

**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, 2024

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from _____ to _____.
Commission file number: 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	Trading Symbol(s)	Name of each exchange on which registered
Common Shares, without par value	SRI	New York Stock Exchange

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

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

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). ☒ Yes ☐ No

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

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

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

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, 2024, the aggregate market value of the registrant's Common Shares held by non-affiliates of the registrant was approximately \$430.7 million. The closing price of the Common Shares on June 28, 2024 as reported on the New York Stock Exchange was \$15.96 per share. As of June 30, 2024, the number of Common Shares outstanding was 27,677,748.

The number of Common Shares outstanding as of February 26, 2025 was 27,695,248.

DOCUMENTS INCORPORATED BY REFERENCE

Definitive Proxy Statement for the Annual Meeting of Shareholders to be held on May 13, 2025, 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,” “estimates,” “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 these statements. Important factors that could cause actual results to differ materially from those in the forward-looking statements include, among other factors:

- 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;
- fluctuations in the cost and availability of key materials and components (including semiconductors, printed circuit boards, resin, aluminum, steel and copper) and our ability to offset cost increases through negotiated price increases with our customers or other cost reduction actions, as necessary;
- global economic trends, competition and geopolitical risks, including impacts from ongoing or potential global conflicts and any related sanctions and other measures, or an escalation of sanctions, tariffs or other trade tensions between the U.S. and other countries;
- tariffs specifically in countries where we have significant manufacturing or supply chain exposure and our ability to either mitigate the impact of tariffs or pass any incremental costs to our customers;
- our ability to achieve cost reductions that offset or exceed customer-mandated selling price reductions;
- the reduced purchases, loss, financial distress or bankruptcy of a major customer or supplier;
- the costs and timing of business realignment, facility closures or similar actions;
- a significant change in commercial, automotive, off-highway or agricultural vehicle production;
- competitive market conditions and resulting effects on sales and pricing;
- foreign currency fluctuations and our ability to manage those impacts;
- customer acceptance of new products;
- our ability to successfully launch/produce products for awarded business;
- adverse changes in laws, government regulations or market conditions affecting our products, our suppliers, 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 of our customers;
- labor disruptions at our facilities, or at any of our significant customers or suppliers;
- business disruptions due to natural disasters or other disasters outside of our control;
- 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;
- 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 1A (“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.

PART I

Item 1. Business.

Overview

Founded in 1965, Stoneridge, Inc. (the “Company”) is a global supplier of safe and efficient electronics systems and technologies. Our systems and products power vehicle intelligence, while enabling safety and security for on-and off-highway transportation sectors around the world. Our worldwide footprint is primarily comprised of 21 locations in 14 countries and enables us to supply global commercial, automotive, off-highway, agricultural and other 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 safety, security and convenience. Our product offerings consist of actuators, sensors, switches and connectors, advanced driver information products, vision systems, connectivity and compliance solutions, control modules, vehicle tracking devices and monitoring services, vehicle security alarms and convenience accessories, telematics solutions and multimedia devices. We supply the majority of our products, predominantly on a sole-source basis, to many of the world’s leading commercial vehicle, automotive and off-highway original equipment manufacturers (“OEMs”) and select non-vehicle OEMs, as well as certain automotive and commercial vehicle 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 and systems aligned with these trends. For example, we continue to invest in the development of advanced system capabilities that are complementary to our driver information solutions and vision systems such as integrated driver assistance technologies and an intelligent connected trailer system.

Beginning with the divestiture of our wiring business in 2014, we accelerated a shift in our product portfolio towards smart products, or those products that contain embedded electronics or logic. We deployed capital in 2017 to make strategic investments including the acquisition of Orlaco, our partner on the development of MirrorEye®, our camera monitor system, and the acquisition of an additional 26 percent of our Stoneridge Brazil business resulting in 100 percent ownership. In 2019, the Company’s Control Devices segment sold its non-core switches and connectors business (the “Non-core Products”) and in 2020 announced the strategic exit of our PM sensor business to further align with our strategic plan. These activities have acted as a catalyst for the advancement of our smart product portfolio, increasing our smart content from just over 50% of our sales in 2014 to almost 82% of our sales in 2024. Our product portfolio shift focuses on the megatrends driving the transportation and off-highway industries.

We have positioned each of our segments for continued long-term success. Our Control Devices segment is increasingly well positioned with a focus on continued development and commercialization of actuation and powertrain agnostic applications that will drive future growth for the segment. Our Electronics segment is expected to drive strong revenue growth through strong demand for our existing products including our MirrorEye camera monitor system in the European and North American commercial vehicle markets. Our Stoneridge Brazil segment continues to integrate into our global strategy as we leverage our global engineering and manufacturing footprint and prepare for continued expansion of our local OEM presence. Overall, we will continue to focus our resources on the areas of largest opportunity for the Company to drive long-term value creation for our shareholders.

Segments and Products

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

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 actuators, sensors, switches and connectors. Actuator products enable OEMs to deploy power functions in a vehicle and can be designed to integrate switching and control functions including our park lock and front-axle disconnect products. Sensor products are employed in major vehicle systems such as the emissions, safety, powertrain, braking, climate control, steering and suspension systems and are now being applied to electric vehicle thermal management systems. Switches and connectors transmit signals that activate specific functions. Our switch and connector 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 advanced driver information solutions, vision systems, connectivity and compliance solutions and control modules. Advanced driver information solutions and connectivity and compliance 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. Vision systems provide enhanced vehicle visibility and safety to drivers. These products are sold principally to the commercial vehicle and off-highway markets through both the OEM and aftermarket channels.

Stoneridge Brazil. Our Stoneridge Brazil segment primarily serves the South American market and designs and manufactures vehicle tracking devices and monitoring services, driver information systems, vehicle security alarms and convenience accessories, telematics solutions and multimedia devices primarily for the automotive and commercial vehicle markets. This segment includes product lines such as vehicle monitoring and tracking devices, driver information systems, security alarms, convenience applications such as parking sensors and rearview cameras, telematics solutions used for fleet management and multimedia devices. These products improve the performance, safety and convenience features of our customers' vehicles. Stoneridge Brazil sells its products through the aftermarket distribution channel, direct to OEMs and to factory authorized dealer installers, also referred to as original equipment services. In addition, monitoring services and tracking devices are sold directly to corporate and individual customers.

Our products and systems are sold to numerous OEM and Tier 1 customers, as well as aftermarket distributors, 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:

Principal End Markets	2024	2023	2022
Commercial vehicle	54%	51%	48%
Automotive	28%	31%	34%
Off-highway and other	13%	12%	12%
Aftermarket distributors and monitoring services	5%	6%	6%

For further information related to our reportable segments and financial information about geographic areas, see Note 13 to the consolidated financial statements.

Production Materials

The principal production materials used in the Company's manufacturing process are electrical components such as printed circuit boards, semiconductors, microprocessors, memory devices, resistors, capacitors, fuses, relays, monitors and cameras, molded plastic components and resins, copper, steel and precious metals. 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.

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 overall business success, nor would the expiration or invalidity of any patent have a material adverse effect on our business or ability to compete.

Industry Cyclicalities 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 commercial, automotive, off-highway 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 commercial, automotive, off-highway and agricultural vehicle production of our principal customers could adversely affect the Company. Our Control Devices and Electronics segments are moderately seasonal, impacted by mid-year and year-end shutdowns and the ramp-up of new model production at key customers. In addition, the demand for our Stoneridge Brazil segment consumer products is typically higher in the second half of the year.

Customers

We have several customers that 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 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 manage our production costs by lowering certain costs and/or limiting the increase of others. If we are unable to effectively manage production costs in the future to mitigate future pricing pressures, our financial condition and results of operations would be adversely affected.

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 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 a competitive price.

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 or developing new, innovative technologies aligned with industry megatrends or customer requests. A large portion 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.

Our product development investment and spending activities are globally coordinated to maximize utilization of resources and collaboration among engineering resources which are organized based on resource availability, capability and cost effectiveness. The product development operations are executed by technology groups in Barneveld, Netherlands; Campinas, Brazil; Juarez, Mexico; Lexington, Ohio; Novi, Michigan; Stockholm, Sweden; Suzhou, China and Tallinn, Estonia.

We have invested, and will continue to invest heavily in technology aligned with our strategy to develop smart products that contain embedded electronics or logic. Product development costs, other than capitalized software 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.

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 seven 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.

Human Capital Management

As of December 31, 2024, the Company employed approximately 4,450 full time and temporary employees in 14 countries, with about 85% 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 works council or other employment arrangements required by law. We work to ensure positive relations with our employees.

We strive to create a work environment that enhances employee engagement, fosters productivity, and is aligned with our values of Integrity, Accountability, Teamwork, Adaptability, Customer Orientation, and Social Responsibility. We know that our success is dependent on our employees' engagement, performance, skills, and development. To that end, we have established talent management programs, which include but are not limited to the following:

- Periodic global employee engagement surveys and subsequent action planning
- Regular talent reviews for employee development and succession planning
- Feedback and coaching to ensure performance is aligned with our goals and strategic direction
- Delivery of Code of Conduct and global policy training
- New employee orientation with globally consistent and locally flexible messaging
- Frequent global "town hall" meetings and other communications
- Employee wellness programs
- Opportunities for community and charitable involvement
- Employee mentoring program
- Internship programs

When we hire new employees, we focus not just on the skills required for current positions, but the ever-changing complex skills and competencies that will be required as we move forward on our path to being the mobility industry's integrated technology partner. We seek diverse sources for candidates and we offer wages and benefits that are competitive in the markets where employees are located.

The Company is committed to creating diverse, equitable and inclusive workplaces that align with our core values and deliver sustainable business success. It is our mission to attract, advance and advocate for a diverse workforce that represents the communities around us. We challenge bias and strive to eliminate barriers through fair policies and practices. We are building an inclusive company where all employees can grow, excel, and contribute to our success in a meaningful way.

Our Human Resources function is an active and visible partner to the business at all levels. Our Chief Human Resources Officer reports directly to the Chief Executive Officer and interacts frequently with the Company's Board of Directors. Our Human Capital focus will continue to be on employee engagement, employee and leadership development, communications, and employee health and safety.

Information About Our Executive Officers

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
James Zizelman	64	President, Chief Executive Officer and Director
Matthew R. Horvath	39	Chief Financial Officer and Treasurer
Susan C. Benedict	58	Chief Human Resources Officer and Assistant General Counsel
Caetano R. Ferraiolo	57	President of the Stoneridge Brazil Division
Robert J. Hartman Jr.	58	Chief Accounting Officer
Natalia Noblet	47	President of the Electronics Division
Rajaey Kased	45	President of the Control Devices Division

James Zizelman, President, Chief Executive Officer and Director. Mr. Zizelman was appointed as President and Chief Executive Officer and elected as Director in January 2023. Previously he served as President of the Control Devices Division since April 2020. Prior to joining Stoneridge, Mr. Zizelman served as the Vice President of Engineering and Program Management for Aptiv from December 2017 to March 2019. Prior to that, Mr. Zizelman was employed at Delphi for more than 20 years, where he was last a Vice President of Engineering from 2016 to 2017.

Matthew R. Horvath, Chief Financial Officer and Treasurer. Mr. Horvath was appointed Chief Financial Officer and Treasurer in September 2021. He previously served as Stoneridge's Executive Director of Corporate Strategy and Investor Relations from September 2020 to August 2021, and prior to that as Director of Investor Relations from November 2016 to August 2020. Prior to joining Stoneridge, Mr. Horvath spent six years at EY, formerly known as Ernst & Young, in the Transaction Advisory practice, primarily focused on business and asset valuation with a focus on the automotive and transportation industry from 2010 - 2016.

Susan C. Benedict, Chief Human Resources Officer and Assistant General Counsel. Ms. Benedict was appointed Chief Human Resources Officer and Assistant General Counsel in June 2019. Ms. Benedict previously served as Stoneridge's Director of Legal since November 2017. Prior to Stoneridge, Ms. Benedict served as Senior Counsel for Koch Industries in October 2017 and Corporate Counsel for Guardian Industries from December 2012 to September 2017.

Caetano R. Ferraiolo, President of the PST Electronics Division. Mr. Ferraiolo was appointed to President of the Stoneridge Brazil Electronics Division in June 2017. Mr. Ferraiolo joined the Company in 2015 and previously served as the Chief Operating Officer of Stoneridge Brazil. 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.

Natalia Noblet, President of the Electronics Division. Ms. Noblet was appointed as President of the Electronics Division in September 2024. Before joining Stoneridge, Ms. Noblet served as senior vice president EMEA (Europe, Middle East, Africa) region within ZF's Commercial Vehicle Solutions division from 2022 until August 2024. From 2020 to 2022 Ms. Noblet held various positions at ZF. From 2017 to 2020 Ms. Noblet served as Chief Quality Officer at WABCO.

Rajaey Kased, President of the Control Devices Division. Mr. Kased was appointed as President of the Control Devices Division in January 2023. He previously was the Vice President of Sales, Strategy, and Product Line Management for the Control Devices Division from 2019. Prior to joining Stoneridge, Mr. Kased served as Head of Business Development, ADAS and Powertrain, North America, at Henkel from 2017 to 2019. Prior to that, Mr. Kased was employed at Delphi from 2005 to 2017 where he served in management and engineering roles of increasing responsibility.

Available Information

We make available, free of charge through our website (www.stoneridge.com), our Annual Reports 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, Nominating and Corporate Governance and Compliance and Ethics 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.

Uncertain Business, Economic and Market Conditions

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

The demand for products is largely dependent on the domestic and foreign production of commercial, automotive, off-highway 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 commercial, automotive, off-highway and agricultural vehicle markets, our net sales, and therefore our results of operations, are significantly dependent on the general state of the economy as well as other factors affecting these markets.

In 2024, approximately 95% of our net sales were derived from commercial, automotive, off-highway and agricultural vehicle markets while approximately 5% were derived from aftermarket distributors and monitoring services markets. An economic downturn or other adverse industry conditions that result in a decline in commercial, automotive, off-highway 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.

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 2024, our top five customers were PACCAR, Traton, Volvo, Daimler Truck and Ford, which comprised 16%, 13%, 13%, 7% and 7% of our net sales, respectively. In 2024, our top ten customers accounted for 66% 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 insolvency.

The Company's estimated sourced future sales from awarded programs may not be realized.

The Company typically enters into customer agreements at the beginning of a vehicle life cycle with the intent to fulfill customer-purchasing requirements for the entire vehicle production life cycle. The vehicle life cycle typically included the two to five year pre-production period and production for a term covering the life of such vehicle model or platform, generally between three to seven years, although there is no guarantee that this will occur. The Company's customers make no firm commitments regarding volume and may terminate these agreements or orders at any time. Therefore, these arrangements do not represent firm orders. The Company's estimated sourced future sales from awarded programs, also referred to as backlog, is the estimated remaining cumulative awarded life-of-program sales for up to a five year period. Several factors may change forecasted revenue from awarded programs; namely, new business wins, vehicle production volume changes, customer price reductions, foreign currency exchange rates, component take rates by customers and short cycled or cancelled models or platforms.

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, manufacturing and information technology systems. We cannot ensure that we will be able to achieve technological advances or introduce new products that may be necessary to remain competitive. Our inability to continuously improve existing products, develop new products and achieve technological advances could have a material adverse effect on our business, financial condition or results of operations.

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.

Public health crises and other global health pandemics, epidemics or disease outbreaks could adversely impact our business, results of operation and financial condition.

A significant public health crisis, pandemic or disease outbreak could adversely impact our business as well as those of our suppliers and customers. For example, the COVID-19 pandemic disrupted the global vehicle industry and customer sales, production volumes, supply of components critical to our business, and purchases of commercial, automotive, off-highway and agricultural vehicles by end-consumers. Any future significant public health crisis could adversely impact the global economy, our industry and the overall demand for our products. In addition, preventative or reactionary measures taken by governmental authorities may disrupt the ability of our employees, suppliers and other business partners to perform their respective functions and obligations relative to the conduct of our business. Our ability to predict and respond to future changes resulting from potential health crises is uncertain as are the ultimate potential impacts on our business. The extent to which a pandemic or similar significant health crises will impact our business in the future is uncertain. In addition, to the extent such significant health crises may adversely affect our business, financial condition, results of operations and cash flows, they may also have the effect of heightening many of the other risk factors in this section.

Financial Risks

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 operating margin impact). The volatility of currency exchange rates may materially adversely affect 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, 2024, there was \$201.6 million in borrowings outstanding on our Fifth Amended and Restated Credit Agreement (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 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.

On February 26, 2025, we entered into Amendment No. 1 to the Fifth Amended and Restated Credit Agreement and Waiver ("Amendment No. 1"). Amendment No. 1 provides for certain financial covenant relief and additional covenant restrictions during the "Covenant Relief Period" (the period ending on the date that the Company delivers a compliance certificate for the quarter ending December 31, 2025). During the Covenant Relief Period:

- the maximum leverage ratio of 3.50 was increased to 6.00 for the quarter ended March 31, 2025, 5.50 for the quarter ended June 30, 2025, 4.50 for the quarter ended September 30, 2025 and 3.50 for the quarter ended December 31, 2025;
- the minimum interest coverage ratio of 3.50 was waived for the quarter ended December 31, 2024 and was reduced to 2.00 for the quarters ended March 31 and June 30, 2025, and 2.50 and 3.50 for the quarter ended September 30, 2025 and December 31, 2025, respectively;
- the Company's aggregate amount of cash and cash equivalents (as defined) cannot exceed \$70.0 million;
- the sale of significant assets (as defined) will require repayment in the amount of any net cash proceeds received and result in the reduction of the Credit Facility commitment, at the lesser of \$100.0 million or the net cash proceeds;
- there were certain restrictions on Restricted Payments (as defined); and
- a Permitted Acquisition (as defined) could not be consummated unless otherwise approved in writing by the required lenders.

Amendment No. 1 added an additional level to the leverage ratio based pricing grid, through maturity, when the leverage ratio is greater than 3.50.

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.

Unanticipated changes in our effective tax rate, the adoption of U.S. or international tax legislation, or exposure to additional tax liabilities could adversely affect our profitability.

Our effective tax rate and future cash tax liability could be impacted by various factors, such as changes in the mix of earnings between jurisdictions, changes in the recognition and/or release of valuation allowances, and the enactment of tax laws or changes in tax laws, regulations, or accounting principles.

The Organization for Economic Cooperation and Development ("OECD") issued new guidelines to implement a 15% global corporate minimum tax to ensure that large multinational enterprises pay a minimum level of tax in the countries they operate. Our effective tax rate and cash tax liabilities could increase in future years, depending on which countries enact the legislation and in what manner. As a result of future changes in our effective tax rate our business, financial condition or results of operations could be materially adversely affected.

Risks Related to Products, Pricing and Supply

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

We require substantial amounts of raw materials, components and other supplies, and substantially all such materials we require are purchased from outside sources. The availability and prices of raw materials, components 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. In the past, we have experienced difficulty obtaining adequate supplies of semiconductors, memory chips and other electronic components. In addition, there have been challenges at times in obtaining timely supply of nylon and resins for our Control Devices segment. If we cannot obtain adequate amounts of raw materials, components and other supplies, or if we experience an increase in the price of raw materials, components and other supplies, our business, financial condition or results of operations could be materially adversely affected.

The prices that we can charge our customers are typically 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 our customers typically 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 and operating inefficiencies. 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 and the inability to achieve productivity and cost reduction targets could adversely affect our business, financial condition or results of operations.

OEM customers have exerted and continue to exert considerable pressure on system and 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 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, however, 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.

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 and convenience 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.

Geopolitical Uncertainties

We are subject to risks related to our international operations.

Approximately 51% of our net sales in 2024 were derived from sales outside of North America. At December 31, 2024, significant concentrations of net assets outside of North America included \$202.4 million in Europe, \$45.5 million in Asia Pacific and \$35.7 million in South America. Non-current assets outside of North America accounted for approximately 59% of our non-current assets as of December 31, 2024. International sales and operations are subject to significant risks, including, among others:

- political and economic instability and conflicts;
- restrictive trade policies;
- economic conditions in local markets;
- currency exchange rates and controls;
- labor or social 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.

Because of the interconnectedness of the global economy, a financial crisis, economic downturn or recession, natural disaster, war, geopolitical crises, or other significant events in one area of the world can have an immediate and material adverse impact on markets around the world. These uncertainties could have a material adverse effect on our business, financial condition or results of operations.

Changes in U.S. administrative policy, including the imposition of or increases in tariffs, changes to existing trade agreements and any resulting changes in international trade relations, may have an adverse effect on our business.

Changes in laws or policies governing the terms of trade, and in particular increased trade restrictions, tariffs or taxes on imports from countries where we manufacture products, such as Mexico and China, could have a material adverse effect on our business and financial results. For example, in February 2025, the U.S. government imposed or threatened to impose new tariffs on imported products from Mexico, Canada and China. The impact of these tariffs is subject to a number of factors, including the effective date and duration of such tariffs, changes in the amount, scope and nature of the tariffs in the future, any retaliatory responses to such actions that the target countries may take and any mitigating actions that may become available. Despite recent trade negotiations between the U.S. and the Mexican, Canadian and Chinese governments, given the uncertainty regarding the scope and duration of any new tariffs, as well as the potential for additional tariffs or trade barriers by the U.S., Mexico, Canada, China or other countries, we can provide no assurance that any strategies we implement to mitigate the impact of such tariffs or other trade actions will be successful. A trade war or other significant changes in trade regulations could have a material adverse effect on our business, financial condition and results of operations.

We operate our business on a global basis and policy changes affecting international trade could adversely impact the demand for our products and our competitive position.

We manufacture, sell and service products globally and rely upon a global supply chain to deliver the raw materials, components, systems and parts that we need to manufacture and service our products. Changes in government policies on foreign trade and investment can affect the demand for our products and services, cause non-U.S. customers to shift preferences toward domestically manufactured or branded products and impact the competitive position of our products or prevent us from being able to sell products in certain countries. Our business benefits from free trade agreements, such as the United States-Mexico-Canada Agreement and the U.S. trade relationships with China and Brazil and efforts to withdraw from, or substantially modify such agreements or arrangements, in addition to the implementation of more restrictive trade policies, such as more detailed inspections, higher tariffs import or export licensing requirements, exchange controls or new barriers to entry, could adversely impact our production costs, customer demand and our relationships with customers and suppliers. Any of these consequences could have a material adverse effect on our business, financial condition or results of operations.

Strategic Performance Risks

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 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 follow 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.

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.

If we do not respond appropriately, the evolution of the global transportation industry toward electrification and shared mobility could adversely affect our business.

The global transportation industry is increasingly focused on the development of more fuel-efficient solutions to meet demands from consumers and governments worldwide to address climate change and an increased desire for environmentally sustainable solutions. The impacts of these changes on us are uncertain and could ultimately prove dramatic. If we do not respond appropriately, the evolution toward electrification and other energy sources could adversely affect our business. The increased adoption of electrified and other non-internal combustion-based powertrains may result in lower demand for some of our products. There has also been an increase in consumer preferences for car and ride sharing, as opposed to automobile ownership, which may result in a long-term reduction in the number of vehicles per capita. The evolution of the industry toward electrification and shared mobility has also attracted increased competition from entrants outside of the traditional light vehicle industry, some of whom may seek to provide products which compete with ours. Failure to innovate and to develop or acquire new and compelling products that capitalize upon new technologies in response to these evolving consumer preferences and demands could adversely affect our business, financial condition or results of operations.

