

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549



FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2018

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 001-35944

POWER SOLUTIONS INTERNATIONAL, INC.
(Exact Name of Registrant as Specified in its Charter)

Delaware
(State or Other Jurisdiction of Incorporation or Organization)
201 Mittel Drive, Wood Dale, IL
(Address of Principal Executive Offices)

33-0963637
(I.R.S. Employer Identification No.)
60191
(Zip Code)

(630) 350-9400

(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
None	—	—

Securities Registered Pursuant to Section 12(g) of the Act:

Common Stock, par value \$0.001 per share

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 and 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 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 if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

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

The aggregate market value of 4,950,215 shares of Common Stock held by non-affiliates of the registrant as of June 30, 2018 was \$47.5 million based on the last reported sale price on the over-the-counter (“OTC”) market on June 30, 2018 (although the total market capitalization of the registrant as of such date was approximately \$178.6 million). Shares of the registrant’s Common Stock held by each executive officer and director and by each person who holds 10% or more of the outstanding Common Stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of December 2, 2019, there were 22,856,534 outstanding shares of the Common Stock of the registrant.

TABLE OF CONTENTS

		Page
	PART I	
	Forward-Looking Statements	4
Item 1.	Business	5
Item 1A.	Risk Factors	12
Item 1B.	Unresolved Staff Comments	22
Item 2.	Properties	22
Item 3.	Legal Proceedings	22
Item 4.	Mine Safety Disclosures	22
	PART II	
Item 5.	Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	23
Item 6.	Selected Financial Data	23
Item 7.	Management’s Discussion and Analysis of Financial Condition and Results of Operations	23
Item 7A.	Quantitative and Qualitative Disclosures about Market Risk	34
Item 8.	Financial Statements and Supplementary Data	35
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	82
Item 9A.	Controls and Procedures	82
Item 9B.	Other Information	87
	PART III	
Item 10.	Directors, Executive Officers and Corporate Governance	88
Item 11.	Executive Compensation	93
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	95
Item 13.	Certain Relationships and Related Transactions, and Director Independence	97
Item 14.	Principal Accounting Fees and Services	97
	PART IV	
Item 15.	Exhibits, Financial Statement Schedules	98
Item 16.	Form 10-K Summary	102
	Signatures	103

FORWARD-LOOKING STATEMENTS

Certain statements contained in this Annual Report on Form 10-K that are not historical facts are intended to constitute “forward-looking statements” entitled to the safe-harbor provisions of Section 21E of the Securities Exchange Act of 1934. These statements may involve risks and uncertainties. These statements often include words such as “anticipate,” “believe,” “budgeted,” “contemplate,” “estimate,” “expect,” “forecast,” “guidance,” “may,” “outlook,” “plan,” “projection,” “should,” “target,” “will,” “would” or similar expressions, but these words are not the exclusive means for identifying such statements. These forward-looking statements include statements regarding the Company’s projected sales and potential profitability, strategic initiatives, future business strategies, warranty mitigation efforts and market opportunities, improvements in its business, remediation of internal controls, improvement of product margins, and product market conditions and trends. These statements are not guarantees of performance or results, and they involve risks, uncertainties and assumptions. Although the Company believes that these forward-looking statements are based on reasonable assumptions, there are many factors that could affect the Company’s results of operations and could cause actual results, performance or achievements to differ materially from those expressed in, or implied by, the Company’s forward-looking statements.

The Company cautions that the risks, uncertainties and other factors that could cause its actual results to differ materially from those expressed in, or implied by, the forward-looking statements include, without limitation: the factors discussed in this report set forth in Item 1A. Risk Factors; management’s ability to successfully implement the Audit Committee’s remedial recommendations; the time and effort required to complete its delinquent financial statements and prepare the related Form 10-Q filings, particularly within the current anticipated timeline, and resume timely filing of its periodic reports; the timing of completion of necessary interim reviews and audits by the Company’s independent registered public accounting firm; the timing of completion of steps to address, and the inability to address and remedy, material weaknesses; the identification of additional material weaknesses or significant deficiencies; variances in non-recurring expenses; risks relating to the substantial costs and diversion of personnel’s attention and resources deployed to address the financial reporting and internal control matters; the ability of the Company to accurately budget for and forecast sales, and the extent to which sales result in recorded revenues; changes in customer demand for our products, the impact of the investigations being conducted by United States Securities and Exchange Commission (the “SEC”), and the criminal division of the United States Attorney’s Office for the Northern District of Illinois (the “USAO”) and any related or additional governmental investigative or enforcement proceedings; any delays and challenges in recruiting key employees consistent with the Company’s plans; any negative impacts from delisting of the Company’s Common Stock from the NASDAQ Stock Market (“NASDAQ”) and any delays and challenges in obtaining a re-listing on a stock exchange.

The Company’s forward-looking statements are presented as of the date hereof. Except as required by law, the Company expressly disclaims any intention or obligation to revise or update any forward-looking statements, whether as a result of new information, future events or otherwise.

AVAILABLE INFORMATION

The Company is subject to the reporting and information requirements of the Securities Exchange Act of 1934, as amended, and as a result, it is obligated to file annual, quarterly and current reports, proxy statements and other information with the SEC. The Company makes these filings available free of charge on its website (<http://www.psiengines.com>) as soon as reasonably practicable after it electronically files them with, or furnishes them to, the SEC. Information on the Company’s website does not constitute part of this Annual Report on Form 10-K. In addition, the SEC maintains a website (<http://www.sec.gov>) that contains the annual, quarterly and current reports, proxy and information statements, and other information the Company electronically files with, or furnishes to, the SEC.

