject to significant environmental, health and safety laws and regulations and related compliance expenditures and liabilities.

Our businesses are subject to many foreign, federal, state and local environmental, health and safety laws and regulations, particularly with respect to the use, handling, treatment, storage, discharge and disposal of substances and hazardous wastes used or generated in our manufacturing processes. Compliance with these laws and regulations is a significant factor in our business. We have incurred and expect to continue to incur significant expenditures to comply with applicable environmental laws and regulations. Our failure to comply with applicable environmental laws and regulations and permit requirements could result in civil or criminal fines or penalties or enforcement actions, including regulatory or judicial orders enjoining or curtailing operations or requiring corrective measures, installation of pollution control equipment or remedial actions.

We are currently, and may in the future be, required to incur costs relating to the investigation or remediation of property, including property where we have disposed of our waste, and for addressing environmental conditions. Some environmental laws and regulations impose liability and responsibility on present and former owners, operators or users of facilities and sites for contamination at such facilities and sites without regard to causation or knowledge of contamination. In addition, we occasionally evaluate various alternatives with respect to our facilities, including possible dispositions or closures. Investigations undertaken in connection with these activities may lead to discoveries of contamination that must be remediated, and closures of facilities may trigger compliance requirements that are not applicable to operating facilities. Consequently, we cannot assure you that existing or future circumstances, the development of new facts or the failure of third parties to address contamination at current or former facilities or properties will not require significant expenditures by us.

We expect to continue to be subject to increasingly stringent environmental and health and safety laws and regulations. It is difficult to predict the future interpretation and development of environmental and health and safety laws and regulations or their impact on our future earnings and operations. We anticipate that compliance will continue to require increased capital expenditures and operating costs. Any increase in these costs, or unanticipated liabilities arising from, among other things, discovery of previously unknown conditions or more aggressive enforcement actions, could adversely affect our results of operations, and there is no assurance that they will not exceed our reserves or have a material adverse effect on our financial condition.

We may experience breaches of, or disruptions to, our information technology systems, or other compromises of our data, including the improper disclosure of personal or confidential data, which may adversely affect our operations and reputation.

We utilize information technology systems in connection with our business operations, including processing orders, managing inventory and accounts receivable collections, purchasing products, maintaining cost-effective operations, routing and re-routing orders. We also depend on our information technology systems to maintain confidential, proprietary and personal information relating to our current, former and prospective employees, customers and other third parties in these systems and in systems of third-party providers who we engage in connection with the processing and storage of certain information. Our information technology systems and those of our third-party providers are subject to disruptions or damage, which may be caused by a wide array of causes, including telecommunications failures, computer failures, power outages, computer viruses, cybersecurity breaches and other intrusions, which could result in the disruption of our operations, or information misappropriation, such as theft of intellectual property or inappropriate disclosure of personal and confidential information. In addition, we could also experience data or cybersecurity breaches stemming from the intentional or negligent acts of our employees or other third parties. To the extent our information technology systems are disabled for a long period of time, key business processes could be interrupted. Any such operational disruptions and/or misappropriation of information, whether in

Table of Contents

systems we maintain or are maintained by others, could have a material adverse effect on our business. In addition, any such damage, compromise or breach to our systems or those of our vendors, could result in a violation of privacy and other laws, and expose us to significant legal and financial liability.

Operating problems in our business may materially adversely affect our financial condition and results of operations.

We are subject to the usual hazards associated with manufacturing and the related storage and transportation of raw materials, products and waste, including explosions, fires, leaks, discharges, inclement weather, natural disasters, mechanical failure, unscheduled downtime and transportation interruption or calamities. The occurrence of material operating problems at our facilities may have a material adverse effect on our operations as a whole, both during and after the period of operational difficulties.

We have a significant amount of goodwill, and any future goodwill impairment charges could adversely impact our results of operations.

As of December 31, 2018, we had goodwill of $103.4 million. The future occurrence of a potential indicator of impairment, such as a significant adverse change in legal factors or business climate, unanticipated competition, a material negative change in relationships with significant customers, strategic decisions made in response to economic or competitive conditions, loss of key personnel or a more-likely-than-not expectation that a reporting unit or a significant portion of a reporting unit will be sold or disposed of, could result in goodwill impairment charges, which could adversely impact our results of operations. We have recorded goodwill impairment charges in the past, and such charges materially impacted our historical results of operations. For additional information, see Note 5, Goodwill, to the consolidated financial statements included elsewhere herein.

Our Chairman of the Board and Chief Executive Officer and our President collectively beneficially own a significant portion of Holdings' outstanding common stock and their interests may conflict with yours.

As of December 31, 2018, Matthew Crawford, our Chairman of the Board and Chief Executive Officer, and Edward Crawford, our President, collectively beneficially owned approximately 29% of Holdings' common stock. Mr. M. Crawford is Mr. E. Crawford's son. Their interests could conflict with your interests.

Our business and operating results may be adversely affected by natural disasters or other catastrophic events beyond our control.

While we have taken precautions to prevent production and service interruptions at our global facilities, severe weather conditions such as hurricanes or tornadoes, as well as major earthquakes and other natural disasters, in areas in which we have manufacturing facilities or from which we obtain products may cause physical damage to our properties, closure of one or more of our business facilities, lack of adequate work force in a market, temporary disruption in the supply of inventory, disruption in the transport of products and utilities, or delays in the delivery of products to our customers. Any of these factors may disrupt our operations and adversely affect our financial condition and results of operations.

The insurance that we maintain may not fully cover all potential expenses.

We maintain property, business interruption and casualty insurance, but such insurance may not cover all risks associated with the hazards of our business and is subject to limitation, including deductible and maximum liabilities covered. We are potentially at risk if one or more of our insurance carriers fail. Additionally, severe disruptions in the domestic and global financial markets could adversely impact the ratings and survival of some insurers. In the future, we may not be able to obtain coverage at current levels, and our premiums may increase significantly on coverage that we maintain.

Item 1B. Unresolved Staff Comments

None.

Table of Contents

Item 2. Properties

As of December 31, 2018, our operations included numerous manufacturing and supply chain logistics services facilities located in 25 states in the United States and in Puerto Rico, as well as in Asia, Canada, Europe, Mexico and Brazil. We lease our world headquarters located in Cleveland, Ohio, which also includes the world headquarters for certain of our businesses. We believe our manufacturing, logistics and corporate office facilities are well-maintained and are suitable and adequate, and have sufficient productive capacity to meet our current needs.

Table of Contents

The following table provides information relative to our principal facilities as of December 31, 2018.

Related Industry Segment[1]	Location	Owned or Leased	Use
SUPPLY TECHNOLOGIES	Brampton, Ontario, Canada	Leased	Manufacturing
	Minneapolis, MN	Leased	Logistics
	Carnegie, PA	Leased	Manufacturing
	Cleveland, OH	Leased	Supply Technologies Corporate Office
	Dayton, OH	Leased	Logistics
	Carol Stream, IL	Leased	Logistics
	Memphis, TN	Leased	Logistics
	Solon, OH	Leased	Logistics
	Streetsboro, OH	Leased	Manufacturing
	Allentown, PA	Leased	Logistics
	Suwanee, GA	Leased	Logistics
	Dublin, VA	Leased	Logistics
	Tulsa, OK	Leased	Logistics
ASSEMBLY COMPONENTS	Ocala, FL	Owned	Manufacturing
	Conneaut, OH	Leased/Owned	Manufacturing
	Lexington, TN	Owned	Manufacturing
	Lobelville, TN	Owned	Manufacturing
	Rootstown, OH	Owned	Manufacturing
	Cleveland, OH	Leased/Owned	Manufacturing
	Wapakoneta, OH	Owned	Manufacturing
	Angola, IN	Owned	Manufacturing
	Huntington, IN	Leased	Manufacturing
	Fremont, IN	Owned	Manufacturing
	Big Rapids, MI	Owned	Manufacturing
	Acuna, Mexico	Owned	Manufacturing
ENGINEERED PRODUCTS	Cicero, IL	Owned	Manufacturing
	Cuyahoga Heights, OH	Owned	Manufacturing
	Pune, India	Owned	Manufacturing
	Canton, OH	Owned	Manufacturing
	Newport, AR	Owned	Manufacturing
	Warren, OH	Owned	Manufacturing
	Leini, Italy	Owned	Manufacturing
	Madison Heights, MI	Leased	Manufacturing
	Canton, OH	Leased	Manufacturing
	La Roeulx, Belgium	Owned	Manufacturing
	Brookfield, WI	Leased	Manufacturing
	Wickliffe, OH	Owned	Manufacturing
	Valencia, Spain	Owned	Manufacturing
	Euclid, OH	Owned	Manufacturing
	Albertville, AL	Leased	Office
	Chennai, India	Owned	Manufacturing
	Leini, Italy	Leased	Manufacturing

(1) Each segment has other facilities, none of which is deemed to be a principal facility.

Table of Contents

Item 3. Legal Proceedings

We are subject to various pending and threatened lawsuits in which claims for monetary damages are asserted in the ordinary course of business. While any litigation involves an element of uncertainty, in the opinion of management, liabilities, if any, arising from currently pending or threatened litigation are not expected to have a material adverse effect on our financial condition, liquidity or results of operations.

In addition to the routine lawsuits and asserted claims noted above, we were a party to the lawsuits and legal proceedings described below as of December 31, 2018:

We were a co-defendant in approximately 86 cases asserting claims on behalf of approximately 188 plaintiffs alleging personal injury as a result of exposure to asbestos. These asbestos cases generally relate to production and sale of asbestos-containing products and allege various theories of liability, including negligence, gross negligence and strict liability, and seek compensatory and, in some cases, punitive damages.

In every asbestos case in which we are named as a party, the complaints are filed against multiple named defendants. In substantially all of the asbestos cases, the plaintiffs either claim damages in excess of a specified amount, typically a minimum amount sufficient to establish jurisdiction of the court in which the case was filed (jurisdictional minimums generally range from $25,000 to $75,000), or do not specify the monetary damages sought. To the extent that any specific amount of damages is sought, the amount applies to claims against all named defendants.

There are three asbestos cases, involving 19 plaintiffs, that plead specified damages against named defendants. In each of the three cases, the plaintiff is seeking compensatory and punitive damages based on a variety of potentially alternative causes of action. In two cases, the plaintiff has alleged three counts at $3.0 million compensatory and punitive damages each; one count at $3.0 million compensatory and $1.0 million punitive damages; one count at $1.0 million. In the third case, the plaintiff has alleged compensatory and punitive damages, each in the amount of $20.0 million, for three separate causes of action, and $5.0 million compensatory damages for the fifth cause of action.

Historically, we have been dismissed from asbestos cases on the basis that the plaintiff incorrectly sued one of our subsidiaries or because the plaintiff failed to identify any asbestos-containing product manufactured or sold by us or our subsidiaries. We intend to vigorously defend these asbestos cases, and believe we will continue to be successful in being dismissed from such cases. However, it is not possible to predict the ultimate outcome of asbestos-related lawsuits, claims and proceedings due to the unpredictable nature of personal injury litigation. Despite this uncertainty, and although our results of operations and cash flows for a particular period could be adversely affected by asbestos-related lawsuits, claims and proceedings, management believes that the ultimate resolution of these matters will not have a material adverse effect on our financial condition, liquidity or results of operations. Among the factors management considered in reaching this conclusion were: (a) our historical success in being dismissed from these types of lawsuits on the bases mentioned above; (b) many cases have been improperly filed against one of our subsidiaries; (c) in many cases the plaintiffs have been unable to establish any causal relationship to us or our products or premises; (d) in many cases, the plaintiffs have been unable to demonstrate that they have suffered any identifiable injury or compensable loss at all or that any injuries that they have incurred did in fact result from alleged exposure to asbestos; and (e) the complaints assert claims against multiple defendants and, in most cases, the damages alleged are not attributed to individual defendants. Additionally, we do not believe that the amounts claimed in any of the asbestos cases are meaningful indicators of our potential exposure because the amounts claimed typically bear no relation to the extent of the plaintiff's injury, if any.