Product Liability Risks

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 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, financial condition, or results of operations.

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.

Intellectual Property Risks

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 of a scope 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, or customer indemnification claims. Third parties have asserted and may assert or prosecute infringement claims against us or our customers 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. As a result of such claims, we could enter into licensing agreements (if available on acceptable terms or at all), be forced to pay damages or cease making or selling certain products, lose our intellectual property protection, or suffers some combination of these effects. Moreover, in such a situation, 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. The Company is aware of claims being made against manufacturers of vehicles by alleged owners of patents related to connectivity-enabled products (frequently referred to as "standard essential patents"). Customers may seek indemnification related to such claims from the Company. The Company has taken actions to mitigate this risk from new programs; however, significant indemnification claims related to these products could have a material adverse effect on our business, financial condition or results of operations.

Information Technology and Cybersecurity Risks

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. 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. 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 steps to protect the Company from cybersecurity risks and security breaches (including enhancing our firewall, workstation, email security and network monitoring with managed extended detection and response (MXDR) 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. We may be required to incur significant costs to protect against damage caused by these disruptions or security breaches in the future. The Company has taken actions to mitigate risks relating to our information technology systems and cybersecurity; however, significant compromises or breaches related to cybersecurity could have a material adverse effect on our business, financial condition or results of operations.

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 systems and the proper processing and maintenance of this electronic information are critical to our business operations.

In addition, we continually 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 or upgraded successfully, or if the systems do not perform in a satisfactory manner once implementation or upgrade 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.

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 business, 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 frequently change. Complying with these various laws could cause the Company to incur substantial costs.

Environmental, Climate and Weather Risks

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 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.

An emphasis on global climate change and other environmental, social, and corporate governance ("ESG") matters by various stakeholders could negatively affect our business.

Customer, investor, employee and other stakeholder expectations of us and our supply base in areas such as the environment, social matters and corporate governance have been rapidly evolving and increasing. The enhanced stakeholder focus on ESG requires the continuous monitoring of various and evolving standards and their associated requirements. Our failure, or that of our supply base, to adequately meet stakeholder expectations may result in, among other things, the loss of business, diluted market valuation, an inability to attract customers or an inability to attract and retain top talent that could adversely affect our business, financial condition or results of operations.

Item 1B. Unresolved Staff Comments.

None.

Item 1C. Cybersecurity.

Cybersecurity Risk Management and Strategy

The Company has processes in place to identify, assess, and monitor material risks from cybersecurity threats, which are part of the Company's overall cybersecurity risk management strategy and have been embedded in the information systems operating procedures and internal controls.

Our information technology ("IT") function manages IT operations and continually evolves our systems to meet the constantly changing digital environment. We enhanced our workstation, server, email security, and network monitoring with managed extended detection and response and alerting capabilities. We perform periodic cybersecurity risk assessments to identify, assess, and prioritize potential risks to information, data assets, and infrastructure. The Company addresses identified risks and develops and implements controls to mitigate issues. The Company engages third parties in connection with its cybersecurity processes as appropriate. The Company has established processes to identify risks from cybersecurity threats associated with its third-party service providers.

The Company has established a cybersecurity policy which requires mandatory compliance of all Company directors, officers, employees, interns, consultants, and contractors. The Company has also established cybersecurity and information security awareness training programs. Employees with access to the Company's network receive annual training on topics such as phishing, malware, and other cybersecurity risks. Training is administered and tracked through online learning modules.

We work to continually evolve our systems to meet the constantly changing digital environment and continue to invest in the cybersecurity and resiliency of our networks and to enhance our internal controls and processes, which are designed to help protect our systems and infrastructure, and the information they contain. There have been no risks from cybersecurity threats that have materially affected or are reasonably likely to materially affect our business strategy, results of operations or financial condition. The nature of potential cybersecurity risks and threats are uncertain, and any future incidents, outages or breaches could have a material adverse effect on the Company's business, financial conditions or results of operations. For more information about the cybersecurity risks we face, refer to the Risk Factors in section "Information Technology and Cybersecurity Risks" in Part I, Item 1A, "Risk Factors".

Cybersecurity Governance

The Company's Board of Directors, as a whole, has oversight responsibility for our strategic and operational risks. The Audit Committee of the Board of Directors is responsible for board-level oversight of cybersecurity risk, and the Audit Committee regularly reports risks and compliance actions to the Board. As part of its oversight role, the Audit Committee receives reporting about the Company's strategy, programs, incidents and threats, and other developments and action items related to cybersecurity regularly throughout the year, including through periodic updates from the Chief Information Officer ("CIO").

Our cybersecurity program is managed by our Director of Global IT Architecture and Cybersecurity (the "Cybersecurity Director"), and our CIO, who reports directly to our Chief Executive Officer. Our CIO and Cybersecurity Director each have over 30 years of experience leading numerous business and technology initiatives and global cross-functional projects to improve the Company's business systems, infrastructure, and processes, including extensive experience assessing and managing cybersecurity programs and risk. Our CIO and the IT function monitor the prevention, mitigation, detection, and remediation of cybersecurity incidents through their management of, and participation in, the processes described above, including the operation of the Company's incident response plans, which include appropriate escalation to the executive team and the Audit Committee. As discussed above, the CIO reports at least semiannually to the Audit Committee about cybersecurity threat risks, among other cybersecurity related matters.

Item 2. Properties.

At December 31, 2024, the Company owned or leased seven manufacturing facilities, which together contain approximately 0.9 million square feet of manufacturing space. Of these manufacturing facilities, two are used by our Control Devices reportable segment, four are used by our Electronics reportable segment and one is used by our Stoneridge Brazil reportable segment. The following table provides information regarding our facilities:

Location	Owned/ Leased	Use	Square Footage
Control Devices			
Lexington, Ohio	Owned	Manufacturing/Engineering	219,612
Suzhou, China ^(A)	Leased	Manufacturing/Engineering/Sales Office	145,033
Lexington, Ohio	Leased	Warehouse	15,000
Novi, Michigan	Leased	Engineering	6,398
Electronics			
Juarez, Mexico ^(B)	Owned	Manufacturing/Engineering	235,035
Tallinn, Estonia	Leased	Manufacturing/Engineering	85,911
Orebro, Sweden	Leased	Manufacturing/Engineering	77,472
Juarez, Mexico ^(B)	Leased	Warehouse/Division Office	64,873
Barneveld, Netherlands	Owned	Manufacturing/Engineering	62,700
El Paso, Texas ^(B)	Leased	Warehouse	57,000
Stockholm, Sweden	Leased	Engineering/Division Office	41,248
Bayonne, France	Leased	Sales Office/Warehouse	9,655
Dundee, Scotland	Leased	Sales Office/Engineering	4,683
Gothenburg, Sweden	Leased	Engineering	710
Stoneridge Brazil			
Manaus, Brazil	Owned	Manufacturing	94,103
Campinas, Brazil	Owned	Engineering/Division Office	45,467
Buenos Aires, Argentina	Leased	Sales Office	4,532
Hortolândia, Brazil	Leased	Sales Office	3,229
Serra, Brazil	Leased	Sales Office	344
Corporate and Other			
Novi, Michigan ^(A, B)	Leased	Headquarters/Division Office	37,713
Esslingen, Germany	Leased	Sales Office	1,722

(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 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 26, 2025, we had 27,695,248 Common Shares, without par value, outstanding that were owned by approximately 250 shareholders of record. This does not include persons whose stock is in nominee or "street name" accounts held by banks, brokers and other nominees.

There were no sales of unregistered securities by the Company or its affiliates during the fiscal year ended December 31, 2024.

The following table presents information with respect to repurchases of Common Shares made by us during the three months ended December 31, 2024. There were 2,268 Common Shares delivered to us by employees as payment for withholding taxes due upon vesting of performance share awards and share unit awards during the three months ended December 31, 2024.

Period	Total number of shares purchased	Average price paid per share	Total number of shares purchased as part of publicly announced plans or programs	Maximum number of shares that may yet be purchased under the plans or programs
10/1/24-10/31/24	183	\$ 10.59	N/A	N/A
11/1/24-11/30/24	237	\$ 6.60	N/A	N/A
12/1/24-12/31/24	1,848	\$ 6.68	N/A	N/A
Total	2,268			

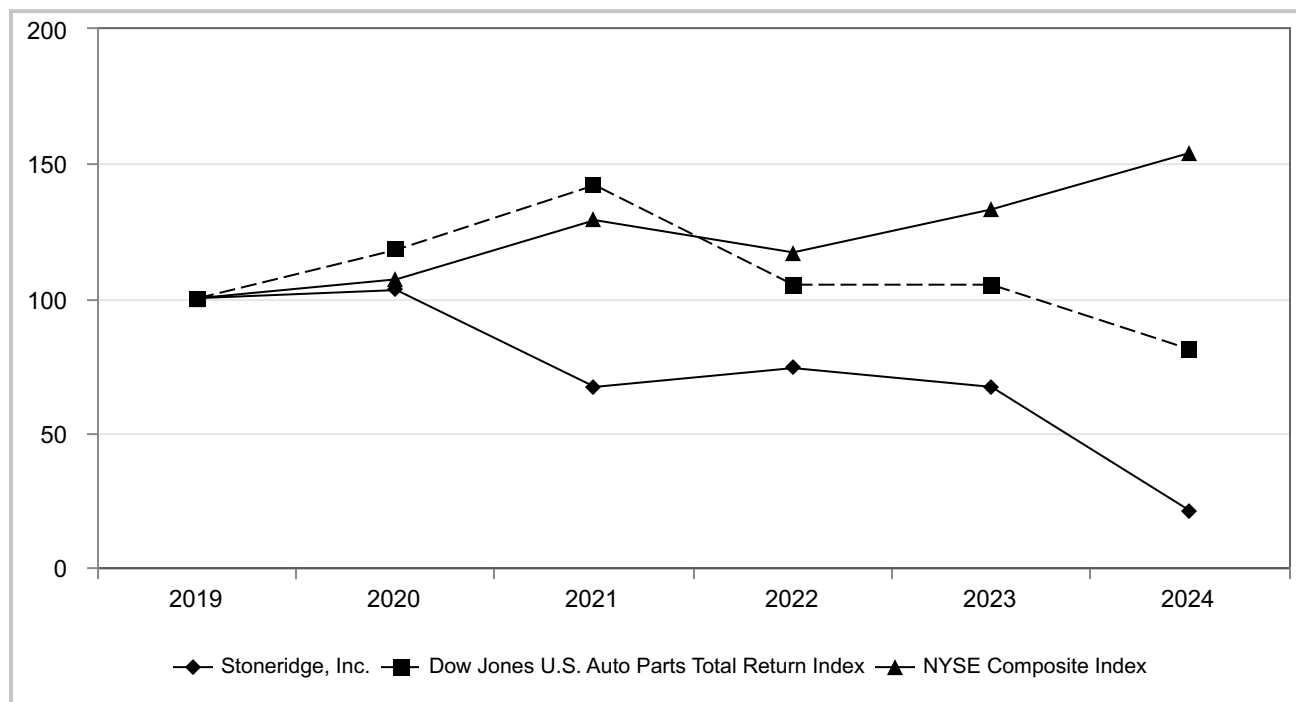
Other than the repurchase of Common Shares of 50,275 and 87,387, respectively, to satisfy employee tax withholdings associated with the delivery of Common Shares earned by employees pursuant to equity-based awards under the Company's Long-Term Incentive Plan there were no other repurchases of Common Shares made by us during the years ended December 31, 2024 or 2023.

The Company did not have a Board approved share repurchase program in effect in either 2024 or 2023.

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

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 Dow Jones U.S. Auto Parts (TR) Index and the NYSE Composite Index. The graph is based on the respective market price of each investment as of December 31, 2019, 2020, 2021, 2022, 2023 and 2024 assuming in each case an initial investment of \$100 on December 31, 2019, and reinvestment of dividends.



	2019	2020	2021	2022	2023	2024
Stoneridge, Inc.	\$ 100	\$ 103	\$ 67	\$ 74	\$ 67	\$ 21
Dow Jones U.S. Auto Parts Total Return Index	\$ 100	\$ 118	\$ 142	\$ 105	\$ 105	\$ 81
NYSE Composite Index	\$ 100	\$ 107	\$ 129	\$ 117	\$ 133	\$ 154

Item 6. [Reserved]

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

Management's Discussion and Analysis ("MD&A") is intended to help the reader understand the results of operations, financial condition, and cash flows of the Company. MD&A is provided as a supplement to, and should be read in conjunction with, the Company's consolidated financial statements and related notes appearing in Item 8 of this Form 10-K "Financial Statements and Supplementary Data". For discussion related to changes in financial condition and the results of operations for fiscal year 2023-related items, refer to Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations in the Company's Annual Report on Form 10-K for fiscal year 2023, which was filed with the Securities and Exchange Commission on March 1, 2024.

We are a global supplier of safe and efficient electronics systems and technologies. Our systems and products power vehicle intelligence, while enabling safety and security for global commercial, automotive, off-highway and agricultural vehicle markets.

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 actuators, sensors, switches and connectors.

Electronics. This segment includes results of operations from the production of advanced driver information solutions, vision systems, connectivity and compliance solutions and control modules.

Stoneridge Brazil. This segment includes results of operations that design and manufacture vehicle tracking devices and monitoring services, driver information systems, vehicle security alarms and convenience accessories, telematics solutions and multimedia devices.

Overview

During 2024, we were adversely affected by lower volumes from lower customer demand in most of our served markets, which was offset by sales in our Electronics segment related to the launches of a European OEM MirrorEye program and out next generation tachograph. Lower sales levels adversely affected gross margin contribution, however we were able to mitigate a portion of the adverse impact through material cost improvement and structural cost reduction actions. We have continued to optimize our engineering footprint to enhance capabilities and capacity for the most efficient return on our engineering spend. Further we significantly increased cash provided by operating activities by reducing working capital levels, specifically lowering inventory.

The Company had net loss of \$16.5 million, or \$(0.60) per diluted share, for the year ended December 31, 2024.

Net loss in 2024 increased by \$11.3 million, or \$(0.41) per diluted share, from \$5.2 million, or \$(0.19) per diluted share, for the year ended December 31, 2023 primarily due to lower contribution from lower sales levels and higher interest expense offset by other income from favorable foreign exchange fluctuations and lower business realignment costs.

In 2024, our net sales decreased by \$67.5 million, or 6.9%, while our operating income decreased \$13.2 million.

Our Control Devices segment net sales decreased by 14.5% primarily as a result of decreases in our North American automotive market, including the impact of expected end of life production for certain programs as well as decreases in our China commercial vehicle market. These decreases were offset by increases in our off-highway, North American commercial vehicle and China automotive markets. Segment gross margin decreased due to lower contribution from lower sales, however, gross margin as a percentage of sales remained consistent with the prior year. Segment operating income decreased from lower contribution from lower sales levels and higher selling, general and administrative expenses ("SG&A") due to a 2023 gain on sale of fixed assets offset by lower D&D from higher customer reimbursements.

Our Electronics segment net sales decreased by 1.8% primarily due to the 2023 impact of lower customer recoveries of required electronic component spot buy purchases, a reduction in retroactive price increases, and lower sales in our agricultural, North American commercial vehicle and European off-highway vehicle markets from lower customer demand. Offsetting these decreases were higher sales volumes in our European commercial vehicle market, including sales related to the launches of a European OEM MirrorEye program and our next generation tachograph as well as our China commercial vehicle and North American off-highway vehicle markets. Segment gross margin as a percent of sales slightly improved due to material cost improvement actions and lower required electronic component spot buy purchases being offset by an increase in overhead costs including higher warranty related expense. Operating income for the segment decreased due to higher D&D as reduced product launch activity resulted in customer reimbursements decreasing more than spending.

Our Stoneridge Brazil segment net sales decreased by 13.2% primarily as a result of unfavorable foreign currency translation and lower sales of our OEM products and monitoring service fees and tracking devices. Segment gross margin decreased due to lower contribution from lower sales and adverse sales mix. Operating income decreased due lower sales and lower gross margin offset by lower SG&A because of a reduction in incentive compensation.

In 2024, SG&A expenses increased slightly compared to 2023 primarily due to higher self-insured medical costs, wages and legal fees as well as a 2023 gain on the sale of fixed assets being offset by lower business realignment costs and incentive compensation benefits as a result of Company performance.

D&D costs increased in 2024 because of lower launch activities and a shift to platform development resulting in lower customer reimbursements and capitalization of software development costs that were offset by lower consulting spend compared to 2023 for our Electronics and Control Devices segments. In addition, higher business realignment costs were incurred in our Electronics segment.

At December 31, 2024 and 2023, we had cash and cash equivalents of \$71.8 million and \$40.8 million, respectively. At December 31, 2024 and 2023, we had \$201.6 million and \$189.3 million, respectively, in borrowings outstanding on the Credit Facility. The 2024 increase in cash and cash equivalents was due to reductions in working capital, specifically lower inventory and a higher outstanding balance on our Credit Facility.

Outlook

The Company believes that focusing on products that address industry megatrends has had and will continue to have a positive effect on both our top-line growth and financial performance. For example, we continue to develop safety, vehicle intelligence and connectivity based products, such as our OEM MirrorEye programs in North America and Europe as well as our next generation tachograph in Europe.

Global inflation has increased significantly since 2021. As a result, rising costs of materials, labor and other inputs used to manufacture and sell our products have impacted our financial performance. In order to minimize the impact of these incremental costs, we have taken several actions, including negotiating price increases and cost recoveries with our customers. Additionally, we continue to focus on improving manufacturing performance and optimizing our global cost structure to both reduce costs and improve operational efficiency. We expect these actions will benefit our future financial performance.

The tariffs on Mexico and China proposed on February 1, 2025 by the U.S. government, should they be implemented and sustained for an extended period of time, could have a significant adverse effect on the Company. Should the tariffs be implemented, we would implement mitigation actions to reduce the impact of tariffs including but not limited to passing any incremental costs to our customers.

Based on IHS Market production forecasts, the North American automotive market is expected to slightly decrease from approximately 15.4 million units in 2024 to 15.1 million units in 2025. We expect our Control Devices segment revenues to decrease as a result of the expected reduction in North American production volumes and the impact of end of life programs. In our Control Devices segment, we remain focused on drivetrain agnostic technologies to drive new business awards as the market continues to evolve. This strategy is highlighted by our recent new business award for a leak detection module product which provides further global opportunities primarily for hybrid vehicle applications, a market that we expect to continue to grow, and is also applicable to traditional powertrain vehicles. We continue to focus on material cost reduction and improved manufacturing performance in order to stabilize margin performance.

Based on IHS Market production forecasts, in 2025 the European commercial vehicle end market volumes are forecasted to increase 3.9% and North American commercial vehicle end market volumes are forecasted to decrease 3.3%. Over the long-term, we expect our Electronics' segment sales to continue to outperform forecasted changes in production volumes due to strong demand for our existing products including our OEM MirrorEye programs in North America and Europe as well as our next generation tachograph in Europe. In addition, over the long-term we expect revenue growth and margin contribution from our off-highway products. We continue to focus on margin improvement through material cost reduction and product quality initiatives. We continue to invest in the development of advanced system capabilities that are complementary to our driver information solutions and vision systems such as integrated driver assistance technologies and an intelligent connected trailer system.

In 2025, we expect net D&D spend to slightly increase driven by spend for the development of next generation products as opposed to new product launch related spend. As a result of reduced launch activities, we expect lower customer reimbursements and capitalization of software development costs. We continue to evaluate and optimize our engineering footprint to enhance capabilities and capacity for the most efficient return on our engineering spend. For example, we expect to utilize our Stoneridge Brazil engineering resources to support Electronics segment projects.

In October 2024, the International Monetary Fund forecasted the Brazil gross domestic product to grow 2.2% in 2025, a decline from forecasted growth of 3.0% in 2024. We expect our served market channels to remain relatively stable in 2024 based on current market and economic conditions, however our sales of in region OEM products have been lower than expected due to lower customer demand and program delays. Stoneridge Brazil will focus on continuing to grow our OEM capabilities in-region to better support our global customers. This focus will provide opportunities for future growth and provide a platform to continue to rotate our local portfolio to more closely align with our global business.

While we expect continued challenges across our end markets in 2025, we continue to focus on operating performance and enterprise-wide cost reduction. We remain focused on improving cash generation and the reduction of debt through efficient operating performance and targeted actions to reduce our inventory levels.

Our future effective tax rate depends on various factors, such as changes in tax laws, regulations, accounting principles and our jurisdictional mix of earnings. We monitor these factors and the impact on our effective tax rate.

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. A significant portion of our raw materials purchased by our Electronics and Stoneridge Brazil segments are denominated in U.S. dollars and, therefore, movements in foreign currency exchange rates can also have a significant effect on our results of operations. The U.S. Dollar strengthened against the Argentine peso, Brazilian real, Mexican peso and Swedish krona in 2024 and the Chinese yuan and Argentine peso in 2023, unfavorably impacting our reported results.

In December 2018, the Company entered into an agreement to make a \$10.0 million investment in a fund ("Autotech Fund II") managed by Autotech Ventures ("Autotech"), a venture capital firm focused on ground transportation technology. The Company's \$10.0 million investment in the Autotech Fund II will be contributed over the expected ten year life of the fund. The Company has contributed \$9.0 million to the Autotech Fund II since December 2018.

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. Business realignment costs of \$2.6 million and \$4.5 million were incurred during the years ended December 31, 2024 and 2023, respectively. Realignment expense for the year ended December 31, 2024 was primarily related to the optimization of our engineering footprint and executive separation costs. We expect to incur business realignment costs in 2025 related operations at our Juarez facility, which we expect will result in cost savings for direct and indirect labor and a more efficient overall operating structure.

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, 2024 Compared To Year Ended December 31, 2023

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

Year ended December 31,		2024		2023	Dollar increase / (decrease)
Net sales	\$	908,295	100.0 %	\$ 975,818	100.0 % \$ (67,523)
Costs and expenses:					
Cost of goods sold		719,042	79.2	774,512	79.4 (55,470)
Selling, general and administrative		117,460	12.9	117,395	12.0 65
Design and development		72,174	7.9	71,075	7.3 1,099
Operating (loss) income		(381)	—	12,836	1.3 (13,217)
Interest expense, net		14,447	1.6	13,000	1.3 1,447
Equity in loss of investee		1,292	0.1	522	0.1 770
Other (income) expense, net		(2,523)	(0.3)	1,236	0.1 (3,759)
Loss before income taxes		(13,597)	(1.5)	(1,922)	(0.2) (11,675)
Provision for income taxes		2,927	0.3	3,261	0.3 (334)
Net loss	\$	(16,524)	(1.8)%	\$ (5,183)	(0.5)% \$ (11,341)

Net Sales. Net sales for our reportable segments, excluding inter-segment sales are summarized in the following table (in thousands):

Year ended December 31,		2024		2023	Dollar decrease	Percent decrease
Control Devices	\$	292,606	32.2 %	\$ 342,065	35.1 % \$ (49,459)	(14.5)%
Electronics		566,040	62.3	576,539	59.0 (10,499)	(1.8)%
Stoneridge Brazil		49,649	5.5	57,214	5.9 (7,565)	(13.2)%
Total net sales	\$	908,295	100.0 %	\$ 975,818	100.0 % \$ (67,523)	(6.9)%

Our Control Devices segment net sales decreased \$49.5 million primarily as a result of decreases in our North American automotive market of \$52.9 million, including the impact of expected end of life production for certain programs as well as decreases in our China commercial vehicle market of \$5.3 million. These decreases were offset by increases in our off-highway, North American commercial vehicle and China automotive markets of \$3.7 million, \$2.6 million and \$2.3 million, respectively, as well as the favorable impact of negotiated price increases of \$0.9 million. In addition, 2024 net sales were impacted by unfavorable foreign currency translation of \$0.7 million compared to 2023.