SPECIAL NOTE ABOUT THIS ANNUAL REPORT

This report is for the annual reporting periods as of and for the years ended December 31, 2018 and 2017. Because of the delay in the Company's public reporting and the changes in the business in the interim, much of the information relating to the Company's business and related matters as detailed below in Item 1. *Business* and Item 1A. *Risk Factors* is for the period between December 31, 2018 and the date of this filing. The Company also included quarterly unaudited information for 2018 and 2017 within this Form 10-K annual report, but it does not otherwise plan to file quarterly reports on Form 10-Q for such periods.

PART I

Unless the context indicates otherwise, references in this Annual Report to "Power Solutions," "PSI," "the Company," "Corporate," "it," "its" and "itself" mean Power Solutions International, Inc. and its wholly owned subsidiaries. References herein to "2018," "fiscal 2018" or "fiscal year 2018" refer to the fiscal year ended December 31, 2018. References herein to "2017," "fiscal 2017" or "fiscal year 2017" refer to the fiscal year ended December 31, 2017.

Item 1. Business.

The Board, Management, Internal Control and Reporting Improvements

As discussed in Item 9A. *Controls and Procedures*, included in Part II, the Company's management team has concluded that there were material weaknesses in the Company's internal control over financial reporting as of December 31, 2018. All of the material weaknesses were previously reported in the Annual Report on Form 10-K for the fiscal year ended December 31, 2017. Management is committed to the implementation of remediation efforts to address the material weaknesses. The remediation efforts summarized below, which have been or will be implemented, are intended both to address the identified material weaknesses and to enhance the Company's overall internal control environment. These efforts include the following:

- The Company appointed a new Chief Executive Officer and Chief Financial Officer in 2017 and a new Vice President, Internal Audit in 2018, with oversight from the Board of Directors (the "Board") and the Audit Committee consisting of new members (since 2017);
- The Company has updated its Code of Business Conduct and Ethics and has initiated an ongoing training program to help ensure that employees understand and comply with the Code.
- The Company will continue to enhance the program to provide extensive communications and training to employees across the entire organization regarding the importance of integrity and accountability;
- In addition to naming a new Chief Executive Officer and Chief Financial Officer, the Company has either replaced or appointed personnel for critical accounting positions with certified public accountants who have the appropriate level of public-company experience, including, among others, a Corporate Controller, a Director of Accounting and a Director of Financial Reporting; and
- The Company has developed and begun implementing a more comprehensive internal controls program along with a formal, enterprise-wide remediation plan, including detailed and prioritized action plans, owners and a phased timeline. This remediation plan is overseen by an executive Internal Control Steering Committee, and progress is communicated to the Audit Committee on a quarterly basis. The Internal Control Steering Committee of which the charter includes the following members: Chief Executive Officer, Chief Financial Officer, General Counsel, Vice President, Internal Audit, Chief Information Officer, Corporate Controller and Executive Vice President.

In light of the material weaknesses in internal control over financial reporting, prior to filing this Annual Report on Form 10-K, the Company completed substantive procedures, including extensive temporary manual procedures and other measures, as needed to assist with meeting the objectives otherwise fulfilled by effective internal control over financial reporting. These procedures included, but were not limited to, conducting additional analysis and implementing substantive measures.

The Company also added additional human resources and retained outside consultants with relevant accounting experience, skills and knowledge, working under the Company's supervision and direction to assist with the account closing and financial statement preparation process. These additional procedures have allowed the Company to conclude that, notwithstanding the material weaknesses in its internal control over financial reporting, the consolidated financial statements included herein fairly present, in all material respects, the Company's financial condition and results of operations for the periods presented in conformity with accounting principles generally accepted in the United States ("U.S. GAAP").

When fully implemented and operational, the Company believes the measures, more fully described in Item 9A. *Controls and Procedures*, included in Part II, will remediate the control deficiencies that led to the material weaknesses it has identified and will strengthen its internal control over financial reporting. The Company is committed to continuing to improve its internal control processes, and reviews its financial reporting controls and procedures on an ongoing basis. As the Company continues to evaluate and work to improve its internal control over financial reporting, it may determine additional measures are needed to address control deficiencies or modify certain remediation measures.

Government Investigations

The SEC's enforcement staff has been conducting an investigation focused on, among other things, the Company's prior financial reporting, misapplication of U.S. GAAP, revenue recognition practices and related conduct, and accounting errors which resulted in the Company restating its 2014, 2015 and first quarter 2016 consolidated financial statements. In addition, the USAO has been conducting a parallel criminal investigation into these matters. The Company is fully cooperating with the SEC and the USAO in their investigations, and it cannot currently predict the ultimate outcome of those investigations. The outcome of such investigations could have a material adverse effect on the Company, the trading prices of its securities and its ability to raise additional capital. If the SEC or the USAO determines that the Company violated federal securities or other laws and institutes civil enforcement or criminal proceedings, the Company may become subject to civil or criminal sanctions, including, but not limited to, criminal or civil charges, fines, other monetary penalties, injunctive relief and compliance conditions imposed by a court or agreement, which may have a material adverse effect on the business, financial condition or results of operations of the Company.