Our cost of defending these lawsuits has not been material to date and, based upon available information, our management does not expect its future costs for asbestos-related lawsuits to have a material adverse effect on our results of operations, liquidity or financial position.

In August 2013, we received a subpoena from the staff of the SEC in connection with the staff’s investigation of a third party. At that time, we also learned that the Department of Justice (“DOJ”) is conducting a criminal investigation of the third party. In connection with its initial response to the staff’s subpoena, we disclosed to the staff of the SEC that, in November 2007, the third party participated in a payment on behalf of us to a foreign tax official that implicates the Foreign Corrupt Practices Act. The Board of Directors formed a special committee to review our transactions with the third party and to make any recommendations to the Board of Directors with respect thereto. The Company intends to cooperate fully with the SEC and

Table of Contents

the DOJ in connection with their investigations of the third party and with the SEC in light of the Company's disclosure. The Company is unable to predict the outcome or impact of the special committee's investigation or the length, scope or results of the SEC's review or the impact on its results of operations. With respect to our disclosure, we have not heard anything from the SEC since 2014 and we do not expect to hear anything further from it, but we will cooperate with the SEC to the extent that it requests any additional information. Accordingly, we do not plan on providing any future disclosure regarding this matter unless circumstances change.

Item 4. Mine Safety Disclosures

Not applicable.

Table of Contents

Part II

Item 5. Market for the Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common stock, par value $1.00 per share, trades on the Nasdaq Global Select Market under the symbol "PKOH". The number of shareholders of record of our common stock as of February 28, 2019 was 369.

Issuer Purchases of Equity Securities

Set forth below is information regarding repurchases of our common stock during the fourth quarter of the year ended December 31, 2018.

Period	Total Number of Shares Purchased (1)	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans (1)	Maximum Number of Shares That May Yet Be Purchased Under the Plans or Program (2)
October 1 — October 31, 2018	467	$ 38.31	—	457,685
November 1 — November 30, 2018	75,000	37.46	75,000	382,685
December 1 — December 31, 2018	250	33.13	—	382,685
Total	75,717	$ 37.45	75,000	382,685

(1) Consists of an aggregate total of 717 shares of common stock we acquired from recipients of restricted stock awards at the time of vesting of such awards in order to settle recipient minimum withholding tax liabilities.

(2) On March 4, 2013, we announced a share repurchase program whereby we may repurchase up to 1.0 million shares of our outstanding common stock.

Table of Contents

Item 6. Selected Financial Data

	Year Ended December 31,				
	2018	2017	2016	2015	2014
	(In millions, except per share data)				
Income Statement Data:					
Net sales	$1,658.1	$1,412.9	$1,276.9	$1,463.8	$1,378.7
Operating income	97.3	83.8	63.0	91.3	91.1
Net income attributable to ParkOhio common shareholders	53.6	28.6	31.7	48.1	45.6
Earnings per common share attributable to ParkOhio shareholders:					
Basic	$4.37	$2.34	$2.62	$3.94	$3.77
Diluted	$4.28	$2.30	$2.58	$3.88	$3.68
Cash dividend per common share	$0.50	$0.50	$0.50	$0.50	0.375

Results for 2018 include a gain on the sale of assets of $1.9 million.

Results for 2017 include income of $3.3 million from the reversal of a litigation reserve, a loss on extinguishment of debt of $11.0 million and a one-time net tax expense of $4.2 million related to the U.S. Tax Cuts and Jobs Act (the "TCJA").

Results for 2016 include an asset impairment charge of $4.0 million.

Results for 2015 include litigation judgment costs of $2.2 million.

	Year Ended December 31,				
	2018	2017	2016	2015	2014
	(In millions)				
Other Financial Data:					
Net cash flows provided by operating activities	$54.8	$46.7	$72.9	$44.7	$53.6
Capital expenditures, net	(45.1)	(27.9)	(28.5)	(36.5)	(25.8)
Selected Balance Sheet Data (as of period end):					
Cash and cash equivalents	55.7	82.8	64.3	62.0	58.0
Total assets	1,208.5	1,132.5	974.3	942.1	969.1
Long-term debt[1]	547.5	515.5	439.0	445.8	429.3

(1) Excluding current portion.

Table of Contents

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations

Our consolidated financial statements include the accounts of Park-Ohio Holdings Corp. and its subsidiaries. All significant intercompany transactions have been eliminated in consolidation.

EXECUTIVE OVERVIEW

General

We are a diversified international company providing world-class customers with a supply chain management outsourcing service, capital equipment used on their production lines, and manufactured components used to assemble their products. We operate through three reportable segments: Supply Technologies, Assembly Components and Engineered Products. Refer to Part 1, Item 1. Business for descriptions of our business segments.

2018 Acquisitions

On February 1, 2018, the Company acquired Canton Drop Forge, Inc. (“CDF”) for $35.6 million in cash. CDF manufactures forgings for high-performance applications in the global aerospace, oil and gas, and other markets. Headquartered in Canton, Ohio, CDF is included in our Engineered Products segment.

On October 1, 2018, the Company acquired Hydrapower Dynamics Limited (“Hydrapower”) for $7.8 million in cash acquired. Headquartered in Birmingham, England, Hydrapower is a manufacturer of fluid handling systems incorporating hoses, manipulated tubes and fabricated assemblies for the bus and truck, automotive, agricultural and construction end markets. Hydrapower is included in our Assembly Components segment.

During 2018, the Company made two acquisitions, both in its Supply Technologies segment, totaling a cash purchase price of $3.5 million. Both acquired companies distribute products into the aerospace and defense end markets.

The results of operations of the 2018 acquisitions are included in our consolidated results from their respective acquisition dates. Collectively, the 2018 acquisitions contributed $72.3 million of sales for the year ended December 31, 2018.

Subsequent Event

On January 31, 2019, the Company's Board of Directors declared a quarterly dividend of $0.125 per common share. The dividend was paid on March 1, 2019, to shareholders of record as of the close of business on February 15, 2019, and resulted in a cash outlay of $1.6 million.

Table of Contents

RESULTS OF OPERATIONS

2018 Compared with 2017 and 2017 Compared with 2016

	2018	2017	2016	2018 vs. 2017 $ Change	2018 vs. 2017 % Change	2017 vs. 2016 $ Change	2017 vs. 2016 % Change
	(Dollars in millions, except per share data)						
Net sales	$1,658.1	$1,412.9	$1,276.9	$245.2	17 %	$136.0	11 %
Cost of sales ("COS")	1,386.6	1,180.1	1,075.7	206.5	17 %	104.4	10 %
Gross profit	271.5	232.8	201.2	38.7	17 %	31.6	16 %
Gross profit as a percentage of net sales	16.4 %	16.5 %	15.8 %				
Selling, general and administrative ("SG&A") expenses	176.1	152.3	134.2	23.8	16 %	18.1	13 %
SG&A expenses as a percentage of net sales	10.6 %	10.8 %	10.5 %				
Gain on sale of assets	(1.9)	—	—	(1.9)		—	
Litigation settlement gain	—	(3.3)	—	3.3	*	(3.3)	*
Asset impairment charge	—	—	4.0	—	*	(4.0)	*
Operating income	97.3	83.8	63.0	13.5	16 %	20.8	33 %
Other components of pension income and other postretirement benefits expense, net	8.8	6.4	6.2	2.4	38 %	0.2	3 %
Interest expense, net	(34.3)	(31.5)	(28.2)	(2.8)	9 %	(3.3)	12 %
Loss on extinguishment of debt	—	(11.0)	—	11.0	*	(11.0)	*
Income before income taxes	71.8	47.7	41.0	24.1	51 %	6.7	16 %
Income tax expense	(16.6)	(18.2)	(8.8)	1.6	(9)%	(9.4)	107 %
Net income	55.2	29.5	32.2	25.7	87 %	(2.7)	(8)%
Net income attributable to noncontrolling interest	(1.6)	(0.9)	(0.5)	(0.7)	*	(0.4)	*
Net income attributable to ParkOhio common shareholders	$53.6	$28.6	$31.7	$25.0	87 %	$(3.1)	(10)%
Earnings per common share attributable to ParkOhio common shareholders							
Basic	$4.37	$2.34	$2.62	$2.03	87 %	$(0.28)	(11)%
Diluted	$4.28	$2.30	$2.58	$1.98	86 %	$(0.28)	(11)%

* Calculation not meaningful

2018 Compared with 2017

Net Sales

Net sales increased 17% to $1,658.1 million in 2018 compared to $1,412.9 million in 2017. The increase in net sales was driven by organic growth of 8%, primarily due to higher end-market demand for products in all three of our business segments, and the sales from our acquisitions in 2018 and 2017, which contributed 9% of the increase.

Cost of Sales & Gross Profit

Cost of sales increased 17% to $1,386.6 million in 2018 compared to $1,180.1 million in 2017. The increase in cost of sales was primarily due to the increase in net sales of 17%, described above. Our gross margin percentage was comparable year-over-year at 16.4% in 2018 compared to 16.5% in 2017, as the profit flow-through from higher sales in 2018 was offset by lower margins in our Assembly Components segment, which is explained more fully in the “Segment Results” section below.

Table of Contents

SG&A Expenses
SG&A expenses increased to $176.1 million in 2018 from $152.3 million in 2017, driven by SG&A expenses from our acquisitions, as well as higher sales and profit in 2018. SG&A expenses as a percentage of net sales decreased to 10.6% in 2018 compared to 10.8% in 2017.
Gain on Sale of Assets

During 2018, the Company sold land to a third party, resulting in cash proceeds of $2.8 million and a pre-tax gain on sale of $1.9 million.
Litigation Settlement Gain

During 2017, the Company paid $4.0 million to settle the IPSCO litigation. In connection with the settlement, the Company recognized $3.3 million of income related to the reversal of its excess litigation liability.
Other Components of Pension Income and Other Postretirement Benefits (“OPEB”) Expense, Net

In accordance with the adoption of Accounting Standards Codification 2017-07, as of January 1, 2018, the Company revised its presentation of total pension income and OPEB expense. Amounts recorded in the consolidated statements of income were as follows:

	Year Ended December 31,	
	2018	2017
	(Dollars in millions)	
Pension and OPEB service cost recorded in COS and SG&A expenses	$3.7	$2.4
Other components of pension income and OPEB expense, net	(8.8)	(6.4)
Total income, net	$(5.1)	$(4.0)

The service costs are recorded in operating income, and Other components of pension income and OPEB expenses are recorded on a separate line in the consolidated statements of income. Prior year amounts have been reclassified to conform to the 2018 presentation.

Interest Expense, Net

Interest expense increased to $34.3 million in 2018 from $31.5 million in 2017, due primarily to higher average outstanding borrowings in 2018 compared to 2017. The higher borrowings were primarily under the Company’s revolving credit facilities to fund the acquisitions in 2018, and to fund higher working capital due to higher sales levels in 2018 compared to 2017. The impact of the higher outstanding borrowings in 2018 on our interest expense was partially offset by lower effective borrowing rates in 2018 compared to 2017, due primarily to the Company’s debt refinancing in April 2017. Our average effective borrowing rates were 5.8% in 2018 compared to 6.1% in 2017.