Our Electronics segment net sales decreased \$10.5 million primarily due to the 2023 impact of lower customer recoveries of required electronic component spot buy purchases of \$14.4 million, a reduction in retroactive price increases of \$2.3 million, and lower sales volumes in our agricultural, North American commercial vehicle and European off-highway vehicle markets of \$1.8 million, \$1.4 million and \$1.3 million, respectively. Offsetting these decreases were higher sales volumes in our European commercial vehicle market of \$6.2 million, including sales related to the launches of a European OEM MirrorEye program and our next generation tachograph and higher sales in our North American off-highway and China commercial vehicle markets of \$2.0 million and \$1.3 million, respectively. In addition, 2024 net sales were favorably impacted by foreign currency translation of \$1.4 million compared to 2023.

Our Stoneridge Brazil segment net sales decreased \$7.6 million primarily as a result of unfavorable foreign currency translation of \$3.8 million and lower sales of our OEM products and monitoring service fees and tracking devices.

Net sales by geographic location are summarized in the following table (in thousands):

Year ended December 31,	2024		2023		Dollar decrease	Percent decrease
North America	\$	447,142	49.2 %	\$ 495,541	50.8 %	\$ (48,399) (9.8)%
South America		49,649	5.5	57,214	5.9	(7,565) (13.2)%
Europe and Other		411,504	45.3	423,063	43.3	(11,559) (2.7)%
Total net sales	\$	908,295	100.0 %	\$ 975,818	100.0 %	\$ (67,523) (6.9)%

The decrease in North American net sales was mostly attributable to decreases in sales volume and the impact of expected end of life production for certain programs in our automotive market of \$53.0 million as well as the 2023 impact of required electronic component spot buy purchases of \$2.7 million. These decreases were offset by higher sales volume in our North American off-highway and commercial vehicle markets of \$5.4 million and \$1.2 million, respectively.

The decrease in net sales in South America was primarily as a result of unfavorable foreign currency translation of \$3.8 million and lower sales of our OEM products and monitoring service fees and tracking devices.

The decrease in net sales in Europe and Other was primarily due to the 2023 impact of lower customer recoveries of required electronic component spot buys of \$11.7 million, and a reduction in retroactive price increases of \$2.2 million and lower sales in our China commercial vehicle, European agricultural and European off-highway markets of \$4.0 million, \$1.4 million and \$1.3 million, respectively. Offsetting these decreases were higher sales volumes in our European commercial vehicle market of \$6.2 million, including sales related to the launches of a European OEM MirrorEye program and our next generation tachograph and our China automotive market of \$2.3 million. 2024 net sales were favorably impacted by foreign currency translation of \$0.7 million compared to 2023.

Cost of Goods Sold and Gross Margin. Cost of goods sold decreased compared to 2023 and our gross margin increased to 20.8% in 2024 compared to 20.6% in 2023. Our material cost as a percentage of net sales decreased by 1.8% to 57.6% in 2024 compared to 59.4% in 2023. The decrease in the material cost percentage was partially due to the impact of 2023 required electronic component spot buy purchases, reimbursed by customers. The impact of these spot buy purchases increased cost of goods sold by \$14.6 million, or 1.5% of net sales during 2023 which reduced gross margin percent by 0.3% in 2023. Other factors contributing to the reduction the material cost percentage were material cost improvement actions. Overhead as a percentage of net sales was 17.0% and 15.1% for 2024 and 2023, respectively. The increase in overhead as a percentage of sales was attributable to higher overhead spending including higher warranty related expense and amortization for capitalized software development costs as well as adverse leverage from lower sales levels.

Our Control Devices segment gross margin decreased from lower contribution from lower sales levels.

Our Electronics segment gross margin slightly improved due to material cost improvement actions and lower required electronic component spot buy purchases being offset by an increase in overhead costs including higher warranty related expense.

Our Stoneridge Brazil segment gross margin decreased because of lower contribution from lower sales levels and adverse sales mix.

Selling, General and Administrative. SG&A expenses increased by \$0.1 million compared to 2023 due to higher self-insured medical costs, wages and legal fees as well as a 2023 gain on the sale of fixed assets being offset by lower business realignment costs and incentive compensation benefits due to Company performance.

Design and Development. D&D costs increased by \$1.1 million because of a reduction in launch activities and a shift in platform development resulting in lower customer reimbursements and capitalization of software development costs that were offset by lower consulting spending compared to 2023 for our Electronics and Control Devices segments. In addition, higher business realignment costs were incurred in our Electronics segment.

Operating (Loss) Income. Operating (loss) income is summarized in the following table by reportable segment (in thousands):

Year ended December 31,	2024	2023	Dollar decrease	Percent decrease
Control Devices	\$ 6,178	\$ 13,582	\$ (7,404)	(54.5)%
Electronics	25,561	27,309	(1,748)	(6.4)%
Stoneridge Brazil	982	4,454	(3,472)	(78.0)%
Unallocated corporate	(33,102)	(32,509)	(593)	(1.8)%
Operating (loss) income	\$ (381)	\$ 12,836	\$ (13,217)	(103.0)%

Our Control Devices segment operating income decreased primarily as a result of lower contribution from lower sales levels and higher SG&A due to a 2023 gain on sale of fixed assets offset by lower D&D spending.

Our Electronics segment operating income decreased primarily due to higher D&D as reduced product launch activity resulted in customer reimbursements decreasing more than spending.

Our Stoneridge Brazil segment operating income decreased primarily as a result of lower contribution from lower sales levels and adverse sales mix offset by lower SG&A because of a reduction in incentive compensation due to Company performance.

Our unallocated corporate operating loss increased due to higher self-insured medical costs and wages offset by lower incentive compensation due to Company performance and business realignment costs.

Operating (loss) income by geographic location is summarized in the following table (in thousands):

Year ended December 31,	2024	2023	Dollar increase / (decrease)	Percent increase / (decrease)
North America	\$ (28,431)	\$ (13,566)	\$ (14,865)	(109.6)%
South America	982	4,454	(3,472)	(78.0)%
Europe and Other	27,068	21,948	5,120	23.3 %
Operating (loss) income	\$ (381)	\$ 12,836	\$ (13,217)	(103.0)%

Our North American operating loss increased primarily as a result of lower contribution from lower sales levels, higher overhead spending including warranty expense, higher self-insured medical costs, wages and a 2023 gain on disposal of fixed assets, offset by lower incentive compensation due to Company performance and lower business realignment costs. Operating income in South America decreased because of lower contribution from lower sales levels. Our operating results in Europe and Other increased primarily because of material cost actions and lower SG&A and D&D spending offset by lower contribution from lower sales levels.

Interest Expense, net. Interest expense, net increased by \$1.4 million compared to 2023. The increase was the result of higher outstanding Credit Facility balances.

Equity in Loss of Investee. Equity loss for Autotech Fund II was \$1.3 million and \$0.5 million for the years ended December 31, 2024 and 2023, respectively.

Other (Income) Expense, net. We record certain foreign currency transaction (gains) losses as a component of other (income) expense, net on the consolidated statement of operations. Other income, net of \$2.5 million, increased by \$3.8 million in 2024 compared to other expense, net of \$1.2 million for 2023 due to the impact of favorable foreign currency movements in our Electronics and Stoneridge Brazil segments from strengthening of the U.S. dollar.

Provision for Income Taxes. In 2024, the provision for income tax expense was \$2.9 million, resulting in an effective tax rate of (21.5)%. In 2023, the provision for income tax expense was \$3.3 million, resulting in an effective tax rate of (169.7)%. In 2024 and 2023, the provision for income taxes was impacted by jurisdictional earnings mix, U.S. taxes on foreign earnings, various tax credits and incentives and tax losses for which no benefit is recognized due to valuation allowances.

The OECD implemented a 15% global corporate minimum tax to ensure that large multinational enterprises pay a minimum level of tax in the countries they operate. A number of countries have passed legislation enacting the OECD Pillar Two model rules as issued, in a modified form or not at all which is effective in 2024. The OECD Pillar Two framework could have a material impact on our effective tax rate and cash tax payments depending on which countries enact the legislation and in what manner.

Liquidity and Capital Resources

Summary of Cash Flows for the years ended December 31, 2024 and 2023 (in thousands):

Year ended December 31,	2024	2023	Dollar increase / (decrease)
Net cash provided by (used for):			
Operating activities	\$ 47,748	\$ 4,946	\$ 42,802
Investing activities	(24,468)	(36,979)	12,511
Financing activities	11,121	17,485	(6,364)
Effect of exchange rate changes on cash and cash equivalents	(3,410)	591	(4,001)
Net change in cash and cash equivalents	\$ 30,991	\$ (13,957)	\$ 44,948

Cash provided by operating activities increased compared to 2023 primarily due to a reduction in working capital levels. Cash provided by receivables was favorable to 2023 as the result of lower sales levels while collection terms remained consistent. Cash provided by inventory improved from the prior year due to the ramp up of product launches occurring in the second half of 2023 and first half of 2024, lower production levels and the impact of our inventory reduction actions.

Net cash used for investing activities decreased compared to the prior year due to lower capital expenditures and capitalized software development costs as well as the 2023 impact of cash proceeds from the sale of equipment.

Net cash provided by financing activities decreased compared to the prior year primarily due to a decrease in Credit Facility borrowings net of repayments.

Summary of Future Cash Flows

The following table summarizes our future cash outflows resulting from financial contracts and commitments, as of December 31, 2024 (in thousands):

	Total	Less than 1 year	2-3 years	4-5 years	After 5 years
Credit Facility	\$ 201,577	\$ —	\$ 201,577	\$ —	\$ —
Debt	—	—	—	—	—
Interest payments ^(A)	25,363	13,233	12,130	—	—
Operating leases	11,445	4,180	4,579	2,686	—
Total contractual obligations ^(B)	\$ 238,385	\$ 17,413	\$ 218,286	\$ 2,686	\$ —

(A) Includes estimated payments under the Company's Credit Facility and other debt obligations using the most current interest rate and principal balance information available at December 31, 2024, extended through the end of the term.

(B) In December 2018, the Company entered into an agreement to make a \$10.0 million investment in Autotech Fund II managed by Autotech, a venture capital firm focused on ground transportation technology. The Company's \$10.0 million investment in the Autotech Fund II will be contributed over the expected ten year life of the fund. The Company has contributed \$9.0 million to the Autotech Fund II since December 2018.

Management will continue to focus on efficiently managing its weighted-average cost of capital and believes that cash flows from operations and the availability of funds from our Credit Facility provide sufficient liquidity to meet our future growth and operating needs.

As outlined in Note 5 to our consolidated financial statements, the Credit Facility permits borrowing up to a maximum level of \$275.0 million through November 2, 2026. The Credit Facility contains certain financial covenants that require the Company to maintain less than a maximum leverage ratio and more than a minimum interest coverage ratio. The Credit Facility also contains affirmative and negative covenants and events of default that are customary for credit arrangements of this type including covenants that place restrictions and/or limitations on the Company's ability to borrow money, make capital expenditures and pay dividends. The Credit Facility had an outstanding balance of \$201.6 million at December 31, 2024.

On February 26, 2025, the Company entered into Amendment No. 1 to the Fifth Amended and Restated Credit Agreement and Waiver ("Amendment No. 1"). Amendment No. 1 provides for certain covenant relief and restrictions during the "Covenant Relief Period" (the period ending on the date that the Company delivers a compliance certificate for the quarter ending December 31, 2025). During the Covenant Relief Period:

- the maximum leverage ratio of 3.50 was increased to 6.00 for the quarter ended March 31, 2025, 5.50 for the quarter ended June 30, 2025, 4.50 for the quarter ended September 30, 2025 and 3.50 for the quarter ended December 31, 2025;
- the minimum interest coverage ratio of 3.50 was waived for the quarter ended December 31, 2024 and was reduced to 2.00 for the quarters ended March 31 and June 30, 2025, and 2.50 and 3.50 for the quarter ended September 30, 2025 and December 31, 2025, respectively;
- the Company's aggregate amount of cash and cash equivalents (as defined) cannot exceed \$70.0 million;
- the sale of significant assets (as defined) will require repayment in the amount of any net cash proceeds received and result in the reduction of the Credit Facility commitment, at the lesser of \$100.0 million or the net cash proceeds;
- there were certain restrictions on Restricted Payments (as defined); and
- a Permitted Acquisition (as defined) could not be consummated unless otherwise approved in writing by the required lenders.

Amendment No. 1 added an additional level to the leverage ratio based pricing grid, through maturity, when the leverage ratio is greater than 3.50.

As a result of Amendment No. 1, the Company was in compliance with all covenants at December 31, 2024. The Company has not experienced a violation that would limit the Company's ability to borrow under the Credit Facility, as amended, and does not expect that the covenants under it will restrict the Company's financing flexibility. However, it is possible that future borrowing flexibility under the Credit Facility may be limited as a result of lower than expected financial performance. The Company expects to make additional repayments on the Credit Facility when cash exceeds the amount needed for operations and to remain in compliance with all covenants.

The Company's wholly-owned subsidiary located in Stockholm, Sweden, has an overdraft credit line which allows overdrafts on the subsidiary's bank account up to a daily maximum level of 20.0 million Swedish krona, or \$1.8 million and \$2.0 million, at December 31, 2024 and 2023, respectively. At December 31, 2024 and 2023, there were no borrowings outstanding on this overdraft credit line. During the year ended December 31, 2024, the subsidiary borrowed and repaid 334.5 million Swedish krona, or \$30.3 million. The Stockholm subsidiary has pledged certain of its assets as collateral in order to obtain a guarantee of certain of the Stockholm subsidiary's obligations to third parties.

The Company's wholly-owned subsidiary located in Suzhou, China, had lines of credit that allowed up to a maximum borrowing level of 20.0 million Chinese yuan, or \$2.7 million and \$2.8 million, at December 31, 2024 and 2023, respectively. At December 31, 2024 and 2023 there was \$0.0 million and \$2.1 million, respectively, in borrowings outstanding recorded within current portion of debt. In addition, the Suzhou subsidiary had a bank acceptance draft line of credit that expired in October 2024 which facilitated the extension of trade payable payment terms by 180 days. The bank acceptance draft line of credit allowed up to a maximum borrowing level of 60.0 million Chinese yuan, or \$8.5 million at December 31, 2023. There was \$2.4 million utilized on the Suzhou bank acceptance draft line of credit at December 31, 2023 recorded on the consolidated balance sheet within accounts payable.

In December 2018, the Company entered into an agreement to make a \$10.0 million investment in Autotech Fund II managed by Autotech. The Company's \$10.0 million investment in the Autotech Fund II will be contributed over the expected ten-year life of the fund. As of December 31, 2024, the Company's cumulative investment in the Autotech Fund II was \$9.0 million. The Company contributed \$0.6 million and \$0.4 million, net to the Autotech Fund II during the years ended December 31, 2024 and 2023, respectively.

Our future results could also be adversely affected by unfavorable changes in foreign currency exchange rates. We have significant foreign denominated transaction exposure in certain locations, especially in Brazil, Argentina, Mexico, Sweden, Estonia, the Netherlands, United Kingdom and China. We have entered into foreign currency forward contracts to reduce our exposure related to certain foreign currency fluctuations. See Note 10 to the consolidated financial statements for additional details. Our future results could also be unfavorably affected by increased commodity prices as commodity fluctuations impact the cost of our raw material purchases.

At December 31, 2024, we had a cash and cash equivalents balance of approximately \$71.8 million, of which 65.8% was held in foreign locations. The Company has approximately \$73.4 million of undrawn commitments under the Credit Facility as of December 31, 2024, which results in total undrawn commitments and cash balances of more than \$145.3 million.

Commitments and Contingencies

See Note 11 to the consolidated financial statements for disclosures of the Company's commitments and contingencies.

Seasonality

Our Control Devices and Electronics segments are moderately seasonal, impacted by mid-year and year-end shutdowns and the ramp-up of new model production at key customers. In addition, the demand for our Stoneridge Brazil segment consumer products is generally higher in the second half of the year.

Inflation and International Presence

By operating internationally, we are affected by foreign currency exchange rates and the economic conditions of certain countries. Furthermore, given the current economic climate and recent fluctuations in certain commodity prices, we believe that an increase in such items could significantly affect our profitability. See Note 10 to the consolidated financial statements for additional details on the Company's commodity price and foreign currency exchange rate risks.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with U.S. Generally Accepted Accounting Principles ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent liabilities at the date of the consolidated financial statements, and the reported amounts of revenues and expenses during the reporting period.

On an ongoing basis, we evaluate estimates and assumptions used in our consolidated financial statements. We base our estimates on historical experience and on various other factors that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ from these estimates.

Our critical accounting policies, those most important to the financial presentation and those that are the most complex, subjective or require significant judgment, are as follows. For additional information, see Item 8 of Part II, "Financial Statements and Supplementary Data — Note 2 — Summary of Significant Accounting Policies."

Revenue Recognition and Sales Commitments. We recognize revenue when obligations under the terms of a contract with our customer are satisfied; generally this occurs with the transfer of control of our products and services, which is usually when the parts are shipped or delivered to the customer's premises. Revenue is measured as the amount of consideration we expect to receive in exchange for transferring goods or providing services. The transaction price will include estimates of variable consideration to the extent it is probable that a significant reversal of revenue recognized will not occur. Incidental items that are not significant in the context of the contract are recognized as expense. Revenue for OEM and Tier 1 supplier customers and aftermarket products are recognized at the point in time it satisfies a performance obligation by transferring control of a part to the customer. A small portion of our sales are comprised of monitoring services of which the revenue is recognized over the life of the contract. See Note 3 to the consolidated financial statements for additional information on our revenue recognition policies, including recognizing revenue based on satisfying performance obligations.

Goodwill. We test goodwill, all of which relates to our Electronics segment, for impairment on at least an annual basis, or more frequently if a triggering event indicates that an impairment may exist. In qualitatively assessing impairment, the primary qualitative factors include, but are not limited to, the results of prior year fair value calculations, changes in our market capitalization, the reporting unit and overall financial performance, and macroeconomic and industry conditions. We consider the qualitative factors and weight of the evidence obtained to determine if it is more likely than not that a reporting unit's fair value is less than the carrying amount. If not, no further goodwill impairment testing is performed. If it is more likely than not that a reporting unit's fair value is less than its carrying amount, or if we elect not to perform a qualitative assessment of a reporting unit, we then perform a quantitative assessment.

For the quantitative assessment, we utilize the income approach, or a combination of, the income approach and market approach to estimate the fair value of the reporting unit. The income approach uses a discounted cash flow method and the market approach uses valuation multiples observed for the reporting unit's guideline public companies. The determination of discounted cash flows are based on management's estimates of revenue growth rates and earnings before interest, taxes, depreciation and amortization ("EBITDA") margin, taking into consideration business and market conditions for the countries and markets in which the reporting unit operates. We calculate the discount rate based on a market-participant, risk-adjusted weighted average cost of capital, which considers industry specific rates of return on debt and equity capital for a target industry capital structure, adjusted for risks associated with business size, geography and other factors specific to the reporting unit. Our quantitative assessment is affected by the uncertainty of revenue growth rates and EBITDA margin, especially in the outer years of a forecast. Further, affecting our quantitative assessment are future changes in the discount rate, as a result of a change in economic conditions or otherwise, which could result in the carrying value of the reporting unit exceeding its respective fair value.

We performed our annual goodwill impairment analysis for our Electronics reporting unit at the beginning of the fourth quarter of 2024. Based on this analysis, we determined that the fair value of this reporting unit substantially exceeded its carrying value. We performed a sensitivity analysis for the significant assumptions used in the goodwill impairment testing analysis for the Electronics reporting unit. The sensitivities were calculated in isolation using the income approach and keeping all other assumptions constant. The cash flow sensitivities do not consider the offsetting impact of a lower discount rate assumption to reflect the reduced risk in estimated future cash flow growth used under the income approach or the related impacts on pricing multiples used under the market approach.

- A hypothetical increase in the discount rate of 100 basis points would not result in goodwill impairment; and
- A hypothetical decrease in EBITDA margin of 100 basis points for each year in the forecast period would not result in goodwill impairment.

In addition to our annual goodwill impairment analysis, we identified impairment triggering events during our fourth quarter 2024 interim evaluation, which was associated with a decrease in our publicly quoted share price and market capitalization. As such, we quantitatively assessed our Electronics reporting unit as of December 31, 2024, and we determined the fair value of the reporting unit substantially exceeded its carrying value and that no impairment of goodwill was needed.

Warranties. Our warranty liability is established based on our best estimate of the amounts necessary to settle existing and future claims on products sold as of the balance sheet dates. These accruals are based on several factors including past experience, production changes, industry developments and various other considerations. Our estimate is based on historical trends of units sold and claim payment amounts, combined with our current understanding of the status of existing claims and discussions with our customers. The key factors in our estimate are the stated or implied warranty period, the customer source, customer policy decisions regarding warranties and customers seeking to hold the company responsible for their product warranties. Although we believe that our warranty liability is adequate and that the judgment applied is appropriate, such amounts estimated to be due and payable could differ materially from what will actually transpire in the future.

Contingencies. We are subject to legal proceedings and claims, including product liability claims, commercial or contractual disputes, environmental enforcement actions and other claims that arise in the normal course of business. We routinely assess the likelihood of any adverse judgments or outcomes to these matters, as well as ranges of probable losses, by consulting with internal personnel principally involved with such matters and with our outside legal counsel handling such matters.

We have accrued for estimated losses when it is probable that a liability or loss has been incurred and the amount can be reasonably estimated. Contingencies by their nature relate to uncertainties that require the exercise of judgment both in assessing whether or not a liability or loss has been incurred and estimating that amount of probable loss. The liabilities may change in the future due to new developments or changes in circumstances. The inherent uncertainty related to the outcome of these matters can result in amounts materially different from any provisions made with respect to their resolution.

Income Taxes. Deferred income taxes are provided for temporary differences between the amount of assets and liabilities for financial reporting purposes and the basis of such assets and liabilities as measured by tax laws and regulations. Our deferred tax assets include, among other items, net operating loss carryforwards and tax credits that can be used to offset taxable income in future periods and reduce income taxes payable in those future periods. Our U.S. state and foreign net operating losses expire at various times or have indefinite expiration dates. Our U.S. federal general business credits, if unused, begin to expire in 2025, and the state and foreign tax credits expire at various times.