General Business Overview

Power Solutions International, Inc., incorporated under the laws of the state of Delaware in 2011, designs, engineers, manufactures, markets and sells a broad range of advanced, emission-certified engines and power systems that are powered by a wide variety of fuels, including natural gas, propane, gasoline, diesel and biofuels, within the energy, industrial and transportation end markets. The Company manages the business as a single segment.

The Company's products are primarily used by global original equipment manufacturers ("OEMs") and end-user customers across a wide range of applications and equipment that includes standby and prime power generation, demand response, microgrid, combined heat and power, arbor equipment, material handling (including forklifts), agricultural and turf, construction, pumps and irrigation, compressors, utility vehicles, light- and medium-duty vocational trucks, and school and transit buses.

The Company provides highly engineered, comprehensive solutions designed to meet specific customer application requirements and technical specifications, including those imposed by environmental regulatory bodies, including the U.S. Environmental Protection Agency ("EPA"), the California Air Resources Board ("CARB") and the People's Republic of China's Ministry of Ecology and Environment ("MEE," formerly the Ministry of Environmental Protection), as well as regulatory bodies within the European Union ("EU").

The Company's products include both sourced and internally designed and manufactured engines that are engineered and integrated with associated components. These comprehensive power systems are tested and validated to meet quality, safety, durability and global environmental standards and regulations.

Through advanced research and development ("R&D") and engineering capabilities, the Company is able to provide its customers with highly optimized, efficient, durable and emissions-compliant products that enhance their competitive position.

The Company's business is well balanced and diversified across end markets and applications and also includes extensive aftermarket and service parts programs. These programs consist of (i) internal aftermarket service parts programs with worldwide sales and distribution capabilities and (ii) internal OEM-developed service parts programs for components and products supplied by the Company.

The Company's end markets, product categories and equipment are as highlighted in the following table:

End Market	Product Categories	Equipment/Products
Energy	Electric Power Generation	Mobile and Stationary / Stand By and Prime Power Demand Response Microgrid Combined Heat and Power ("CHP")
	Large Custom Generator Set ("Genset") Enclosures	Electric Power Generators Grid Connectivity Solar and Wind
Industrial	Material Handling Agricultural Irrigation / Pumps Construction Compressors Other Industrial	Forklifts Wood Chippers Stump Grinders Sweepers/Industrial Scrubbers Aerial Lift Platforms/Scissor Lifts Irrigation Pumps Oil and Gas Compression Oil Lifts Off Road Utility Vehicles Ground Support Equipment Ice Resurfacing Equipment Pump Jacks
Transportation	Trucks Buses Fuel Systems and Tanks	Class 2 - 7 Vocational Trucks and Vans School Buses (Type A and Type C) Transit Buses Terminal and Utility Tractors

Products

The Company's sourced and internally designed and manufactured engine blocks are engineered and integrated with associated components in a range of configurations that includes basic engine blocks integrated with appropriate fuel system parts as well as completely packaged power systems that include any combination of front accessory drives, cooling systems, electronic systems, air intake systems, fuel systems, housings, power takeoff systems, exhaust systems, hydraulic systems, enclosures, brackets, hoses, tubes, packaging, telematics and other assembled componentry. The Company also designs and manufactures large, custom engineered integrated electrical power generation systems for both standby and prime power applications. The Company's comprehensive power systems are tested and validated to meet quality, safety, durability and global environmental standards and regulations.

The Company's engines and power systems include both emission-certified compression and spark-ignited internal combustion engines ranging from 0.99 liters ("L") to 53L of displacement, which run on a wide variety of fuels, including natural gas, propane, gasoline, diesel and biofuels within the energy, industrial and transportation end markets.

Strategic Initiatives/Growth Strategies

The Company has initiated a comprehensive set of business objectives aimed at improving profitability, streamlining processes, strengthening the business and focusing on achieving growth in higher-return product lines. Key elements of these objectives and other initiatives are highlighted below.

Improve profitability

The Company has implemented a plan focused on enhancing profitability through the review of its customer and product portfolio. To date, this has resulted in strategic price increases in certain areas of the business, along with product redesign and the re-sourcing of certain components, to support improved margins. This program is a multi-year effort and will entail a strategic assessment of certain areas in which profitability does not meet established thresholds. The Company is also seeking opportunities to improve its profitability through the initiation of programs to improve manufacturing efficiency and working capital efficiency. It has also been investing heavily in the expansion of its heavy-duty engine product line, which has historically provided better margins. Further, the Company is in the early phases of production of certain products and anticipates potential benefits as it gains improved economies of scale through greater volumes. Lastly, since mid-2016, the Company incurred substantial costs related to its restatement of prior financial statements and remediation of its material weaknesses. The Company has seen a meaningful reduction in certain of these costs with the completion of the restatement of its prior financial statements in May 2019 and expects to see further reductions once it files delinquent periodic reports and remediates its material weaknesses.

Warranty expense mitigation efforts

The Company aims to curtail its warranty expense through various mitigation efforts. As part of this, the Company is developing reimbursement and commercial remedies from key suppliers, where applicable. Also, the Company is undergoing a continued evaluation and improvement of its engineering validation and reliability programs for products and applications. The Company also continues to make investments in technology to further enhance its tools and processes.