Loss on Extinguishment of Debt

During 2017, we incurred $11.0 million of expenses related to our debt refinancing activities. Such expenses included tender premiums, bank and other fees and accelerated amortization of certain debt issuance costs previously capitalized related to our former borrowings.

Table of Contents

Income Tax Expense

The provision for income taxes was $16.6 million in 2018 (an effective rate of 23.2%) compared to a provision of $18.2 million in 2017 (an effective rate of 38.0%). The lower rate in 2018 is due primarily to: (1) the favorable impact of the lower statutory income tax rate in the U.S. in 2018, which decreased from 35% to 21% effective January 1, 2018 as a result of the Tax Cuts and Jobs Act (the "TCJA"); (2) a benefit of approximately $3.0 million related to reversals of previously-recorded valuation allowances in certain foreign tax jurisdictions; and (3) net tax expense of $4.2 million in 2017 related to adoption of the TCJA that did not repeat in 2018. The $4.2 million of net expense related to adoption of the TCJA in 2017 included expense of $14.2 million for the transition tax and a tax benefit of $10.0 million from the adjustment of deferred tax assets and liabilities to reflect the decrease in the corporate income tax rate.

2017 Compared with 2016

Net Sales

Net sales increased 11% to $1,412.9 million in 2017 compared to $1,276.9 million in 2016. The increase in net sales was primarily due to higher end market demand for products in our Supply Technologies and Engineered Products segments, and the 2017 sales contributions from both our GH Electrotermia S.A. ("GH") acquisition completed at the end of 2016 and the 2017 acquisitions of Aero-Missile Components Inc. ("AMC") and Heads & All Threads Ltd. ("HAT"). Excluding the impact of the acquisitions, net sales grew by 5% in 2017 compared to 2016.

Cost of Sales & Gross Profit

Cost of sales increased 10% to $1,180.1 million in 2017 compared to $1,075.7 million in 2016. The increase in cost of sales was primarily due to the increase in net sales of 11% described above. Our gross margin percentage was 16.5% in 2017 compared to 15.8% in 2016. This 70 basis point improvement was primarily due to the profit flow-through from higher sales in 2017, the benefit of cost reduction actions taken in 2016, and favorable product mix.

SG&A Expenses

SG&A expenses increased to $152.3 million in 2017 from $134.2 million in 2016, driven by SG&A expenses from the acquisitions, as well as the higher sales levels in 2017. SG&A expenses as a percentage of sales were relatively consistent year-over-year, at 10.8% in 2017 compared to 10.5% in 2016.

Litigation Settlement Gain

During 2017, the Company paid $4.0 million to settle the IPSCO litigation. In connection with the settlement, the Company recognized $3.3 million of income related to the reversal of its excess litigation liability.

Asset Impairment Charge

An asset impairment charge of $4.0 million was recorded in 2016 due to the accelerated end of production in certain programs with an automotive customer in our aluminum products business.

Other Components of Pension Income and OPEB Expense, Net

In accordance with the adoption of Accounting Standards Codification 2017-07, as of January 1, 2018, the Company revised its presentation of total pension income and OPEB expense. Amounts recorded in the consolidated statements of income were as follows:

Table of Contents

	Year Ended December 31,	
	2017	2016
	(Dollars in millions)	
Pension and OPEB service cost recorded in COS and SG&A expenses	$2.4	$2.4
Other components of pension income and OPEB expense, net	(6.4)	(6.2)
Total income, net	$(4.0)	$(3.8)

The service costs are recorded in operating income, and Other components of pension income and OPEB expenses are recorded on a separate line in the consolidated statements of income. 2017 and 2016 amounts have been reclassified to conform to the 2018 presentation.

Interest Expense, Net

Interest expense increased to $31.5 million in 2017 from $28.2 million in 2016, due primarily to higher outstanding borrowings. Our average borrowing rate was consistent year-over-year at 6.1%.

As described more fully below, in April 2017, we refinanced our outstanding senior notes, increasing the principal amount from $250 million to $350 million and reducing the interest rate from 8.125% to 6.625%. The net impact of the higher senior notes balance at a lower rate was an increase in interest expense of approximately $2.1 million in 2017.

Loss on Extinguishment of Debt

During 2017, we incurred $11.0 million of expenses related to our debt refinancing activities. Such expenses included tender premiums, bank and other fees and accelerated amortization of certain debt issuance costs related to our former borrowings that were previously capitalized.

Income Tax Expense

The provision for income taxes was $18.2 million in 2017 (an effective rate of 38.0%) and $8.8 million in 2016 (an effective rate of 21.5%). Income taxes in 2017 include a net $4.2 million of expense related to the TCJA, as discussed more fully above. The TCJA decreased the effective tax rate by approximately 880 basis points in 2017. In 2017 and 2016, the Company reversed various income tax accruals totaling $1.6 million and $4.0 million, respectively, relating to previous uncertain tax positions for which the statutes of limitations expired.

Excluding the one-time impact of the TCJA, the effective rates in both years are lower than the U.S. statutory rate of 35% due primarily to the income tax accrual reversals mentioned above, as well as earnings in jurisdictions in which the income tax rates are lower than the U.S. statutory income tax rate.

SEGMENT RESULTS

For purposes of measuring business segment performance, the Company utilizes segment operating income, which is defined as revenues less expenses identifiable to the product lines within each segment. The Company does not allocate items that are non-operating or unusual in nature or are corporate costs, which include but are not limited to executive and share-based compensation and corporate office costs. Segment operating income reconciles to consolidated income before income taxes by deducting corporate costs; certain non-cash and/or non-operating items; Other components of pension income and OPEB expense, net; and interest expense.

24

Table of Contents

Supply Technologies Segment

	Year Ended December 31,		
	2018	2017	2016
	(Dollars in millions)		
Net sales	$636.8	$561.8	$502.1
Segment operating income	$49.0	$43.3	$37.5
Segment operating income margin	7.7 %	7.7 %	7.5 %

2018 Compared to 2017

Net sales were up 13% in 2018 compared to 2017, due primarily to organic growth of 7% and sales from the 2018 and 2017 acquisitions. The organic growth was due primarily to higher customer demand in the Company's truck and truck-related market, which was up 33%; the Company's aerospace market, which was up 37%; the Company's automotive and vehicle parts market, which was up 23%; and the Company’s industrial equipment market, which was up 11%.

Segment operating income increased by $5.7 million in 2018 compared to 2017 due primarily to the higher sales volumes. Segment operating income margin was comparable year-over-year at 7.7%, as the profit flow-through from higher sales in 2018 was offset by costs to launch new sales initiatives and changes in sales mix.

2017 Compared to 2016

Net Sales were up 12% in 2017 compared to 2016, due primarily to organic growth of 8% and the sales from the 2017 acquisitions. The organic growth was due primarily to higher customer demand in the Company's power sport and recreational equipment market, which was up 16%; the Company's truck and truck-related market, which was up 5%; the Company's semiconductor market, which was up 37%; and the Company's commercial aerospace market, which was up 25%.

Segment operating income increased by $5.8 million in 2017 compared to 2016, and segment operating income margin increased by 20 basis points, due primarily to the higher sales volumes noted above.

Assembly Components Segment

	Year Ended December 31,		
	2018	2017	2016
	(Dollars in millions)		
Net sales	$578.3	$524.5	$529.4
Segment operating income	$42.9	$47.8	$48.0
Segment operating income margin	7.4 %	9.1 %	9.1 %

2018 Compared to 2017

Net sales were up 10% in 2018 compared to 2017 due primarily to organic growth of 5% and sales from the 2018 acquisition of Hydrapower and the December 2017 acquisition of an injection molding business. The organic growth was driven by higher sales volumes in our aluminum products business due to new programs, more than offsetting lower sales volumes in our fuel products line caused by end-of-life programs.

Segment operating income and operating income margin were down $4.9 million and 170 basis points, respectively, in 2018 compared to 2017. These decreases were driven by start-up and product launch costs in 2018 related to new facilities in China and Mexico; excess operational costs at certain facilities; and changes in sales mix.

2017 Compared to 2016

Table of Contents

Net sales were down 1% in 2017 compared to 2016 due primarily to lower sales volumes in our extruded rubber and plastic product lines and our aluminum product line, which more than offset higher sales in our fuel filler pipe and fuel rail product lines. The lower sales volumes in rubber and plastic were due primarily to the end of life in certain programs, and the lower sales volumes in aluminum were due to the end of production in certain programs during 2016. The higher sales volumes in our fuel products businesses were driven by new product launches and higher foreign sales, particularly in China and Mexico.

Segment operating income and operating income margin was relatively consistent year over year. The favorable impact of higher sales in our fuel products businesses offset the impact of lower sales in rubber, plastics and aluminum, as well as start-up costs of approximately $1.4 million incurred by the segment during 2017 related to our new facilities in China.

Engineered Products Segment

	Year Ended December 31,		
	2018	2017	2016
	(Dollars in millions)		
Net sales	$443.0	$326.6	$245.4
Segment operating income	$38.4	$19.5	$9.4
Segment operating income margin	8.7 %	6.0 %	3.8 %

2018 Compared to 2017

Net sales were up 36% in 2018 compared to 2017 due primarily to sales at CDF, which was acquired in February 2018, and organic growth of 14%. The organic growth was driven by increased customer demand for our induction heating and pipe threading products, as well as our forged steel and machined products.

Segment operating income increased by $18.9 million, and segment operating income margin increased by 270 basis points, due primarily to the income from CDF and the profit flow-through from higher sales in our capital equipment and forged and machined products businesses.

2017 Compared to 2016

Net sales were up 33% in 2017 compared to 2016 due primarily to $55 million of sales at GH, which was acquired at the end of 2016, and increased customer demand for our induction heating and pipe threading products in our legacy businesses.

Segment operating income increased by $10.1 million, and segment operating income margin increased by 220 basis points, due primarily to the higher sales in 2017 and the benefit of cost reduction actions taken in 2016 in response to lower sales levels a year ago.

Liquidity and Capital Resources

Table of Contents

The following table summarizes the major components of cash flows:

	2018	2017	2016
Cash provided (used) by:	(In millions)		
Operating activities	$54.8	$46.7	$72.9
Investing activities	(89.2)	(67.6)	(51.9)
Financing activities	9.4	33.7	(17.2)
Effect of exchange rate on cash	(2.1)	5.7	(1.5)
(Decrease) increase in cash and cash equivalents	$(27.1)	$18.5	$2.3

Operating Activities

Cash provided by operating activities increased by $8.1 million in 2018 compared to 2017, driven by higher profitability in 2018 partially offset by higher working capital to support higher sales levels in 2018 compared to 2017.
Cash provided by operating activities decreased by $26.2 million in 2017 compared to 2016, driven by higher sales levels in 2017, which resulted in higher accounts receivable balances in 2017 compared to 2016.

Investing Activities

Capital expenditures (net of proceeds from asset sales) were $42.3 million in 2018, $27.9 million in 2017 and $28.5 million in 2016. These capital expenditures were primarily for growth initiatives, with the majority in our Assembly Components and Engineered Products segments. In the Assembly Components segment, we continued to launch newly awarded products in our fuel product and aluminum businesses and completed construction of our new factories in China and Mexico. In the Engineered Products segment, we continued to invest in a new forging line at the Company’s facility in Arkansas.

In 2018, we spent $46.9 million on acquisitions of businesses, primarily CDF and Hydrapower. See Note 3 to the consolidated financial statements included elsewhere herein for additional information.