Accounting standards require that deferred tax assets be reduced by a valuation allowance if, based on all available evidence, it is considered more likely than not that some portion or all of the recorded deferred tax assets will not be realized in future periods. This assessment requires significant judgment, and in making this evaluation, the Company has considered historical pre-tax income or loss and the four sources of income in determining the need for a valuation allowance when the realization of its deferred tax assets are not more likely than not. The four sources of income considered are 1.) taxable income in prior carryback years where carryback is allowable, 2.) future reversals of existing temporary differences, 3.) consideration of reasonable and prudent tax planning strategies, and 4.) forecasts of future taxable income, exclusive of reversing temporary differences and carryforwards. In the cases where a valuation allowance has been recorded, the evidence described above did not result in a conclusion that the deferred tax assets are more likely than not to be realizable. Current and future provision for income taxes is significantly impacted by the initial recognition of and changes in valuation allowances. The Company intends to maintain these allowances until it is more likely than not that the deferred tax assets will be realized. The Company is significantly impacted by the Global Intangible Low-Taxed Income ("GILTI") tax provisions of the US tax code, and should those provisions change, it could have a material impact on our assessment of the realizability of general business credits in the US for which we currently believe are more likely than not to be realized based on the considerations noted above. Risk factors include U.S. and foreign economic conditions that affect the automotive and commercial vehicle markets of which the Company has significant operations.

The Company has recognized deferred taxes related to the expected foreign currency impact upon repatriation from foreign subsidiaries not considered indefinitely reinvested.

The Company has made an accounting policy election to reflect the impact of GILTI taxes, if any, as a current period tax expense when incurred.

Recently Adopted Accounting Standards

In March 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2020-04, "Reference Rate Reform (Topic 848) – Facilitation of the Effects of Reference Rate Reform on Financial Reporting." The guidance in ASU 2020-04 provides temporary optional expedient and exceptions to the guidance in U.S. GAAP on contract modifications and hedge accounting to ease the financial reporting burdens related to expected market transition from the London Interbank Offered Rate ("LIBOR") and other interbank offered rates to alternative reference rates, such as the Secured Overnight Financing Rate ("SOFR") (also known as the "reference rate reform"). The guidance allows companies to elect not to apply certain modification accounting requirements to contracts affected by the reference rate reform, if certain criteria are met. The guidance also allowed companies to elect various optional expedients which would allow them to continue to apply hedge accounting for hedging relationships affected by the reference rate reform, if certain criteria are met. The new standard was effective upon issuance and generally can be applied to applicable contract modifications through December 31, 2023.

In February 2022, the Company amended its credit facility to incorporate hardwired mechanics to permit a future replacement of LIBOR as the interest reference rate without lender consent. The Company has applied the guidance to impacted transactions during the transition period. The adoption of this standard did not have a material impact on the Company's consolidated financial statements.

In November 2023, the FASB issued ASU No. 2023-07, "Segment Reporting (Topic 280) – Improvements to Reportable Segment Disclosures", which expands annual and interim disclosure requirements for reportable segments, primarily through enhanced disclosures about significant segment expenses. The updated standard is effective for annual periods beginning in fiscal 2025 and interim periods beginning in the first quarter of fiscal 2026. Early adoption is permitted. We adopted this ASU retrospectively on December 31, 2024. Refer to Note 13, Segment Reporting for the inclusion of the new required disclosures.

Recently Issued Accounting Standards Not Yet Adopted as of December 31, 2024

In December 2023, the FASB issued ASU No. 2023-09, "Income Taxes (Topic 740) – Improvements to Income Tax Disclosures," which requires companies to disclose, on an annual basis, specific categories in the effective tax rate reconciliation and provide additional information for reconciling items that meet a quantitative threshold. In addition, companies are required to disclose additional information about income taxes paid. The standard is effective for fiscal years beginning after December 15, 2024, with early adoption permitted. The standard is to be adopted on a prospective basis; however, retrospective application is permitted. This ASU will modify the Company's financial statement disclosures but will not have a significant impact on its consolidated financial statements.

In November 2024, the FASB issued ASU No. 2024-03, "Income Statement – Reporting Comprehensive Income – Expense Disaggregation Disclosures," which requires companies to disclose certain costs and expenses within the notes to the financial statements. The standard is effective for fiscal years beginning after December 15, 2026, and interim periods within fiscal years beginning after December 15, 2027, with early adoption permitted. We are currently evaluating the impact on our annual consolidated financial statement disclosures.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Interest Rates

We are exposed to interest rate risk primarily from the effects of changes in interest rates. At December 31, 2024, 100.0% of our outstanding debt was floating-rate. We estimate that a 1.0% change in the interest costs of our floating-rate debt outstanding as of December 31, 2024 would change interest expense on an annual basis by approximately \$2.0 million.

Currency Exchange Rates

In addition to the United States, we have significant operations in Europe, South America, Mexico and China. As a result we are subject to translation risk because of the transactions of our foreign operations are in local currency (particularly the Brazilian real, Chinese renminbi, Mexican peso, euro, Swedish krona and Argentinian peso) and must be translated into U.S. dollars. As currency exchange rates fluctuate, the translation of our consolidated statements of operations into U.S. dollars affects the comparability of revenues, expenses, operating income, net income and earnings per share between years.

We have previously used derivative financial instruments, including foreign currency forward contracts, to mitigate our exposure to fluctuations in foreign currency exchange rates by reducing the effect of such fluctuations on foreign currency denominated intercompany transactions, inventory material purchases and other foreign currency exposures.

As discussed in detail in Note 10 to our consolidated financial statements, we entered into foreign currency forward contracts the purpose of which is to reduce exposure related to the Company's future Mexican peso-denominated purchases.

We estimate that a 10.0% unidirectional change in currency exchange rates relative to the U.S dollar would have changed our income before income taxes for the year ended December 31, 2024 by approximately \$2.9 million.

Commodity Price Risk

The competitive marketplace in which we operate may limit our ability to recover increased costs through higher prices. As such, we are subject to market risk with respect to commodity price fluctuations principally related to our purchases of purchase of copper, steel, zinc, resins and certain other commodities through a combination of fixed price agreements, staggered short-term contract maturities and commercial negotiations with our suppliers and customers. In the future, if we believe that the terms of a fixed price agreement become beneficial to us, we will enter into another such instrument. We may also consider pursuing alternative commodities or alternative suppliers to mitigate this risk over a period of time.

Item 8. Financial Statements and Supplementary Data.

**INDEX TO CONSOLIDATED FINANCIAL STATEMENTS
AND FINANCIAL STATEMENT SCHEDULE**

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Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Stoneridge, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Stoneridge, Inc. and subsidiaries (the Company) as of December 31, 2024 and 2023, the related consolidated statements of operations, comprehensive (loss) income, cash flows and shareholders' equity for each of the three years in the period ended December 31, 2024, and the related notes and financial statement schedule listed in the Index at Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2024 and 2023, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2024, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2024, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated March 3, 2025 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the account or disclosure to which it relates.

Product warranty and recall reserves

Description of the Matter

The Company's reserves for product warranty and recall totaled \$27.5 million at December 31, 2024. As described in Note 2 to the consolidated financial statements, the Company's reserve for product warranty and recall is based on several factors, including the historical trends of units sold and claim payment amounts, combined with the Company's current understanding of existing warranty and recall claims. The warranty liability requires a forecast of the resolution of existing claims as well as expected future claims on products previously sold.

Auditing the Company's reserve for product warranty and recall is complex due to the measurement uncertainty associated with the estimate, management's judgment in determining the cost and volume estimates used in the computation, as well as volume and costing assumptions in determining the expected future claims on products previously sold.

How We Addressed the Matter in Our Audit

We evaluated the design and tested the operating effectiveness of the Company's controls over the product warranty and recall process. For example, we tested management review controls over the appropriateness of assumptions management used in the calculation and the completeness of warranty claims.

To evaluate the reserve for product warranty and recall, we performed audit procedures that included, among others, evaluating the Company's estimation methodology and testing significant assumptions including the completeness and accuracy of the underlying claims data and reasonableness of the cost assumptions used in the computation of management's estimate. We performed inquiries of the Company's quality control team and obtained legal confirmation letters to evaluate the status and assessment of certain reserves. We also have assessed the historical accuracy of management's product warranty and recall reserves by comparing actual results to previous estimates and judgments made by management.

The logo for Ernst & Young LLP, featuring the company name in a stylized, handwritten-style script.

We have served as the Company's auditor since 2002.
Detroit, MI
March 3, 2025

STONERIDGE, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

December 31, (in thousands)	2024	2023
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 71,832	\$ 40,841
Accounts receivable, less reserves of \$1,060 and \$1,058, respectively	137,766	166,545
Inventories, net	151,337	187,758
Prepaid expenses and other current assets	26,579	34,246
Total current assets	387,514	429,390
Long-term assets:		
Property, plant and equipment, net	97,667	110,126
Intangible assets, net	39,677	47,314
Goodwill	33,085	35,295
Operating lease right-of-use asset	10,050	10,795
Investments and other long-term assets, net	53,563	46,980
Total long-term assets	234,042	250,510
Total assets	\$ 621,556	\$ 679,900
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Current portion of debt	\$ —	\$ 2,113
Accounts payable	83,478	111,925
Accrued expenses and other current liabilities	66,494	64,203
Total current liabilities	149,972	178,241
Long-term liabilities:		
Revolving credit facility	201,577	189,346
Deferred income taxes	5,321	7,224
Operating lease long-term liability	6,484	7,684
Other long-term liabilities	12,942	9,688
Total long-term liabilities	226,324	213,942
Shareholders' equity:		
Preferred Shares, without par value, 5,000 shares authorized, none issued	—	—
Common Shares, without par value, 60,000 shares authorized, 28,966 and 28,966 shares issued and 27,695 and 27,549 shares outstanding at December 31, 2024 and December 31, 2023, respectively, with no stated value	—	—
Additional paid-in capital	225,712	227,340
Common Shares held in treasury, 1,271 and 1,417 shares at December 31, 2024 and December 31, 2023, respectively, at cost	(38,424)	(43,344)
Retained earnings	179,985	196,509
Accumulated other comprehensive loss	(122,013)	(92,788)
Total shareholders' equity	245,260	287,717
Total liabilities and shareholders' equity	\$ 621,556	\$ 679,900

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

STONERIDGE, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS

Year ended December 31, (in thousands, except per share data)	2024	2023	2022
Net sales	\$ 908,295	\$ 975,818	\$ 899,923
Costs and expenses:			
Cost of goods sold	719,042	774,512	724,997
Selling, general and administrative	117,460	117,395	106,695
Design and development	72,174	71,075	65,296
Operating (loss) income	(381)	12,836	2,935
Interest expense, net	14,447	13,000	7,097
Equity in loss of investee	1,292	522	823
Other (income) expense, net	(2,523)	1,236	5,711
Loss before income taxes	(13,597)	(1,922)	(10,696)
Provision for income taxes	2,927	3,261	3,360
Net loss	\$ (16,524)	\$ (5,183)	\$ (14,056)
Loss per share:			
Basic	\$ (0.60)	\$ (0.19)	\$ (0.52)
Diluted	\$ (0.60)	\$ (0.19)	\$ (0.52)
Weighted-average shares outstanding:			
Basic	27,596	27,443	27,258
Diluted	27,596	27,443	27,258

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

STONERIDGE, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME

Year ended December 31, (in thousands)	2024	2023	2022
Net loss	\$ (16,524)	\$ (5,183)	\$ (14,056)
Other comprehensive (loss) income, net of tax:			
Foreign currency translation ⁽¹⁾	(25,839)	9,118	(6,171)
Unrealized (loss) gain on derivatives ⁽²⁾	(3,386)	1,236	53
Other comprehensive (loss) income, net of tax	(29,225)	10,354	(6,118)
Comprehensive (loss) income	\$ (45,749)	\$ 5,171	\$ (20,174)

(1) Net of tax expense of \$514 for the year ended December 31, 2022.

(2) Net of tax (benefit) expense of \$(901), \$328 and \$14 for the years ended December 31, 2024, 2023 and 2022, respectively.

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

STONERIDGE, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

Year ended December 31, (in thousands)	2024	2023	2022
OPERATING ACTIVITIES:			
Net loss	\$ (16,524)	\$ (5,183)	\$ (14,056)
Adjustments to reconcile net income to net cash provided by (used for) operating activities:			
Depreciation	26,140	26,749	26,720
Amortization, including accretion and write-off of deferred financing costs	8,852	8,132	8,055
Deferred income taxes	(5,742)	(4,038)	(5,110)
Loss of equity method investee	1,292	522	823
Loss (gain) on sale of fixed assets	257	(860)	(241)
Share-based compensation expense	4,094	3,322	5,942
Excess tax deficiency related to share-based compensation expense	248	230	543
Changes in operating assets and liabilities:			
Accounts receivable, net	20,170	(5,854)	(13,161)
Inventories, net	26,904	(31,563)	(20,127)
Prepaid expenses and other assets	877	16,625	(5,159)
Accounts payable	(24,624)	1,090	18,489
Accrued expenses and other liabilities	5,804	(4,226)	4,088
Net cash provided by operating activities	47,748	4,946	6,806
INVESTING ACTIVITIES:			
Capital expenditures, including intangibles	(24,303)	(38,498)	(31,609)
Proceeds from sale of fixed assets	385	1,869	158
Proceeds from settlement of net investment hedges	—	—	3,820
Investment in venture capital fund	(550)	(350)	(950)
Net cash used for investing activities	(24,468)	(36,979)	(28,581)
FINANCING ACTIVITIES:			
Revolving credit facility borrowings	135,500	117,369	21,562
Revolving credit facility payments	(121,500)	(96,568)	(18,000)
Proceeds from issuance of debt	31,661	35,757	38,940
Repayments of debt	(33,745)	(35,102)	(42,248)
Earn-out consideration cash payment	—	—	(6,276)
Other financing costs	—	(2,251)	(484)
Repurchase of Common Shares to satisfy employee tax withholding	(795)	(1,720)	(791)
Net cash provided by (used for) financing activities	11,121	17,485	(7,297)
Effect of exchange rate changes on cash and cash equivalents	(3,410)	591	(1,677)
Net change in cash and cash equivalents	30,991	(13,957)	(30,749)
Cash and cash equivalents at beginning of period	40,841	54,798	85,547
Cash and cash equivalents at end of period	\$ 71,832	\$ 40,841	\$ 54,798
Supplemental disclosure of cash flow information:			
Cash paid for interest	\$ 15,458	\$ 13,007	\$ 7,293
Cash paid for income taxes, net	\$ 9,255	\$ 10,302	\$ 6,178

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

STONERIDGE, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(in thousands)	Number of Common Shares outstanding	Number of treasury shares	Additional paid-in capital	Common Shares held in treasury	Retained earnings	Accumulated other comprehensive loss	Total shareholders' equity
BALANCE , DECEMBER 31, 2021	27,191	1,775	\$ 232,490	\$ (55,264)	\$ 215,748	\$ (97,024)	\$ 295,950
Net loss	—	—	—	—	(14,056)	—	(14,056)
Unrealized gain on derivatives, net	—	—	—	—	—	53	53
Currency translation adjustments	—	—	—	—	—	(6,171)	(6,171)
Issuance of Common Shares	193	(193)	—	—	—	—	—
Repurchased Common Shares for treasury, net	(43)	43	—	4,898	—	—	4,898
Share-based compensation, net	—	—	268	—	—	—	268
BALANCE DECEMBER 31, 2022	27,341	1,625	\$ 232,758	\$ (50,366)	\$ 201,692	\$ (103,142)	\$ 280,942
Net loss	—	—	\$ —	\$ —	(5,183)	—	(5,183)
Unrealized gain on derivatives, net	—	—	—	—	—	1,236	1,236
Currency translation adjustments	—	—	—	—	—	9,118	9,118
Issuance of Common Shares	297	(297)	—	—	—	—	—
Repurchased Common Shares for treasury, net	(89)	89	—	7,022	—	—	7,022
Share-based compensation, net	—	—	(5,418)	—	—	—	(5,418)
BALANCE DECEMBER 31, 2023	27,549	1,417	\$ 227,340	\$ (43,344)	\$ 196,509	\$ (92,788)	\$ 287,717
Net loss	—	—	\$ —	\$ —	(16,524)	—	(16,524)
Unrealized loss on derivatives, net	—	—	—	—	—	(3,386)	(3,386)
Currency translation adjustments	—	—	—	—	—	(25,839)	(25,839)
Issuance of Common Shares	196	(196)	—	—	—	—	—
Repurchased Common Shares for treasury, net	(50)	50	—	4,920	—	—	4,920
Share-based compensation, net	—	—	(1,628)	—	—	—	(1,628)
BALANCE DECEMBER 31, 2024	27,695	1,271	\$ 225,712	\$ (38,424)	\$ 179,985	\$ (122,013)	\$ 245,260

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

STONERIDGE, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(in thousands, except share and per share data, unless otherwise indicated)

1. Organization and Nature of Business

Stoneridge, Inc. and its subsidiaries are global designers and manufacturers of highly engineered electrical and electronic systems, components and modules for the commercial, automotive, off-highway and agricultural vehicle markets.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying consolidated financial statements include the accounts of Stoneridge, Inc. and its wholly-owned subsidiaries (collectively, the "Company"). Intercompany transactions and balances have been eliminated in consolidation. The Company analyzes its ownership interests in accordance with Accounting Standards Codification ("ASC") "Consolidations (Topic 810)" to determine whether they are a variable interest entity and, if so, whether the Company is the primary beneficiary.

Accounting Estimates

The preparation of financial statements in conformity with U.S. Generally Accepted Accounting Principles ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, including certain self-insured risks and liabilities, disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Because actual results could differ from those estimates, the Company revises its estimates and assumptions as new information becomes available.

Cash and Cash Equivalents

The Company's cash and cash equivalents include actively traded money market funds with short-term investments in marketable securities, primarily U.S. government securities. Cash and cash equivalents are stated at cost, which approximates fair value, due to the highly liquid nature and short-term duration of the underlying securities with original maturities of 90 days or less.

Accounts Receivable and Concentration of Credit Risk

Revenues are principally generated from the commercial, automotive, off-highway and agricultural vehicle markets. The Company's largest customers are PACCAR and Traton, primarily related to the Electronics reportable segment and accounted for the following percentages of consolidated net sales:

	2024	2023	2022
PACCAR	16%	16%	15%
Traton	13%	15%	11%

Accounts receivable are recorded at the invoice price, net of an estimate of allowance for doubtful accounts and other reserves.

Credit losses

The Company primarily utilizes historical write-off experience, combined with customer specific considerations and industry and regional economic data to develop the estimate of the allowance for doubtful accounts in accordance with ASC Topic 326, Financial Instruments – Credit Losses ("ASC 326"). These allowances reflect management's estimate of credit losses over the remaining expected life of such assets. If customer specific or economic circumstances change substantially, estimates of the recoverability of amounts due to the Company could be reduced by a material amount. The Company does not have collateral requirements with its customers.

STONERIDGE, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(in thousands, except share and per share data, unless otherwise indicated)

2. Summary of Significant Accounting Policies - (continued)

Inventories

Inventories are valued at the lower of cost (using either the first-in, first-out ("FIFO") or average cost methods) or net realizable value. The Company evaluates and adjusts as necessary its excess and obsolescence reserve on a quarterly basis. Excess inventories are quantities of items that exceed anticipated sales or usage for a reasonable period. The Company has guidelines for calculating provisions for excess inventories based on the number of months of inventories on hand compared to anticipated sales or usage. Management uses its judgment to forecast sales or usage and to determine what constitutes a reasonable period. Inventory cost includes material, labor and overhead. Inventories consist of the following:

December 31		2024		2023
Raw materials	\$	108,283	\$	142,744
Work-in-progress		7,627		11,907
Finished goods		35,427		33,107
Total inventories, net	\$	151,337	\$	187,758

Inventory valued using the FIFO method was \$138,420 and \$176,033 at December 31, 2024 and 2023, respectively. Inventory valued using the average cost method was \$12,917 and \$11,725 at December 31, 2024 and 2023, respectively.

Long Term Supply Commitment

In 2022, the Company entered into a long term supply agreement, as amended, with a supplier for the purchase of certain electronic semiconductor components through December 31, 2030. Pursuant to the agreement, the Company paid capacity deposits of \$1,000 in 2022 and 2023, respectively. The capacity deposits are recognized in prepaid and other current assets on our consolidated balance sheet. This long term supply agreement requires the Company to purchase minimum annual volumes while requiring the supplier to sell these components at a fixed price. The Company purchased \$3,053, \$6,028 and \$1,174 of these components during the years ended December 31, 2024, 2023 and 2022, respectively. The Company is required to purchase \$5,571, \$6,314, \$7,463, \$8,313, \$841 and \$1,492 of components in each of the years 2025 through 2030, respectively.

Pre-production Costs Related to Long-term Supply Arrangements

Engineering, research and development and other design and development costs for products sold on long-term supply arrangements are expensed as incurred unless the Company has a contractual guarantee for reimbursement from the customer which are capitalized as pre-production costs. Costs for molds, dies and other tools used to make products sold on long-term supply arrangements for which the Company either has title to the assets or has the non-cancelable right to use the assets during the term of the supply arrangement are capitalized in property, plant and equipment and amortized to cost of sales over the shorter of the term of the arrangement or over the estimated useful lives of the assets, typically three to seven years. Costs for molds, dies and other tools used to make products sold on long-term supply arrangements for which the Company has a contractual guarantee to a lump sum reimbursement from the customer are capitalized either as a component of prepaid expenses and other current assets or an investment and other long-term assets, net within the consolidated balance sheets. Capitalized pre-production costs were \$13,104 and \$12,378 at December 31, 2024 and 2023, respectively, and were recorded as a component of prepaid expenses and other current assets on the consolidated balance sheets.

STONERIDGE, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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2. Summary of Significant Accounting Policies - (continued)

Property, Plant and Equipment

Property, plant and equipment are recorded at cost and consist of the following:

December 31	2024	2023
Land and land improvements	\$ 3,125	\$ 3,133
Buildings and improvements	29,895	32,097
Machinery and equipment	271,465	254,738
Office furniture and fixtures	9,272	9,708
Tooling	39,184	47,191
Information technology	37,512	36,853
Vehicles	741	789
Leasehold improvements	5,511	5,249
Construction in progress	19,773	27,589
Total property, plant, and equipment	416,478	417,347
Less: accumulated depreciation	(318,811)	(307,221)
Property, plant and equipment, net	\$ 97,667	\$ 110,126

Depreciation is provided using the straight-line method over the estimated useful lives of the assets. Depreciation expense for the years ended December 31, 2024, 2023 and 2022 was \$26,140, \$26,697 and \$26,687, respectively. Depreciable lives within each property classification are as follows:

Buildings and improvements	10-40 years
Machinery and equipment	3-10 years
Office furniture and fixtures	3-10 years
Tooling	2-7 years
Information technology	3-7 years
Vehicles	3-7 years
Leasehold improvements	shorter of lease term or 3-10 years

Maintenance and repair expenditures that are not considered improvements and do not extend the useful life of the property, plant and equipment are charged to expense as incurred. Expenditures for improvements and major renewals are capitalized. When assets are retired or otherwise disposed of, the related cost and accumulated depreciation are removed from the accounts, and any gain or loss on the disposition is recorded in the consolidated statements of operations as a component of selling, general and administrative expenses ("SG&A").