Streamlining of business processes

The Company has an ongoing program to review and identify cost reductions throughout the organization. As part of this program, the Company continues to adopt tighter controls, monitors major areas of spending and is centralizing certain business processes.

Strengthening of business through the optimization of business systems and technology

The Company is working to strengthen its business through the optimization of its business systems and technology to support the remediation of internal controls, improve processes, drive greater operational efficiencies and provide better and timelier decision making across the organization. As part of this initiative, the Company is working on the upgrade and reimplementation of its Enterprise Resource Planning system.

Increased emphasis on energy product offerings through new product development and investments

The Company has been a major participant in the energy market for many years as a supplier to several of the world's leading power generation companies and through its large custom genset enclosure business. Building on its broad product offering, in March 2018 and October 2018, the Company received EPA certification for its 32L and 40L heavy-duty engines, respectively, and has development and launch plans for a 53L model. These heavy-duty engines provide a natural-gas-fueled power range from 500 kilowatt-electric ("kWe") to 1.25 megawatt ("MW"), which is well above the Company's prior capabilities, allowing it to serve a greater portion of the demand response, microgrid, combined heat and power, and oil and gas markets. Additionally, in September 2019, the Company received EPA emergency standby certification for its 20L, 40L and 53L diesel engines, which provide a power range of 550 kWe to 1.65 MW. These diesel engines are largely designed for energy market applications including emergency power, wastewater treatment, and oil and gas exploration and production. Also, the engines can handle mission critical customer operations in the health care, data center, hospitality and transportation industries. In addition to dedicating significant R&D resources within the energy market, the Company has also strategically invested in expanding its management, sales and operations staff to support these efforts. The Company's heavy-duty engines have historically provided better margins.

Capitalize on key market trends

The Company's breadth of products and solutions will enable it to capitalize on numerous market trends that it believes have the potential to drive customer demand for its products and contribute toward its long-term growth. Further, the Company's R&D activity is largely focused on expanding its solutions to further address trends in these areas. The key trends include the following:

- The worldwide growth of intermittent sources of energy, such as wind and solar, and an aged electric grid in the United States, coupled with power outage activity due to weather or power shutdowns, which is driving increased demand for generators, microgrids and demand response equipment;
- Increasingly stringent regulations and growing efforts to reduce emissions, which are driving demand for alternatives to diesel power engines (e.g., EPA Tier 4 emission standards, CARB regulations, MEE policies in China), in particular, in several markets such as the power generation market for oil and gas, school bus, arbor care and the China bus market, among others;
- Growth in e-commerce activity around the world, which is driving demand for last-mile delivery vehicles; and
- The availability of automotive engines that are suited for industrial application.

New product expansion by leveraging deep industry experience

Throughout the Company's history, it has evolved from a provider of diesel power systems to become a major supplier of power systems fueled by alternatives to diesel, including gasoline, propane and natural gas, among others. By leveraging the deep industry experience of its engineering and new-product development teams, the Company is continuing to take steps to broaden the range of its power system product offerings, including engine classes, power ratings and the OEM and direct user market categories into which it supplies products. The Company plans to capitalize on its technologically sophisticated, in-house design, prototyping, testing and application engineering capabilities to further refine its superior power system technology.

Leverage the Company's relationship with Weichai

In March 2017, the Company executed a share purchase agreement (the "SPA") with Weichai America Corp., a wholly owned subsidiary of Weichai Power Co., Ltd. (HK2338, SZ000338) (herein collectively referred to as "Weichai"). Under the terms of the SPA, Weichai invested \$60.0 million in the Company (the "Weichai Transaction") by purchasing a combination of newly issued Common and Preferred Stock as well as a stock purchase warrant, which significantly strengthened the Company's financial condition and contributed to the subsequent extinguishment of a \$60.0 million term loan. The Company and Weichai also entered

into a strategic collaboration agreement (the “Collaboration Agreement”) under which they have been working together to accelerate market opportunities for each company’s respective product lines across various geographic and end-user markets.

The Collaboration Agreement provides the Company with strategic benefits and opportunities, including the ability to leverage Weichai’s strengths and capabilities in R&D, manufacturing, procurement and distribution and its widespread sales channels in China and other emerging markets. This collaboration has already enabled the Company to broaden its existing product portfolio, improve material quality, decrease costs, accelerate the development of new products and bring them to market, and expand access and exposure to new markets.

Among other things, the Collaboration Agreement establishes a joint steering committee, permits Weichai to second a limited number of certain technical, marketing, sales, procurement and finance personnel to work at the Company and establishes several collaborations, including with respect to stationary natural gas applications and Weichai diesel engines. The Collaboration Agreement also provides for the steering committee to create different subcommittees with various operating roles, and it otherwise governs the treatment of intellectual property of the parties prior to the collaboration and the intellectual property developed during the collaboration. The Collaboration Agreement has a term of three years.

The Weichai stock purchase warrant, as last amended (the “Weichai Warrant”), was exercisable commencing on April 1, 2019 for such number of shares of the Company’s Common Stock as was sufficient to provide Weichai with majority ownership of the Company’s Common Stock. On April 23, 2019, Weichai exercised the Weichai Warrant resulting in the Company issuing 4,049,759 shares of the Company’s Common Stock (see Changes in Control section, included in Part III, Item 12. *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters*, for additional information). Weichai is currently the Company’s largest stockholder, holding 51.4% of the Company’s outstanding Common Stock as of December 2, 2019.