In 2017, we spent a combined $39.7 million on acquisitions of businesses. See Note 3 to the consolidated financial statements included elsewhere herein for additional information.

In 2016, we spent $23.4 million on the acquisition of GH. See Note 3 to the consolidated financial statements included elsewhere herein for additional information.

Financing Activities
Cash provided by financing activities in 2018 included net borrowings of $40.3 million on our revolving credit facility to fund the 2018 acquisitions, and repayments of other debt of $12.4 million. During 2018, we also paid dividends of $6.4 million; repurchased treasury shares for $9.0 million; and made payments of withholding taxes on share awards of $3.1 million.

During September 2018, we repatriated cash of $24.4 million from a foreign subsidiary to the U.S., and utilized the cash to pay down a portion of the amount outstanding under our revolving credit facility in the U.S.

Cash provided by financing activities in 2017 reflected the proceeds from our issuance of senior notes in April 2017, net of the premium on the early extinguishment of our former senior notes and bank financing fees, repayments under our revolving credit facility and the payoff of our previously-outstanding term loan and senior notes. During 2017, we also paid dividends of $6.9 million and repurchased treasury shares for $4.2 million.

Cash used by financing activities in 2016 consisted primarily of the net payments of debt instruments of $7.0 million, payment of cash dividends of $6.2 million and payment of an acquisition earn-out of $2.0 million. During the year, we reduced

Table of Contents

outstanding indebtedness by $33.4 million using cash flow from operating activities, before borrowing $26.4 million to fund the GH acquisition.

Liquidity

Overall, our net borrowings and cash provided by operating activities in 2018 were used to make acquisitions and to fund higher working capital needs, our quarterly cash dividend payments and share repurchases. Overall, our cash balances of $55.7 million decreased by $27.1 million during 2018 due to the factors described above. See Note 7 to the consolidated financial statements included elsewhere herein for further discussion of our financing arrangements. The following table summarizes our indicators of liquidity:

	2018	2017
	(Dollars in millions)	
Cash and cash equivalents	$55.7	$82.8
Gross debt (excluding unamortized debt issuance costs)	$573.1	$541.9
Working capital (excluding cash)	$366.0	$310.7
Net debt as a % of capitalization	59 %	55 %

Our liquidity needs are primarily for working capital and capital expenditures. Our primary sources of liquidity have been funds provided by operations, funds available from existing bank credit arrangements and the sale of our debt securities. Our existing financial resources (working capital and available bank borrowing arrangements) and anticipated funds from operations are expected to be adequate to meet anticipated cash requirements for at least the next twelve months, including but not limited to our ability to maintain current operations and fund capital expenditure requirements, service our debt and pay dividends.

As of December 31, 2018, we had $165.1 million outstanding under the revolving credit facility, approximately $203.3 million of unused borrowing availability and cash and cash equivalents of $55.7 million.

The Company had cash and cash equivalents held by foreign subsidiaries of $46.2 million at December 31, 2018 and $76.0 million at December 31, 2017. We do not expect restrictions on repatriation of cash held outside the U.S. to have a material effect on our overall liquidity, financial condition or results of operations for the foreseeable future.

Senior Notes

In April 2017, Park-Ohio Industries, Inc. (“Park-Ohio”), the operating subsidiary of Park-Ohio Holdings Corp., completed the sale, in a private placement, of $350.0 million aggregate principal amount of 6.625% Senior Notes due 2027 (the “Notes”). The net proceeds from the issuance of the Notes were used to repay in full our previously outstanding 8.125% Senior Notes due 2021 and our outstanding term loan, and to repay a portion of the borrowings then outstanding under our revolving credit facility.

Credit Agreement

In June 2018, Park-Ohio entered into Amendment No. 1 to its Seventh Amended and Restated Credit Agreement (the “Credit Agreement”). The Amendment to the Credit Agreement, among other things, provided increases in the revolving credit facility from $350.0 million to $375.0 million, the Canadian revolving subcommitment from $35.0 million to $40.0 million, and the European revolving subcommitment from $25.0 million to $30.0 million. Furthermore, the Company has the option, pursuant to the Credit Agreement, to increase the availability under the revolving credit facility by an aggregate incremental amount up to $100.0 million.

Capital Leases

Table of Contents

On August 13, 2015, the Company entered into a Capital Lease Agreement (the "Lease Agreement"). The Lease Agreement provides the Company up to $50.0 million for capital leases. Capital lease obligations of $20.7 million were borrowed under the Lease Agreement to acquire machinery and equipment as of December 31, 2018.

Covenants

The future availability of bank borrowings under the revolving credit facility provided by the Credit Agreement is based on our ability to meet a debt service ratio covenant, which could be materially impacted by negative economic trends. Failure to meet the debt service ratio covenant could materially impact the availability and interest rate of future borrowings.
At December 31, 2018, our debt service coverage ratio was 1.9, and, therefore, we were in compliance with the debt service coverage ratio covenant in the revolving credit facility provided by the Credit Agreement. The debt service coverage ratio is calculated at the end of each fiscal quarter based on the following ratio: (1) the most recently ended four fiscal quarters of consolidated EBITDA, as defined in the Credit Agreement, minus cash taxes paid, minus unfunded capital expenditures, plus cash tax refunds; to (2) consolidated debt charges, which are consolidated cash interest expense, plus scheduled principal payments on indebtedness, plus scheduled reductions in our term debt as defined in the Credit Agreement. The debt service coverage ratio must be greater than 1.0 and not less than 1.15 for any two consecutive fiscal quarters. We were also in compliance with the other covenants contained in the revolving credit facility as of December 31, 2018. While we expect to remain in compliance throughout 2019, declines in sales volumes in 2019 could adversely impact our ability to remain in compliance with certain of these financial covenants. Additionally, to the extent our customers are adversely affected by declines in the economy in general, they may be unable to pay their accounts payable to us on a timely basis or at all, which could make our accounts receivable ineligible for purposes of the revolving credit facility and could reduce our borrowing base and our ability to borrow under such facility.

Dividends

The company paid dividends of $6.4 million during 2018. In January 2019, our Board of Directors declared a quarterly dividend of $0.125 per common share. The dividend was paid on March 1, 2019 to shareholders of record as of the close of business on February 15, 2019 and resulted in a cash outlay of $1.6 million. Although we currently intend to pay a quarterly dividend on an ongoing basis, all future dividend declarations will be at the discretion of our Board of Directors and dependent upon then-existing conditions, including our operating results and financial condition, capital requirements, contractual restrictions, business prospects and other factors that our Board of Directors may deem relevant.

Contractual Obligations

Table of Contents

The following table summarizes our principal contractual obligations and other commercial commitments over various future periods as of December 31, 2018:

		Payments Due or Commitment Expiration Per Period			
(In millions)	Total	Less Than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Short-term and long-term debt obligations	$552.4	$11.3	$14.4	$170.3	$356.4
Interest obligations (1)	192.2	23.2	46.4	46.4	76.2
Operating lease obligations	82.5	18.5	24.5	16.3	23.2
Capital lease obligations	20.7	6.6	9.1	3.4	1.6
Purchase obligations (2)	184.2	184.1	0.1	—	—
Pension obligations (3)	58.1	5.4	11.3	11.7	29.7
Postretirement obligations (3)	8.1	1.0	1.9	1.8	3.4
Transition tax	8.8	—	1.1	4.5	3.2
Standby letters of credit and bank guarantees	27.5	23.0	3.5	1.0	—
Total	$1,134.5	$273.1	$112.3	$255.4	$493.7

(1) Interest obligations are included on the Notes only and assume the Notes are paid at maturity. The calculation of interest on debt outstanding under our revolving credit facility and other variable rate debt ($5.7 million based on 3.48% average interest rate and outstanding borrowings of $165.1 million at December 31, 2018, respectively) is not included above due to the estimation required.

(2) Purchase obligations include contractual obligations for raw materials and services.

(3) Pension and postretirement obligations include projected benefit payments to participants only through 2027.

The table above excludes the liability for unrecognized income tax benefits disclosed in Note 8 to the consolidated financial statements included elsewhere herein, since we cannot predict, with reasonable reliability, the timing of potential cash settlements with the respective taxing authorities.

Off-Balance Sheet Arrangements

We do not have off-balance sheet arrangements, financing or other relationships with unconsolidated entities or other persons or derivative instruments.

Critical Accounting Policies and Estimates

Preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make certain estimates and assumptions which affect amounts reported in our consolidated financial statements. On an ongoing basis, we evaluate the accounting policies and estimates that are used to prepare financial statements. Management has made their best estimates and judgments of certain amounts included in the financial statements, giving due consideration to materiality. We do not believe that there is great likelihood that materially different amounts would be reported under different conditions or using different assumptions related to the accounting policies described below. However, application of these accounting policies involves the exercise of judgment and use of assumptions as to future uncertainties and, as a result, actual results could differ from these estimates.

Certain accounting policies that require significant management estimates and are deemed critical to our results of operations or financial position are discussed below. On a regular basis, critical accounting policies are reviewed with the Audit Committee of the Board of Directors.

Revenue Recognition: We recognize revenue, other than from long-term contracts, when our obligations under the contact terms are satisfied and control transfers to the customer, typically upon shipment. Revenue from certain long-term contracts is accounted for over time, when products are manufactured or services are performed, as control transfers under these

30

arrangements. We follow the input method since reasonably reliable estimates of revenue and costs of a contract can be made. See Note 2 of the consolidated financial statements included elsewhere herein for additional disclosures on revenue.

Allowance for Obsolete and Slow-Moving Inventory: Inventories are generally valued using first-in, first-out (“FIFO”) or the weighted-average inventory method; stated at the lower of cost or net realizable value; and have been reduced by an allowance for obsolete and slow-moving inventories. The estimated allowance is based on management’s review of inventories on hand with minimal sales activity, which is compared to estimated future usage and sales. Inventories identified by management as slow-moving or obsolete are reserved for based on estimated selling prices less disposal costs. Though we consider these allowances adequate and proper, changes in economic conditions in specific markets in which we operate could have a material effect on allowances required.

Impairment of Long-Lived Assets: In accordance with Accounting Standards Codification (“ASC”) 360, “Property, Plant and Equipment,” management performs impairment tests of long-lived assets, including property and equipment, whenever an event occurs or circumstances change that indicate that the carrying value may not be recoverable or the useful life of the asset has changed. We review our long-lived assets for indicators of impairment such as a decision to idle certain facilities and consolidate certain operations, a current-period operating or cash flow loss or a forecast that demonstrates continuing losses associated with the use of a long-lived asset and the expectation that, more likely than not, a long-lived asset will be sold or otherwise disposed of significantly before the end of its previously estimated useful life. When we identify impairment indicators, we determine whether the carrying amount of our long-lived assets is recoverable by comparing the carrying value to the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the assets. We consider whether impairments exist at the lowest level of independent identifiable cash flows within a reporting unit (for example, plant location, program level or asset level). If the carrying value of the assets exceeds the expected cash flows, we estimate the fair value of these assets by using appraisals or recent selling experience in selling similar assets, or for certain assets with reasonably predictable cash flows by performing a discounted cash flow analysis to estimate fair value when market information is not available to determine whether an impairment existed.

Business Combinations, Goodwill and Indefinite-Lived Assets: Business combinations are accounted for using the purchase method of accounting. This method requires the Company to record assets and liabilities of the business acquired at their estimated fair values as of the acquisition date. Any excess of the cost of the acquisition over the fair value of the net assets acquired is recorded as goodwill. The Company uses valuation specialists to perform appraisals and assist in the determination of the fair values of the assets acquired and liabilities assumed. These valuations require management to make estimates and assumptions.

