STONERIDGE INC
Form 10-K
February 28, 2019
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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10 K

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

For the fiscal year ended December 31, 2018

Commission file number: 001 13337

STONERIDGE, INC.

(Exact name of registrant as specified in its charter)

Ohio	34 1598949
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

39675 MacKenzie Drive, Suite 400, Novi, Michigan	48377
(Address of principal executive offices)	(Zip Code)

(248) 489 9300
Registrant’s telephone number, including area code

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

Title of each class	Name of each exchange on which registered
Common Shares, without par value	New York Stock Exchange

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically 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).

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.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See definition of “large accelerated filer,” “accelerated filer,” “smaller reporting company” and “emerging growth company” in Rule 12b 2 of the Exchange Act. (Check one):

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

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b 2 of the Act).

Yes No

As of June 30, 2018, the aggregate market value of the registrant’s Common Shares held by non-affiliates of the registrant was approximately $961.3 million. The closing price of the Common Shares on June 30, 2018 as reported on the New York Stock Exchange was $35.14 per share. As of June 30, 2018, the number of Common Shares outstanding was 28,481,728.

The number of Common Shares outstanding as of February 20, 2019 was 28,488,935.

DOCUMENTS INCORPORATED BY REFERENCE

Definitive Proxy Statement for the Annual Meeting of Shareholders to be held on May 14, 2019, into Part III, Items 10, 11, 12, 13 and 14.

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Forward-Looking Statements

Portions of this report on Form 10 K contain “forward-looking statements” under the Private Securities Litigation Reform Act of 1995. These statements appear in a number of places in this report and may include statements regarding the intent, belief or current expectations of the Company, with respect to, among other things, our (i) future product and facility expansion, (ii) acquisition strategy, (iii) investments and new product development, (iv) growth opportunities related to awarded business and (v) operational expectations. Forward-looking statements may be identified by the words “will,” “may,” “should,” “designed to,” “believes,” “plans,” “projects,” “intends,” “expects,” “estimate “anticipates,” “continue,” and similar words and expressions. The forward-looking statements are subject to risks and uncertainties that could cause actual events or results to differ materially from those expressed in or implied by the statements. Important factors that could cause actual results to differ materially from those in the forward-looking statements include, among other factors:

- the reduced purchases, loss or bankruptcy of a major customer or supplier;
- the costs and timing of business realignment, facility closures or similar actions;
- a significant change in automotive, commercial, off-highway, motorcycle or agricultural vehicle production;
- competitive market conditions and resulting effects on sales and pricing;
- the impact on changes in foreign currency exchange rates on sales, costs and results, particularly the Argentinian peso, Brazilian real, Chinese renminbi, euro, Mexican peso and Swedish krona;
- our ability to achieve cost reductions that offset or exceed customer-mandated selling price reductions;
- customer acceptance of new products;
- our ability to successfully launch/produce products for awarded business;
- adverse changes in laws, government regulations or market conditions, including tariffs, affecting our products or our customers’ products;
- our ability to protect our intellectual property and successfully defend against assertions made against us;
- liabilities arising from warranty claims, product recall or field actions, product liability and legal proceedings to which we are or may become a party, or the impact of product recall or field actions on our customers;
- labor disruptions at our facilities or at any of our significant customers or suppliers;
- the ability of our suppliers to supply us with parts and components at competitive prices on a timely basis, including the impact of potential tariffs and trade considerations on their operations and output;
- the amount of our indebtedness and the restrictive covenants contained in the agreements governing our indebtedness, including our revolving credit facility;
- capital availability or costs, including changes in interest rates or market perceptions;
- the failure to achieve the successful integration of any acquired company or business;
- risks related to a failure of our information technology systems and networks, and risks associated with current and emerging technology threats and damage from computer viruses, unauthorized access, cyber attack and other similar disruptions; and
- the items described in Part I, Item IA (“Risk Factors”).

The forward-looking statements contained herein represent our estimates only as of the date of this filing and should not be relied upon as representing our estimates as of any subsequent date. While we may elect to update these forward-looking statements at some point in the future, we specifically disclaim any obligation to do so, whether to reflect actual results, changes in assumptions, changes in other factors affecting such forward-looking statements or otherwise.

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PART I

Item 1. Business.

Overview

Founded in 1965, Stoneridge, Inc. (the “Company”) is a global designer and manufacturer of highly engineered electrical and electronic components, modules and systems for the automotive, commercial, off-highway, motorcycle and agricultural vehicle markets. Our products and systems are critical elements in the management of mechanical and electrical systems to improve overall vehicle performance, convenience and monitoring in areas such as emissions control, fuel efficiency, safety, security and infotainment. Our extensive footprint encompasses 26 locations in 13 countries and enables us to supply global and regional automotive, commercial, off-highway, motorcycle and agricultural vehicle markets.

Our custom-engineered products and systems are used to activate equipment and accessories, monitor and display vehicle performance and control, distribute electrical power and signals and provide vehicle security and convenience. Our product offerings consist of (i) sensors, (ii) application-specific actuators, switches and valves, (iii) vehicle and driver information systems, (iv) vehicle management electronics, (v) power and switch distribution modules and telematics, (vi) camera-based vision systems and monitors, (vii) security alarms and vehicle tracking devices and monitoring services and (viii) convenience accessories. We supply the majority of our products, predominantly on a sole-source basis, to many of the world’s leading commercial vehicle and automotive original equipment manufacturers (“OEMs”) and select non-vehicle OEMs, as well as certain commercial vehicle and automotive Tier 1 suppliers. Our customers are increasingly utilizing electronic technology to comply with more stringent regulations (particularly emissions and safety) and to meet end-user demand for improved vehicle performance and greater convenience. As a result of this trend, per-vehicle electronic content has been increasing. Our technology and our partnership-oriented approach to product design and development enables us to develop next-generation products for this trend.

On January 31, 2017, the Company acquired Exploitatiemaatschappij Berghaaf B.V. (“Orlaco”), an electronics business which designs, manufactures and sells camera-based vision systems, monitors and related products. The acquisition was accounted for as a business combination, and accordingly, the Company’s consolidated financial statements herein include the results of Orlaco from the acquisition date to December 31, 2018. See Note 2 to the consolidated financial statements for additional details regarding the Orlaco acquisition.

The Company had a 74% controlling interest in PST Eletronica Ltda. (“PST”) from December 31, 2011 through May 15, 2017. On May 16, 2017, the Company acquired the remaining 26% noncontrolling interest in PST, which was accounted for as an equity transaction. As such, PST is now a wholly owned subsidiary. See Note 4 to the consolidated financial statements for additional details regarding the acquisition of PST’s noncontrolling interest.

Beginning with the divestiture of our wiring business in 2014, we accelerated a shift in our product portfolio towards smart products, or those products which contain embedded electronics or logic. While the wiring business was our largest single business, based on revenues and employees, and the business that the Company was founded on, it was largely a commodity that did not provide a technology platform to drive our expected future growth. In addition to the divestiture of the wiring business, we deployed capital in 2017 to make strategic investments including the acquisition of Orlaco, our partner on the development of MirrorEye, our camera monitoring system, and the acquisition of 100 percent of our PST business in Brazil. These activities have acted as a catalyst for the advancement of our smart product portfolio, increasing our smart content from just over 50 percent of our sales in 2014 to almost 75% of our sales in 2018. Our product portfolio shift focuses on the megatrends driving the transportation industry.

Segments and Products

We conduct our business in three reportable business segments which are the same as our operating segments: Control Devices, Electronics and PST.

Control Devices. Our Control Devices segment designs and manufactures products that monitor, measure or activate specific functions within a vehicle. This segment includes product lines such as sensors, actuators, valves and switches. Sensor products are employed in major vehicle systems such as the emissions, safety, powertrain, braking, climate

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control, steering and suspension systems. Actuator products enable OEMs to deploy power functions in a vehicle and can be designed to integrate switching and control functions including our park and shift by wire products. Switches transmit signals that activate specific functions. Our switch technology is principally used in two capacities, user-activated and hidden. User-activated switches are used by a vehicle's operator or passengers to manually activate in-vehicle accessories. Hidden switches are not typically visible to vehicle operators or passengers and are engaged to activate or deactivate selected functions as part of normal vehicle operations. We sell these products principally to the automotive market. To a lesser extent, we also sell these products to the commercial vehicle and agricultural markets.

Electronics. Our Electronics segment designs and manufactures electronic instrument clusters, electronic control units, driver information systems, camera-based vision systems, monitors and related products. These products collect, store and display vehicle information such as speed, pressure, maintenance data, trip information, operator performance, temperature, distance traveled and driver messages related to vehicle performance. In addition, power distribution modules and systems regulate, coordinate, monitor and direct the operation of the electrical system within a vehicle. These products use state-of-the-art hardware, software and multiplexing technology and are sold principally to the commercial vehicle market through both the OEM and aftermarket channels. The camera-based vision systems, monitors and related products are sold principally to the off-highway vehicle market.