Impairment of Long-Lived or Finite-Lived Assets

The Company reviews the carrying value of its long-lived assets and finite-lived intangible assets for impairment when events or circumstances indicate that their carrying value may not be recoverable. Factors the Company considers important that could trigger testing of the related asset groups for an impairment include current period operating or cash flow losses combined with a history of operating or cash flow losses, a projection or forecast that demonstrates continuing losses, significant adverse changes in the business climate within a particular business or current expectations that a long-lived asset will be sold or otherwise disposed of significantly before the end of its estimated useful life. To test for impairment, the estimated undiscounted cash flows expected to be generated from the use and disposal of the asset or asset group is compared to its carrying value. An asset group is established by identifying the lowest level of cash flows generated by the group of assets that are largely independent of cash flows of other assets. If cash flows cannot be separately and independently identified for a single asset, we will determine whether an impairment has occurred for the group of assets for which we can identify projected cash flows. If these undiscounted cash flows are less than their respective carrying values, an impairment charge would be recognized to the extent that the carrying values exceed estimated fair values. The estimation of undiscounted cash flows and fair value requires us to make assumptions regarding future operating results over the life of the asset or the life of the primary asset in the asset group. The results of the impairment testing are dependent on these estimates which require judgment. The occurrence of certain events, including changes in economic

STONERIDGE, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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2. Summary of Significant Accounting Policies - (continued)

and competitive conditions, could impact cash flows eventually realized and management's ability to accurately assess whether an asset is impaired.

Goodwill and Other Intangible Assets

Goodwill

The total purchase price associated with acquisitions is allocated to the acquisition date fair values of identifiable assets acquired and liabilities assumed with the excess purchase price assigned to goodwill.

Goodwill was \$33,085 and \$35,295 at December 31, 2024 and 2023, respectively, all of which relates to the Electronics segment. Goodwill is not amortized, but instead is tested for impairment at least annually, or earlier when events and circumstances indicate that it is more likely than not that such assets have been impaired, by applying a fair value-based test. Goodwill is evaluated at the reporting unit level by comparing the fair value of the reporting unit with its carrying amount including goodwill. An impairment of goodwill exists if the carrying amount of the reporting unit exceeds its fair value. The impairment loss is the amount by which the carrying amount exceeds the reporting unit's fair value, limited to the total amount of goodwill.

In conducting our annual impairment assessment testing, we first perform a qualitative assessment of whether it is more likely than not that a reporting unit's fair value is less than its carrying amount. If not, no further goodwill impairment testing is performed. If it is more likely than not that a reporting unit's fair value is less than its carrying amount, or if we elect not to perform a qualitative assessment of a reporting unit, we then compare the fair value of the reporting unit to the related net book value. If the net book value of a reporting unit exceeds its fair value, an impairment loss is measured and recognized.

The Company utilizes an income approach to estimate the fair value of a reporting unit and a market valuation approach to further support this analysis. The income approach is based on projected debt-free cash flow which is discounted to the present value using discount factors that consider the timing and risk of cash flows. We believe that this approach is appropriate because it provides a fair value estimate based on the reporting unit's expected long-term operating cash flow performance. This approach also mitigates the impact of cyclical trends that occur in the industry. Fair value is estimated using internally developed forecasts, as well as commercial and discount rate assumptions. The discount rate used is the value-weighted average of our estimated cost of equity and of debt ("cost of capital") derived using both known and estimated customary market metrics. Our weighted average cost of capital is adjusted to reflect a risk factor, if necessary. Other significant assumptions include terminal value growth rates, terminal value margin rates, future capital expenditures and changes in future working capital requirements. While there are inherent uncertainties related to the assumptions used and to management's application of these assumptions to this analysis, we believe that the income approach provides a reasonable estimate of the fair value of a reporting unit. The market valuation approach is used to further support our analysis.

There was no impairment of goodwill for the years ended December 31, 2024, 2023 or 2022.

Goodwill and changes in the carrying amount of goodwill for the Electronics segment for the years ended December 31, 2024 and 2023 were as follows:

		2024		2023
Balance at January 1	\$	35,295	\$	34,225
Currency translation		(2,210)		1,070
Balance at December 31	\$	33,085	\$	35,295

The Company's cumulative goodwill impairment loss since inception was \$300,083 at December 31, 2024 and 2023, which includes Stoneridge Brazil's goodwill impairment in 2014 and goodwill impairment recorded by the Company's Control Devices segment in 2008 and 2004.

STONERIDGE, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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2. Summary of Significant Accounting Policies - (continued)

Other Intangible Assets

Other intangible assets, net at December 31, 2024 and 2023 consisted of the following:

As of December 31, 2024	Acquisition cost	Accumulated amortization	Net
Customer lists	\$ 40,669	\$ (26,303)	\$ 14,366
Tradenames	14,444	(8,135)	6,309
Technology and patents	11,657	(9,934)	1,723
Capitalized software development	26,123	(8,844)	17,279
Total	\$ 92,893	\$ (53,216)	\$ 39,677

As of December 31, 2023	Acquisition cost	Accumulated amortization	Net
Customer lists	\$ 46,393	\$ (27,580)	\$ 18,813
Tradenames	17,423	(9,118)	8,305
Technology and patents	13,636	(11,098)	2,538
Capitalized software development	23,023	(5,365)	17,658
Total	\$ 100,475	\$ (53,161)	\$ 47,314

Other intangible assets, net at December 31, 2024 for customer lists, tradenames, technology and patents, and capitalized software development include \$12,463, \$2,979, \$251 and \$15,816, respectively, related to the Electronics segment. Customer lists, tradenames and technology of \$1,903, \$3,330 and \$1,424, respectively, related to the Stoneridge Brazil segment at December 31, 2024. Patents and capitalized software development of \$48 and \$1,463, respectively, related to the Control Devices segment at December 31, 2024.

The Company designs and develops software that will be embedded into certain products and sold to customers. Software development costs are capitalized after the software product development reaches technological feasibility and until the software product becomes available for general release to customers. These intangible assets are amortized using the straight-line method over estimated useful lives generally ranging from three to seven years.

The Company recognized \$8,127, \$6,942 and \$7,003 of amortization expense related to intangible assets in 2024, 2023 and 2022, respectively. Amortization expense is included as a component of cost of goods sold ("COGS"), SG&A and design and development ("D&D") on the consolidated statements of operations. Annual amortization expense for intangible assets is estimated to be approximately \$7,900 for the year 2025 and approximately \$6,300 for the years 2026 through 2029. The weighted-average remaining amortization period is approximately 6 years.

There were no intangible impairment charges for the years ended December 31, 2024, 2023 or 2022.

Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consist of the following:

As of December 31	2024	2023
Compensation related liabilities	\$ 21,171	\$ 23,941
Product warranty and recall obligations	16,848	14,381
Other ^(A)	28,475	25,881
Total accrued expenses and other current liabilities	\$ 66,494	\$ 64,203

(A) "Other" is comprised of miscellaneous accruals, none of which individually contributed a significant portion of the total.

STONERIDGE, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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2. Summary of Significant Accounting Policies - (continued)

Income Taxes

The Company accounts for income taxes using the liability method. Deferred income taxes reflect the tax consequences on future years of differences between the tax basis of assets and liabilities and their financial reporting amounts. Future tax benefits are recognized to the extent that realization of such benefits is more likely than not to occur. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in the period that includes the enactment date.

Deferred tax assets are recognized to the extent that these assets are more likely than not to be realized (See Note 6). In making such a determination, the Company considers all available positive and negative evidence, including future release of existing taxable temporary differences, projected future taxable income, tax planning strategies, and results of recent operations. Certain deferred tax assets are dependent on future taxable income to be realized. Release of some or all of a valuation allowance would result in the recognition of certain deferred tax assets and a decrease to income tax expense for the period the release is recorded.

The Company's policy is to provide for uncertain tax positions and the related interest and penalties based upon management's assessment of whether a tax benefit is more likely than not to be sustained upon examination by tax authorities. To the extent the Company prevails in matters for which a liability for an unrecognized tax benefit is established or is required to pay amounts in excess of the liability, the Company's effective tax rate in a given financial statement period may be affected. The Company adjusts this liability in the period in which an uncertain tax position is effectively settled, the statute of limitations expires for the relevant taxing authority to examine the tax position, or more information becomes available.

The Company has made an accounting policy election to reflect GILTI taxes, if any, as a current period tax expense when incurred.

Currency Translation

The financial statements of foreign subsidiaries, where the local currency is the functional currency, are translated into U.S. dollars using exchange rates in effect at the period end for assets and liabilities and average exchange rates during each reporting period for the results of operations. Adjustments resulting from translation of financial statements are reflected as a component of accumulated other comprehensive loss in the Company's consolidated balance sheets.

Foreign currency transactions are remeasured into the functional currency using translation rates in effect at the time of the transaction with the resulting adjustments included on the consolidated statements of operations within other (income) expense, net. These foreign currency transaction (gains) losses, including the impact of hedging activities, were \$(2,414), \$1,226 and \$5,534 for the years ended December 31, 2024, 2023 and 2022, respectively.

Revenue Recognition and Sales Commitments

The Company recognizes revenue when obligations under the terms of a contract with our customer are satisfied; generally this occurs with the transfer of control of our products and services, which is usually when the parts are shipped or delivered to the customer's premises. The Company recognizes monitoring service revenues over time, as the services are provided to customers. Revenue is measured as the amount of consideration we expect to receive in exchange for transferring goods or providing services. The transaction price will include estimates of variable consideration to the extent it is probable that a significant reversal of revenue recognized will not occur. Incidental items that are not significant in the context of the contract are recognized as expense. The Company collects certain taxes and fees on behalf of government agencies and remits such collections on a periodic basis. The taxes are collected from customers but are not included in net sales. Estimated returns are based on historical authorized returns. The Company often enters into agreements with its customers at the beginning of a given vehicle's expected production life. Once such agreements are entered into, it is the Company's obligation to fulfill the customers' purchasing requirements for the entire production life of the vehicle. These agreements are subject to potential renegotiation from time to time, which may affect product pricing. See Note 3 for additional disclosure.

Shipping and Handling Costs

Shipping and handling costs are included in COGS on the consolidated statements of operations.

STONERIDGE, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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2. Summary of Significant Accounting Policies - (continued)

Product Warranty and Recall Reserves

Amounts accrued for product warranty and recall claims are established based on the Company's best estimate of the amounts necessary to settle existing and future claims on products sold as of the balance sheet dates. These accruals are based on several factors including past experience, production changes, industry developments and various other considerations. Our estimate is based on historical trends of units sold and claim payment amounts, combined with our current understanding of the status of existing claims, forecasts of the resolution of existing claims, expected future claims on products sold and commercial discussions with our customers. The key factors in our estimate are the warranty period and the customer source. The Company can provide no assurances that it will not experience material claims or that it will not incur significant costs to defend or settle such claims beyond the amounts accrued. The current portion of the product warranty and recall reserve is included as a component of accrued expenses and other current liabilities on the consolidated balance sheets. Product warranty and recall includes \$10,675 and \$7,228 of a long-term liability at December 31, 2024 and 2023, respectively, which is included as a component of other long-term liabilities on the consolidated balance sheets.

In 2023, the Company received a demand for arbitration from one of our customers seeking recovery of warranty claims in the amount of 29,340 euro (\$32,669), related to past sales of PM sensor products, a product line we exited in 2019. The Company denies responsibility for these claims. Based on our review of the technical and legal merits, we believe these warranty claims lack substantive merit and are significantly overstated. The Company continues to vigorously defend this matter in private arbitration. While no assurances can be made as to the ultimate outcome of this matter, or any other future claims, we do not currently believe a material loss is probable.

The following provides a reconciliation of changes in the product warranty and recall reserve:

Year ended December 31,		2024	2023
Product warranty and recall at beginning of period	\$	21,610	\$ 13,477
Accruals for warranties established during period		18,479	15,057
Aggregate changes in pre-existing liabilities due to claim developments		1,934	1,199
Settlements made during the period		(13,052)	(8,639)
Foreign currency translation		(1,448)	516
Product warranty and recall at end of period	\$	27,523	\$ 21,610

Design and Development Costs

Expenses associated with the development of new products, and changes to existing products, other than capitalized software development costs, are charged to expense as incurred, and are included in the Company's consolidated statements of operations as a separate component of costs and expenses. These product development costs amounted to \$72,174, \$71,075 and \$65,296 for the years ended December 31, 2024, 2023 and 2022, respectively, or 7.9%, 7.3% and 7.3% of net sales for these respective periods.

Research and Development Activities

The Company enters into research and development contracts with certain customers, which generally provide for reimbursement of costs. The Company incurred and was reimbursed for contracted research and development costs of \$11,883, \$18,809 and \$23,784 for the years ended December 31, 2024, 2023 and 2022, respectively.

Share-Based Compensation

At December 31, 2024, the Company had two share-based compensation plans: (1) 2016 Long-Term Incentive Plan for employees and (2) the 2018 Amended and Restated Directors' Restricted Shares Plan, for non-employee directors. See Note 8 for additional details on share-based compensation plans.

Total compensation expense recognized as a component of SG&A expense on the consolidated statements of operations for share-based compensation arrangements was \$4,094, \$3,322 and \$5,942 for the years ended December 31, 2024, 2023 and 2022, respectively. There was no share-based compensation expense capitalized in inventory during 2024, 2023 or 2022. Share-based compensation expense is calculated using estimated volatility and forfeitures based on historical data, future expectations and the expected term of the share-based compensation awards.

STONERIDGE, INC. AND SUBSIDIARIES
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2. Summary of Significant Accounting Policies - (continued)

Financial Instruments and Derivative Financial Instruments

Financial instruments, including derivative financial instruments, held by the Company include cash and cash equivalents, accounts receivable, accounts payable, long-term debt and foreign currency forward contracts. The carrying value of cash and cash equivalents, accounts receivable and accounts payable is considered to be representative of fair value because of the short maturity of these instruments. See Note 10 for fair value disclosures of the Company's financial instruments.

Common Shares Held in Treasury

The Company accounts for Common Shares held in treasury under the cost method (applied on a FIFO basis) and includes such shares as a reduction of total shareholders' equity.

Loss Per Share

Basic loss per share was computed by dividing net loss by the weighted-average number of Common Shares outstanding for each respective period. Diluted earnings per share was calculated by dividing net loss by the weighted-average of all potentially dilutive Common Shares that were outstanding during the periods presented. However, for all periods in which the Company recognized a net loss, the Company did not recognize the effect of the potential dilutive securities as their inclusion would be anti-dilutive. Potential dilutive shares of 202,163, 227,741 and 232,458 for the years ended December 31, 2024, 2023 and 2022, respectively, were excluded from diluted loss per share because the effect would have been anti-dilutive.

Actual weighted-average Common Shares outstanding used in calculating basic and diluted net loss per share were as follows:

Year ended December 31,	2024	2023	2022
Basic weighted-average Common Shares outstanding	27,595,698	27,442,984	27,258,456
Effect of dilutive shares	—	—	—
Diluted weighted-average Common Shares outstanding	27,595,698	27,442,984	27,258,456

There were 605,196, 418,834 and 767,593 performance-based right to receive Common Shares outstanding at December 31, 2024, 2023 and 2022, respectively. These performance-based restricted and right to receive Common Shares are included in the computation of diluted earnings per share based on the number of Common Shares that would be issuable if the end of the year were the end of the contingency period.

Deferred Financing Costs, net

Deferred financing costs are amortized over the life of the related financial instrument using the straight-line method, which approximates the effective interest method. Deferred financing cost amortization and debt discount accretion, for the years ended December 31, 2024, 2023 and 2022 was \$725, \$1,190 and \$1,051, respectively, and is included as a component of interest expense, net in the consolidated statements of operations. In 2022, the Company capitalized \$484 of deferred financing costs as a result of entering into Amendment No. 3 to the Fourth Amended and Restated Credit Facility. In connection with Amendment No. 3, the Company wrote off a portion of the previously recorded deferred financing costs of \$365 in interest expense, net during the year ended December 31, 2022. In 2023, the Company capitalized \$332 of deferred financing costs as a result of entering into Amendment No. 4 to the Fourth Amended and Restated Credit Facility. Additionally in 2023, the Company capitalized \$1,915 of deferred financing costs and wrote off \$309 of previously recorded deferred financing costs as a result of entering into the Fifth Amended and Restated Credit Agreement. See Note 5 to the consolidated financial statements for additional details regarding the Credit Facility and related deferred financing costs. The Company has elected to continue to present deferred financing costs within long-term assets in the Company's consolidated balance sheets. Deferred financing costs, net, were \$1,332 and \$2,057, as of December 31, 2024 and 2023, respectively.

STONERIDGE, INC. AND SUBSIDIARIES
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2. Summary of Significant Accounting Policies - (continued)

Changes in Accumulated Other Comprehensive Loss by Component

Changes in accumulated other comprehensive loss for the years ended December 31, 2024 and 2023 were as follows:

	Foreign currency translation	Unrealized gain (loss) on derivatives	Total
Balance at January 1, 2024	\$ (94,256)	\$ 1,468	\$ (92,788)
Other comprehensive loss before reclassifications	(25,839)	(3,700)	(29,539)
Amounts reclassified from accumulated other comprehensive loss	—	314	314
Net other comprehensive loss, net of tax	(25,839)	(3,386)	(29,225)
Balance at December 31, 2024	\$ (120,095)	\$ (1,918)	\$ (122,013)
Balance at January 1, 2023	\$ (103,374)	\$ 232	\$ (103,142)
Other comprehensive income before reclassifications	9,118	1,817	10,935
Amounts reclassified from accumulated other comprehensive loss	—	(581)	(581)
Net other comprehensive income, net of tax	9,118	1,236	10,354
Balance at December 31, 2023	\$ (94,256)	\$ 1,468	\$ (92,788)

Reclassifications

Certain prior period amounts have been reclassified to conform to their 2024 presentation in the consolidated financial statements.

Recently Adopted Accounting Standards

In March 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2020-04, "Reference Rate Reform (Topic 848) – Facilitation of the Effects of Reference Rate Reform on Financial Reporting." The guidance in ASU 2020-04 provides temporary optional expedient and exceptions to the guidance in U.S. GAAP on contract modifications and hedge accounting to ease the financial reporting burdens related to expected market transition from the London Interbank Offered Rate ("LIBOR") and other interbank offered rates to alternative reference rates, such as the Secured Overnight Financing Rate ("SOFR") (also known as the "reference rate reform"). The guidance allows companies to elect not to apply certain modification accounting requirements to contracts affected by the reference rate reform, if certain criteria are met. The guidance also allows companies to elect various optional expedients which would allow them to continue to apply hedge accounting for hedging relationships affected by the reference rate reform, if certain criteria are met. The new standard was effective upon issuance and generally could have been applied to applicable contract modifications through December 31, 2023.

In February 2022, the Company amended its credit facility to incorporate hardwired mechanics to permit a future replacement of LIBOR as the interest reference rate without lender consent. The Company has applied the guidance to impacted transactions during the transition period. The adoption of this standard did not have a material impact on the Company's consolidated financial statements.

In November 2023, the FASB issued ASU No. 2023-07, "Segment Reporting (Topic 280) – Improvements to Reportable Segment Disclosures", which expands annual and interim disclosure requirements for reportable segments, primarily through enhanced disclosures about significant segment expenses. The updated standard is effective for annual periods beginning in fiscal 2025 and interim periods beginning in the first quarter of fiscal 2026. Early adoption is permitted. We adopted this ASU retrospectively on December 31, 2024. Refer to Note 13, Segment Reporting for the inclusion of the new required disclosures.

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2. Summary of Significant Accounting Policies - (continued)

Recently Issued Accounting Standards Not Yet Adopted as of December 31, 2024

In December 2023, the FASB issued ASU No. 2023-09, "Income Taxes (Topic 740) – Improvements to Income Tax Disclosures," which requires companies to disclose, on an annual basis, specific categories in the effective tax rate reconciliation and provide additional information for reconciling items that meet a quantitative threshold. In addition, companies are required to disclose additional information about income taxes paid. The standard is effective for fiscal years beginning after December 15, 2024, with early adoption permitted. The standard is to be adopted on a prospective basis; however, retrospective application is permitted. This ASU will modify the Company's financial statement disclosures, but will not have a significant impact on its consolidated financial statements.

In November 2024, the FASB issued ASU No. 2024-03, "Income Statement – Reporting Comprehensive Income – Expense Disaggregation Disclosures," which requires companies to disclose certain costs and expenses within the notes to the financial statements. The standard is effective for fiscal years beginning after December 15, 2026, and interim periods within fiscal years beginning after December 15, 2027, with early adoption permitted. We are currently evaluating the impact on our annual consolidated financial statement disclosures.

3. Revenue

Revenue is recognized when obligations under the terms of a contract with our customer are satisfied; generally this occurs with the transfer of control of our products and services, which is usually when the parts are shipped or delivered to the customer's premises. Revenue is measured as the amount of consideration we expect to receive in exchange for transferring goods or providing services. The transaction price will include estimates of variable consideration to the extent it is probable that a significant reversal of revenue recognized will not occur. Incidental items that are not significant in the context of the contract are recognized as expense. The expected costs associated with our base warranties are recognized as expense when the products are sold. Customer returns only occur if products do not meet the specifications of the contract and are not connected to any repurchase obligations of the Company.

The Company does not have any financing components or significant payment terms as payment occurs shortly after the point of sale. Taxes assessed by a governmental authority that are both imposed on and concurrent with a specific revenue-producing transaction that are collected by the Company from a customer are excluded from revenue. Amounts billed to customers related to shipping and handling costs are included in net sales in the consolidated statements of operations. Shipping and handling costs associated with outbound freight after control over a product is transferred to the customer are accounted for as a fulfillment cost and are included in cost of sales.

Revenue by Reportable Segment

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 actuators, sensors, switches and connectors. We sell these products principally to the automotive market in the North American and Asia Pacific regions. To a lesser extent, we also sell these products to the commercial vehicle and agricultural markets in the North American and Asia Pacific regions. Our customers included in these markets primarily consist of original equipment manufacturers ("OEM") and companies supplying components directly to the OEMs ("Tier 1 supplier").

Electronics. Our Electronics segment designs and manufactures advanced driver information solutions, vision systems, connectivity and compliance solutions and control modules. These products are sold principally to the commercial and off-highway vehicle markets primarily through our OEM and aftermarket channels in the European, North American and Asia Pacific regions.

Stoneridge Brazil. Our Stoneridge Brazil segment primarily serves the South American region and specializes in the design, manufacture and sale of vehicle tracking devices and monitoring services, driver information systems, vehicle security alarms and convenience accessories, telematics solutions and multimedia devices. Stoneridge Brazil sells its products through the aftermarket distribution channel, to factory authorized dealer installers, also referred to as original equipment services and directly to OEMs. In addition, monitoring services and tracking devices are sold directly to corporate customers and individual consumers.