As required by ASC 350, “Intangibles - Goodwill and Other” (“ASC 350”), management performs impairment testing of goodwill at least annually, as of October 1 of each year, or more frequently if impairment indicators arise. In accordance with ASC 350, management tests goodwill for impairment at the reporting unit level. A reporting unit is an operating segment pursuant to ASC 280, “Segment Reporting”, or one level below the operating segment (component level) as determined by the availability of discrete financial information that is regularly reviewed by operating segment management. Our reporting units have been identified at the component level. For 2018, 2017 and 2016, we performed quantitative testing for each reporting unit with a goodwill balance.

Goodwill testing compares the carrying amount of the reporting unit to its estimated fair value. To the extent that the carrying value of the reporting unit exceeds its estimated fair value, an impairment charge is recorded. In applying the quantitative approach, we rely on a number of factors, including future business plans, actual and forecasted operating results, and market data. The significant assumptions employed under this method include discount rates; revenue growth rates, including assumed terminal growth rates; future capital expenditures and working capital needs; and operating margins used to project future cash flows for a reporting unit. The discount rates utilized reflect market-based estimates of capital costs and discount rates adjusted for management’s assessment of a market participant’s view with respect to other risks associated with the projected cash flows of the individual reporting unit. Our estimates are based upon assumptions we believe to be reasonable, but which by nature are uncertain and unpredictable. We believe we incorporate ample sensitivity ranges into our analysis of goodwill impairment testing for a reporting unit, such that actual experience would need to be materially out of the range of expected assumptions

in order for an impairment to remain undetected.
The results of testing as of October 1, 2018, 2017 and 2016 for all reporting units confirmed that the estimated fair value exceeded carrying values, and no impairment existed as of those dates.

Table of Contents

Additionally, we test all indefinite-lived intangible assets for impairment at least annually, as of October 1 of each year, or more frequently if impairment indicators arise. In 2018, 2017 and 2016, we utilized a quantitative approach using the royalty relief method. The significant assumptions employed under this method include discount rates, revenue growth rates, including assumed terminal growth rates, and royalty rates. The discount rates utilized reflect market-based estimates of capital costs and discount rates adjusted for management's assessment of a market participant's view with respect to other risks associated with the projected cash flows of the individual reporting unit. Our estimates are based upon assumptions we believe to be reasonable, but which by nature are uncertain and unpredictable. We believe we incorporate ample sensitivity ranges into our analysis of intangible impairment testing, such that actual experience would need to be materially out of the range of expected assumptions in order for an impairment to remain undetected.

The results of testing as of October 1, 2018, 2017 and 2016 for all reporting units confirmed that the estimated fair value exceeded carrying values, and no impairment existed as of those dates.

See Notes 5 and 6 of the consolidated financial statements included elsewhere herein for additional disclosure on goodwill and indefinite-lived intangibles.

Income Taxes: In accordance with ASC 740, "Income Taxes" ("ASC 740"), we account for income taxes under the asset and liability method, whereby deferred tax assets and liabilities are determined based on temporary differences between the financial reporting and the tax bases of assets and liabilities and are measured using the currently enacted tax rates. Specifically, we measure gross deferred tax assets for deductible temporary differences and carryforwards, such as operating losses and tax credits, using the applicable enacted tax rates and apply the more likely than not measurement criterion.

In determining if it is more likely than not that all or some portion of a deferred tax asset will be realized, we consider the following factors: future reversals of existing taxable temporary differences; future taxable income; taxable income in prior years if carryback is permitted under the tax law; and tax planning strategies that could accelerate taxable income. Based on these factors, when we have determined that the realizability of certain domestic and foreign deferred tax assets is more likely than not to not be realized, a valuation allowance has been established.

Further, at each interim reporting period, we estimate an effective income tax rate that is expected to be applicable for the full year. Significant judgment is involved regarding the application of global income tax laws and regulations and when projecting the jurisdictional mix of income. Additionally, interpretation of tax laws, court decisions or other guidance provided by taxing authorities influences our estimate of the effective income tax rates. As a result, our actual annual effective income tax rates and related income tax liabilities may differ materially from our interim estimated effective tax rates and related income tax liabilities. Any resulting differences are recorded in the period they become known.

Pension and Other Postretirement Benefit Plans: We and our subsidiaries have pension plans, principally noncontributory defined benefit or noncontributory defined contribution plans and postretirement benefit plans covering substantially all employees. The measurement of liabilities related to these plans is based on management's assumptions related to future events, including interest rates, return on pension plan assets, rate of compensation increases, and health care cost trends. Pension plan asset performance in the future will directly impact our net income. We have evaluated our pension and other postretirement benefit assumptions, considering current trends in interest rates and market conditions and believe our assumptions are appropriate.

We consult with our actuaries at least annually when reviewing and selecting the discount rates to be used. The discount rates used by the Company are based on yields of various corporate and governmental bond indices with actual maturity dates that approximate the estimated benefit payment streams of the related pension plans. The discount rates are also reviewed in comparison with current benchmark indices, economic market conditions and the movement in the benchmark yield since the previous fiscal year. The liability weighted-average discount rate for the defined benefit pension plan is 4.24% for 2018, compared with 3.52% in 2017. For the other postretirement benefit plan, the rate is 4.06% for 2018 and 3.32% for 2017. This rate represents the interest rates generally available in the United States, which is the Company's only country with other postretirement benefit liabilities. Another assumption that affects the Company's pension expense is the expected long-term rate of return on assets. The Company's pension plans are funded. The weighted-average expected long-term rate of return on assets assumption is 8.25% for 2018. In determining the expected return on plan assets, we consider both historical performance and

Table of Contents

an estimate of future long-term rates of return on assets similar to those in our plan. We consult with and consider opinions of financial and actuarial experts in developing appropriate return assumptions.

Legal Contingencies: We are involved in a variety of claims, suits, investigations and administrative proceedings with respect to commercial, premises liability, product liability, employment and environmental matters arising from the ordinary course of business. We accrue reserves for legal contingencies, on an undiscounted basis, when it is probable that we have incurred a liability and we can reasonably estimate an amount. When a single amount cannot be reasonably estimated, but the cost can be estimated within a range and no amount within the range is a better estimate than any other amount, we accrue the minimum amount in the range. Based upon facts and information currently available, we believe the amounts reserved are adequate for such pending matters. We monitor the development of legal proceedings on a regular basis and will adjust our reserves when, and to the extent, additional information becomes available.

Environmental

We have been identified as a potentially responsible party at third-party sites under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, or comparable state laws, which provide for strict and, under certain circumstances, joint and several liability. We are participating in the cost of certain clean-up efforts at several of these sites. However, our share of such costs has not been material and based on available information, management does not expect our exposure at any of these locations to have a material adverse effect on our results of operations, liquidity or financial condition.

We have been named as one of many defendants in a number of asbestos-related personal injury lawsuits. Our cost of defending such lawsuits has not been material to date and, based upon available information, management does not expect our future costs for asbestos-related lawsuits to have a material adverse effect on our results of operations, liquidity or financial condition. We caution, however, that inherent in management's estimates of our exposure are expected trends in claims severity, frequency and other factors that may materially vary as claims are filed and settled or otherwise resolved.

Seasonality; Variability of Operating Results

The timing of orders placed by our customers has varied with, among other factors, orders for customers' finished goods, customer production schedules, competitive conditions and general economic conditions. The variability of the level and timing of orders has, from time to time, resulted in significant periodic and quarterly fluctuations in the operations of our business units. Such variability is particularly evident in the industrial equipment business unit included in the Engineered Products segment, which typically ships a few large systems per year.

Forward-Looking Statements

This Annual Report on Form 10-K contains certain statements that are "forward-looking statements" within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. The words "believes", "anticipates", "plans", "expects", "intends", "estimates" and similar expressions are intended to identify forward-looking statements.

These forward-looking statements, including statements regarding future performance of the Company, that are subject to known and unknown risks, uncertainties and other factors that may cause our actual results, performance and achievements, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. These factors that could cause actual results to differ materially from expectations include, but are not limited to, the following: our substantial indebtedness; the uncertainty of the global economic environment; general business conditions and competitive factors, including pricing pressures and product innovation; demand for our products and services; raw material availability and pricing; fluctuations in energy costs; component part availability and pricing; changes in our relationships with customers and suppliers; the financial condition of our customers, including the impact of any bankruptcies; our ability to successfully integrate recent and future acquisitions into existing operations; the amounts and timing, if any, of purchases of our common stock; changes in general domestic economic conditions such as inflation rates, interest rates, tax rates, unemployment rates, higher labor and healthcare costs, recessions and changing government policies, laws and regulations, including those related to the current global uncertainties and crises; adverse impacts to us, our suppliers

Table of Contents

and customers from acts of terrorism or hostilities; our ability to meet various covenants, including financial covenants, contained in the agreements governing our indebtedness; disruptions, uncertainties or volatility in the credit markets that may limit our access to capital; potential disruption due to a partial or complete reconfiguration of the European Union; increasingly stringent domestic and foreign governmental regulations, including those affecting the environment or import and export controls and other trade barriers; inherent uncertainties involved in assessing our potential liability for environmental remediation-related activities; the outcome of pending and future litigation and other claims and disputes with customers; our dependence on the automotive and heavy-duty truck industries, which are highly cyclical; the dependence of the automotive industry on consumer spending; our ability to negotiate contracts with labor unions; our dependence on key management; our dependence on information systems; our ability to continue to pay cash dividends, and the other factors we describe under "Item 1A. Risk Factors" included in this Annual Report on Form 10-K. Any forward-looking statement speaks only as of the date on which such statement is made, and we undertake no obligation to update any forward-looking statement, whether as a result of new information, future events or otherwise, except as required by law. In light of these and other uncertainties, the inclusion of a forward-looking statement herein should not be regarded as a representation by us that our plans and objectives will be achieved. The Company assumes no obligation to update the information in this Annual Report on Form 10-K, except to the extent required by law.

Table of Contents

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risk, including changes in interest rates. As of December 31, 2018, we are subject to interest rate risk on borrowings under the floating rate revolving credit facility provided by our Credit Agreement, which consisted of borrowings of $165.1 million at December 31, 2018. A 100 basis point increase in the interest rate would have resulted in an increase in interest expense on these borrowings of approximately $1.7 million for the year ended December 31, 2018.

Our foreign subsidiaries generally conduct business in local currencies. We face translation risks related to the changes in foreign currency exchange rates. Amounts invested in our foreign operations are translated in U.S. dollars at the exchange rates in effect at the balance sheet date. The resulting translation adjustments are recorded as a component of Accumulated other comprehensive loss in the Shareholders' equity section of the accompanying Consolidated Balance Sheets. Sales and expenses at our foreign operations are translated into U.S. dollars at the applicable monthly average exchange rates. Therefore, changes in exchange rates may either positively or negatively affect our net sales and expenses from foreign operations as expressed in U.S. dollars.

Our largest exposures to commodity prices relate to steel and natural gas prices, which have fluctuated widely in recent years. We do not have any commodity swap agreements, forward purchase or hedge contracts.

Table of Contents

Item 8. Financial Statements and Supplementary Data

Index to Consolidated Financial Statements and Supplementary Financial Data

Table of Contents

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Park-Ohio Holdings Corp.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Park-Ohio Holdings Corp. and subsidiaries (the Company) as of December 31, 2018 and 2017, the related consolidated statements of income, comprehensive income (loss), shareholders' equity and cash flows for each of the three years in the period ended December 31, 2018, and the related notes and financial statement schedule listed in the Index at Item 15(a) (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company’s internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated March 5, 2019 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the 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 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company’s auditor since 1967.