PST. Our PST segment primarily serves the South American market and specializes in the design, manufacture and sale of in-vehicle audio and video devices, electronic vehicle security alarms, convenience accessories, vehicle tracking devices and monitoring services primarily for the automotive and motorcycle markets. This segment includes product lines such as alarms, convenience applications, vehicle monitoring and tracking devices and infotainment systems. These products improve the performance, safety and convenience features of our customers' vehicles. PST sells its products through the aftermarket distribution channel, to factory authorized dealer installers, also referred to as original equipment services, direct to OEMs and through mass merchandisers. In addition, monitoring services and tracking devices are sold directly to corporate and individual customers.

Segment	Product Category	2018	2017	2016
Control Devices	Sensors, switches, valves and actuators	51 %	54 %	59 %
Electronics	Electronic instrument clusters, electronic control units driver information systems and camera-based vision systems	40	34	29
PST	Security alarms, vehicle tracking devices and monitoring services and convenience accessories	9	12	12

Our products and systems are sold to numerous OEM and Tier 1 customers, as well as aftermarket distributors and mass merchandisers, for use on many different vehicle platforms. We supply multiple parts to many of our principal OEM and Tier 1 customers under requirements contracts for a particular vehicle model. These contracts range in duration from one year to the production life of the model, which commonly extends for three to seven years.

The following table sets forth for the periods indicated, the percentage of net sales derived from our principal end markets for the years ended December 31:

Principal End Markets	2018	2017	2016
Automotive	41 %	46 %	50 %

Commercial vehicle	33	29	33
Aftermarket distributors, mass merchandisers and monitoring services	9	12	12
Off-highway and other	17	13	5

For further information related to our reportable segments and financial information about geographic areas, see Note 14 to the consolidated financial statements.

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Production Materials

The principal production materials used in the Company's manufacturing process are molded plastic components and resins, copper, steel, precious metals and certain electrical components such as printed circuit boards, semiconductors, microprocessors, memory devices, resistors, capacitors, fuses, relays, infotainment devices and cameras. We purchase production materials pursuant to both annual contract and spot purchasing methods. Such materials are available from multiple sources, but we generally establish collaborative relationships with a qualified supplier for each of our key production materials in order to lower costs and enhance service and quality. As global demand for our production materials increases, we may have difficulties obtaining adequate production materials from our suppliers to satisfy our customers. Any extended period of time for which we cannot obtain adequate production material or which we experience an increase in the price of production material would materially affect our results of operations and financial condition.

Patents, Trademarks and Intellectual Property

We maintain and have pending various U.S. and foreign patents, trademarks and other rights to intellectual property relating to the reportable segments of our business, which we believe are appropriate to protect the Company's interests in existing products, new inventions, manufacturing processes and product developments. We do not believe any single patent is material to our business, nor would the expiration or invalidity of any patent have a material adverse effect on our business or ability to compete.

Industry Cyclicality and Seasonality

The markets for products in each of our reportable segments have been cyclical. Because these products are used principally in the production of vehicles for the automotive, commercial, off-highway, motorcycle and agricultural vehicle markets, revenues and therefore results of operations, are significantly dependent on the general state of the economy and other factors, like the impact of environmental regulations on our customers and end market consumers, which affect these markets. A significant decline in automotive, commercial, off-highway, motorcycle and agricultural vehicle production of our principal customers could adversely impact the Company. Our Electronics and Control Devices segments are typically not affected by seasonality, however the demand for our PST segment consumer products is typically higher in the second half of the year, the fourth quarter in particular.

Customers

We have several customers which account for a significant percentage of our sales. The loss of any significant portion of our sales to these customers, or the loss of a significant customer, would have a material adverse impact on our financial condition and results of operations. We supply numerous different products to each of our principal customers. Contracts with several of our customers provide for supplying their requirements for a particular model, rather than for manufacturing a specific quantity of products. Such contracts range from one year to the life of the model, which is generally three to seven years. These contracts are subject to potential renegotiation from time to time, which may affect product pricing and generally may be terminated by our customers at any time. Therefore, the loss of a contract for a major model or a significant decrease in demand for certain key models or group of related models sold by any of our major customers would have a material adverse impact on the Company. We may enter into contracts to supply products, the introduction of which may then be delayed or cancelled. We also compete to supply products for successor models, and are therefore subject to the risk that the customer will not select the Company to produce products on any such model, which could have a material adverse impact on our financial condition and results of operations.

Due to the competitive nature of the markets we serve, we face pricing pressures from our customers in the ordinary course of business. In response to these pricing pressures we have been able to effectively manage our production costs by the combination of lowering certain costs and limiting the increase of others, the net impact of which has not been material. However, if we are unable to effectively manage production costs in the future to mitigate future pricing pressures, our results of operations would be adversely affected.

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The following table presents our principal customers, as a percentage of net sales:

	2018	2017	2016
Ford Motor Company	12 %	14 %	17 %
Volvo	8	6	6
Daimler	6	6	6
General Motors Company	5	7	7
MAN	5	3	3
Scania	5	5	6
Other	59	59	55

Backlog

The Company defines backlog as the cumulative remaining sales for awarded programs for the next five years. The Company's backlog was $3.4 billion as of December 31, 2018, compared to $3.3 billion as of December 31, 2017. The Company's estimated net sales may be impacted by various assumptions, including new program vehicle production levels, customer price reductions, currency exchange rates and program launch timing. In addition, the Company typically enters into customer agreements at the beginning of a vehicle life cycle with the intent to fulfill purchasing requirements for the entire vehicle production life cycle. These agreements may be terminated by customers at any time and, accordingly, expected net sales information does not represent firm orders or firm commitments.

Competition

The markets for our products in our reportable segments are highly competitive. We compete based on technological innovation, price, quality, performance, service and delivery. We compete for new business both at the beginning of the development of new models and upon the redesign of existing models for OEM customers. New model development generally begins two to five years before the marketing of such models to the public. Once a supplier has been selected to provide parts for a new program, an OEM customer will usually continue to purchase those parts from the selected supplier for the life of the program, although not necessarily for any model redesigns. We compete for aftermarket and mass merchandiser sales based on price, product functionality, quality and service.

Our diversity in products creates a wide range of competitors, which vary depending on both market and geographic location. We compete based on strong customer relations and a fast and flexible organization that develops technically effective solutions at or below target price. We compete against the following companies:

Control Devices. Our primary competitors include BorgWarner, Bosch, Continental AG, CTS Corporation, Delphi Technologies, Denso Corporation, ETO Magnetic Corp., GHSP, Kongsberg Automotive, Methode Electronics, NTK Technologies, Inc., Sensata, and ZF Friedrichshafen AG.

Electronics. Our primary competitors include Actia Group, Aptiv, Bosch, Continental AG, Dongfeng Electronic Technology Co., Ltd., Hella KGaA Hueck & Co., Magneti Marelli S.p.A., Mekra Lang GmbH and Visteon.

PST. Our primary competitors include Autotrac, CalAmp Corporation, Hinor, Ituran, Kostal, Lennox, MultiLaser, Onix, Pioneer Corporation, Sascar, Taramps and Tury.

Product Development

Our research and development efforts for our reportable segments are largely product design and development oriented and consist primarily of applying known technologies to customer requests. We work closely with our customers to solve customer requests using innovative approaches. The majority of our development expenses are related to customer-sponsored programs where we are involved in designing custom-engineered solutions for specific applications or for next generation technology. To further our vehicle platform penetration, we have also developed collaborative relationships with the design and engineering departments of key customers. These collaborative efforts have resulted in the development of new and complimentary products and the enhancement of existing products.

While our engineering and product development departments are organized by market, our segments interact and collaborate on new products. The product development operations are complimented by technology groups in Barneveld, Netherlands; Campinas, Brazil; Canton, Massachusetts; Juarez, Mexico; Lexington, Ohio; Pune, India and Stockholm, Sweden.

We use efficient and quality oriented work processes to address our customers' high standards. Our product development technical resources include a full complement of computer-aided design and engineering software systems, including (i) virtual three-dimensional modeling, (ii) functional simulation and analysis capabilities and (iii) data links for rapid prototyping. These systems enable us to expedite product design and the manufacturing process to shorten the development time and ultimately time to market.