STONERIDGE, INC. AND SUBSIDIARIES
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3. Revenue - (continued)

The following tables disaggregate our revenue by reportable segment and geographical location⁽¹⁾ for the periods ended December 31, 2024, 2023 and 2022:

Year ended December 31,	Control Devices			Electronics			Stoneridge Brazil			Consolidated		
	2024	2023	2022	2024	2023	2022	2024	2023	2022	2024	2023	2022
Net Sales:												
North America	\$245,208	\$290,213	\$291,808	\$201,934	\$205,328	\$153,120	\$ —	\$ —	\$ —	\$447,142	\$495,541	\$444,928
South America	—	—	—	—	—	—	49,649	57,214	52,230	49,649	57,214	52,230
Europe	—	—	—	360,199	360,682	347,129	—	—	—	360,199	360,682	347,129
Asia Pacific	47,398	51,852	50,788	3,907	10,529	4,848	—	—	—	51,305	62,381	55,636
Total net sales	\$292,606	\$342,065	\$342,596	\$566,040	\$576,539	\$505,097	\$ 49,649	\$ 57,214	\$ 52,230	\$908,295	\$975,818	\$899,923

⁽¹⁾ Company sales based on geographic location are where the sale originates not where the customer is located.

Performance Obligations

For OEM and Tier 1 supplier customers, the Company typically enters into contracts to provide serial production parts that consist of a set of documents including, but not limited to, an award letter, master purchase agreement and master terms and conditions. For each production product, the Company enters into separate purchase orders that contain the product specifications and an agreed-upon price. The performance obligation does not exist until a customer release is received for a specific number of parts. The majority of the parts sold to OEM and Tier 1 supplier customers are customized to the specific customer, with the exception of MirrorEye camera monitor systems (“CMS”) sold through our aftermarket channel that are mostly common across all customers. The transaction price is equal to the contracted price per part and there is no expectation of material variable consideration in the transaction price. For most customer contracts, the Company does not have an enforceable right to payment at any time prior to when the parts are shipped or delivered to the customer; therefore, the Company recognizes revenue at the point in time it satisfies a performance obligation by transferring control of a part to the customer. Certain customer contracts contain an enforceable right to payment if the customer terminates the contract for convenience and therefore are recognized over time using the cost to complete input method.

Our aftermarket products are focused on meeting the demand for safety and compliance parts and accessories as well as repair and replacement parts and are sold primarily to aftermarket distributors and direct to consumers in our South American, European and North American markets. Aftermarket products have one type of performance obligation which is the delivery of aftermarket parts and spare parts. For aftermarket customers, the Company typically has standard terms and conditions for all customers. In addition, aftermarket products have alternative use as they can be sold to multiple customers. Revenue for aftermarket part production contracts is recognized at a point in time when the control of the parts transfer to the customer which is based on the shipping terms. Aftermarket contracts may include variable consideration related to discounts, rebates and extended warranties which are included in the transaction price upon recognizing the product revenue.

A small portion of the Company’s sales are comprised of monitoring services that include both monitoring devices and fees to individual, corporate, fleet and cargo customers in our Stoneridge Brazil segment. These monitoring service contracts are generally not capable of being distinct and are accounted for as a single performance obligation. We recognize revenue for our monitoring products and services contracts over the life of the contract. There is no variable consideration associated with these contracts. The Company has the right to consideration from a customer in the amount that corresponds directly with the value to the customer of the Company’s performance to date. Therefore, the Company recognizes revenue over time using the practical expedient ASC 606-10-55-18 in the amount the Company has a “right to invoice” rather than selecting an output or input method.

Contract Balances

The Company had no material contract assets, contract liabilities or capitalized contract acquisition costs as of December 31, 2024 or 2023.

4. Investments

PST Eletrônica Ltda.

The Company had a 74% controlling interest in Stoneridge Brazil from December 31, 2011 through May 15, 2017. On May 16, 2017, the Company acquired the remaining 26% noncontrolling interest in Stoneridge Brazil. As part of the acquisition agreement, the Company was required to pay additional earn-out consideration based on Stoneridge Brazil’s financial performance in 2021. The final earn-out consideration of \$8,272 was paid in the second quarter of 2022. See Note 10 for the fair value and foreign currency adjustments of the earn-out consideration for the current and prior periods.

STONERIDGE, INC. AND SUBSIDIARIES
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4. Investments - (continued)

Other Investments

In December 2018, the Company entered into an agreement to make a \$10,000 investment in a fund ("Autotech Fund II") managed by Autotech Ventures ("Autotech"), a venture capital firm focused on ground transportation technology which is accounted for under the equity method of accounting. The Company's \$10,000 investment in the Autotech Fund II will be contributed over the expected ten-year life of the fund. The Company has contributed \$8,950 to the Autotech Fund II as of December 31, 2024. The Company contributed \$550, \$350 and \$950 to the Autotech Fund II during the years ended December 31, 2024, 2023 and 2022, respectively. The Company has a 6.7% interest in Autotech Fund II. The Company recognized losses of \$1,292, \$522 and \$823 during the years ended December 31, 2024, 2023 and 2022, respectively. The Autotech Fund II investment recorded in investments and other long-term assets, net in the consolidated balance sheets was \$7,730 and \$8,472 as of December 31, 2024 and 2023, respectively.

5. Debt

	December 31, 2024	December 31, 2023	Interest rates at December 31, 2024	Maturity
Revolving Credit Facility				
Credit Facility	\$ 201,577	\$ 189,346	6.56 %	November 2026
Debt				
Suzhou short-term credit line	—	2,113		
Total debt	—	2,113		
Less: current portion	—	(2,113)		
Total long-term debt, net	\$ —	\$ —		

Revolving Credit Facility

On June 5, 2019, the Company entered into the Fourth Amended and Restated Credit Agreement, as amended, (the "Fourth Amended and Restated Credit Agreement"). The Fourth Amended and Restated Credit Agreement provided for a \$300,000 senior secured revolving credit facility. As a result of entering into the Fourth Amended and Restated Credit Agreement and related amendments, the Company capitalized \$332 and \$484 of deferred financing costs during the years ended December 31, 2023 and 2022, respectively. The Company wrote off a portion of the previously recorded deferred financing costs of \$365 in interest expense, net during the year ended December 31, 2022.

On November 2, 2023, the Company entered into the Fifth Amended and Restated Credit Agreement (the "Credit Facility"). The Credit Facility provides for a \$275,000 senior secured revolving credit facility and it replaced and superseded the Fourth Amended and Restated Credit Agreement. The Credit Facility has an accordion feature which allows the Company to increase the availability by up to \$150,000 upon the satisfaction of certain conditions, including the consent of lenders providing the increase in commitments and also includes a letter of credit subfacility, swing line subfacility and multicurrency subfacility. The Credit Facility has a termination date of November 2, 2026. Borrowings under the Credit Facility bear interest at either the Base Rate or the SOFR rate, at the Company's option, plus the applicable margin as set forth in the Credit Facility. The Credit Facility contains certain financial covenants that require the Company to maintain less than a maximum leverage ratio and more than a minimum interest coverage ratio.

As a result of entering into the Fifth Amended and Restated Credit Agreement, the Company capitalized \$1,915 of deferred financing costs and wrote off \$309 of previously recorded deferred financing costs during the year ended December 31, 2023.

The Credit Facility contains customary affirmative covenants and representations. The Credit Facility also contains customary negative covenants, which, among other things, are subject to certain exceptions, including restrictions on (i) indebtedness, (ii) liens, (iii) liquidations, mergers, consolidations and acquisitions, (iv) disposition of assets or subsidiaries, (v) affiliate transactions, (vi) continuation of or change in business, (vii) restricted payments, (viii) restrictions in agreements on dividends, intercompany loans and granting liens on the collateral, (ix) loans and investments and (x) changes in organizational documents and fiscal year. The Credit Facility contains customary events of default, subject to customary thresholds and exceptions, including, among other things, (i) non-payment of principal and non-payment of interest and fees, (ii) a material inaccuracy of a representation or warranty at the time made, (iii) a failure to comply with any covenant, subject to customary grace periods in the case of certain affirmative covenants, (iv) cross default of other debt, final judgments and other adverse orders in excess of \$30,000, (v) any loan document shall cease to be a legal, valid and binding agreement,

STONERIDGE, INC. AND SUBSIDIARIES
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5. Debt - (continued)

(vi) certain uninsured losses or proceedings against assets with a value in excess of \$30,000, (vii) ERISA events, (viii) a change of control, or (ix) bankruptcy or insolvency proceedings.

On February 26, 2025, the Company entered into Amendment No. 1 to the Fifth Amended and Restated Credit Agreement and Waiver ("Amendment No. 1"). Amendment No. 1 provides for certain covenant relief and restrictions during the "Covenant Relief Period" (the period ending on the date that the Company delivers a compliance certificate for the quarter ending December 31, 2025). During the Covenant Relief Period:

- the maximum leverage ratio of 3.50 was increased to 6.00 for the quarter ended March 31, 2025, 5.50 for the quarter ended June 30, 2025, 4.50 for the quarter ended September 30, 2025 and 3.50 for the quarter ended December 31, 2025;
- the minimum interest coverage ratio of 3.50 was waived for the quarter ended December 31, 2024 and was reduced to 2.00 for the quarters ended March 31 and June 30, 2025, and 2.50 and 3.50 for the quarter ended September 30, 2025 and December 31, 2025, respectively;
- the Company's aggregate amount of cash and cash equivalents (as defined) cannot exceed \$70,000;
- the sale of significant assets (as defined) will require repayment in the amount of any net cash proceeds received and result in the reduction of the Credit Facility commitment, at the lesser of \$100,000 or the net cash proceeds;
- there were certain restrictions on Restricted Payments (as defined); and
- a Permitted Acquisition (as defined) could not be consummated unless otherwise approved in writing by the required lenders.

Amendment No. 1 added an additional level to the leverage ratio based pricing grid, through maturity, when the leverage ratio is greater than 3.50.

Borrowings outstanding on credit facilities were \$201,577 and \$189,346 at December 31, 2024 and 2023, respectively.

As a result of Amendment No. 1, the Company was in compliance with all credit facility covenants at December 31, 2024 and 2023.

The Company also had outstanding letters of credit of \$1,571 and \$1,586 at December 31, 2024 and 2023, respectively.

Debt

The Company's wholly-owned subsidiary located in Stockholm, Sweden (the "Stockholm subsidiary"), has an overdraft credit line which allows overdrafts on the subsidiary's bank account up to a daily maximum level of 20,000 Swedish krona, or \$1,809 and \$1,987 at December 31, 2024 and 2023, respectively. At December 31, 2024 and December 31, 2023 there were no borrowings outstanding on this overdraft credit line. During the year ended December 31, 2024, the subsidiary borrowed and repaid 334,515 Swedish krona, or \$30,259. The Stockholm subsidiary has pledged certain of its assets as collateral in order to obtain a guarantee of certain of the Stockholm subsidiary's obligations to third parties.

The Company's wholly-owned subsidiary located in Suzhou, China (the "Suzhou subsidiary"), had lines of credit (the "Suzhou credit line") that allowed up to a maximum borrowing level of 20,000 Chinese yuan, or \$2,740 and \$2,818 at December 31, 2024 and 2023, respectively. At December 31, 2024 and 2023 there was \$0 and \$2,113, respectively, in borrowings outstanding on the Suzhou credit line. The Suzhou credit line was included on the consolidated balance sheet within current portion of debt. In addition, the Suzhou subsidiary had a bank acceptance draft line of credit that expired in October 2024 which facilitated the extension of trade payable payment terms by 180 days. The bank acceptance draft line of credit allowed up to a maximum borrowing level of 60,000 Chinese yuan, or \$8,453 at December 31, 2023. There was \$2,387 utilized on the Suzhou bank acceptance draft line of credit at December 31, 2023. The Suzhou bank acceptance draft line of credit was included on the consolidated balance sheet within accounts payable.

STONERIDGE, INC. AND SUBSIDIARIES
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5. Debt - (continued)

At December 31, 2024, the future maturities of the Credit Facility were as follows:

Year ended December 31,	
2025	\$ —
2026	201,577
2027	—
2028	—
2029	—
Total	\$ 201,577

6. Income Taxes

The income tax expense included in the accompanying consolidated statement of operations represents federal, state and foreign income taxes. The components of (loss) income before income taxes and the provision (benefit) for income taxes consist of the following:

Year ended December 31,	2024	2023	2022
(Loss) income before income taxes:			
Domestic	\$ (45,419)	\$ (29,658)	\$ (11,944)
Foreign	31,822	27,736	1,248
Total loss before income taxes	\$ (13,597)	\$ (1,922)	\$ (10,696)
Provision (benefit) for income taxes:			
Current:			
Federal	\$ (653)	\$ 219	\$ 435
State and local	(49)	(101)	747
Foreign	9,371	7,181	7,288
Total current provision	\$ 8,669	\$ 7,299	\$ 8,470
Deferred:			
Federal	\$ (3,536)	\$ (2,265)	\$ (3,282)
State and local	(445)	2	(25)
Foreign	(1,761)	(1,775)	(1,803)
Total deferred benefit	(5,742)	(4,038)	(5,110)
Total income tax provision	\$ 2,927	\$ 3,261	\$ 3,360

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6. Income Taxes - (continued)

A summary of the differences between the statutory federal income tax rate of 21.0% and the consolidated provision for income taxes is shown below.

Year ended December 31,	2024	2023	2022
Statutory U.S. federal income tax benefit	\$ (2,855)	\$ (403)	\$ (2,246)
State income taxes, net of federal tax benefit	(542)	(136)	495
Tax credits and incentives	(2,585)	(4,886)	(3,906)
Foreign tax rate differential	245	706	910
Impact of change in enacted tax law	3	5	300
Change in valuation allowance	(1,663)	1,817	5,248
U.S. tax on foreign earnings	5,922	4,815	1,376
Tax reserves and audit adjustments	4,054	—	(346)
Tax impact of unconsolidated subsidiaries	—	—	395
Unremitted earnings on foreign subsidiaries	(22)	—	(898)
Non-deductible expenses	607	1,338	657
Compensation and benefits	478	306	774
Other	(715)	(301)	601
Provision for income taxes	\$ 2,927	\$ 3,261	\$ 3,360

Significant components of the Company's deferred tax assets and liabilities were as follows:

As of December 31,	2024	2023
Deferred tax assets:		
Inventories	\$ 1,478	\$ 1,678
Employee compensation and benefits	1,870	2,324
Accrued liabilities and reserves	6,981	6,466
Property, plant and equipment	3,657	3,290
Tax loss carryforwards	13,071	18,129
Tax credit carryforwards	23,921	22,191
Capitalized research and development	4,665	4,345
Disallowed interest deduction	3,575	380
Lease liability	2,339	2,351
Other	1,659	660
Gross deferred tax assets	63,216	61,814
Less: Valuation allowance	(17,632)	(21,082)
Deferred tax assets less valuation allowance	45,584	40,732
Deferred tax liabilities:		
Property, plant and equipment	(767)	(1,271)
Intangible assets	(6,577)	(8,942)
Right-of-use-assets	(2,148)	(2,059)
Other	(3,943)	(5,292)
Gross deferred tax liabilities	(13,435)	(17,564)
Net deferred tax assets	\$ 32,149	\$ 23,168

STONERIDGE, INC. AND SUBSIDIARIES
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6. Income Taxes - (continued)

The balance sheet classification of our net deferred tax asset is shown below:

Year ended December 31,	2024		2023	
Long-term deferred tax assets	\$	37,470	\$	30,392
Long-term deferred tax liabilities		(5,321)		(7,224)
Net deferred tax assets	\$	32,149	\$	23,168

The Company has recognized deferred taxes related to the expected foreign currency impact upon repatriation from foreign subsidiaries not considered indefinitely reinvested. At December 31, 2024, the aggregate undistributed earnings of our foreign subsidiaries amounted to \$35,670.

Based on the Company's review of both positive and negative evidence regarding the realizability of deferred tax assets at December 31, 2024, a valuation allowance is recorded against certain deferred tax assets based upon the conclusion that it was more likely than not they would not be realized. Certain deferred tax assets are dependent on future taxable income to be realized.

The Company has net operating loss carry forwards of \$50,495 and \$53,487 for state and foreign tax jurisdictions, respectively. The state net operating losses expire from 2025-2044 or have indefinite lives and the foreign net operating losses expire from 2025-2029 or have indefinite lives. The Company has general business and foreign tax credit carry forwards of \$22,111, \$1,020 and \$790 for U.S. federal, state and foreign jurisdictions, respectively. The U.S. federal general business credits, if unused, begin to expire in 2025, and the state and foreign tax credits expire at various times.

As of December 31, 2024, the Company has consolidated deferred tax assets of 63216 with a valuation allowance of 17632 principally related to tax credit carryforwards, tax loss carryforwards and other deferred tax assets in Sweden, Brazil, and the US. The Company has considered historical pre-tax income or loss and the four sources of income in determining the need for a valuation allowance when the realization of its deferred tax assets are not more likely than not. The four sources of income considered are 1.) taxable income in prior carryback years where carryback is allowable, 2.) future reversals of existing temporary differences, 3.) consideration of reasonable and prudent tax planning strategies, and 4.) forecasts of future taxable income, exclusive of reversing temporary differences and carryforwards. In the cases where a valuation allowance has been recorded, the evidence described above did not result in a conclusion that the deferred tax assets are more likely than not to be realizable. Current and future provision for income taxes is significantly impacted by the initial recognition of and changes in valuation allowances. The Company intends to maintain these allowances until it is more likely than not that the deferred tax assets will be realized. The Company is significantly impacted by the GILTI tax provisions of the US tax code, and should those provisions change, it could have a material impact on our assessment of the realizability of general business credits in the US for which we currently believe are more likely than not to be realized based on the considerations noted above.

The following is a reconciliation of the Company's total gross unrecognized tax benefits:

	2024		2023		2022
Balance as of January 1	\$	2,545	\$	2,545	\$ 2,891
Tax positions related to the current year:					
Additions		2,298		—	—
Tax positions related to the prior years:					
Reductions		—		—	—
Expirations of statutes of limitation		—		—	(346)
Cumulative translation adjustment		(97)		—	—
Balance as of December 31	\$	4,746	\$	2,545	\$ 2,545

The Company has classified its uncertain tax positions as a reduction to non-current deferred income tax assets. If the Company's tax positions are sustained by the taxing authorities in favor of the Company, the amount that would affect the Company's effective tax rate is approximately \$4,746 and \$2,545 at December 31, 2024 and 2023, respectively.

The Company classifies interest expense and, if applicable, penalties which could be assessed related to unrecognized tax benefits as a component of provision for income taxes. The Company recognized interest and penalties of \$34, \$0 and \$0 for the years ended December 31, 2024, 2023 and 2022, respectively.

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6. Income Taxes - (continued)

On August 16, 2022, the U.S. enacted the Inflation Reduction Act of 2022 ("IRA"), which, among other things, implemented a 15% minimum tax on financial statement income of certain large corporations, a 1% excise tax on net stock repurchases and several tax incentives to promote clean energy. For the years ended December 31, 2024 and 2023, the IRA did not have a material impact on the Company's consolidated financial statements.

The Company conducts business globally and, as a result, files income tax returns in the U.S. federal jurisdiction and various state and foreign jurisdictions. In the normal course of business, the Company is subject to examination by taxing authorities throughout the world. The following table summarizes the open tax years for each jurisdiction:

Jurisdiction	Open Tax Years
U.S. Federal	2017-2024
Argentina	2019-2024
Brazil	2015-2024
China	2019-2024
France	2021-2024
Germany	2020-2024
Italy	2019-2024
Mauritius	2021-2024
Mexico	2019-2024
Netherlands	2020-2024
Sweden	2019-2024
United Kingdom	2023-2024

7. Leases

Lessee

The Company has various cancelable and noncancelable leased assets within all of our segments, which include certain properties, vehicles and equipment of which are all classified as operating leases. Payments for these leases are generally fixed; however, several of our leases are composed of variable lease payments including index-based payments or inflation-based payments based on a Consumer Price Index ("CPI") or other escalators. Our lease agreements do not contain any material residual value guarantees or material restrictive covenants.

Under Leases (Topic 842), the Company determines an arrangement is a lease when we have the right to control the use of identified property, vehicle or equipment for a period of time in exchange for consideration. Other than the leases that we have already identified, we are not aware of any material leases that have not yet commenced. For leases that have a calculated lease term of 12 months or less and do not include an option to purchase the underlying asset which we are reasonably certain to exercise, the Company has made the policy election to not apply the recognition requirements in Leases (Topic 842). For these short-term leases, the Company recognizes the lease as a period expense on a straight-line basis over the lease term and variable lease payments in the period in which the obligation for those payments is incurred.

For the leases identified, right of use ("ROU") assets and lease liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As most of our leases do not provide an implicit rate, the Company used the calculated incremental borrowing rate based on the information available at the implementation date, and going forward at the commencement date, in determining the present value of lease payments. The Company will use the implicit rate when readily determinable. The ROU asset includes the carrying amount of the lease liability, plus (minus) any prepaid (accrued) lease payments, less the unamortized balance of lease incentives received. The Company's lease terms may include options to extend or terminate the lease and such options are included in the lease term when it is reasonably certain that the Company will exercise that option. Lease expense for lease payments is recognized on a straight-line basis over the lease term. Lease expenses are recognized within COGS, SG&A and D&D costs in the consolidated statements of operations. The Company has made the policy election to account for lease and non-lease components as a single lease component for all of its leases.

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7. Leases - (continued)

The components of lease expense are as follows:

Year ended December 31,	2024	2023
Operating lease cost	\$ 4,296	\$ 4,532
Short-term lease cost	657	675
Variable lease cost	847	706
Total lease cost	\$ 5,800	\$ 5,913

Balance sheet information related to leases is as follows:

As of December 31,	2024	2023
Assets:		
Operating lease right-of-use assets	\$ 10,050	\$ 10,795
Liabilities:		
Operating lease current liability, included in other current liabilities	\$ 3,992	\$ 3,871
Operating lease long-term liability	6,484	7,684
Total leased liabilities	\$ 10,476	\$ 11,555

Maturities of operating lease liabilities are as follows:

As of December 31,	2024
2025	\$ 4,180
2026	2,869
2027	1,710
2028	1,517
2029	1,169
Thereafter	—
Total future minimum lease payments	\$ 11,445
Less: imputed interest	(969)
Total lease liabilities	\$ 10,476

Weighted-average remaining lease term and discount rate for operating leases is as follows:

As of December 31,	2024	2023
Weighted-average remaining lease term (in years)	3.75	4.00
Weighted-average discount rate	6.77%	5.98%

Other information:

Year ended December 31,	2024	2023
Operating cash flows:		
Cash paid related to operating lease obligations	\$ 4,548	\$ 4,545
Non-cash activity:		
Right-of-use assets obtained in exchange for operating lease obligations	\$ 3,302	\$ 250

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8. Share-Based Compensation Plans

In May 2016, the Company's shareholders approved the 2016 Long-Term Incentive Plan (the "2016 Plan") and reserved 1,800,000 Common Shares (of which the maximum number of Common Shares which may be issued). In May 2020, the Company's shareholders approved an amendment to the 2016 Plan to increase by 1,100,000 the number of Common Shares authorized for issuance. The amendment to the 2016 Plan brought the total Common Shares available for issuance to 2,900,000. Under the 2016 Plan, as of December 31, 2024, the Company has granted 3,787,892 share units, of which 1,513,927 were time-based with cliff vesting using the straight-line method and 2,273,965 were performance-based. As of December 31, 2024, 1,751,371 of the shares granted have been forfeited. There are 863,479 shares available to be granted under the 2016 Plan at December 31, 2024.