Cleveland, Ohio
March 5, 2019

Table of Contents

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Park-Ohio Holdings Corp.

Opinion on Internal Control over Financial Reporting

We have audited Park-Ohio Holdings Corp. and subsidiaries' internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control- Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Park-Ohio Holdings Corp. and subsidiaries (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on the COSO criteria.
We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2018 and 2017, the related consolidated statements of income, comprehensive income (loss), shareholders' equity and cash flows for each of the three years in the period ended December 31, 2018, and the related notes and financial statement schedule listed in the Index at Item 15(a) and our report dated March 5, 2019 expressed an unqualified opinion thereon.

As indicated in the accompanying Management's Report on Internal Control over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Canton Drop Forge, Hydrapower Dynamics Limited and the two acquisitions in the Supply Technologies segment, which are included in the 2018 consolidated financial statements of the Company and constituted approximately six percent of the Company's total assets as of December 31, 2018 and approximately four percent of the Company's total revenues; for the year then ended. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of Canton Drop Forge, Hydrapower Dynamics Limited and the two acquisitions in the Supply Technologies segment.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the

Table of Contents

company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

/s/ Ernst & Young LLP

Cleveland, Ohio
March 5, 2019

Table of Contents

Park-Ohio Holdings Corp. and Subsidiaries
Consolidated Balance Sheets

	December 31, 2018	December 31, 2017
	(In millions, except share data)	
ASSETS		
Current assets:		
Cash and cash equivalents	$55.7	$ 82.8
Accounts receivable, net	264.4	242.6
Inventories, net	317.8	282.8
Unbilled contract revenue	66.3	44.5
Other current assets	16.4	16.9
Total current assets	720.6	669.6
Property, plant and equipment, net	219.4	177.0
Goodwill	103.4	100.2
Intangible assets, net	95.3	99.5
Pension assets	57.0	74.3
Other long-term assets	12.8	11.9
Total assets	$1,208.5	$ 1,132.5
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Trade accounts payable	$177.8	$ 173.7
Current portion of long-term debt and short-term debt	17.9	17.7
Accrued employee compensation	27.5	23.0
Deferred revenue	39.5	23.0
Other accrued expenses	36.2	38.7
Total current liabilities	298.9	276.1
Long-term liabilities, less current portion:		
Long-term debt	547.5	515.5
Deferred income taxes	23.4	22.3
Other long-term liabilities	26.1	30.6
Total long-term liabilities	597.0	568.4
Park-Ohio Holdings Corp. and Subsidiaries shareholders' equity:		
Capital stock, par value $1 a share		
Serial preferred stock: Authorized -- 632,470 shares: Issued and outstanding -- none	—	—
Common stock: Authorized - 40,000,000 shares; Issued - 15,555,275 shares in 2018 and 15,153,009 in 2017	15.6	15.2
Additional paid-in capital	125.7	117.8
Retained earnings	265.9	216.1
Treasury stock, at cost, 2,928,869 shares in 2018 and 2,624,354 shares in 2017	(67.3)	(55.2)
Accumulated other comprehensive loss	(40.9)	(17.9)
Total Park-Ohio Holdings Corp. and Subsidiaries shareholders' equity	299.0	276.0
Noncontrolling interests	13.6	12.0
Total equity	312.6	288.0
Total liabilities and shareholders' equity	$1,208.5	$ 1,132.5

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

40

Table of Contents

Park-Ohio Holdings Corp. and Subsidiaries
Consolidated Statements of Income

	Year Ended December 31,		
	2018	2017	2016
	(In millions, except per share data)		
Net sales	$1,658.1	$1,412.9	$1,276.9
Cost of sales	1,386.6	1,180.1	1,075.7
Gross profit	271.5	232.8	201.2
Selling, general and administrative expenses	176.1	152.3	134.2
Gain on sale of assets	(1.9)	—	—
Litigation settlement gain	—	(3.3)	—
Asset impairment charge	—	—	4.0
Operating income	97.3	83.8	63.0
Other components of pension income and other postretirement benefits expense, net	8.8	6.4	6.2
Interest expense, net	(34.3)	(31.5)	(28.2)
Loss on extinguishment of debt	—	(11.0)	—
Income before income taxes	71.8	47.7	41.0
Income tax expense	(16.6)	(18.2)	(8.8)
Net income	55.2	29.5	32.2
Net income attributable to noncontrolling interest	(1.6)	(0.9)	(0.5)
Net income attributable to ParkOhio common shareholders	$53.6	$28.6	$31.7
Earnings per common share attributable to ParkOhio common shareholders:			
Basic	$4.37	$2.34	$2.62
Diluted	$4.28	$2.30	$2.58
Weighted-average shares used to compute earnings per share:			
Basic	12.3	12.2	12.1
Diluted	12.5	12.5	12.3

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

Table of Contents

Park-Ohio Holdings Corp. and Subsidiaries
Consolidated Statements of Comprehensive Income (Loss)

	Year Ended December 31,		
	2018	2017	2016
	(In millions)		
Net income	$55.2	$29.5	$32.2
Other comprehensive income (loss):			
Currency translation	(9.7)	19.2	(13.9)
Pension and other postretirement benefits, net of tax	(13.3)	5.6	1.2
Total other comprehensive income (loss)	(23.0)	24.8	(12.7)
Total comprehensive income, net of tax	32.2	54.3	19.5
Comprehensive income attributable to noncontrolling interest	(1.6)	(0.9)	(0.5)
Comprehensive income attributable to ParkOhio common shareholders	$30.6	$53.4	$19.0

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

Table of Contents

Park-Ohio Holdings Corp. and Subsidiaries
Consolidated Statements of Shareholders' Equity

	Common Stock							
	Shares	Amount	Additional Paid-In Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive (Loss) Income	Noncontrolling Interest	Total
	(In whole shares)	(In millions)						
Balance at January 1, 2016	14,653,985	$14.7	$99.0	$168.3	$(46.7)	$(30.0)	$6.9	$212.2
Comprehensive income (loss)	—	—	—	31.7	—	(12.7)	0.5	19.5
Stock-based compensation	—	—	10.6	—	—	—	—	10.6
Restricted stock awards issued	172,550	0.2	(0.2)	—	—	—	—	—
Restricted stock cancelled	(4,000)	—	—	—	—	—	—	—
Performance shares issued	1,500	—	—	—	—	—	—	—
Exercise of stock options	22,000	—	0.5	—	—	—	—	0.5
Dividends		—	—	(6.2)	—	—	—	(6.2)
Purchase of treasury stock (62,208 shares)	—	—	—	—	(1.9)	—	—	(1.9)
Income tax effect of share-based compensation exercises and vesting	—	—	(0.6)	—	—	—	—	(0.6)
Acquisition	—	—	—	—	—	—	2.1	2.1
Other	—	—	(0.5)	(0.2)	—	—	0.5	(0.2)
Balance at December 31, 2016	14,846,035	14.9	108.8	193.6	(48.6)	(42.7)	10.0	236.0
Comprehensive income	—	—	—	28.6	—	24.8	0.9	54.3
Stock-based compensation	—	—	8.6	—	—	—	—	8.6
Restricted stock awards issued	266,280	0.3	(0.3)	—	—	—	—	—
Restricted stock cancelled	(2,000)	—	—	—	—	—	—	—
Performance shares issued	4,694	—	—	—	—	—	—	—
Exercise of stock options	38,000	—	0.7	—	—	—	—	0.7
Dividends	—	—	—	(6.3)	—	—	(0.6)	(6.9)
Purchase of treasury stock (178,243 shares)	—	—	—	—	(6.6)	—	—	(6.6)
Acquisition adjustment	—	—	—	—	—	—	1.7	1.7
Other	—	—	—	0.2	—	—	—	0.2
Balance at December 31, 2017	15,153,009	15.2	117.8	216.1	(55.2)	(17.9)	12.0	288.0
Comprehensive income	—	—	—	53.6	—	(23.0)	1.6	32.2
Stock-based compensation	—	—	8.3	—	—	—	—	8.3
Restricted stock awards issued	410,100	0.4	(0.4)	—	—	—	—	—
Restricted stock cancelled	(7,834)	—	—	—	—	—	—	—
Dividends	—	—	—	(6.4)	—	—	—	(6.4)
Purchase of treasury stock (304,512 shares)	—	—	—	—	(12.1)	—	—	(12.1)
Adoption of ASU 2014-09	—	—	—	2.6	—	—	—	2.6
Balance at December 31, 2018	15,555,275	$15.6	$125.7	$265.9	$(67.3)	$(40.9)	$13.6	$312.6

	Year Ended December 31,		
	2018	2017	2016
Cash dividend per common share	$0.50	$0.50	$0.50

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

43

Table of Contents

Park-Ohio Holdings Corp. and Subsidiaries
Consolidated Statements of Cash Flows

	Year Ended December 31,		
	2018	2017	2016
OPERATING ACTIVITIES	(In millions)		
Net income	$55.2	$29.5	$32.2
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	36.3	31.5	29.5
Stock-based compensation	8.3	8.6	10.6
Gain on sale of assets	(1.9)	—	—
Loss on extinguishment of debt	—	11.0	—
Litigation settlement gain	—	(3.3)	—
Asset impairment charge	—	—	4.0
Deferred income taxes	0.6	5.6	2.8
Net impact of Tax Cuts and Jobs Act	0.3	4.2	—
Changes in operating assets and liabilities:			
Accounts receivable	(11.9)	(25.1)	13.7
Inventories	(29.4)	(19.0)	8.6
Prepaid and other current assets	(9.7)	(4.4)	(5.5)
Accounts payable and accrued expenses	15.5	23.8	(8.8)
Other noncurrent liabilities	(2.0)	(4.3)	(8.1)
Litigation settlement payment	—	(4.0)	—
Other	(6.5)	(7.4)	(6.1)
Net cash provided by operating activities	54.8	46.7	72.9
INVESTING ACTIVITIES			
Purchases of property, plant and equipment	(45.1)	(27.9)	(28.5)
Proceeds from sale of assets	2.8	—	—
Business acquisitions, net of cash acquired	(46.9)	(39.7)	(23.4)
Net cash used by investing activities	(89.2)	(67.6)	(51.9)
FINANCING ACTIVITIES			
Proceeds from (payments on) revolving credit facility, net	40.3	(8.1)	(36.2)
Payments on term loans and other debt	(15.5)	(31.3)	(4.5)
Proceeds from other long-term debt	4.0	—	34.9
(Payments on) proceeds from capital lease facilities, net	(0.9)	1.5	(1.2)
Issuance of 6.625% senior notes due 2027	—	350.0	—
Deferred financing costs	—	(7.6)	—
Repurchase of 8.125% senior notes due 2021	—	(250.0)	—
Premium on early extinguishment of debt	—	(8.0)	—
Dividends	(6.4)	(6.9)	(6.2)
Purchase of treasury shares	(9.0)	(4.2)	(0.1)
Payments of withholding taxes on share awards	(3.1)	(2.4)	(1.8)
Other	—	0.7	(2.1)
Net cash provided (used) by financing activities	9.4	33.7	(17.2)
Effect of exchange rate changes on cash	(2.1)	5.7	(1.5)
(Decrease) increase in cash and cash equivalents	(27.1)	18.5	2.3
Cash and cash equivalents at beginning of year	82.8	64.3	62.0
Cash and cash equivalents at end of year	$55.7	$82.8	$64.3
Income taxes paid	$21.0	$11.3	$8.7