We have further strengthened our electrical engineering competencies through investment in equipment such as (i) automotive electro-magnetic compliance test chambers, (ii) programmable automotive and commercial vehicle transient generators, (iii) circuit simulators and (iv) other environmental test equipment. Additional investment in 3 D printing product machining equipment has allowed us to fabricate new product samples in a fraction of the time required historically. Our product development and validation efforts are supported by full service, on-site test labs at most manufacturing facilities, thus enabling cross-functional engineering teams to optimize the product, process and system performance before tooling initiation.

We have invested, and will continue to invest heavily in technology to develop new products for our customers. Product development costs incurred in connection with the development of new products and manufacturing methods, to the extent not recoverable from the customer, are expensed as incurred. Such costs amounted to approximately $51.1 million, $48.9 million, and $40.2 million for 2018, 2017, and 2016, respectively, or 5.9%, 5.9%, and 5.8% of net sales for these periods.

We will continue to prioritize investment spending toward the design and development of new products over sustaining existing product programs for specific customers, which allows us to sell our products to multiple customers. The typical product development process takes three to five years to show tangible results. As part of our effort to evaluate our investment spending, we review our current product portfolio and adjust our spending to either accelerate or eliminate our investment in these products based on our position in the market and the potential of the market and product.

Environmental and Other Regulations

Our operations are subject to various federal, state, local and foreign laws and regulations governing, among other things, emissions to air, discharge to water and the generation, handling, storage, transportation, treatment and disposal of waste and other materials. We believe that our business, operations and facilities have been and are being operated in compliance, in all material respects, with applicable environmental and health and safety laws and regulations, many of which provide for substantial fines and criminal sanctions for violations.

Employees

As of December 31, 2018, we had approximately 4,600 employees, approximately 76% of whom were located outside of the United States. Although we have no collective bargaining agreements covering U.S. employees, a significant number of employees located in Brazil, China, Estonia, Mexico, Netherlands, Sweden and the United Kingdom either (i) are represented by a union and are covered by a collective bargaining agreement, or (ii) are covered by a work council or other employment arrangements required by law. We believe that relations with our employees are good.

Joint Ventures

We form joint ventures in various global markets in order to achieve several strategic objectives including (i) diversifying our business by expanding in high-growth regions, (ii) employing complementary design processes, growth technologies and intellectual capital, and (iii) realizing cost savings from combined sourcing.

We have a 49% noncontrolling equity interest in Minda Stoneridge Instruments Ltd. ("MSIL"). Based in India, MSIL manufactures electromechanical/electronic instrumentation equipment and sensors primarily for the automotive, motorcycle and commercial vehicle markets. We leverage our investment in MSIL by sharing our knowledge and

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expertise in electrical components and systems and expanding MSIL's product offering through the joint development of our products designed for the market in India.

Executive Officers of the Company

Each executive officer of the Company serves the Board of Directors at its pleasure. The Board of Directors appoints corporate officers annually. The following table sets forth the names, ages, and positions of the executive officers of the Company:

Name	Age	Position
Jonathan B. DeGaynor	52	President, Chief Executive Officer and Director
Robert R. Krakowiak	48	Executive Vice President, Chief Financial Officer and Treasurer
Thomas A. Beaver	65	Vice President of the Company and President of Global Sales
Laurent Borne	43	President of the Electronics Division and Chief Technology Officer
Thomas M. Dono, Jr.	46	Chief Legal Officer
Caetano R. Ferraiolo	51	President of the PST Electronics Division
Robert J. Hartman Jr.	52	Chief Accounting Officer
Daniel M. Kusiak	49	Chief Procurement Officer
Anthony L. Moore	55	Vice President of Operations
Alisa A. Nagle	51	Chief Human Resources Officer
Robert Willig	56	President of the Control Devices Division

Jonathan B. DeGaynor, President, Chief Executive Officer and Director. Mr. DeGaynor was appointed as President and Chief Executive Officer in March 2015. He has served as a director since May 2015. Prior to joining Stoneridge, Mr. DeGaynor served as the Vice President of Strategic Planning and Innovation of Guardian Industries Corp. ("Guardian"), from October 2014 until March 2015. Mr. DeGaynor served as Vice President of Business Development, Managing Director Asia for SRG Global, Inc., a Guardian company, from 2008 through September 2014. Mr. DeGaynor served as Chief Operating Officer, International for Autocam Corporation from 2005 to 2008. Prior to that, Mr. DeGaynor held positions of increasing responsibility with Delphi Corporation from 1993 to 2005.

Robert R. Krakowiak, Executive Vice President, Chief Financial Officer and Treasurer. Mr. Krakowiak was appointed as Executive Vice President in October 2018 and Chief Financial Officer and Treasurer in August 2016. Prior to joining Stoneridge, Mr. Krakowiak served as Vice President, Treasurer and Investor Relations at Visteon Corporation from 2012 until August 2016. Prior to that, Mr. Krakowiak held the following positions at Owens Corning: from 2009 until 2012, Vice President of Finance (Composite Solutions Business); from 2008 until 2009, Vice President–Corporate Financial Planning and Analysis; from 2006 until 2008, Vice President and Controller (Roofing and Asphalt); and from 2005 until 2006, Assistant Treasurer.

Thomas A. Beaver, Vice President of the Company and President of Global Sales. Mr. Beaver has served as Vice President of the Company and President of Global Sales since May 2012. Prior to that, Mr. Beaver served as Vice President of the Company and Vice President of Global Sales and Systems Engineering from January 2005 to May 2012. From January 2000 to January 2005, Mr. Beaver served as Vice President of Stoneridge Sales and Marketing.

Laurent Borne, President of the Electronics Division and Chief Technology Officer. Mr. Borne was appointed as President of the Electronics Division in January 2019. Mr. Borne joined the Company in August 2018 and has been serving as the Company's Chief Technology Officer and will continue to serve in this role. Prior to joining Stoneridge, Mr. Borne served as Vice President of Product Development at Whirlpool Corporation from 2014 until August 2018.

Thomas M. Dono, Jr., Chief Legal Officer. Mr. Dono was appointed as Chief Legal Officer in January 2018. Prior to joining Stoneridge, Mr. Dono served as Executive Vice President, General Counsel and Corporate Secretary at Metaldyne Performance Group, Inc. from July 2016 to April 2017. Prior to that, Mr. Dono served as Senior Vice President, Legal Affairs, General Counsel and Corporate Secretary at Key Safety Systems, Inc. from May 2009 to July 2016.

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Caetano R. Ferraiolo, President of the PST Electronics Division. Mr. Ferraiolo was appointed to President of the PST Electronics Division in June 2017. Mr. Ferraiolo joined the Company in 2015 and previously served as the Chief Operating Officer of PST. From 2010 to 2015 he served as Vice President of Operations for Cannondale Sports Group in Brazil. Prior to that, Mr. Ferraiolo served as Director of European Commercial and Development, Autocam Corporation from 2005 to 2010.

Robert J. Hartman Jr., Chief Accounting Officer. Mr. Hartman was appointed as Chief Accounting Officer and to the role of principal accounting officer in July 2016. Prior to that, Mr. Hartman served as Corporate Controller of the Company since 2006 and prior to that as Stoneridge's Director of Internal Audit from 2003.

Daniel M. Kusiak, Chief Procurement Officer. Mr. Kusiak was appointed as Chief Procurement Officer in October 2018. Prior to that, Mr. Kusiak served as Vice President of Global Procurement since he joined Stoneridge in 2015. Prior to that, he served as head of Strategic Business Initiatives at Sypris Technologies, Inc. from 2013. Prior to that, Kusiak was employed at Meritor, Inc. where he held positions of increasing responsibility in the purchasing function over a 10-year tenure.

Anthony L. Moore, Vice President of Operations. Mr. Moore was appointed as Vice President of Operations in May 2016. Prior to joining the Company, he served as Global Vice President of Integrated Supply Chain and Operations at Ingersoll Rand, Compressed Air Systems from October 2015. Prior to that, Mr. Moore served as Chief Product Development and Supply Chain Officer at Remington Outdoor Company from May 2012 to September 2015. Before that, Mr. Moore was employed at Cooper Industries, Inc. where he held several leadership positions in the areas of supply chain, operations, and engineering from 2008.

Alisa A. Nagle, Chief Human Resources Officer. Ms. Nagle has served as Chief Human Resources Officer since joining the Company in November 2015. From 2007 until her employment with the Company, Ms. Nagle served as Vice President of Human Resources – Global Aftermarket and Original Equipment Groups and Global Central Functions at Johnson Controls, Inc.

Robert Willig, President of the Control Devices Division. Mr. Willig was appointed to President of the Control Devices Division in October 2017. Until his employment with the Company, Mr. Willig served as President and Chief Executive Officer of Plasan Carbon Composites from April 2017 to October 2017; President of Driveline Americas, GKN PLC from April 2013 to July 2016; and President of Sinter Americas, GKN PLC from September 2010 to April 2013. Prior to that, he served as President of the Power Transmission Division of Tomkins PLC from 2008.