Expand global business

Through the expansion of its product lineup and the entry into new markets, the Company has a history of growing its product offerings internationally beyond North America. The Company sees opportunity in continuing to grow its business worldwide with further R&D investment including new-product development and offerings.

Strengthened engine development and testing capability

In April 2018, the Company acquired the assets of Chicago Technical Center R&D facility from Ricardo, Inc. This transaction has allowed the Company to significantly strengthen and expand its testing capabilities and increase its capacity to meet current and future engine development, certification and durability testing needs. The advanced R&D facility immediately provided three strategic benefits for the corporate engine programs: (i) increased speed to market response, (ii) greater ability to innovate and optimize product performance and reliability, and (iii) lower cost of product development through direct control of in-house EPA and CARB-certified testing cell operations, scheduling and management of the industry-leading engine testing center.

Sales and Marketing

The Company employs a direct sales and marketing approach to maintain maximum interface with and service support for its OEM customers. This direct interface incorporates the corporate internal technical sales representatives. The Company complements its direct OEM relationships with a localized, independent sales and product support organization. This localized sales and support organization provides the necessary knowledge of local customs and requirements while also delivering immediate sales assistance and customer support.

The Company has invested in and is focused on capturing aftermarket sales of the value-added components that are included in its power systems. With a significant portion of the selling prices of the Company’s power systems coming from value-added components, this is a large, continuing growth opportunity for its aftermarket business.

Customers

The Company’s customers primarily include global OEMs and direct end users across a wide range of applications that demand high product quality, best-in-class engineering support and on-time delivery. Within several applications for which the Company provides solutions, it maintains supplier relationships with two or more customers, which are often among the largest in that category.

The Company’s largest customers, based upon its consolidated net sales in 2018, included Hyster-Yale Materials Handling Group and the following subsidiaries / affiliates of Daimler AG: Freightliner Custom Chassis Corporation, Thomas Built Buses and FUSO Company (collectively, “Freightliner”). Hyster-Yale Materials Handling Group and Freightliner represented 15% and 11% of 2018 consolidated net sales, respectively. The largest customers change from time to time as a result of various factors, including prevailing market conditions, customers’ strategies and inventory of the Company’s power systems.

Competition

In each of the Company's end markets there are a variety of competitors, including engine manufacturers, independent suppliers and distributors of engines, fuel systems and component providers, manufacturers of power generation equipment, engine packagers and integrators, and the in-house operations of certain OEMs, some of which have longer operating histories, strong brand recognition and significantly greater financial and marketing resources.

Notwithstanding significant competition, the Company believes that the following factors provide it with a differentiated value proposition that allows the Company to compete effectively:

- Fuel-agnostic strategy;
- Demonstrated expertise in on- and off-road applications;
- Ability to leverage Weichai's strengths and capabilities;
- Completeness and comprehensiveness of engines and power systems;
- Expansive product integrations, including electronics, controls, fuel systems and transmissions;
- Commonality of technology platform spanning all product lines;
- Emissions regulation compliance and certification;
- Breadth and depth of advanced engineering disciplines;
- Industry-leading product and application engineering;
- Competitive pricing/cost;
- Ability to tailor power systems to specific customer needs;
- Performance and quality;
- Speed to market; and
- Customer support and service.

Manufacturing

The Company manufactures and assembles its products at facilities in suburban Chicago, Illinois, and Darien, Wisconsin, and customizes its power systems to meet specific requirements of OEM applications and the needs of its OEM customers. The Company has invested in precision computer numerical control ("CNC") machining equipment to finish its internally designed engine blocks and cylinder heads, which are cast by various suppliers. The manufacturing lines in the Company's production facilities are technologically sophisticated lean, agile and flexible, and the Company allocates production capacity on its mixed model manufacturing lines to accommodate the demand levels and product mix required by its OEM customers.

The Company focuses on safety, people, quality, on-time delivery and cost in its manufacturing operations. The Company is certified to the most recent International Organization for Standardization ("ISO") standard, ISO 9001: 2015. The ISO 9000 family of quality management standards, which must be met in order to become ISO certified, is designed to help organizations monitor and improve the quality and delivery of their products and/or services to their customers. The Company also uses tools such as Six Sigma, Lean Manufacturing, 80/20, Value Stream Mapping and other manufacturing engineering strategies to help manage its business, build quality, and drive performance and a continuous improvement culture within the manufacturing operations' teams. The Company also uses a customer relationship management database to help to collect customer feedback and to track overall quality performance at its OEM customers. Structured staff training is a constant priority and includes closed-loop quality monitoring and feedback systems.

Research, Development and Engineering

The Company's research, development and engineering programs are focused on new product development, enhancements to current products, quality improvements and material cost reductions across its product lines. Its efforts are market driven, with the sales team identifying and defining market requirements and trends and its engineering and new-product development groups reviewing existing power system portfolios and developing new solutions that build upon the technology within that portfolio. To further enhance the Company's research, development and engineering programs, the Company finalized the purchase of emissions testing assets and the sublease of an emissions testing facility from Ricardo, Inc., a subsidiary of the strategic engineering and environmental consultancy, Ricardo Plc., for \$5.6 million in cash in April 2018. See Note 4. *Property, Plant and Equipment, and Leases* in Item 8. *Financial Statements and Supplemental Information* for further discussion.