Interest paid	$33.0	$29.9	$25.9

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

Table of Contents

PARK-OHIO HOLDINGS CORP. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Dollars in millions, except per share data.)
NOTE 1 — Summary of Significant Accounting Policies
Consolidation and Basis of Presentation: Park-Ohio Holdings Corp. ("ParkOhio," "we" or the "Company") is a diversified international company providing world-class customers with a supply chain management outsourcing service, capital equipment used on their production lines, and manufactured components used to assemble their products. The Company operates through three reportable segments: Supply Technologies, Assembly Components and Engineered Products. The consolidated financial statements include the accounts of the Company and all of its majority-owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation. The Company does not have off-balance sheet arrangements or financings with unconsolidated entities or other persons. The Company leases certain real properties owned by related parties as described in Note 11. Transactions with related parties are not material to the Company's financial position, results of operations or cash flows.
Accounting Estimates: The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts in the consolidated financial statements. Actual results could differ from those estimates.
Cash Equivalents: The Company considers all highly liquid investments with an original maturity of three months or less when purchased to be cash equivalents.
Accounts Receivable and Allowance for Doubtful Accounts: Accounts receivable are recorded at net realizable value. Accounts receivable are reduced by an allowance for amounts that may become uncollectable in the future. The allowance for doubtful accounts was $6.2 million and $4.5 million at December 31, 2018 and 2017, respectively. The Company's policy is to identify and reserve for specific collectability concerns based on customers' financial condition and payment history as well as a general reserve based on historical trends and other information. During 2018 and 2017, we sold approximately $106.8 million and $80.0 million, respectively, of accounts receivable to mitigate accounts receivable concentration risk and to increase working capital efficiency. Sales of accounts receivable are reflected as a reduction of accounts receivable in the Consolidated Balance Sheets, and the proceeds are included in cash flows from operating activities in the Consolidated Statements of Cash Flows. In 2018 and 2017, expense in the amount of $1.0 million and $0.6 million, respectively, related to the discount on sale of accounts receivable is recorded in the Consolidated Statements of Income.
Inventories: Inventories are valued using first-in, first-out ("FIFO") or the weighted-average inventory method and stated at the lower of cost or net realizable value, except for the inventories at Canton Drop Forge ("CDF"), which was acquired on February 1, 2018. CDF inventories are stated using the last-in, first-out ("LIFO") method.

Major Classes of Inventories	December 31, 2018	December 31, 2017
Raw materials and supplies	$ 85.0	$ 67.6
Work in process	48.9	43.9
Finished goods	182.0	171.3
LIFO reserve	1.9	—
Inventories, net	$ 317.8	$ 282.8

Other Inventory Items		
Inventory reserves	$ (34.9)	$ (29.8)
Consigned inventory	$ 10.3	$ 9.8

Property, Plant and Equipment: Property, plant and equipment is carried at cost. Additions and improvements that extend the lives of assets are capitalized, and expenditures for repairs and maintenance are charged to operations as incurred.

Table of Contents

Depreciation and amortization of fixed assets, including capital leases, is computed principally by the straight-line method based on the estimated useful lives of the assets ranging from five to 40 years for buildings, and one to 20 years for machinery and equipment (with the majority in the range of three to ten years).
The following table summarizes property, plant and equipment:

	December 31, 2018	December 31, 2017
Land and land improvements	$ 11.9	$ 11.6
Buildings	82.3	73.9
Machinery and equipment	392.6	348.6
Leased property under capital leases	35.8	24.1
Total property, plant and equipment	522.6	458.2
Less: Accumulated depreciation	303.2	281.2
Property, plant and equipment, net	$ 219.4	$ 177.0

	Year Ended December 31,		
	2018	2017	2016
Depreciation expense	$29.4	$24.9	$23.4

Goodwill and Indefinite-Lived Assets: In accordance with Accounting Standards Codification (“ASC”) 350, “Intangibles — Goodwill and Other” (“ASC 350”), goodwill and indefinite life intangible assets are not amortized but rather are tested annually for impairment as of October 1, or whenever events or changes in circumstances indicate there may be an
indicator of impairment in accordance with ASC 350. Goodwill is tested for impairment at the reporting unit level and is based on the net assets of each reporting unit, including goodwill and intangible assets, compared to its fair value. Our reporting units have been identified at the component level. The Company completed its annual goodwill and indefinite-lived intangibles impairment testing as of October 1 of each year, noting no impairment. To determine fair value, the Company uses primarily an income approach, utilizing a discounted cash flow model based on forecasted cash flows and weighted average cost of capital for its goodwill testing, and a relief of royalty method for its indefinite-lived intangibles testing.

See Notes 5 and 6 of the consolidated financial statements for additional disclosures about goodwill and indefinite-lived intangibles.
Impairment of Other Long-Lived Assets: Other long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate the carrying amount may not be recoverable. Upon indications of impairment, assets and liabilities are grouped at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities. The asset group would be considered impaired when the estimated future net undiscounted cash flows generated by the asset group are less than its carrying value.
Fair Values of Financial Instruments: Certain financial instruments are required to be recorded at fair value. The Company measures financial assets and liabilities at fair value in three levels of inputs. The three-tier fair value hierarchy, which prioritizes the inputs used in the valuation methodologies, is as follows:
Level 1 — Valuations based on quoted prices for identical assets and liabilities in active markets.
Level 2 — Valuations based on observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets and liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data.
Level 3 — Valuations based on unobservable inputs reflecting our own assumptions, consistent with reasonably available assumptions made by other market participants. These valuations require significant judgment.

Table of Contents

Changes in assumptions or estimation methods could affect the fair value estimates; however, we do not believe any such changes would have a material impact on our financial condition, results of operations or cash flows. The carrying value of cash and cash equivalents, accounts receivable, accounts payable and borrowings under the Credit Agreement (as defined in Note 7) approximate fair value at December 31, 2018 and December 31, 2017 because of the short-term nature of these instruments. The fair values of long-term debt and pension plan assets are disclosed in Note 7 and Note 12, respectively.

The Company has not changed its valuation techniques for measuring fair value during 2018, and there were no transfers between levels during the periods presented.

Income Taxes: The Company accounts for income taxes under the asset and liability method, whereby deferred tax assets and liabilities are determined based on temporary differences between the financial reporting and the tax bases of assets and liabilities and measured using the current enacted tax rates. In determining these amounts, management determined the probability of realizing deferred tax assets, taking into consideration factors including historical operating results, cumulative earnings and losses, expectations of future earnings, taxable income and the extended period of time over which the postretirement benefits will be paid. As required by ASC 740, “Income Taxes” (“ASC 740”), the Company records valuation allowances if, based on the weight of available evidence, it is more likely than not that all or some portion of our deferred tax assets will not be realized.

Revenue Recognition: The Company recognizes revenue, other than from long-term contracts within the Engineered Products segment, when its obligations under the contract terms are satisfied and control transfers to the customer, typically upon shipment. Revenue from certain long-term contracts is accounted for over time, when products are manufactured or services are performed, as control transfers under these arrangements. We follow this method since reasonably reliable estimates of revenue and costs of a contract can be made. See Note 2 for additional disclosure on revenue.

Cost of Sales: Cost of sales is primarily comprised of direct materials and supplies consumed in the manufacture of product; manufacturing labor, depreciation expense and direct overhead expense; and shipping and handling costs.

Concentration of Credit Risk: The Company sells its products to customers in diversified industries. The Company performs ongoing credit evaluations of its customers’ financial condition but does not require collateral to support customer receivables. The Company establishes an allowance for doubtful accounts based upon factors surrounding the credit risk of specific customers, historical trends and other information. As of December 31, 2018, the Company had uncollateralized receivables with six customers in the automotive industry, each with several locations, aggregating $46.8 million, which represented approximately 18% of the Company’s trade accounts receivable. During 2018, sales to these customers amounted to approximately $338.2 million, which represented approximately 20% of the Company’s net sales.

Environmental: The Company expenses environmental costs related to existing conditions resulting from past or current operations and from which no current or future benefit is discernible. Costs that extend the life of the related property or mitigate or prevent future environmental contamination are capitalized. The Company records a liability when environmental assessments and/or remedial efforts are probable and can be reasonably estimated. The estimated liability of the Company is not reduced for possible recoveries from insurance carriers and is undiscounted.

Foreign Currency Translation: The functional currency of the Company's subsidiaries outside the United States is the local currency. Financial statements are translated into U.S. dollars at year-end exchange rates for assets and liabilities and weighted-average exchange rates during the period for revenues and expenses. The resulting translation adjustments are recorded in Accumulated other comprehensive income (loss) in shareholders’ equity. Gains and losses resulting from foreign currency transactions, including intercompany transactions that are not considered long-term investments, are included in the Consolidated Statements of Income.

Warranties: The Company estimates the amount of warranty claims on sold products that may be incurred based on current and historical data. The actual warranty expense could differ from the estimates made by the Company based on product performance. The following table presents the changes in the Company’s product warranty liability:

47

	Year Ended December 31,		
	2018	2017	2016
Balance at January 1	$7.9	$7.1	$6.1
Claims paid during the year	(5.3)	(4.0)	(3.7)
Warranty expense	3.6	4.7	2.0
Acquired warranty liabilities	—	0.1	2.8
Other	—	—	(0.1)
Balance at December 31	$6.2	$7.9	$7.1

Weighted-Average Number of Shares Used in Computing Earnings Per Share: The following table sets forth the weighted-average number of shares used in the computation of earnings per share:

	Year Ended December 31,		
	2018	2017	2016
	(In whole shares)		
Weighted average basic shares outstanding	12,255,490	12,211,978	12,126,264
Dilutive impact of employee stock awards	253,023	243,963	148,188
Weighted average diluted shares outstanding	12,508,513	12,455,941	12,274,452

Outstanding stock options with exercise prices greater than the average price of the common shares are anti-dilutive and are not included in the computation of diluted earnings per share. For the years ended December 31, 2018, 2017 and 2016, the anti-dilutive shares were insignificant.

Accounting Pronouncements Adopted

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standard Update ("ASU") 2014-09, "Revenue from Contracts with Customers," a new comprehensive revenue recognition standard that supersedes previous guidance under U.S. GAAP. The core principle of the new standard is that a company should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. Our implementation efforts included identification of revenue within the scope of the standard, evaluation of revenue contracts under the guidance, and an assessment of the impacts of the new standard on our consolidated financial statements.

The Company adopted the new standard as of January 1, 2018 using the modified retrospective method of adoption. This method allowed companies to record a one-time adjustment to beginning retained earnings as of January 1, 2018 for the cumulative effect that the standard had on open contracts at the date of adoption. During our implementation, we identified certain contracts that now require over time recognition under the new standard, either as goods are manufactured or services are performed, rather than at the time of shipment or completion as recorded under previous guidance. Upon adoption, we recorded previously unrecognized revenue of $13.6 million, resulting in a cumulative-effect adjustment of $2.6 million to our 2018 beginning retained earnings. See Note 2 for further details.