Available Information

We make available, free of charge through our website (www.stoneridge.com), our Annual Report on Form 10 K ("Annual Report"), Quarterly Reports on Form 10 Q, Current Reports on Form 8 K, all amendments to those reports, and other filings with the U.S. Securities and Exchange Commission ("SEC"), as soon as reasonably practicable after they are filed with the SEC. Our Corporate Governance Guidelines, Code of Business Conduct and Ethics, Code of Ethics for Senior Financial Officers, Whistleblower Policy and Procedures and the charters of the Board of Director's Audit, Compensation and Nominating and Corporate Governance Committees are posted on our website as well. Copies of these documents will be available to any shareholder upon request. Requests should be directed in writing to Investor Relations at Stoneridge, Inc., 39675 MacKenzie Drive, Suite 400, Novi, Michigan 48377. The SEC maintains a website (www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including the Company.

Item 1A. Risk Factors.

Our business is cyclical and a downturn in the automotive, commercial, off-highway, motorcycle and agricultural vehicle markets as well as overall economic conditions could reduce the sales and profitability of our business.

The demand for products is largely dependent on the domestic and foreign production of automotive, commercial, off-highway, motorcycle and agricultural vehicles. The markets for our products have been cyclical, because new vehicle demand is dependent on, among other things, consumer spending and is tied closely to the overall strength of the economy. Because the majority of our products are used principally in the production of vehicles for the automotive,

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commercial, off-highway, motorcycle and agricultural vehicle markets, our net sales, and therefore our results of operations, are significantly dependent on the general state of the economy and other factors which affect these markets. A decline in automotive, commercial, off-highway, motorcycle or agricultural vehicle production, or a material decline in market share by our significant customers, could adversely affect our results of operations and financial condition.

In 2018, approximately 91% of our net sales were derived from automotive, commercial, off-highway, motorcycle and agricultural vehicle markets while approximately 9% were derived from aftermarket distributors, mass merchandisers and monitoring services markets.

We have foreign currency translation and transaction risks that may materially adversely affect our operating results, financial condition and liquidity.

The financial position and results of operations of our international subsidiaries are initially recorded in various foreign currencies and then translated into U.S. dollars at the applicable exchange rate for inclusion in our consolidated financial statements. The strengthening of the U.S. dollar against these foreign currencies ordinarily has a negative effect on our reported sales and operating margin (and conversely, the weakening of the U.S. dollar against these foreign currencies has a positive impact). The volatility of currency exchange rates may materially adversely affect our operating results.

We are subject to risks related to our international operations.

Approximately 45% of our net sales in 2018 were derived from sales outside of North America. At December 31, 2018, significant concentrations of net assets outside of North America included $33.5 million in South America and $203.2 million in Europe and Other. Non-current assets outside of North America accounted for approximately 64% of our non-current assets as of December 31, 2018. International sales and operations are subject to significant risks, including, among others:

- political and economic instability;
- restrictive trade policies;
- economic conditions in local markets;
- currency exchange controls;
- labor unrest;
- difficulty in obtaining distribution support and potentially adverse tax consequences; and
- the imposition of product tariffs and the burden of complying with a wide variety of international and U.S. export laws.

Significant changes in U.S. administrative policy, including changes to existing trade agreements and resulting changes in international relations, could adversely affect our financial performance.

As a result of changes to U.S. administrative policy, among other possible changes, there may be changes to existing trade agreements and greater restrictions on free trade generally, particularly for products manufactured in China, Mexico, and Canada. In November 2018, the United States, Mexico and Canada signed the United States-Mexico-Canada Agreement (“USMCA”), the successor agreement to the North American Free Trade Agreement (“NAFTA”). The USMCA has been ratified by the Mexico Congress. The U.S. Congress is not expected to vote on the agreement until the third quarter of 2019, and approval by the Canadian Parliament is expected to follow U.S. approval. It remains unclear what the U.S. administration or foreign governments will or will not do with respect to NAFTA, USMCA or other international trade agreements and policies. Reflective of the automotive industry, our vehicle parts manufacturing facilities in the United States, Mexico and Canada are highly dependent on duty-free trade within the USMCA region. Our facility in Mexico represents a critical component of our supply chain and that of our customers. We have significant imports into the United States, and the imposition of customs duties on these imports could negatively impact our financial performance. If such customs duties are implemented, Mexico and Canada may take retaliatory actions with respect to U.S. imports or U.S. investments in their countries. Any such potential actions could adversely affect our business, financial condition or results of operations.

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We may not realize sales represented by awarded business.

We base our growth projections, in part, on business awards made by our customers. These business awards generally renew annually during a program life cycle. Failure of actual production orders from our customers to approximate these business awards could have a material adverse effect on our business, financial condition or results of operations.

The prices that we can charge some of our customers are predetermined and we bear the risk of costs in excess of our estimates, in addition to the risk of adverse effects resulting from general customer demands for cost reductions and quality improvements.

Our supply agreements with some of our customers require us to provide our products at predetermined prices. In some cases, these prices decline over the course of the contract and may require us to meet certain productivity and cost reduction targets. In addition, our customers may require us to share productivity savings in excess of our cost reduction targets. The costs that we incur in fulfilling these contracts may vary substantially from our initial estimates. Unanticipated cost increases or the inability to meet certain cost reduction targets may occur as a result of several factors, including increases in the costs of labor, components or materials. In some cases, we are permitted to pass on to our customers the cost increases associated with specific materials. However, cost overruns that we cannot pass on to our customers could adversely affect our business, financial condition or results of operations.

OEM customers have exerted and continue to exert considerable pressure on component suppliers to reduce costs, improve quality and provide additional design and engineering capabilities and continue to demand and receive price reductions and measurable increases in quality through their use of competitive selection processes, rating programs and various other arrangements. We may be unable to generate sufficient production cost savings in the future to offset required price reductions. Additionally, OEMs have generally required component suppliers to provide more design engineering input at earlier stages of the product development process, the costs of which have, in some cases, been absorbed by the suppliers. Future price reductions, increased quality standards and additional engineering capabilities required by OEMs may reduce our profitability and have a material adverse effect on our business, financial condition or results of operations.

We have limited or no redundancy for certain of our manufacturing facilities, and therefore damage or disruption to those facilities could interrupt our operations, increase our costs of doing business and impair our ability to deliver our products on a timely basis.

If certain of our existing production facilities become incapable of manufacturing products for any reason, we may be unable to meet production requirements, we may lose revenue and we may not be able to maintain our relationships with our customers. Without operation of certain existing production facilities, we may be limited in our ability to deliver products until we restore the manufacturing capability at the particular facility, find an alternative manufacturing facility or arrange an alternative source of supply. We carry business interruption insurance to cover lost revenue and profits in an amount we consider adequate, this insurance does not cover all possible situations and may be insufficient. Also, our business interruption insurance would not compensate us for the loss of opportunity and potential adverse impact on relations with our existing customers resulting from our inability to produce products for them.

Our business is very competitive and increased competition could reduce our sales and profitability.

The markets for our products are highly competitive. We compete based on technological innovation, price, quality, performance, service and delivery. Many of our competitors are more diversified and have greater financial and other resources than we do. In addition, with respect to certain products, some of our competitors are divisions of our OEM customers. We cannot assure that our business will not be adversely affected by competition or that we will be able to maintain our profitability if the competitive environment changes.

The loss or insolvency of any of our principal customers would adversely affect our future results.

We are dependent on several principal customers for a significant percentage of our net sales. In 2018, our top five customers were Ford Motor Company, Volvo, General Motors Company, Daimler and MAN which comprised 12%, 8%, 6%, 5% and 5% of our net sales, respectively. In 2018, our top ten customers accounted for 54% of our net sales. The loss of any significant portion of our sales to these customers would have a material adverse effect on our results of operations and financial condition. In addition, we have significant receivable balances related to these customers and other major customers that would be at risk in the event of their bankruptcy.

The discontinuation of, loss of business or lack of commercial success, with respect to a particular vehicle model for which the Company is a significant supplier could reduce the Company’s sales and harm its profitability.

Although the Company has purchase orders from many of its customers, these purchase orders generally provide for the supply of a customer’s annual requirements for a particular vehicle model and assembly plant, or in some cases, for the supply of a customer’s requirements for the life of a particular vehicle model, rather than for the purchase of a specific quantity of products. In addition, it is possible that our customers could elect to manufacture components internally that are currently produced by outside suppliers, such as our Company. The discontinuation of, the loss of business with respect to or a lack of commercial success of a particular vehicle model for which the Company is a significant supplier, could reduce the Company’s sales and have a material adverse effect on our business, financial condition or results of operations.