The Company's product and application development engineering teams include in-house mechanical and electrical engineering functions. Internal resources are supplemented with engineering outsourcing relationships for design, development and product testing. In addition to these engineering outsourcing relationships, the Company benefits from the design, development and testing capabilities of its supplier base. The Company staffs its engineering support activities associated with released product and component sourcing programs with dedicated internal engineering personnel.

Research, development and engineering expenditures include salaries, contractor fees, building costs, utilities, testing, information technology and administrative expenses and are expensed, net of contract reimbursements, when incurred. From time to time, the Company enters into agreements with its customers to fund a portion of the research, development and engineering costs of a

particular project. These reimbursements are accounted for as a reduction of the related Research, development and engineering expenditure. The Company's research, development and engineering expenditures for 2018 and 2017 were \$28.6 million and \$19.9 million, respectively.

Supplier Relationships

In addition to producing its own engines, the Company has established relationships with its suppliers for certain engines that are integrated into its comprehensive power systems, the most significant of which are Doosan Infracore Co., Ltd. ("Doosan"), a subsidiary of Doosan Group, Shenyang Aerospace Mitsubishi Motors Engine Manufacturing Co., Ltd. ("SAME"), General Motors Company ("GM") and Weichai. The Company also sources other power system components and coordinates design efforts with third-party suppliers for some of its key components. In general, the prices at which the Company purchases engines, components and other raw materials are based on market factors, including the prices offered by other suppliers operating in the same market and the prevailing market prices of raw materials.

The Company aggregates product sourcing efforts across its large and diverse OEM customer base and across industry categories, capitalizing on volume, economies of scale and global supply opportunities. The Company's customers benefit from the aggregation of its global sourcing, procurement, and assembly and services, obtaining cost benefits that they might not obtain if they were to rely on their own internal resources, capabilities and more limited demand requirements. Through this process, customers are able to streamline their supply base by consolidating procurement and assembly efforts down to a single part number product supplied by the Company. The Company delivers this assembly to its customer's production line ready to install into the customers' product.

The Company is party to a supply agreement with Doosan, under which it purchases and distributes, on an exclusive basis, specified Doosan engines within a territory consisting of the United States, Canada and Mexico. On October 1, 2019, the supply agreement with Doosan was amended and extended to December 31, 2023, after which the agreement will automatically be extended for additional one-year terms unless a notice of termination is provided by either party six months prior to the scheduled expiration. The addendum also includes minimum product purchase commitments for the period 2019 through 2023, subject to reductions based on market declines in oil prices and defined prescribed payments to Doosan triggered by shortfalls in purchases made by the Company during each annual calendar period.

The Company is also party to a supply agreement with GM through December 31, 2019 for the exclusive purchase and distribution of the 6.0L engine to OEMs for usage in the on-road market, which includes the Company's sale of this engine to its customer, Freightliner. With the GM announcement that it will discontinue its production of the 6.0L engine, the Company has been conducting last time buys of this engine to ensure adequate supply to Freightliner and other customers. The Company does not have a supply agreement with GM for its successor product to the 6.0L engine. However, it is actively exploring opportunities to identify engine alternatives for this product.

The Company is also party to a supply agreement with SAME through December 31, 2019 for the exclusive purchase and distribution of engines around the world, with the exception of China (including Hong Kong, Macao and Taiwan), within the forklift and marine markets. The agreement, which automatically extends for an additional one-year term on an annual basis, unless either party provides notice of termination at least 180 days before the expiration date, includes minimum purchase commitments.

Product Support

The Company's dedicated team of product and application engineers enables it to deliver high-quality, responsive technical support to its OEM and end-user customers. The Company provides technical support and training to its customers, including in-plant training and support through web- and phone-based field service. The Company further supports its customers by engaging regional providers to perform warranty services and offer support for its power systems. The Company also leverages its technical resources to provide service and support functions for its power systems sold to OEM customers.

Backlog

Backlog generally is not considered a significant factor in the Company's business.

Employees

As of December 31, 2018, the Company's workforce consisted of approximately 1,100 full-time employees. None of the members of the Company's workforce are represented by a union or covered by a collective bargaining agreement.

Impact of Government Regulation

The Company's power systems are subject to extensive statutory and regulatory requirements that directly or indirectly impose standards governing exhaust emissions, evaporative emissions, greenhouse gas ("GHG") emissions and noise. The Company's power systems are subject to compliance with regulatory standards imposed by the EPA, state regulatory agencies in the United States, including the CARB, and other regulatory agencies around the world, such as the MEE. Since its engines are sold into both off-road and on-road markets, the Company must ensure certification to the specific regulations within the applicable statutory segment. For products sold into the U.S. market, both EPA and CARB have imposed specific regulations on engines used in both

off-road equipment and on-road vehicles. These regulations generally serve to restrict exhaust emissions, with a primary focus on oxides of nitrogen, hydrocarbons and carbon monoxide. Exhaust emission regulations for engines used in off-highway industrial and power generation equipment vary based upon the use of the equipment into which the engine is incorporated (such as stationary power generation or mobile off-highway industrial equipment) and the type of fuel used to drive the power system. Similarly, on-road regulations from the EPA and CARB focus on the same exhaust constituents as well as sophisticated requirements to meet on-board diagnostic (“OBD”) system regulations. Emissions of GHGs such as carbon dioxide (“CO2”), methane and nitrogen dioxide (“NO2”) are also regulated, with more stringent regulatory requirements starting in 2021. The Company continues to make significant investments into the necessary intellectual property that supports full compliance of the Company’s engines now and into the foreseeable future.