In 2024, 2023 and 2022, pursuant to the 2016 Plan, the Company granted time-based share units and performance-based performance share units. The majority of the time-based share units cliff vest three years after the date of grant. The performance-based performance share units vest and are no longer subject to forfeiture upon the recipient remaining an employee of the Company for three years from the date of grant and, for a portion of the annual awards, upon the Company attaining certain targets of performance measured against a peer group's three year performance in terms of total shareholder return and, for the remaining portion of the annual awards, upon achieving certain earnings per share targets and return on invested capital targets established by the Company during the performance period of the award.

The allocation of performance shares granted between total shareholder return, earnings per share and return on invested capital were as follows for the years ended December 31:

	2024	2023	2022
Total shareholder return	46%	46%	46%
Earnings per share	36%	36%	36%
Return on invested capital	18%	18%	18%

In 2023, the Company granted retention-based phantom shares to certain employees that vest in June 2025 provided the employee remains employed with the Company. The phantom shares will settle in cash based on the volume-weighted average closing price of the Company's stock for a 30 day period prior to the vesting date. As of December 31, 2024, the Company has recorded a liability of \$897 for the phantom shares which was included on the consolidated balance sheet as a component of accrued expenses and other current liabilities.

In April 2005, the Company adopted the Directors' Restricted Shares Plan (the "Director Share Plan") and reserved 500,000 Common Shares for issuance under the Director Share Plan. In May 2013, shareholders approved an amendment to the Director Share Plan to increase the number of shares for issuance by 200,000 to 700,000. In May 2018, the Company's shareholders approved the 2018 Amended and Restated Director's Restricted Shares Plan (the "2018 Director Share Plan") to increase the number of shares for issuance by 150,000 to 850,000. In May 2022, the Company's shareholders approved Amendment No. 1 to the 2018 Director Share Plan to increase the number of shares for issuance by 100,000 to 950,000. In May 2024, the Company's shareholders approved Amendment No. 2 to the 2018 Director Share Plan to increase the number of shares for issuance by 200,000 to 1,150,000. Under the 2018 Director Share Plan, the Company has cumulatively issued 931,692 restricted Common Shares. As such, there are 218,308 restricted Common Shares available to be issued on December 31, 2024. Shares issued annually under the 2018 Director Share Plan are no longer subject to forfeiture one year after the date of grant.

Share Units and Performance Shares

The fair value of the non-vested time-based share unit awards was calculated using the market value of the Common Shares on the date of issuance. The weighted-average grant-date fair value of time-based share units granted during the years ended December 31, 2024, 2023 and 2022 was \$16.35, \$18.48, and \$18.71, respectively.

The fair value of the non-vested performance-based performance share awards with a performance condition requiring the Company to obtain certain earnings per share and return on invested capital targets were estimated using the market value of the shares on the date of grant. The fair value of non-vested performance-based performance share awards with a market condition requiring the Company to obtain a total shareholder return target relative to a group of peer companies was estimated using a Monte Carlo valuation model taking into consideration the probability of achievement using multiple simulations. The awards that use earnings per share and return on invested capital as the performance target are expensed beginning when it is probable that the Company will meet the underlying performance condition.

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8. Share-Based Compensation Plans - (continued)

A summary of the status of the Company's non-vested share units and performance shares as of December 31, 2024 and the changes during the year then ended, are presented below:

	Time-based awards		Performance-based awards	
	Share units	Weighted-average grant date fair value	Performance shares	Weighted-average grant date fair value
Non-vested as of January 1, 2024	410,716	\$ 20.35	418,949	\$ 21.89
Granted	200,518	\$ 16.35	301,276	\$ 17.84
Vested	(176,583)	\$ 24.22	(13,182)	\$ 18.65
Forfeited or cancelled	(25,563)	\$ 18.61	(101,732)	\$ 32.02
Non-vested as of December 31, 2024	409,088	\$ 16.83	605,311	\$ 18.24

A summary of the status of the Company's non-vested share units and performance shares as of December 31, 2023 and the changes during the year then ended, are presented below:

	Time-based awards		Performance-based awards	
	Share units	Weighted-average grant date fair value	Performance shares	Weighted-average grant date fair value
Non-vested as of January 1, 2023	570,803	\$ 22.29	767,592	\$ 24.03
Granted	253,630	\$ 18.48	261,202	\$ 17.08
Vested	(264,566)	\$ 20.88	(6,289)	\$ 29.27
Forfeited or cancelled	(149,151)	\$ 23.65	(603,556)	\$ 22.45
Non-vested as of December 31, 2023	410,716	\$ 20.35	418,949	\$ 21.89

As of December 31, 2024 total unrecognized compensation cost related to non-vested time-based share units granted was \$1,930. That cost is expected to be recognized over a weighted-average period of 1.08 years.

For the years ended December 31, 2024, 2023 and 2022, the total fair value of awards vested was \$3,146, \$5,623 and \$3,334, respectively.

As of December 31, 2024, there was no unrecognized compensation cost related to non-vested performance shares granted that are probable to vest. As noted above, the Company has issued and outstanding performance-based share units that use different performance targets (total shareholder return, earnings per share and return on invested capital).

The excess tax deficiency (benefit) realized from the vesting of share units and performance shares of the share-based payment arrangements was \$248, \$230 and \$543 for the years ended December 31, 2024, 2023 and 2022, respectively.

9. Employee Benefit Plans

The Company has certain defined contribution profit sharing and 401(k) plans covering substantially all of its employees in the United States and Europe. The Company provides matching contributions to the Company's 401(k) plan. Company contributions are generally discretionary. For the years ended December 31, 2024, 2023 and 2022, expenses related to these plans amounted to \$5,808, \$5,536 and \$4,883, respectively.

10. Financial Instruments and Fair Value Measurements

Financial Instruments

A financial instrument is cash or a contract that imposes an obligation to deliver or conveys a right to receive cash or another financial instrument. The carrying values of cash and cash equivalents, accounts receivable and accounts payable are considered to be representative of fair value because of the short maturity of these instruments. The fair value of debt approximates the carrying value of debt, due to the variable interest rate on the Credit Facility and the maturity of outstanding debt.

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10. Financial Instruments and Fair Value Measurements - (continued)

Derivative Instruments and Hedging Activities

On December 31, 2024, the Company had open Mexican peso-denominated foreign currency forward contracts. The Company used foreign currency forward contracts solely for hedging and not for speculative purposes during 2024 and 2023. Management believes that its use of these instruments to reduce risk is in the Company's best interest. The counterparties to these financial instruments are financial institutions with investment grade credit ratings.

Foreign Currency Exchange Rate Risk

The Company conducts business internationally and, therefore, is exposed to foreign currency exchange rate risk. The Company uses derivative financial instruments as cash flow hedges and used net investment hedges to manage its exposure to fluctuations in foreign currency exchange rates by reducing the effect of such fluctuations on foreign currency denominated intercompany transactions, inventory purchases and other foreign currency exposures.

Net Investment Hedges

During 2021, the Company entered into two cross-currency swaps, designated as net investment hedges, with notional values of \$25,000 each that were scheduled to mature in August 2026 and August 2028. These swaps hedged a portion of the net investment in a certain euro-denominated subsidiary. As a result of favorable market conditions during 2022 the Company unwound the two net investment hedges and recognized a net gain of \$3,716, which was recorded on the Company's consolidated balance sheet in accumulated other comprehensive loss. The cash received from the settlement of these swaps of \$3,820 was classified in investing activities in the consolidated statement of cash flows.

The Company elected to assess hedge effectiveness of the net investment hedges under the spot method. Accordingly, periodic changes in the fair value of the derivative instruments attributable to factors other than spot exchange rate variability were excluded from the measurement of hedge ineffectiveness and reported directly in earnings each reporting period. The change in fair value of these derivative instruments was recorded in cumulative translation adjustment, which is a component of accumulated other comprehensive loss in the consolidated balance sheets. The Company had no outstanding net investment hedges as of December 31, 2024 or 2023.

Cash Flow Hedges

The Company entered into foreign currency forward contracts to hedge the Mexican peso currency in 2024 and 2023. These forward contracts were executed to hedge forecasted transactions and have been accounted for as cash flow hedges. As such, gains and losses on derivatives qualifying as cash flow hedges are recorded in accumulated other comprehensive loss, to the extent that hedges are effective, until the underlying transactions are recognized in earnings. Unrealized amounts in accumulated other comprehensive loss will fluctuate based on changes in the fair value of hedge derivative contracts at each reporting period. The cash flow hedges were highly effective. The effectiveness of the transactions has been and will be measured on an ongoing basis using regression analysis and forecasted future purchases of the currency.

In certain instances, the foreign currency forward contracts may not qualify for hedge accounting or are not designated as hedges and, therefore, are marked-to-market with gains and losses recognized in the Company's consolidated statements of operations as a component of other (income) expense, net. During 2024 and 2023, all of the Company's foreign currency forward contracts were designated as cash flow hedges.

The Company's foreign currency forward contracts offset a portion of the gains and losses on the underlying foreign currency denominated transactions as follows:

Mexican peso-denominated Foreign Currency Forward Contracts – Cash Flow Hedges

The Company holds Mexican peso-denominated foreign currency forward contracts which expire ratably on a monthly basis from January 2025 to December 2025. The notional amounts at December 31, 2024 and 2023 related to Mexican peso-denominated foreign currency forward contracts were \$32,339 and \$26,613, respectively.

The Company evaluated the effectiveness of the Mexican peso-denominated foreign currency forward contracts held as of December 31, 2024 and the year then ended, and concluded that the hedges were highly effective.

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10. Financial Instruments and Fair Value Measurements - (continued)

Interest Rate Risk

Interest Rate Risk – Cash Flow Hedge

On February 18, 2020, the Company entered into a floating-to-fixed interest rate swap agreement (the “Swap”) with a notional amount of \$50,000 to hedge its exposure to interest payment fluctuations on a portion of its Fourth Amended and Restated Credit Agreement borrowings. The Swap matured on March 10, 2023. The Swap was designated as a cash flow hedge of the variable interest rate obligation under the Company's Fourth Amended and Restated Credit Agreement. Accordingly, the change in fair value of the Swap was recognized in accumulated other comprehensive loss. The Swap agreement required monthly settlements on the same days that the Fourth Amended and Restated Credit Agreement interest payments were due and had a maturity date of March 10, 2023, which was prior to the Fourth Amended and Restated Credit Agreement maturity date of June 4, 2024. Under the Swap terms, the Company paid a fixed interest rate and received a floating interest rate based on the one-month LIBOR, with a floor. The critical terms of the Swap were aligned with the terms of the Fourth Amended and Restated Credit Agreement, resulting in no hedge ineffectiveness. The difference between amounts to be received and paid under the Swap were recognized as a component of interest expense, net on the consolidated statements of operations. The swap settlements reduced interest expense, net by \$290 and \$156 for the years ended December 31, 2023 and 2022, respectively.

The notional amounts and fair values of derivative instruments in the consolidated balance sheets were as follows:

	Notional amounts ^(A)		Prepaid expenses and other current assets		Accrued expenses and other current liabilities	
As of December 31,	2024	2023	2024	2023	2024	2023
Cash flow hedges:						
Forward currency contracts	\$ 32,339	\$ 26,613	\$ —	\$ 1,858	\$ 2,429	\$ —

(A) Notional amounts represent the gross contract of the derivatives outstanding in U.S. dollars.

Gross amounts recorded for the cash flow hedges in other comprehensive (loss) income and in net loss for the years ended December 31 were as follows:

	(Loss) gain recorded in other comprehensive (loss) income			(Loss) gain reclassified from other comprehensive (loss) income into net loss ^(A)		
	2024	2023	2022	2024	2023	2022
Derivatives designated as cash flow hedges:						
Forward currency contracts	\$ (4,684)	\$ 2,304	\$ 1,346	\$ (397)	\$ 446	\$ 2,076
Interest rate swap	\$ —	\$ (4)	\$ 953	\$ —	\$ 290	\$ 156
Derivatives designated as net investment hedges:						
Cross-currency swaps	\$ —	\$ —	\$ 2,446	\$ —	\$ —	\$ —

(A) (Losses) gains reclassified from comprehensive (loss) income into net loss recognized in COGS in the consolidated statements of operations for the years ended December 31, 2024, 2023 and 2022 were \$(350), \$337 and \$1,572, respectively. (Losses) gains reclassified from other comprehensive (loss) income into net loss recognized in SG&A in the consolidated statements of operations were \$(47), \$109 and \$504 for the years ended December 31, 2024, 2023 and 2022, respectively. Gains reclassified from other comprehensive (loss) income into net loss recognized in interest expense, net in the consolidated statements of operations were \$0, \$290 and \$156 for the years ended December 31, 2024, 2023 and 2022, respectively.

Cash flows from derivatives used to manage foreign exchange and interest rate risks are classified as operating activities within the consolidated statements of cash flows.

The Company has measured the ineffectiveness of the forward currency contracts and any amounts recognized in the consolidated financial statements were immaterial for the years ended December 31, 2024, 2023 and 2022.

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10. Financial Instruments and Fair Value Measurements - (continued)

Fair Value Measurements

Certain assets and liabilities held by the Company are measured at fair value on a recurring basis and are categorized using the three levels of the fair value hierarchy based on the reliability of the inputs used. Fair values estimated using Level 1 inputs consist of quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date. Fair values estimated using Level 2 inputs, other than quoted prices, are observable for the asset or liability, either directly or indirectly and include among other things, quoted prices for similar assets or liabilities in markets that are active or inactive as well as inputs other than quoted prices that are observable. For forward currency and cross-currency contracts, inputs include forward foreign currency exchange rates. For the interest rate swap, inputs included LIBOR. Fair values estimated using Level 3 inputs consist of significant unobservable inputs.

The following table presents our assets and liabilities that are measured at fair value on a recurring basis and are categorized using the three levels of the fair value hierarchy based on the reliability of inputs used.

December 31,	2024				2023
	Fair values estimated using				
	Fair value	Level 1 inputs	Level 2 inputs	Level 3 inputs	Fair value
Financial assets carried at fair value:					
Forward currency contracts	\$ —	\$ —	\$ —	\$ —	1,858
Total financial assets carried at fair value	\$ —	\$ —	\$ —	\$ —	1,858
Financial liabilities carried at fair value:					
Forward currency contracts	\$ 2,429	\$ —	\$ 2,429	\$ —	—
Total financial liabilities carried at fair value	\$ 2,429	\$ —	\$ 2,429	\$ —	—

The following table sets forth a summary of the change in fair value of the Company's Level 3 financial liabilities related to earn-out consideration that are measured at fair value on a recurring basis.

	2022
Balance at January 1	\$ 7,351
Change in fair value	—
Foreign currency adjustments	921
Earn-out consideration cash payment	(8,272)
Balance at December 31	\$ —

The Company was required to pay the Stoneridge Brazil earn-out consideration based on Stoneridge Brazil's financial performance in 2021. The earn-out consideration obligation of \$8,272 was paid in April 2022 and recorded in the consolidated statement of cash flows within operating and financing activities in the amounts of \$1,996 and \$6,276, respectively, for the year ended December 31, 2022.

There were no transfers in or out of Level 3 from other levels in the fair value hierarchy for the year ended December 31, 2024.

No non-recurring fair value adjustments were required for nonfinancial assets for the years ended December 31, 2024 and 2023.

Impairment of Long-Lived Assets or Finite-Lived Assets

The Company reviews the carrying value of its long-lived assets and finite-lived intangible assets for impairment when events or circumstances indicate that their carrying value may not be recoverable. Factors the Company considers important that could trigger testing of the related asset groups for an impairment include current period operating or cash flow losses combined with a history of operating or cash flow losses, a projection or forecast that demonstrates continuing losses, significant adverse changes in the business climate within a particular business or current expectations that a long-lived asset will be sold or otherwise disposed of significantly before the end of its estimated useful life. To test for impairment, the estimated undiscounted cash flows expected to be generated from the use and disposal of the asset or asset group is compared to its carrying value. An asset group is established by identifying the lowest level of cash flows generated by the group of assets that are largely independent of cash flows of other assets. If cash flows cannot be separately and

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10. Financial Instruments and Fair Value Measurements - (continued)

independently identified for a single asset, we will determine whether an impairment has occurred for the group of assets for which we can identify projected cash flows. If these undiscounted cash flows are less than their respective carrying values, an impairment charge would be recognized to the extent that the carrying values exceed estimated fair values. The estimation of undiscounted cash flows and fair value requires us to make assumptions regarding future operating results over the life of the asset or the life of the primary asset in the asset group. The results of the impairment testing are dependent on these estimates which require judgment. The occurrence of certain events, including changes in economic and competitive conditions, could impact cash flows eventually realized and management's ability to accurately assess whether an asset is impaired.

11. Commitments and Contingencies

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. The Company establishes accruals for matters which it believes that losses are probable and can be reasonably estimated. Although it is not possible to predict with certainty the outcome of these matters, the Company is of the opinion that the ultimate resolution of these matters will not have a material adverse effect on its consolidated results of operations or financial position.

In 2023, the Company received a demand for arbitration from one of our customers seeking recovery of warranty claims in the amount of 29,340 euro (\$32,669), related to past sales of PM sensor products, a product line we exited in 2019. The Company denies responsibility for these claims. Based on our review of the technical and legal merits, we believe these warranty claims lack substantive merit and are significantly overstated. The Company continues to vigorously defend this matter in private arbitration. While no assurances can be made as to the ultimate outcome of this matter, or any other future claims, we do not currently believe a material loss is probable.

As a result of environmental studies performed at the Company's former facility located in Sarasota, Florida, the Company became aware of soil and groundwater contamination at the site. The Company engaged an environmental engineering consultant to assess the level of contamination and to develop a remediation and monitoring plan for the site. Soil remediation at the site was completed during the year ended December 31, 2010. A remedial action plan was approved by the Florida Department of Environmental Protection and groundwater remediation began in the fourth quarter of 2015. During the years ended December 31, 2024, 2023 and 2022, the Company recognized expense of \$157, \$125 and \$0, respectively, related to ground water remediation. At December 31, 2024 and 2023, the Company had accruals of \$244 and \$143 respectively, related to future remediation costs. At December 31, 2024 and 2023, \$144 and \$136, respectively, were recorded as a component of accrued expenses and other current liabilities on the consolidated balance sheets while the remaining amounts as of December 31, 2024 and 2023 were recorded as a component of other long-term liabilities. Costs associated with the recorded liability will be incurred to complete the groundwater remediation and monitoring. The recorded liability is based on assumptions in the remedial action plan as well as estimates for future remediation activities. Although the Company sold the Sarasota facility and related property in December 2011, the liability to remediate the site contamination remains the responsibility of the Company. Due to the ongoing site remediation, the Company is currently required to maintain a \$1,489 letter of credit for the benefit of the buyer.

The Company's Stoneridge Brazil subsidiary has civil, labor, environmental and other tax contingencies (excluding income tax) for which the likelihood of loss is deemed to be reasonably possible, but not probable, by the Company which is supported by legal advisors in Brazil. As a result, no provision has been recorded with respect to these contingencies, which amounted to R\$42,834 (\$6,918) and R\$41,681 (\$8,609) at December 31, 2024 and 2023, respectively. An unfavorable outcome on these contingencies could result in significant cost to the Company and adversely affect its results of operations and cash flows.

On August 12, 2020, the Brazilian Administrative Counsel for Economic Defense ("CADE") issued a ruling against Stoneridge Brazil for abuse of dominance and market foreclosure through its prior use of exclusivity provisions in agreements with its distributors. The CADE tribunal imposed a R\$7,995 (\$1,291) fine which is included in the reasonably possible contingencies noted above. The Company continues to challenge this ruling in Brazilian federal courts to reverse this decision by the CADE tribunal.

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12. Business Realignment

The Company regularly evaluates the performance of its businesses and cost structures, including personnel, and makes necessary changes thereto in order to optimize its results. The Company also evaluates the required skill sets of its personnel and periodically makes strategic changes. As a consequence of these actions, the Company incurs severance related costs which are referred to as business realignment charges. The Company does not expect future charges related to the previously incurred termination actions noted below.

Business realignment charges by reportable segment were as follows:

Year ended December 31,	2024	2023	2022
Control Devices ^(A)	\$ 250	\$ 511	\$ —
Electronics ^(B)	2,333	2,862	—
Stoneridge Brazil ^(C)	—	—	98
Unallocated Corporate ^(D)	59	1,137	190
Total business realignment charges	\$ 2,642	\$ 4,510	\$ 288

(A) Severance costs for the year ended December 31, 2024 related to COGS were \$250. Severance costs for the year ended December 31, 2023 related to COGS and SG&A were \$369 and \$142, respectively.

(B) Severance costs for the year ended December 31, 2024 related to COGS, SG&A and D&D were \$327, \$458 and \$1,548, respectively. Severance costs for the year ended December 31, 2023 related to COGS, SG&A and D&D were \$423, \$2,057 and \$382 respectively.

(C) Severance costs for the year ended December 31, 2022 related to SG&A were \$98.

(D) Severance related costs for the year ended December 31, 2024 related to SG&A were \$59. Severance related costs for the year ended December 31, 2023 related to SG&A and D&D were \$1,122 and 15, respectively. Severance related costs for the year ended December 31, 2022 related to SG&A were \$190.

Business realignment charges classified by statement of operations line item were as follows:

Year ended December 31,	2024	2023	2022
Cost of goods sold	\$ 577	\$ 792	\$ —
Selling, general and administrative	517	3,321	288
Design and development	1,548	397	—
Total business realignment charges	\$ 2,642	\$ 4,510	\$ 288

Reconciliations of the beginning and ending liability balances related to business realignment were as follows:

	Accrual as of January 1, 2024	2024 Charge to Expense	Utilization		Accrual as of December 31, 2024
			Cash	Non-Cash	
Employee termination benefits	\$ 1,230	\$ 2,642	\$ (3,461)	\$ —	\$ 411
Total	\$ 1,230	\$ 2,642	\$ (3,461)	\$ —	\$ 411

	Accrual as of January 1, 2023	2023 Charge to Expense	Utilization		Accrual as of December 31, 2023
			Cash	Non-Cash	
Employee termination benefits	\$ 101	\$ 4,510	\$ (3,381)	\$ —	\$ 1,230
Total	\$ 101	\$ 4,510	\$ (3,381)	\$ —	\$ 1,230

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13. Segment Reporting

Operating segments are defined as components of an enterprise that are evaluated regularly by the Company's chief operating decision maker ("CODM") in deciding how to allocate resources and in assessing performance. The Company's CODM is the chief executive officer.

The Company has three reportable segments, Control Devices, Electronics and Stoneridge Brazil, which also represent its operating segments. The Control Devices reportable segment produces actuators, sensors, switches and connectors. The Electronics reportable segment produces advanced driver information solutions, vision systems, connectivity and compliance solutions and control modules. The Stoneridge Brazil reportable segment designs and manufactures vehicle tracking devices and monitoring services, driver information systems, vehicle security alarms and convenience accessories, telematics solutions and multimedia devices.