Our inability to effectively manage the timing, quality and costs of new program launches could adversely affect our financial performance.

In connection with the award of new business, we obligate ourselves to deliver new products and services that are subject to our customers’ timing, performance and quality standards. Additionally, as a Tier 1 supplier, we must effectively coordinate the activities of numerous suppliers in order for the program launches of our products to be successful. Given the complexity of new program launches, we may experience difficulties managing product quality, timeliness and associated costs. In addition, new program launches require a significant ramp up of costs; however, our sales related to these new programs generally are dependent upon the timing and success of our customers’ introduction of new vehicles. Our inability to effectively manage the timing, quality and costs of these new program launches could adversely affect our business, financial condition or results of operations.

We are dependent on the availability and price of raw materials and other supplies.

We require substantial amounts of raw materials and other supplies, and substantially all such materials we require are purchased from outside sources. The availability and prices of raw materials and other supplies may be subject to curtailment or change due to, among other things, new laws or regulations, suppliers’ allocations to other purchasers and interruptions in production by suppliers, weather emergencies, natural disasters, commercial disputes, acts of terrorism or war, changes in exchange rates and worldwide price levels. If demand for raw materials we require increases, we may have difficulties obtaining adequate raw materials and other supplies from our suppliers to satisfy our customers. At times, we have experienced difficulty obtaining adequate supplies of semiconductors and memory chips. In addition, there have been challenges at times in obtaining timely supply of nylon and resins for our Control Devices segment and audio component parts for our PST segment. If we cannot obtain adequate raw materials and other supplies, or if we experience an increase in the price of raw materials and other supplies, our business, financial condition or results of operations could be materially adversely affected.

We use a variety of commodities, including copper, zinc, resins and certain other commodities. Increasing commodity costs could have a negative impact on our results. We have sought at times to alleviate the effect of increasing costs by selectively hedging a portion of our exposure. The inability to effectively hedge any commodity cost increase may have a material adverse effect on our business, financial condition or results of operations.

We must implement and sustain a competitive technological advantage in producing our products to compete effectively.

Our products are subject to changing technology, which could place us at a competitive disadvantage relative to alternative products introduced by competitors. Our success will depend on our ability to continue to meet customers' changing specifications with respect to technological innovation, price, quality, performance, service and delivery by implementing and sustaining competitive technological advances. Our business may, therefore, require significant recurring additional capital expenditures and investment in product development and manufacturing and management information systems. We cannot assure that we will be able to achieve technological advances or introduce new products

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that may be necessary to remain competitive. Our inability to continuously improve existing products, to develop new products and to achieve technological advances could have a material adverse effect on our business, financial condition or results of operations.

We rely on independent dealers and distributors to sell certain products in the aftermarket sales channel and a disruption to this channel would harm our business.

Because we sell certain products such as security accessories and driver information products to independent dealers and distributors, we are subject to many risks, including risks related to their inventory levels and support for our products. If dealers and distributors do not maintain sufficient inventory levels to meet customer demand, our sales could be negatively impacted.

Our dealer network also sells products offered by our competitors. If our competitors offer our dealers more favorable terms, those dealers may de-emphasize or decline to carry our products. In the future, we may not be able to retain or attract a sufficient number of qualified dealers and distributors. Our inability to maintain successful relationships with dealers and distributors, or to expand our distribution channels, could have a material adverse effect on our business, financial condition or results of operations.

Our Global Positioning Systems (“GPS”) products depend upon satellites maintained by the United States Department of Defense. If a significant number of these satellites become inoperable, unavailable or are not replaced, or if the policies of the United States government for the use of the GPS without charge are changed, our business will suffer.

The GPS is a satellite-based navigation and positioning system consisting of a constellation of orbiting satellites. The satellites and their ground control and monitoring stations are maintained and operated by the United States Department of Defense. The Department of Defense does not currently charge users for access to the satellite signals. These satellites and their ground support systems are complex electronic systems subject to electronic and mechanical failures and possible sabotage.

If a significant number of satellites were to become inoperable, unavailable or are not replaced, it would impair the current utility of our GPS products and the growth of market opportunities. In addition, there can be no assurance that the U.S. government will remain committed to the operation and maintenance of GPS satellites over a long period, or that the policies of the U.S. government that provide for the use of the GPS without charge and without accuracy degradation will remain unchanged. Because of the increasing commercial applications of the GPS, other U.S. government agencies may become involved in the administration or the regulation of the use of GPS signals. Any of the foregoing factors could affect the willingness of buyers of our products to select GPS-based products instead of products based on competing technologies, which could adversely affect our operational revenues, financial condition and results of operation.

We may incur material product liability costs.

We may be subject to product liability claims in the event that the failure of any of our products results in personal injury or death and we cannot assure that we will not experience material product liability losses in the future. We cannot assure that our product liability insurance will be adequate for liabilities ultimately incurred or that it will continue to be available on terms acceptable to us. In addition, if any of our products prove to be defective, we may be required to participate in government-imposed or customer OEM-instituted recalls involving such products. A successful claim brought against us that exceeds available insurance coverage or a requirement to participate in any product recall could have a material adverse effect on our business, financial condition or results of operations.

Increased or unexpected product warranty claims could adversely affect us.

We typically provide our customers a warranty covering workmanship, and in some cases materials, on products we manufacture. Our warranty generally provides that products will be free from defects and adhere to customer specifications. If a product fails to comply with the warranty, we may be obligated or compelled, at our expense, to correct any defect by repairing or replacing the defective product. Our customers are increasingly seeking to hold suppliers responsible for product warranties, which could negatively impact our exposure to these costs. We maintain

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warranty reserves in an amount based on historical trends of units sold and costs incurred, combined with our current understanding of the status of existing claims. To estimate the warranty reserves, we must forecast the resolution of existing claims, as well as expected future claims on products previously sold. The costs of claims estimated to be due and payable could differ materially from what we may ultimately be required to pay. An increase in the rate of warranty claims or the occurrence of unexpected warranty claims could have a material adverse effect on our customer relations, our business, our financial condition or results of operations.

If we fail to protect our intellectual property rights or maintain our rights to use licensed intellectual property or are found liable for infringing the rights of others, our business could be adversely affected.

Our intellectual property, including our patents, trademarks, copyrights, trade secrets and license agreements, are important in the operation of our businesses, and we rely on the patent, trademark, copyright and trade secret laws of the United States and other countries, as well as nondisclosure agreements, to protect our intellectual property rights. We may not, however, be able to prevent third parties from infringing, misappropriating or otherwise violating our intellectual property, breaching any nondisclosure agreements with us, or independently developing technology that is similar or superior to ours and not covered by our intellectual property. Any of the foregoing could reduce any competitive advantage we have developed, cause us to lose sales or otherwise harm our business. We cannot assure that any intellectual property will provide us with any competitive advantage or will not be challenged, rejected, cancelled, invalidated or declared unenforceable. In the case of pending patent applications, we may not be successful in securing issued patents, or securing patents that provide us with a competitive advantage for our businesses. In addition, our competitors may design products around our patents that avoid infringement and violation of our intellectual property rights.

We cannot be certain that we have rights to all intellectual property currently used in the conduct of our businesses or that we have complied with the terms of agreements by which we acquire such rights, which could expose us to infringement, misappropriation or other claims alleging violations of third party intellectual property rights. Third parties have asserted and may assert or prosecute infringement claims against us in connection with the services and products that we offer, and we may or may not be able to successfully defend these claims. Litigation, either to enforce our intellectual property rights or to defend against claims regarding intellectual property rights of others, could result in substantial costs and a diversion of our resources. Any such claims and resulting litigation could require us to enter into licensing agreements (if available on acceptable terms or at all), pay damages and cease making or selling certain products and could result in a loss of our intellectual property protection. Moreover, we may need to redesign some of our products to avoid future infringement liability. We also may be required to indemnify customers or other third parties at significant expense in connection with such claims and actions. Recently, the Company has seen an increase in customer requests for indemnification in connection with third party patent claims related to connectivity-enabled products. These claims are being made by patent-holders seeking royalties and who may enter into litigation based on patent infringement allegations. Any of the foregoing could have a material adverse effect on our business, financial condition or results of operations.

We may not be able to successfully integrate acquisitions into our business or may otherwise be unable to benefit from pursuing acquisitions.

Failure to successfully identify, complete and/or integrate acquisitions could have a material adverse effect on us. A portion of our growth in sales and earnings has been generated from acquisitions and subsequent improvements in the performance of the businesses acquired. We expect to continue a strategy of selectively identifying and acquiring businesses with complementary products. We cannot assure you that any business acquired by us will be successfully integrated with our operations or prove to be profitable. We could incur substantial indebtedness in connection with our acquisition strategy, which could significantly increase our interest expense.