The first EPA emissions regulations adopted for diesel engines, known as Tier 1, applied to diesel engines used in mobile off-highway applications in the U.S., and similar standards for diesel engines, known as Stage I regulations, were implemented thereafter in the EU. The EPA and applicable agencies in the EU have continued to develop emissions regulations for diesel engines in the U.S. and the EU, respectively, and have adopted more restrictive standards. The current diesel engine emission requirements in the U.S are known as Tier 4 and are applicable to off-road diesel engines used in industrial equipment. Similarly, the EU has adopted more restrictive standards under its Stage V regulations. Tier 4 and Stage V regulations call for reductions in levels of particulate matter and oxides of nitrogen.

The Company’s entry into the transportation end market began in 2013 with the development of its 8.8L power systems targeted for 2015 regulatory standards. In 2014, the EPA and CARB certified the Company’s new engine as a Model Year 2015 product for liquid propane gas (“LPG”) and compressed natural gas (“CNG”) fuels, and in 2015 the Company launched its first propane-fueled engine for on-road applications. To assist the adoption of alternative-fueled vehicles in the marketplace, the EPA and CARB granted alternative-fueled engines an exemption from OBD regulations until 2018 (CARB)/2019 (EPA). The Company has leveraged this exemption on its 8.8L certifications to date. Gasoline engines are not exempt from OBD regulations, therefore, in 2017, the Company achieved full OBD certification for its 2018 and beyond gasoline 6.0L and 8.8L products. The knowledge gained from this gasoline OBD development is being applied to the Company’s alternative-fueled engines for 2019 after all OBD exemptions ended as of December 31, 2018. In 2016, the EPA launched new Phase 1 GHG emission regulations. The Company’s products currently qualify for an exemption for Phase 1 GHG under Title 40 of the Code of Federal Regulation Section 1036.150(d). Starting in 2020, the Company’s engines will need to meet Phase 1 GHG standards as a result of the Weichai ownership change in 2019 as the Company’s products will no longer qualify for the exemption. The Company has developed a plan to address the impact of the regulation requirements. New EPA Phase 2 GHG regulations will start in 2021 and the Company’s engines will need to meet Phase 2 GHG standards.

The initial and ongoing certification requirements vary by power system application and market segment. Each application must undergo a series of rigorous and demanding tests to demonstrate compliance with regulatory standards, including useful life, zero hours and durability testing. Once a power system is certified, regulatory agencies impose ongoing compliance requirements, which include testing newly produced power systems on a regular quarterly schedule to ensure ongoing compliance with applicable regulations. In addition, there are field audit requirements, which require the removal of power systems from service at specified stages of their useful lives to perform confirmatory exhaust emissions testing and/or OBD system audits and testing. All of the Company’s emission-certified power systems meet existing exhaust emission standards of the EPA and CARB. Failure to comply with these standards could result in adverse effects on the Company’s future financial results.

Item 1A. Risk Factors.

The Company’s business and results of operations are subject to various risks, including those listed below, many of which are not within the Company’s control, which may cause actual financial performance to differ materially from historical or projected future performance. These factors are not necessarily listed in order of importance. New risks may emerge at any time, and the Company cannot predict those risks or estimate the extent to which they may affect its results of operations.

Risks Related to the Company’s Delay in Filing Timely Reports with the SEC, the Restatement of Prior Consolidated Financial Statements, Accounting and Internal Controls, the Company’s De-listing from NASDAQ, and Litigation Related to These Aforementioned Items

The Company is the subject of a formal investigation by the SEC and a parallel criminal investigation by the USAO. Any adverse outcome of these continuing investigations could have a material adverse effect on the Company.

While the Company is fully cooperating with the SEC and the USAO in their investigations, it cannot currently predict the ultimate outcome of those investigations. Such investigations and the outcome of such investigations could have a material adverse effect on the Company, the trading prices of its securities and its ability to raise additional capital. If the SEC or the USAO determines

that the Company violated federal securities or other laws and institutes civil enforcement or criminal proceedings, the Company may become subject to civil or criminal sanctions, including, but not limited to, civil or criminal charges, fines, other monetary penalties, injunctive relief and compliance conditions imposed by a court or agreement, which may have a material adverse effect on the financial condition or results of operations of the Company.

The restatement of the Company's previously issued consolidated financial statements and the delays in the Company's filing of consolidated financial statements has resulted in shareholder lawsuits that could have a material adverse effect on the Company's financial condition, results of operations and cash flows.

The Company has been subject to various shareholder lawsuits arising from matters related to the errors identified in the restatement of its previously issued financial statements. The Company may encounter additional such lawsuits. The Company has devoted and may be required to continue to devote significant time, attention and resources to these matters, and the outcome of these lawsuits cannot be predicted. Substantial damages or other monetary remedies assessed against the Company could have a material adverse effect on its business, financial condition, results of operations and cash flows. See Note 9. *Commitments and Contingencies*, included in Part II, Item 8. *Financial Statements and Supplementary Data*, for additional information regarding these matters.