The accounting policies of the Company's reportable segments are the same as those described in Note 2. The Company's management evaluates the performance of its reportable segments based primarily on revenues from external customers, capital expenditures and operating income. Inter-segment sales are eliminated upon consolidation.

The Company's management, including the CODM, utilizes operating income as the key performance measure of segment profitability to evaluate segment performance, and for planning and forecasting purposes to allocate resources to the segments, as management believes this measure is most reflective of the financial performance of the Company's operating segments. The CODM regularly evaluates budget-to-actual and period-over-period variances for this metric when making decisions about the allocation of operating and capital resources to each segment. The CODM also uses operating income in evaluating the operating performance of each segment and as part of determining the compensation of the segment managers and certain other employees. COGS and D&D are the significant expenses regularly reviewed by the CODM. Other segment costs primarily include SG&A items.

The financial information presented below is for our three reportable operating segments and includes adjustments for unallocated corporate costs and intercompany eliminations, where applicable. Such costs and eliminations do not meet the requirements for being classified as an operating segment. Corporate costs include various support functions, such as accounting/finance, executive administration, human resources, information technology and legal.

A summary of financial information by reportable segment is as follows:

December 31,	2024	2023	2022
Net Sales:			
Control Devices	\$ 292,606	\$ 342,065	\$ 342,596
Inter-segment sales	3,677	3,195	2,719
Control Devices net sales	296,283	345,260	345,315
Electronics	566,040	576,539	505,097
Inter-segment sales	28,664	31,621	28,709
Electronics net sales	594,704	608,160	533,806
Stoneridge Brazil	49,649	57,214	52,230
Inter-segment sales	477	13	32
Stoneridge Brazil net sales	50,126	57,227	52,262
Eliminations	(32,818)	(34,829)	(31,460)
Total net sales	\$ 908,295	\$ 975,818	\$ 899,923
Cost of Goods Sold:			
Control Devices	\$ 243,784	\$ 285,303	\$ 279,605
Electronics	445,537	456,403	414,550
Stoneridge Brazil	29,745	32,630	30,909
Unallocated Corporate ^(A)	(24)	176	(67)
Total cost of goods sold	\$ 719,042	\$ 774,512	\$ 724,997

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13. Segment Reporting - (continued)

December 31,	2024		2023		2022
Design and Development:					
Control Devices	\$	20,044	\$	21,848	\$ 20,654
Electronics		45,560		43,027	39,651
Stoneridge Brazil		3,113		3,061	2,634
Unallocated Corporate ^(A)		3,457		3,139	2,357
Total design and development	\$	72,174	\$	71,075	\$ 65,296
Other Segment Costs:					
Control Devices	\$	22,600	\$	21,332	\$ 18,419
Electronics		49,382		49,799	45,769
Stoneridge Brazil		15,809		17,068	15,537
Unallocated Corporate ^(A)		29,669		29,196	26,970
Total other segment costs	\$	117,460	\$	117,395	\$ 106,695
Operating (Loss) Income:					
Control Devices	\$	6,178	\$	13,582	\$ 23,917
Electronics		25,561		27,309	5,128
Stoneridge Brazil		982		4,454	3,150
Unallocated Corporate ^(A)		(33,102)		(32,509)	(29,260)
Total operating (loss) income	\$	(381)	\$	12,836	\$ 2,935
Depreciation and Amortization:					
Control Devices	\$	11,686	\$	12,414	\$ 13,521
Electronics		15,814		14,035	13,913
Stoneridge Brazil		4,753		4,801	3,939
Unallocated Corporate ^(C)		2,013		2,388	2,318
Total depreciation and amortization ^(B)	\$	34,266	\$	33,638	\$ 33,691
Interest Expense (Income), net:					
Control Devices	\$	(4)	\$	149	\$ 93
Electronics		1,498		1,771	1,009
Stoneridge Brazil		(982)		(1,693)	(1,282)
Unallocated Corporate		13,935		12,773	7,277
Total interest expense, net	\$	14,447	\$	13,000	\$ 7,097
Capital Expenditures:					
Control Devices	\$	6,544	\$	9,230	\$ 12,620
Electronics		8,623		18,313	10,479
Stoneridge Brazil		2,705		3,054	3,480
Unallocated Corporate ^(C)		1,338		1,229	653
Total capital expenditures	\$	19,210	\$	31,826	\$ 27,232

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13. Segment Reporting - (continued)

December 31,	2024	2023
Total Assets:		
Control Devices	\$ 136,028	\$ 159,612
Electronics	365,226	404,994
Stoneridge Brazil	48,280	66,318
Corporate ^(C)	471,793	419,469
Eliminations	(399,771)	(370,493)
Total assets	\$ 621,556	\$ 679,900

The following tables present net sales and long-term assets for the geographic areas in which the Company operates:

December 31,	2024	2023	2022
Net Sales:			
United States	\$ 447,142	\$ 495,541	\$ 444,928
North America	\$ 447,142	\$ 495,541	\$ 444,928
Brazil	49,649	57,214	52,230
South America	\$ 49,649	\$ 57,214	\$ 52,230
Sweden	159,035	157,895	170,228
Estonia	110,112	109,480	89,130
Netherlands	84,297	74,842	68,326
Other Europe	6,755	18,465	19,445
China	51,305	62,381	55,636
Europe and Other	\$ 411,504	\$ 423,063	\$ 402,765
Total net sales	\$ 908,295	\$ 975,818	\$ 899,923

December 31,	2024	2023
Long-term Assets:		
United States	\$ 90,111	\$ 87,712
Mexico	5,254	4,707
North America	\$ 95,365	\$ 92,419
Brazil	25,222	32,679
South America	\$ 25,222	\$ 32,679
Sweden	32,918	31,058
Estonia	8,363	9,581
Netherlands	57,677	64,660
Other Europe	653	577
China	13,844	19,536
Europe and Other	\$ 113,455	\$ 125,412
Total long-term assets	\$ 234,042	\$ 250,510

(A) Unallocated Corporate expenses include, among other items, accounting/finance, human resources, information technology and legal costs as well as share-based compensation.

(B) These amounts represent depreciation and amortization on property, plant and equipment and certain intangible assets.

(C) Assets located at Corporate consist primarily of cash, intercompany receivables, fixed and leased assets for the headquarter building, information technology assets, equity investments and investments in subsidiaries.

STONERIDGE, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(in thousands, except share and per share data, unless otherwise indicated)

14. Subsequent Events

Credit Facility Amendment

On February 26, 2025, the Company entered into Amendment No. 1 to the Credit Facility. Refer to Note 5 of the consolidated financial statements for details regarding this amendment.

SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS

The following schedule provides the activity for accounts receivable reserves and valuation allowance for deferred tax assets for the years ended December 31, 2024, 2023 and 2022 (in thousands):

	Balance at beginning of period	Charged to costs and expenses	Write-offs	Balance at end of period
Accounts receivable reserves:				
Year ended December 31, 2024	\$ 1,058	\$ 632	\$ (630)	\$ 1,060
Year ended December 31, 2023	\$ 962	\$ 412	\$ (316)	\$ 1,058
Year ended December 31, 2022	\$ 1,443	\$ 1,255	\$ (1,736)	\$ 962

	Balance at beginning of period	Additions	Deductions	Other Changes	Balance at end of period
Valuation allowance for deferred tax assets:					
Year ended December 31, 2024	\$ 21,082	\$ 885	\$ (2,547)	\$ (1,788)	\$ 17,632
Year ended December 31, 2023	\$ 18,496	\$ 1,974	\$ (157)	\$ 769	\$ 21,082
Year ended December 31, 2022	\$ 14,516	\$ 6,005	\$ (757)	\$ (1,268)	\$ 18,496

Item 9. Changes In and Disagreements With Accountants On Accounting and Financial Disclosure.

There have been no disagreements between the management of the Company and its Independent Registered Public Accounting Firm on any matter of accounting principles or practices of financial statement disclosures, or auditing scope or procedure.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

As of December 31, 2024, an evaluation was performed under the supervision and with the participation of the Company's management, including the principal executive officer ("PEO") and principal financial officer ("PFO"), of the effectiveness of the design and operation of the Company's disclosure controls and procedures as defined in Rule 13a-15(e) and Rule 15d-15(e) of the Securities Exchange Act of 1934, as amended. Based on that evaluation, the Company's PEO and PFO, concluded that the Company's disclosure controls and procedures were effective as of December 31, 2024.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). In evaluating the Company's internal control over financial reporting, management has adopted the framework in *Internal Control-Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (the "2013 Framework"). Under the supervision and with the participation of our management, including the PEO and PFO, we conducted an evaluation of the effectiveness of our internal control over financial reporting, as of December 31, 2024. Based on our evaluation under the 2013 Framework, our management has concluded that our internal control over financial reporting was effective as of December 31, 2024.

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

Ernst & Young LLP, an independent registered public accounting firm, as auditor of the Company's financial statements, has issued an attestation report on the Company's internal control over financial reporting as of December 31, 2024. Ernst & Young's report is included herein.

Changes in Internal Control Over Financial Reporting

There were no changes to our internal controls over financial reporting during the quarter ended December 31, 2024 that have materially or are reasonably likely to materially affect internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Stoneridge, Inc.

Opinion on Internal Control over Financial Reporting

We have audited Stoneridge, Inc. and subsidiaries' internal control over financial reporting as of December 31, 2024, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Stoneridge, Inc. and subsidiaries (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2024, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2024 and 2023, the related consolidated statements of operations, comprehensive (loss) income, cash flows and shareholders' equity for each of the three years in the period ended December 31, 2024, and the related notes and financial statement schedule listed in the Index at Item 15(a)(2) and our report dated March 3, 2025 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

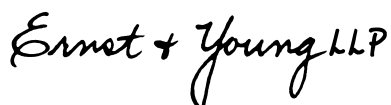
We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

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

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

The logo for Ernst & Young LLP, featuring the company name in a stylized, handwritten-style script.

Detroit, Michigan
March 3, 2025

Item 9B. Other Information.

During the three months ended December 31, 2024, no director or officer of the Company adopted or terminated a “Rule 10b5-1 trading arrangement” or “non-Rule 10b5-1 trading arrangement,” as each term is defined in Item 408(a) of Regulation S-K.

Credit Facility Amendment

On February 26, 2025, the Company entered into Amendment No. 1 to the Fifth Amended and Restated Credit Agreement and Waiver by and among the Company and certain of its subsidiaries as Borrowers, certain of its subsidiaries as Guarantors, PNC Bank, National Association, as Administrative Agent, and the financial parties thereto (the, “Lenders”) (“Amendment No. 1”). Amendment No. 1 provides for certain covenant relief and additional covenant restrictions during the “Covenant Relief Period” (the period ending on the date that the Company delivers a compliance certificate for the quarter ending December 31, 2025 in form and substance satisfactory to the administrative agent). During the Covenant Relief Period:

- the maximum leverage ratio of 3.50 was increased to 6.00 for the quarter ended March 31, 2025, 5.50 for the quarter ended June 30, 2025, 4.50 for the quarter ended September 30, 2025 and 3.50 for the quarter ended December 31, 2025;
- the minimum interest coverage ratio of 3.50 was waived for the quarter ended December 31, 2024 and was reduced to 2.00 for the quarters ended March 31 and June 30, 2025, and 2.50 and 3.50 for the quarter ended September 30, 2025 and December 31, 2025, respectively;
- the Company’s aggregate amount of cash and cash equivalents (as defined) cannot exceed \$70.0 million;
- the sale of significant assets (as defined) will require repayment in the amount of any net cash proceeds received and result in the reduction of the Credit Facility commitment, at the lesser of \$100.0 million or the net cash proceeds;
- there were certain restrictions on Restricted Payments (as defined); and
- a Permitted Acquisition (as defined) could not be consummated unless otherwise approved in writing by the required lenders.

Amendment No. 1 added an additional level to the leverage ratio based pricing grid, through maturity, when the leverage ratio is greater than 3.50.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections.

Not Applicable.

PART III**Item 10. Directors, Executive Officers and Corporate Governance.**

The information required by this Item 10 regarding our directors is incorporated by reference to the information under the sections and subsections entitled, “Proposal One: Election of Directors,” “Section 16(a) Beneficial Ownership Reporting Compliance” and “Corporate Governance” contained in the Company’s Proxy Statement in connection with its Annual Meeting of Shareholders to be held on May 13, 2025. The information required by this Item 10 regarding our executive officers appears as a Supplementary Item following Item 1 under Part I, hereof.

We have adopted a code of ethics that applies to our senior financial officers, including our principal executive officer, principal financial officer, and principal accounting officer. This code of ethics and our corporate governance policies are posted on our website at <https://investors.stoneridge.com/investors/corporate-governance/governance-documents/>. We will satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding any material amendment to our code of ethics, and any waiver from a provision of our code of ethics that applies to our principal executive officer, principal financial officer, principal accounting officer, or persons performing similar functions, by posting such information on our website at the internet website address set forth above.

We have an Insider Trading and Pre-Clearance Policy governing the purchase, sale and other dispositions of the Company’s securities that applies to all personnel of the Company, including directors, officers and employees and other covered persons. We believe that our Insider Trading and Pre-Clearance policy is reasonably designed to promote compliance with insider trading laws, rules and regulations, as well as applicable listing standards. A copy of our insider trading policy is filed as Exhibit 19.1.

Item 11. Executive Compensation.

The information required by this Item 11 is incorporated by reference to the information under the sections and subsections “Compensation Committee,” “Compensation Committee Interlocks and Insider Participation,” “Compensation Committee Report” and “Executive Compensation” contained in the Company’s Proxy Statement in connection with its Annual Meeting of Shareholders to be held on May 13, 2025.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information required by this Item 12 (other than the information required by Item 201(d) of Regulation S-K which is set forth below) is incorporated by reference to the information under the heading “Security Ownership of Certain Beneficial Owners and Management” contained in the Company’s Proxy Statement in connection with its Annual Meeting of Shareholders to be held on May 13, 2025.

In May 2010, we adopted an Amended Directors’ Restricted Share Plan and an Amended and Restated Long-Term Incentive Plan, as amended. In May 2013, we adopted an Amended Directors’ Restricted Shares Plan and an Amended and Restated Long-Term Incentive Plan, as amended, to increase the number of shares available for issuance under the plans. In May 2016, we adopted the 2016 Long-Term Incentive Plan. In May 2018, we adopted the 2018 Amended and Restated Director’s Restricted Shares Plan. In May 2022, we adopted the 2018 Amended and Restated Director’s Restricted Shares Plan, Amendment No. 1, to increase the number of shares available for issuance under this plan. In May 2024, we adopted the 2018 Amended and Restated Director’s Restricted Shares Plan, Amendment No. 2, to increase the number of shares available for issuance under the plan. Our shareholders approved each plan.

Equity compensation plan information as of December 31, 2024 is as follows:

	Number of securities remaining available for future issuance under equity compensation plans ^(A)
Equity compensation plans approved by shareholders	1,081,787
Equity compensation plans not approved by shareholders	—

(A) Excludes 935,154 share units issued to key employees pursuant to the Company’s 2016 Long-Term Incentive Plan.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information required by this Item 13 is incorporated by reference to the information under the subsections “Transactions with Related Persons”, “Review and Approval of Transactions with Related Persons” and “Director Independence” contained in the Company’s Proxy Statement in connection with its Annual Meeting of Shareholders to be held on May 13, 2025.

Item 14. Principal Accounting Fees and Services.

The information required by this Item 14 is incorporated by reference to the information under the subsections “Service Fees Paid to Independent Registered Accounting Firm” and “Pre-Approval Policies and Procedures” contained in the Company’s Proxy Statement in connection with its Annual Meeting of Shareholders to be held on May 13, 2025.

PART IV

Item 15. Exhibits, Financial Statement Schedule.

(a) The following documents are filed as part of this Form 10-K.

	Page in Form 10-K
(1) Consolidated Financial Statements:	
Report of Independent Registered Public Accounting Firm	31
Consolidated Balance Sheets as of December 31, 2024 and 2023	33
Consolidated Statements of Operations for the Years Ended December 31, 2024, 2023 and 2022	34
Consolidated Statements of Comprehensive (Loss) Income for the Years Ended December 31, 2024, 2023 and 2022	35
Consolidated Statements of Cash Flows for the Years Ended December 31, 2024, 2023 and 2022	36
Consolidated Statements of Shareholders' Equity for the Years Ended December 31, 2024, 2023 and 2022	37
Notes to Consolidated Financial Statements	38
(2) Financial Statement Schedule:	
Schedule II – Valuation and Qualifying Accounts	67
(3) Exhibits:	72

Exhibit Number	Exhibit
3.1	Second Amended and Restated Articles of Incorporation of the Company (incorporated by reference to Exhibit 3.1 to the Company's Annual Report on Form 10-K for the year ended December 31, 2022).
3.2	Amended and Restated Code of Regulations of the Company (incorporated by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2007).
4.1	Common Share Certificate (incorporated by reference to Exhibit 4.1 to the Company's Annual Report on Form 10-K for the year ended December 31, 1997).
4.2	Description of Stoneridge, Inc. Common Shares registered under Section 12 of the Securities Exchange Act of 1934, as amended (incorporated by reference to Exhibit 4.2 to the Company's Annual Report on Form 10-K for the year ended December 31, 2019).
10.1	Stoneridge, Inc. Deferred Compensation Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on June 2, 2017)*.
10.2	First Amendment to the Stoneridge, Inc. Deferred Compensation Plan (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on October 26, 2018)*.
10.3	Stoneridge, Inc. Long-Term Cash Incentive Plan (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2009)*.
10.4	Stoneridge, Inc. 2016 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.2 to the Company's Current Report on Form 8-K filed on May 12, 2016)*.
10.5	First Amendment to the Stoneridge, Inc. 2016 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K filed on May 20, 2020)*.
10.6	Stoneridge, Inc. Annual Incentive Plan (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on May 12, 2021)*.
10.7	Stoneridge, Inc. 2018 Amended and Restated Directors' Restricted Shares Plan (incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K filed on May 16, 2018)*.
10.8	Amendment No. 1 to the Stoneridge, Inc. 2018 Amended and Restated Directors' Restricted Shares Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on May 19, 2022)*.
10.9	Amendment No. 2 to the Stoneridge, Inc. 2018 Amended and Restated Directors' Restricted Shares Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on May 16, 2024)*.
10.10	Amended and Restated Officers' and Key Employees' Severance Plan of Stoneridge, Inc. (incorporated by reference to Exhibit 10.6 to the Company's Annual Report on Form 10-K for the year ended December 31, 2020)*.
10.11	Form of Change in Control Agreement (incorporated by reference to Exhibit 10.13 to the Company's Annual Report on Form 10-K for the year ended December 31, 2020)*.
10.12	Fourth Amended and Restated Credit Agreement (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on June 7, 2019).

Exhibit Number	Exhibit
10.13	Waiver and Amendment No. 1 to the Fourth Amended and Restated Credit Agreement (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on July 1, 2020).
10.14	Amendment No. 2 to the Fourth Amended and Restated Credit Agreement (incorporated by reference to Exhibit 10.22 to the Company's Annual Report on Form 10-K for the year ended December 31, 2021).
10.15	Amendment No. 3 to the Fourth Amended and Restated Credit Agreement (incorporated by reference to Exhibit 10.23 to the Company's Annual Report on Form 10-K for the year ended December 31, 2021).
10.16	Amendment No. 4 to the Fourth Amended and Restated Credit Agreement (incorporated by reference to Exhibit 10.23 to the Company's Annual Report on Form 10-K for the year ended December 31, 2022).
10.17	Fifth Amended and Restated Credit Agreement, dated November 2, 2023 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on November 2, 2023).
10.18	Form of Stoneridge, Inc. Directors' Restricted Shares Plan 2023 Grant Agreement (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023)*.
10.19	Form of Stoneridge, Inc. Long-Term Incentive Plan 2023 Performance Shares Grant Agreement (incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023)*.
10.20	Form of Stoneridge, Inc. Long-Term Incentive Plan 2023 Restricted Share Units Agreement (incorporated by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023)*.
10.21	Employment Agreement, dated April 13, 2023, between the Company and James Zizelman (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on April 18, 2023)*.
10.22	Indemnification Agreement, dated April 13, 2023, between the Company and James Zizelman (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on April 18, 2023).
10.23	Form of 2023 Phantom Share Grant Agreement (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on June 22, 2023)*.
10.24	Exit Agreement, dated April 30, 2024, between the Company and Peter Österberg (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2024)*.
10.25	Employment Contract, dated August 31, 2024, between the Company and Natalia Noblet (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2024)*.
19.1	Stoneridge Inc. Insider Trading and Pre-Clearance Policy, filed herewith.
21.1	Principal Subsidiaries and Affiliates of the Company, filed herewith.
23.1	Consent of Independent Registered Public Accounting Firm, filed herewith.
31.1	Chief Executive Officer certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, filed herewith.
31.2	Chief Financial Officer certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, filed herewith.

Exhibit Number	Exhibit
32.1	Chief Executive Officer certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, filed herewith.
32.2	Chief Financial Officer certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, filed herewith.
97.1	Stoneridge, Inc. Compensation Recovery Policy (incorporated by reference to Exhibit 97.1 to the Company's Annual Report on Form 10-K for the year ended December 31, 2023).
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File – the cover page XBRL tags are embedded within the Inline XBRL document

* - Reflects management contract or compensatory plan or arrangement required to be filed as an exhibit pursuant to Item 15(b) of this Annual Report on Form 10-K.

(b) The exhibits listed are filed as part of or incorporated by reference into this report.

(c) Additional Financial Statement Schedules. None.

Item 16. Form 10-K Summary.

None.

SIGNATURES

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

STONERIDGE, INC.

Date: March 3, 2025

/s/ MATTHEW R. HORVATH

Matthew R. Horvath

Chief Financial Officer and Treasurer

(Principal Financial Officer)

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

Date: March 3, 2025

/s/ JAMES ZIZELMAN

James Zizelman

President, Chief Executive Officer and Director

(Principal Executive Officer)

Date: March 3, 2025

/s/ MATTHEW R. HORVATH

Matthew R. Horvath

Chief Financial Officer and Treasurer

(Principal Financial Officer)

Date: March 3, 2025

/s/ ROBERT J. HARTMAN JR.

Robert J. Hartman Jr.

Chief Accounting Officer

(Principal Accounting Officer)

Date: March 3, 2025

/s/ WILLIAM M. LASKY

William M. Lasky

Chairman of the Board of Directors

Date: March 3, 2025

/s/ IRA C. KAPLAN

Ira C. Kaplan

Director

Date: March 3, 2025

/s/ KIM KORTH

Kim Korth

Director

Date: March 3, 2025

/s/ GEORGE S. MAYES, JR.

George S. Mayes, Jr.

Director

Date: March 3, 2025

/s/ CARSTEN J. REINHARDT

Carsten J. Reinhardt

Director

Date: March 3, 2025

/s/ SHEILA RUTT

Sheila Rutt

Director

Date: March 3, 2025

/s/ PAUL J. SCHLATHER

Paul J. Schlather

Director

Date: March 3, 2025

/s/ FRANK S. SKLARSKY

Frank S. Sklarsky

Director



39675 MacKenzie Drive, Suite 400
Novi, Michigan 48377