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We anticipate that acquisitions could occur in foreign markets in which we do not currently operate. As a result, the process of integrating acquired operations into our existing operations may result in unforeseen operating difficulties and may require significant financial resources that would otherwise be available for the ongoing development or expansion of existing operations. Any failure to successfully integrate such acquisitions could have a material adverse effect on our business, financial condition or results of operations.

Our debt obligations could limit our flexibility in managing our business and expose us to risks.

As of December 31, 2018, there was $96.0 million in borrowings outstanding on our revolving credit facility (the “Credit Facility”). In addition, we are permitted under our Credit Facility to incur additional debt, subject to specified limitations. Our leverage and the terms of our indebtedness may have important consequences including the following:

- we may have difficulty satisfying our obligations with respect to our indebtedness, and if we fail to comply with these requirements, an event of default could result;
- we may be required to dedicate a substantial portion of our cash flow from operations to required payments on indebtedness, thereby reducing the availability of cash flow for working capital, capital expenditures and other general corporate activities;
- covenants relating to our debt may limit our ability to obtain additional financing for working capital, capital expenditures and other general corporate activities;
- covenants relating to our debt may limit our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate; and
- we may be placed at a competitive disadvantage against any less leveraged competitors.

These and other consequences of our leverage and the terms of our indebtedness could have a material adverse effect on our business, financial condition or results of operations.

Covenants in our Credit Facility may limit our ability to pursue our business strategies.

Our Credit Facility limits our ability to, among other things:

- incur additional debt and guarantees;
- pay dividends and repurchase our shares;
- make other restricted payments, including investments;
- create liens;
- sell or otherwise dispose of assets, including capital shares of subsidiaries;
- enter into agreements that restrict dividends from subsidiaries;
- consolidate, merge or sell or otherwise dispose of all or substantially all of our assets; and
- substantially change the nature of our business.

The agreement governing our Credit Facility requires us to maintain a maximum leverage ratio of 3.00 to 1.00, and a minimum interest coverage ratio of 3.50 to 1.00 and places a maximum annual limit on capital expenditures. Our ability to comply with these covenants as well as the negative covenants under the terms of our indebtedness, may be affected by events beyond our control.

A breach of any of the negative covenants under our indebtedness or our inability to comply with the leverage and interest ratio requirements in the Credit Facility could result in an event of default. If an event of default occurs, the lenders under the Credit Facility could elect to declare all outstanding borrowings, together with accrued interest and other fees, to be immediately due and payable and terminate any commitments they have to provide further borrowings, and the Credit Facility lenders could pursue foreclosure and other remedies against us and our assets.

A failure of our information technology (IT) networks and systems, or the inability to successfully implement upgrades to our enterprise resource planning (ERP) systems, could adversely impact our business and operations.

We rely upon information technology networks and systems to process, transmit and store electronic information, and to manage or support a variety of business processes and/or activities. The secure operation of these IT networks and

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systems and the proper processing and maintenance of this information are critical to our business operations. Despite the implementation of security measures, our IT networks and systems are at risk to damages from computer viruses, unauthorized access, cyber-attack and other similar disruptions. The occurrence of any of these events could compromise our IT networks and systems, and the information stored there could be accessed, publicly disclosed or lost. Any such access, disclosure, loss of information or disruption of our operations could cause significant damage to our reputation, affect our relationships with our customers, suppliers and employees, lead to claims against the Company and ultimately harm our business. We may be required to incur significant costs to protect against damage caused by these disruptions or security breaches in the future.

Also, we continually expand and update our IT networks and systems in response to the changing needs of our business and periodically upgrade our ERP systems. Should our networks or systems not be implemented successfully, or if the systems do not perform in a satisfactory manner once implementation is complete, our business and operations could be disrupted and our results of operations could be adversely affected, including our ability to report accurate and timely financial results.

We may be subject to risks relating to our information technology systems and cybersecurity.

We rely on information technology systems to process, transmit and store electronic information and manage and operate our business. A breach in security could expose us and our customers and suppliers to risks of misuse of confidential information, manipulation and destruction of data, production downtimes and operations disruptions, which in turn could adversely affect our reputation, competitive position, business or results of operations. While we have taken reasonable steps to protect the Company from cybersecurity risks and security breaches (including enhancing our firewall, workstation, email security and network monitoring and alerting capabilities, and training employees around phishing, malware and other cybersecurity risks), and we have policies and procedures to prevent or limit the impact of systems failures, interruptions, and security breaches, there can be no assurance that such events will not occur or that they will be adequately addressed if they do. Although we rely on commonly used security and processing systems to provide the security and authentication necessary to effect the secure transmission of data, these precautions may not protect our systems from all potential compromises or breaches of security.

Privacy and security concerns relating to the Company’s current or future products and services could damage its reputation and deter current and potential users from using them.

We may gain access to sensitive, confidential or personal data or information that is subject to privacy and security laws, regulations and customer-imposed controls. Concerns about our practices with regard to the collection, use, disclosure, or security of personal information or other privacy related matters, even if unfounded, could damage our reputation and adversely affect our financial condition or operating results. Furthermore, regulatory authorities around the world are considering a number of legislative and regulatory proposals concerning cybersecurity and data protection. In addition, the interpretation and application of consumer and data protection laws in the U.S., Europe and elsewhere are often uncertain and in flux. Complying with these various laws could cause the Company to incur substantial costs.

Compliance with environmental and other governmental regulations could be costly and require us to make significant expenditures.

Our operations are subject to various federal, state, local and foreign laws and regulations governing, among other things:

- the discharge of pollutants into the air and water;
- the generation, handling, storage, transportation, treatment, and disposal of waste and other materials;

· the cleanup of contaminated properties; and
· the health and safety of our employees.

Our business, operations and facilities are subject to environmental and health and safety laws and regulations, many of which provide for substantial fines for violations. The operation of our manufacturing facilities entails risks and we cannot assure you that we will not incur material costs or liabilities in connection with these operations. In addition, potentially significant expenditures could be required in order to comply with evolving environmental, health and safety

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laws, regulations or requirements that may be adopted or imposed in the future. Changes in environmental, health and safety laws, regulations and requirements or other governmental regulations could increase our cost of doing business or adversely affect the demand for our products.

Our annual effective tax rate could be volatile and materially change as a result of changes in the mix of earnings and other factors including changes in the recognition and/or release of valuation allowances against deferred tax assets.

Our overall effective tax rate is computed by dividing our total tax expense (benefit) by our total earnings (loss) before tax. However, tax expense and benefits are not recognized on a global basis, but rather on a jurisdictional or legal entity basis. Losses in certain jurisdictions may not provide a current financial statement tax benefit as a result of the need to maintain a valuation allowance against the associated deferred tax asset. Also, management periodically evaluates the realizability of our deferred tax assets which may result in the recognition and/or release of valuation allowances. As a result, changes in the mix of earnings between jurisdictions and changes in the recognition and/or release of valuation allowances, among other factors, could have a significant effect on our overall effective tax rate.

The comprehensive U.S. tax reform bill that was enacted in 2017 could adversely affect our financial performance.

In December 2017, the Tax Cuts and Jobs Act (the “Act”) was signed into law and significantly revised the Internal Revenue Code of 1986, as amended (the “IRC”). This legislation, among other things, contains significant changes to corporate taxation, including the reduction of the corporate income tax rate from 35% to 21% beginning in 2018, a one-time transition tax on offshore earnings at reduced tax rates regardless of whether the earnings are repatriated, the elimination of U.S. tax on foreign dividends (subject to certain important exceptions), new taxes on certain foreign earnings, a new minimum tax related to payments to foreign subsidiaries and affiliates, a deduction for foreign-derived intangible income (“FDII”), a significantly modified foreign tax credit regime, immediate deductions for certain new investments and the modification or repeal of many business deductions and credits. Notwithstanding the reduction in the corporate income tax rate, we are continuing to examine the long-term impact of the new federal tax law. During 2018, the Department of the Treasury issued certain guidance in the form of notices and proposed regulations with respect to several provisions of the Act. It is anticipated that final regulations or other guidance may be issued with respect to the Act in 2019 and subsequent years. We can provide no assurances that the final regulations will not adversely affect our financial performance. In addition, it is uncertain if, and to what extent, various states will conform to the new tax law and foreign countries will react to the new tax law by adopting tax legislation or taking other actions that could adversely affect our business financial condition or results of operation.

Item 1B. Unresolved Staff Comments.

None.

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Item 2. Properties.