In March 2017, the FASB issued ASU 2017-07, "Compensation - Retirement Benefits (Topic 715), Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost." The ASU requires that an employer report the service cost component in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. The Company adopted this standard effective January 1, 2018. Other components of pension income and other postretirement benefits expense, net includes all amounts other than the service cost component. Such amounts are included on a separate line below operating income on the condensed consolidated statements of income. The new standard requires a retrospective application and allows a practical expedient that permits an employer to use the amounts disclosed in its pension footnote for the prior comparative periods as the estimation basis for applying the retrospective presentation. This resulted in the reclassification of the following amounts from previously-reported Selling, general and administrative ("SG&A") expenses for 2017 and 2016:

	Year Ended December 31,	
	2017	2016
Amounts recorded in Cost of sales	$(1.8)	$(1.8)
Amounts recorded in SG&A expenses	(0.6)	$(0.6)
Amounts recorded in Other components of pension income and other postretirement benefits expenses, net	6.4	$6.2
Total pension income and other postretirement benefits expense, net	$4.0	$3.8

Recent Accounting Pronouncements Not Yet Adopted

In February 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)." This accounting standard requires that a lessee recognize a lease asset and a lease liability on its balance sheet for all leases, including operating leases, with a term greater than 12 months. ASU 2016-02 will require additional disclosures in the notes to the consolidated financial statements and is effective for the Company as of January 1, 2019. In July 2018, the FASB issued updated guidance which allows an additional transition method to adopt the new leases standard at the adoption date, rather than as of the beginning of the earliest period presented, and recognize a cumulative-effect adjustment to the beginning balance of retained earnings in the period of adoption. The Company has elected this transition method at the date of adoption. The Company has elected the package of practical expedients permitted under the transition guidance within the new standard, which, among other things, allows it to carry forward historical lease classifications. The Company also made an accounting policy election not to record a right-of-use asset or lease liability related to leases with an initial term of 12 months or less. The Company recognizes these lease payments in the consolidated income statements on a straight-line basis over the lease term. The Company's implementation team has identified its population of leases; is concluding its testing of the functionality and related controls of its new third-party lease software; is finalizing its incremental borrowing rate; and is determining the quantitative impact as of the transition date. An estimate of the impact on the consolidated financial statements cannot be made at this time.

In June 2016, the FASB issued ASU 2016-13, "Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses of Financial Instruments," which replaces the current incurred loss impairment model with a methodology that reflects expected credit losses. Under the new methodology, entities will be required to measure expected credit losses on financial instruments held at amortized cost, including trade receivables, based on historical experience, current conditions and reasonable forecasts. Adoption of this guidance is required for interim and annual periods beginning after December 15, 2019, with early adoption permitted for interim and annual periods beginning after December 15, 2018. The Company is currently evaluating the expected impact of this standard.

In February 2018, the FASB issued ASU 2018-02, "Income Statement—Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income." The ASU affects any entity that is required to apply the provisions of Topic 220, "Income Statement—Reporting Comprehensive Income," and has items of other comprehensive income for which the related tax effects are presented in other comprehensive income as required by GAAP. The ASU is effective for interim and annual periods beginning after December 15, 2018. Early adoption is permitted. The new standard requires a retrospective application to each period in which the effect of the change in the U.S. federal corporate income tax rate in the Tax Cuts and Jobs Act (the "TCJA") is recognized. The Company is currently evaluating the impact of adopting this guidance.

In August 2018, the FASB issued Accounting Standards Update 2018-13, “Fair Value Measurement (Topic 820): Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement,” which changes the requirements on fair value measurements by removing, modifying or adding certain disclosures. Adoption of this guidance is required for interim and annual periods beginning after December 15, 2019 with early adoption permitted. The Company is currently evaluating the expected impact of this standard.

No other recently issued ASUs are expected to have a material impact on our results of operations, financial condition or liquidity.

NOTE 2 — Revenue

As discussed above in Note 1, effective January 1, 2018, the Company adopted ASU 2014-09, "Revenue from Contracts with Customers." Substantially all of the Company's contracts have a single performance obligation to transfer products to or, in limited cases, perform services for the customer. Accordingly, the Company recognizes revenue when its obligations under the contract terms are satisfied and control transfers to the customer. Revenue is recognized at an amount that reflects the consideration the Company expects to receive in exchange for the good or service, including estimated provisions for rebates, discounts, returns and allowances. The Company sells its products both directly to customers, and in limited cases, through distributors, generally under agreements with payment terms between 30-90 days; the Company has no financing components.

The majority of the Company's revenue is derived from contracts (i) with an original contract length of one year or less, or (ii) for which it recognizes revenue at the amount at which it has the right to invoice as products or services are delivered. The Company has elected the practical expedient not to disclose the value of remaining performance obligations associated with these types of contacts.

The Company also has certain contracts which contain performance obligations that are immaterial in the context of the contract with the customer. The Company has elected the practical expedient not to assess whether these promised goods or services are performance obligations.

Supply Technologies provides our customers with Total Supply Management™, a proactive solutions approach that manages the efficiencies of every aspect of supplying production parts and materials to our customers' manufacturing floor, from strategic planning to program implementation. Within this segment, contracts routinely consist of a long-term agreement or master service agreement with quantity and pricing specified through individual purchase orders. Revenue is recognized at a point in time, which is in almost all cases is at the shipping point, as that is when control transfers to the customer.

Assembly Components designs, develops and manufactures: aluminum products; highly efficient, high pressure direct fuel injection fuel rails and pipes; fuel filler pipes that route fuel from the gas cap to the gas tank; and flexible multi-layer plastic and rubber assemblies used to transport fuel from the vehicle's gas tank and then, at extreme high pressure, to the engine's fuel injector nozzles. Within this segment, contracts routinely consist of a long-term agreement or master service agreement with quantity and pricing specified through individual purchase orders. Revenue is recognized at a point in time, which is at the shipping point, as that is when control transfers to the customer.

Engineered Products operates a diverse group of niche manufacturing businesses that design and manufacture a broad range of highly-engineered products, including induction heating and melting systems, pipe threading systems and forged and machined products. Engineered Products also produces and provides services and spare parts for the equipment it manufactures. In this segment, revenue is recognized for certain revenue streams at a point in time, and over time for other revenue streams. For point in time arrangements, revenue is recognized at the shipping point, as that is when control transfers to the customer. For over time arrangements, revenue is recognized over the time during which products are manufactured or services are performed, as control transfers under these arrangements over a period of time. Over time arrangements represent 16% of the Company's total consolidated sales for the year ended

December 31, 2018. The Company uses the input method to calculate the contract revenues to be recognized, which utilizes costs incurred to date in relation to total expected costs to satisfy the Company's performance obligation under the contract. Incurred costs represent work performed and therefore best depict the transfer of control to the customer.

For over time arrangements, contract liabilities primarily relate to advances or deposits received from the Company's customers before revenue is recognized. These amounts, which totaled $39.5 million and $23.0 million at December 31, 2018 and December 31, 2017, respectively, are recorded as Deferred revenue in the Consolidated Balance Sheets.

Table of Contents
PARK-OHIO HOLDINGS CORP. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

For over time arrangements, contract assets primarily relate to revenue recognized in advance of billings to customers under long-term contracts accounted for under percentage of completion. These amounts, which totaled $66.3 million and $44.5 million at December 31, 2018 and December 31, 2017, respectively, are recorded as Unbilled contract revenue in the Consolidated Balance Sheets.

The adoption of ASU 2014-09 had the impact of increasing unbilled contract revenue by $13.6 million, reducing inventory by $10.1 million, increasing accrued income taxes by $0.9 million and increasing beginning retained earnings by $2.6 million as of January 1, 2018.

The Company has elected to account for shipping and handling as activities to fulfill the promise to transfer its products. As such, shipping and handling fees billed to customers in a sales transaction are recorded in Net sales, and shipping and handling costs incurred are recorded in Cost of sales. The Company has elected to exclude from Net sales any value-added, sales or other taxes which it collects concurrent with revenue-producing activities. These accounting policy elections are consistent with the manner in which the Company historically recorded shipping and handling fees and expenses.

We disaggregate our revenue by product line and geographic region of our customer, as we believe these best depict how the nature, amount, timing and uncertainty of our revenues and cash flows are affected by economic factors. See details in the tables below.

	Year Ended December 31,	
	2018	2017
PRODUCT LINE		
Supply Technologies	$555.3	$479.2
Engineered specialty fasteners and other products	81.5	82.6
Supply Technologies Segment	636.8	561.8
Fuel, rubber and plastic products	382.5	366.3
Aluminum products	195.8	158.2
Assembly Components Segment	578.3	524.5
Industrial equipment	312.1	274.4
Forged and machined products	130.9	52.2
Engineered Products Segment	443.0	326.6
Total revenues	$1,658.1	$1,412.9

Table of Contents
PARK-OHIO HOLDINGS CORP. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

	Supply Technologies Segment	Assembly Components Segment	Engineered Products Segment	Total Revenues
Year Ended December 31, 2018				
GEOGRAPHIC REGION				
United States	$ 421.8	$ 410.2	$ 254.3	$ 1,086.3
Europe	98.2	7.8	77.3	183.3
Asia	49.2	30.0	61.2	140.4
Mexico	53.3	34.0	16.2	103.5
Canada	13.3	94.9	22.5	130.7
Other	1.0	1.4	11.5	13.9
Total	$ 636.8	$ 578.3	$ 443.0	$ 1,658.1
Year Ended December 31, 2017				
GEOGRAPHIC REGION				
United States	$ 382.5	$ 380.2	$ 160.6	$ 923.3
Europe	70.3	3.4	69.7	143.4
Asia	44.0	29.9	52.4	126.3
Mexico	52.7	32.7	20.6	106.0
Canada	11.5	77.0	15.3	103.8
Other	0.8	1.3	8.0	10.1
Total	$ 561.8	$ 524.5	$ 326.6	$ 1,412.9

NOTE 3 — Segments

The Company operates through three reportable segments: Supply Technologies, Assembly Components and Engineered Products. Supply Technologies provides our customers with Total Supply Management™ services for a broad range of high-volume, specialty production components. Assembly Components manufactures cast aluminum components, automotive and industrial rubber and thermoplastic products, gasoline direct injection systems, fuel filler and hydraulic assemblies for automotive, agricultural equipment, construction equipment, heavy-duty truck and marine equipment industries, and also provides value-added services such as design and engineering, machining and assembly. Engineered Products operates a diverse group of niche manufacturing businesses that design and manufacture a broad range of high-quality products engineered for specific customer applications.

For purposes of measuring business segment performance, the Company utilizes segment operating income, which is defined as revenues less expenses identifiable to the product lines within each segment. The Company does not allocate items that are non-operating; unusual in nature; or are corporate costs, which include but are not limited to executive compensation and corporate office costs. Segment operating income reconciles to consolidated income before income taxes by deducting corporate costs, certain non-cash and/or non-operating items; Other components of pension income and other postretirement benefits (“OPEB”) expense, net; and interest expense.

Table of Contents
PARK-OHIO HOLDINGS CORP. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Results by business segment were as follows:

	Year Ended December 31,		
	2018	2017	2016
Net sales:			
Supply Technologies	$636.8	$561.8	$502.1
Assembly Components	578.3	524.5	529.4
Engineered Products	443.0	326.6	245.4
	$1,658.1	$1,412.9	$1,276.9
Segment operating income:			
Supply Technologies	$49.0	$43.3	$37.5
Assembly Components	42.9	47.8	48.0
Engineered Products	38.4	19.5	9.4
Total segment operating income	130.3	110.6	94.9
Corporate costs	(34.9)	(30.1)	(27.9)
Gain on sale of assets	1.9	—	—
Litigation settlement gain	—	3.3	—
Asset impairment charge	—	—	(4.0)
Operating income	97.3	83.8	63.0
Other components of pension income and other postretirement benefits expense, net	8.8	6.4	6.2
Interest expense, net	(34.3)	(31.5)	(28.2)
Loss on extinguishment of debt	—	(11.0)	