At December 31, 2018, the Company and its joint venture owned or leased 11 manufacturing facilities, which together contain approximately 1.2 million square feet of manufacturing space. Of these manufacturing facilities, five are used by our Control Devices reportable segment, three are used by our Electronics reportable segment, one is used by our PST reportable segment and two are used by our joint venture, MSIL. The following table provides information regarding our facilities:

Location	Owned/ Leased	Use	Square Footage
Control Devices			
Lexington, Ohio	Owned	Manufacturing/Engineering	219,612
Juarez, Mexico (A)	Owned	Manufacturing/Engineering	189,327
Suzhou, China (A)	Leased	Manufacturing/Engineering/Sales Office	145,033
Canton, Massachusetts	Owned	Manufacturing/Engineering	132,560
Suzhou, China (A)	Leased	Manufacturing	77,253
El Paso, Texas (A)	Leased	Warehouse	57,000
Lexington, Ohio	Leased	Warehouse	15,000
Lexington, Ohio	Leased	Warehouse	2,700
Electronics			
Tallinn, Estonia (B)	Leased	Manufacturing/Engineering	85,911
Orebro, Sweden	Leased	Manufacturing	77,472
Barneveld, Netherlands	Owned	Manufacturing/Engineering/Warehouse	62,700
Stockholm, Sweden	Leased	Engineering Office/Division Office	39,600
Dundee, Scotland	Leased	Engineering/Sales Office	34,605
Bayonne, France	Leased	Sales Office/Warehouse	9,655
Jasper, Georgia	Leased	Sales Office/Warehouse	6,250
Lomersheim, Germany	Leased	Sales Office/Warehouse	5,597
Shanghai, China (B)	Leased	Engineering Office/Sales Office	5,034
Ottobrunn, Germany	Leased	Sales Office	1,119
PST			
Manaus, Brazil	Owned	Manufacturing	102,247
Campinas, Brazil	Owned	Engineering/Division Office	45,467
Campinas, Brazil	Leased	Sales Office	9,246
Buenos Aires, Argentina	Leased	Sales Office	2,906
Corporate and Other			
Novi, Michigan (B)	Leased	Headquarters/Division Office	37,713
Stuttgart, Germany	Leased	Sales Office/Engineering	1,000
Cheonan, South Korea	Leased	Sales Office	427
Joint Venture			
Pune, India	Owned	Manufacturing/Engineering/Sales Office	80,000
Chennai, India	Leased	Manufacturing	25,629

(A) This facility is also used in the Electronics reportable segment.

(B) This facility is also used in the Control Devices reportable segment.

Item 3. Legal Proceedings.

From time to time we are subject to various legal actions and claims incidental to our business, including those arising out of breach of contracts, product warranties, product liability, patent infringement, regulatory matters, and employment-related matters. It is our opinion that the outcome of such matters will not have a material adverse impact

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on our consolidated financial position, results of operations, or cash flows. However, the final amounts required to resolve these matters could differ materially from our recorded estimates. See Note 11 to the consolidated financial statements.

Item 4. Mine Safety Disclosure.

Not Applicable.

PART II

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

Our shares are listed on the New York Stock Exchange ("NYSE") under the symbol "SRI." As of February 20, 2019, we had 28,488,935 Common Shares, without par value, outstanding which were owned by approximately 160 shareholders of record. This does not include persons whose stock is in nominee or "street name" accounts held by brokers.

There were no repurchases of Common Shares made by us during the years ended December 31, 2018 or 2017, other than the repurchase of Common Shares of 153,397 and 132,211, respectively, to satisfy employee tax withholdings associated with the vesting of restricted Common Shares.

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Performance Graph

Set forth below is a line graph comparing the cumulative total return of a hypothetical investment in our Common Shares with the cumulative total return of hypothetical investments in the Morningstar Auto Parts Industry Group Index and the NYSE Composite Index based on the respective market price of each investment as of December 31, 2013, 2014, 2015, 2016, 2017 and 2018 assuming in each case an initial investment of $100 on December 31, 2013, and reinvestment of dividends.

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	2013	2014	2015	2016	2017	2018
Stoneridge, Inc.	$ 100	$ 101	$ 116	$ 139	$ 179	$ 193
Morningstar Auto Parts Index	$ 100	$ 114	$ 109	$ 116	$ 149	$ 104
NYSE Composite Index	$ 100	$ 107	$ 103	$ 115	$ 137	$ 125

For information on “Related Stockholder Matters” required by Item 201(d) of Regulation S-K, refer to Item 12 of this report.

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Item 6. Selected Financial Data.

The following table sets forth selected historical financial data and should be read in conjunction with the consolidated financial statements and notes related thereto and other financial information included elsewhere herein. The selected historical data was derived from our consolidated financial statements.

Year ended December 31	2018	2017	2016	2015	2014
	(in thousands, except per share data)				
Statement of Operations Data:					
Net sales:					
Control Devices	$ 441,297	$ 447,528	$ 408,132	$ 333,010	$ 306,658
Electronics (A)	344,727	282,383	205,256	216,544	214,141
PST	80,175	94,533	82,589	95,258	139,780
Total net sales	$ 866,199	$ 824,444	$ 695,977	$ 644,812	$ 660,579
Gross profit	$ 256,631	$ 248,140	$ 195,439	$ 176,978	$ 190,874
Operating income (loss):					
Control Devices	$ 64,191	$ 72,555	$ 61,815	$ 44,690	$ 35,387
Electronics (A)	28,236	18,119	14,798	13,784	17,444
PST (E)	4,989	2,661	(3,462)	(7,542)	(59,587)
Unallocated Corporate (H)	(30,412)	(35,965)	(29,069)	(23,117)	(19,067)
Total operating income (loss)	$ 67,004	$ 57,370	$ 44,082	$ 27,815	$ (25,823)
Equity in earnings of investees	$ 2,038	$ 1,636	$ 1,233	$ 608	$ 815
Income (loss) before income taxes from continuing operations (F)	$ 65,058	$ 52,582	$ 39,185	$ 20,230	$ (53,060)
Income (loss) from continuing operations (A) (B) (C) (D) (E) (F)	$ 53,848	$ 45,049	$ 75,574	$ 20,777	$ (51,204)
Loss from discontinued operations (G)	-	-	-	(210)	(9,387)
Net income (loss) (A) (B) (C) (D) (E) (F) (G)	53,848	45,049	75,574	20,567	(60,591)
Net loss attributable to noncontrolling interest (D)(E)	-	(130)	(1,887)	(2,207)	(13,483)
Net income (loss) attributable to Stoneridge, Inc.	$ 53,848	$ 45,179	$ 77,461	$ 22,774	$ (47,108)
Basic earnings (loss) per share from continuing operations attributable to Stoneridge, Inc.	$ 1.90	$ 1.61	$ 2.79	$ 0.84	$ (1.40)
Diluted earnings (loss) per share from continuing operations					

attributable to Stoneridge, Inc.	$ 1.85	$ 1.57	$ 2.74	$ 0.82	$ (1.40)
Basic loss per share attributable to discontinued operations	$ -	$ -	$ -	$ (0.01)	$ (0.35)
Diluted loss per share attributable to discontinued operations	$ -	$ -	$ -	$ (0.01)	$ (0.35)
Basic earnings (loss) per share attributable to Stoneridge, Inc.	$ 1.90	$ 1.61	$ 2.79	$ 0.83	$ (1.75)
Diluted earnings (loss) per share attributable to Stoneridge, Inc.	$ 1.85	$ 1.57	$ 2.74	$ 0.81	$ (1.75)
Other Continuing Operations Data:					
Design and development	$ 51,074	$ 48,877	$ 40,212	$ 38,792	$ 41,609
Capital expenditures	$ 29,027	$ 32,170	$ 24,476	$ 28,735	$ 23,516
Depreciation and amortization (I)	$ 29,191	$ 27,930	$ 23,258	$ 22,274	$ 27,105
Balance Sheet Data (as of December 31):					
Working capital	$ 172,870	$ 167,245	$ 128,184	$ 123,859	$ 125,197
Total assets	$ 559,519	$ 559,037	$ 394,529	$ 364,252	$ 398,751
Long-term debt, net of current portion	$ 96,983	$ 124,852	$ 75,060	$ 104,458	$ 110,651
Shareholders' equity	$ 283,266	$ 244,072	$ 192,077	$ 106,429	$ 113,806

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(A) The amounts for 2018 and 2017 include the Orlaco business as of the acquisition date which is included within our Electronics operating segment and is disclosed in Note 2 to the Company's consolidation financial statements.
(B) The amounts for 2017 include the impact of the Tax Legislation, a net tax benefit of $(9,062), consisting of an increase in tax expense of $6,207 due to the one-time deemed repatriation tax, offset by the favorable impact of the reduced tax rate on the Company's net deferred tax liabilities and other deferred tax adjustments of $(15,269) related to certain earnings included in the one-time transition tax.
(C) The Company recorded a release of a valuation allowance associated with its U.S. federal, certain state and foreign deferred tax assets of $48.5 million for the year ended December 31, 2016.
(D) The Company recorded a full valuation allowance on PST's net deferred tax assets of $1,237 for the year ended December 31, 2016 of which $322 was attributable to noncontrolling interest.
(E) The Company recorded a goodwill impairment of $51,458 related to PST during the year ended December 31, 2014 of which $11,304 was attributable to noncontrolling interest.
(F) The Company recorded a loss on extinguishment of debt of $10,607 related to the redemption of the 9.5% senior notes during the year ended December 31, 2014.
(G) The Company sold its Wiring business during the year ended December 31, 2014. As such, for all periods presented the Company reported this business as discontinued operations in the Company's consolidated financial statements.
(H) Unallocated corporate expenses include, among other items, accounting/finance, human resources, information technology and legal costs as well as share-based compensation.
(I) These amounts represent depreciation and amortization on fixed and certain finite-lived intangible assets.

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

We are a global designer and manufacturer of highly engineered electrical and electronic components, modules and systems primarily for the automotive, commercial, off-highway, motorcycle and agricultural vehicle markets.

On January 31, 2017, the Company acquired Exploitatiemaatschappij Berghaaf B.V. ("Orlaco"). As such, the Company's consolidated financial statements herein include the results of Orlaco from the date of acquisition. On May 16, 2017, the Company also acquired the remaining 26% noncontrolling interest in PST.

The following discussion and analysis should be read in conjunction with the consolidated financial statements and notes related thereto and other financial information included elsewhere herein.

Segments

We are organized by products produced and markets served. Under this structure, our operations have been reported using the following segments:

Control Devices. This segment includes results of operations that manufacture sensors, switches, valves and actuators.

Electronics. This segment includes results of operations from the production of electronic instrument clusters, electronic control units, driver information systems, camera-based vision systems, monitors and related products.

PST. This segment includes results of operations that design and manufacture electronic vehicle alarms, convenience accessories, vehicle tracking devices and monitoring services and in-vehicle audio and video devices.

Overview

The Company had net income attributable to Stoneridge, Inc. of $53.8 million, or $1.85 per diluted share, for the year ended December 31, 2018.

Net income attributable to Stoneridge, Inc. in 2018 increased by $8.7 million, or $0.28 per diluted share, from $45.2 million, or $1.57 per diluted share, for the year ended December 31, 2017 primarily due to increased sales and operating profit in our Electronics segment.

In 2018, our net sales increased by $41.8 million, or 5.1%, while our operating income increased $9.6 million, or 16.8%.

Our Control Devices segment net sales decreased by 1.4% primarily as a result of decreased sales volume in the North American automotive market as a result of certain program volume reductions partially offset by increased sales volume in our commercial vehicle and China automotive markets. Segment gross margin decreased slightly due to lower sales and higher direct material costs as a percentage of sales, adversely affected by tariffs, partially offset by lower overhead costs from a reduction in warranty costs. Segment operating income decreased by 11.5% relative to 2017.

Our Electronics segment net sales increased by 22.1% primarily due to an increase in European and North American commercial vehicle and off-highway product sales. Segment gross margin increased due to higher sales offset and favorable product mix offset by the adverse affect of U.S denominated material purchases at non-U.S. based operations. Operating income for the segment increased by 55.8% relative to 2017.

Our PST segment net sales decreased by 15.2% primarily due to unfavorable foreign currency translation of $11.9 million, or 12.6%, as well as lower volumes for our audio products and our Argentina aftermarket channel. Segment gross margin improved slightly due to a favorable sales mix related to lower audio products that resulted in lower direct material costs as a percentage of sales. Operating income increased by 87.5% compared to 2017 primarily due to a decrease in selling, general and administrative expenses ("SG&A").

In 2018, SG&A expenses were favorably impacted by a decrease in expense for the fair value of Orlaco and PST earn-out consideration of $7.3 million offset by an increase in restructuring and business realignment costs of $1.8 million.

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At December 31, 2018 and 2017, we had cash and cash equivalents of $81.1 million and $66.0 million, respectively. Cash and cash equivalents increased during 2018 primarily due to cash paid for business acquisitions in 2017 and higher capital expenditures in 2017 offset by net debt financing. Net cash flows from operations in 2018 increased slightly over 2017. At December 31, 2018 and 2017 we had $96.0 million and $121.0 million, respectively, in borrowings outstanding on our $300.0 million Credit Facility. The decrease in the Credit Facility balance during 2018 was the result of voluntary principal repayments.

Outlook

The Company continues to drive financial performance through top-line growth in our Electronics segment. The Company continues to implement operating efficiency improvements in order to create sustainable long-term margins. The Company believes that focusing on products that address industry megatrends will have a positive impact on both our top-line growth and underlying margins. In 2019, we believe that we will be favorably impacted by North American retrofit sales of our MirrorEye camera monitor system.

The North American automotive vehicle market is expected to remain consistent with 2018 at 17.0 million units in 2019. Based on our product mix, the Company expects sales volumes in our Control Devices segment to be consistent with the prior year.

The North American commercial vehicle market increased in 2018 and we expect it to increase slightly in 2019. We expect the European commercial vehicle market in 2019 to remain at approximately the same level with 2018.

Our PST segment revenues and operating performance decreased compared to 2017, mostly due to the decline in audio product demand as well as the decline in the Argentinian economy. In January 2019, the International Monetary Fund ("IMF") forecasted the Brazil gross domestic product to grow 2.5% in 2019 and 2.2% in 2020. As the Brazilian economy improves, we expect our served market channels to improve including audio products which have had lower demand in 2018 compared to the prior year. Our financial performance in our PST segment is also subject to uncertainty from movements in the Brazilian Real and Argentina Peso foreign currencies.

Trade actions initiated by the U.S. imposing tariffs on imports have been met with retaliatory tariffs by other countries, adding a level of uncertainty to the global economic environment. These and other actions are likely to impact trade polices with other countries and the overall global economy which could adversely impact our results of operations.

In January 2019, we committed to a restructuring plan that will result in the closure of our Canton, Massachusetts facility ("Canton Facility") by the end of 2019 and the consolidation of manufacturing operations at that site into other Company locations ("Canton Restructuring"). Company management informed employees at the Canton Facility of this restructuring decision on January 11, 2019. This restructuring action will result in the closure of the Canton facility and the termination of the employment of Canton Facility employees. The estimated costs for the Canton Restructuring include employee severance and termination costs, contract terminations costs, professional fees, the non-cash write-off of impaired fixed assets and transition costs. The estimated total cost of the Canton Facility restructuring plan, that will impact our Control Devices segment, is between $8.5 million and $9.5 million and will be incurred through 2020.

Other Matters

A significant portion of our sales are outside of the United States. These sales are generated by our non-U.S. based operations, and therefore, movements in foreign currency exchange rates can have a significant effect on our results of operations, which are presented in U.S. dollars. Our Electronics and PST segments have non-U.S. based operations that purchase a significant portion of raw materials denominated in U.S. dollars and therefore our results of operations are subject to fluctuations in foreign currency rates. The U.S. dollar weakened against the Swedish krona, euro and Brazilian real in 2017 favorably impacting our material costs and our reported results. The U.S. Dollar strengthened against the Swedish krona, euro, Brazilian real and Argentinian peso in 2018, unfavorably impacting our material costs and reported results.

In the fourth quarter of 2018, we undertook business realignment actions for our Electronics segment affecting our European Aftermarket business and China operations. We recognized expense of $3.6 million as a result of these

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actions for severance, contract termination costs, excess and obsolete inventory write-offs and the non-cash write-off of intangible assets and impaired fixed assets. In addition, we regularly evaluate the performance of our businesses and their cost structures, including personnel, and make necessary changes thereto in order to optimize our results. We also evaluate the required skill sets of our personnel and periodically make strategic changes. As a consequence of these actions, we incur severance related costs which we refer to as business realignment charges.

Because of the competitive nature of the markets we serve, we face pricing pressures from our customers in the ordinary course of business. In response to these pricing pressures we have been able to effectively manage our production costs by the combination of lowering certain costs and limiting the increase of others, the net impact of which to date has not been material. However, if we are unable to effectively manage production costs in the future to mitigate future pricing pressures, our results of operations would be adversely affected.

Year Ended December 31, 2018 Compared To Year Ended December 31, 2017

Consolidated statements of operations as a percentage of net sales are presented in the following table (in thousands):

Year ended December 31,	2018		2017		Dollar increase / (decrease)
Net sales	$ 866,199	100.0 %	$ 824,444	100.0 %	$ 41,755
Costs and expenses:					
Cost of goods sold	609,568	70.4	576,304	69.9	33,264
Selling, general and administrative	138,553	16.0			