Limitations of the Company's Directors and Officers liability insurance and potential indemnification obligations will have a material adverse effect on the Company's financial condition, results of operations and cash flows.

Under its bylaws and certain indemnification agreements, the Company has obligations to indemnify current and former officers and directors and certain current and former employees. Based on cumulative legal fees incurred and probable legal settlements, at December 2, 2019, the Company estimates that it has approximately \$1.6 million of remaining availability under its primary directors and officers insurance coverage of \$30 million. Expenses incurred or liabilities that may be imposed in connection with actions against certain of the Company's past and present directors and officers and certain current and former employees who are entitled to indemnification in excess of the remaining availability under the Company's directors and officers insurance coverage will require the Company to fund such expenses with its existing cash resources, which will have a material adverse effect on the Company's financial condition, results of operations and cash flows.

As a result of the Company's delayed filings, NASDAQ delisted the Company's Common Stock in April 2017. The continued delisting of its Common Stock could have a material adverse effect on the Company.

The failure to timely file its periodic reports with the SEC resulted in the Company not being in compliance with NASDAQ Listing Rule 5250(c)(1), which requires listed companies to timely file all required periodic financial reports with the SEC, and triggered the delisting of the Company's Common Stock. The Company's delisting and potential inability to remediate failures to comply with applicable NASDAQ rules to be relisted could have a material adverse effect on the Company by, among other things, reducing:

- The liquidity of its Common Stock;
- The market price of its Common Stock;
- The number of institutional and other investors that will consider investing in its Common Stock;
- The number of market makers in its Common Stock;
- The availability of information concerning the trading prices and volume of its Common Stock;
- The number of broker-dealers willing to execute trades in shares of its Common Stock;
- The Company's ability to obtain equity financing for the continuation of its operations;
- The Company's ability to use its equity as consideration in any merger transaction; and
- The effectiveness of equity-based compensation plans for its employees used to attract and retain individuals important to the Company's operations.

The Company has identified material weaknesses in its internal control over financial reporting that have not been fully remediated. If its remediation measures are insufficient to address the material weaknesses, or if the Company otherwise fails to establish and maintain an effective system of internal control over financial reporting, it may not be able to accurately report financial results, timely file periodic reports, maintain its reporting status or prevent fraud.

In connection with the Company's assessment of the effectiveness of its internal control over financial reporting as of December 31, 2018, the Company concluded that there were material weaknesses in its internal control over financial reporting. See Item 9A. *Controls and Procedures*, included in Part II, for additional information regarding these matters.

The Company's management may identify other material weaknesses in its internal control over financial reporting in the future. The existence of internal control material weaknesses could harm its business, the market price of its Common Stock and its ability to retain the Company's current, or obtain new, lenders, suppliers, key employees, and alliance and strategic partners. In addition, the existence of material weaknesses in the Company's internal control over financial reporting may affect its ability to timely file periodic reports under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). The inability to timely file periodic reports could result in the SEC revoking the registration of the Company's Common Stock, which would negatively impact the Company's ability to re-list its Common Stock on the NASDAQ or any other stock exchange.

The Company has incurred significant costs in connection with the restatement of previously issued consolidated financial statements and will continue to incur significant costs to remediate its failure to timely file its periodic reports and related material weaknesses in internal control.

The Company has incurred, and will continue to incur, significant expenses, including audit, legal, consulting and other professional fees, and lender and noteholder consent fees, related to the restatement of its previously issued consolidated financial statements and the ongoing remediation of material weaknesses in its internal control over financial reporting. The Company has taken a number of actions, including adding significant internal resources and implementing a number of additional procedures and controls, in order to strengthen its accounting function and reduce the risk of future material misstatements in its financial statements. To the extent that these actions are not successful, the Company may be forced to incur additional time and expense, which could have a material adverse effect on its results of operations.

The Company's historical failure to timely file its periodic reports with the SEC could materially and adversely affect its prospective results of operations and may limit it from accessing the public or capital markets to raise debt or equity capital, which may limit the Company's ability to access debt capital financing, which in turn may limit its ability to pursue one of its potential strategies.

Any failure to make timely filings of one or more future periodic reports could result in further defaults and breaches and further negatively impact the Company's creditworthiness, each of which could have an adverse impact on its ability to obtain financing in the future, the cost of future financings and its results of operations.

Any failure by the Company to make timely filings with the SEC or other failure to remain compliant with reporting requirements of the SEC may inhibit its ability to access the public or capital markets to raise debt or equity capital. The inability to access capital may limit the Company's options to finance its business and may substantially limit its ability to finance potential acquisitions or other strategies. As needs arise, the Company may seek additional borrowings or alternative sources of financing; however, difficulties in borrowing capital or raising financing could have a material adverse effect on its operations, planned capital expenditures and ability to fund further growth.

Risks Related to the Company's Business and Industry

The Company's management has concluded as of the filing of this 2018 Form 10-K that, due to uncertainty surrounding the Company's ability to extend or refinance its current debt agreements and uncertainty as to whether it will have sufficient liquidity to fund its business activities, substantial doubt exists as to its ability to continue as a going concern. The Company's plans to alleviate the substantial doubt about its ability to continue as a going concern may not be successful, and it may be forced to limit its business activities or be unable to continue as a going concern, which would have a material adverse effect on its results of operations and financial condition.

The consolidated financial statements included herein have been prepared assuming the Company will continue as a going concern. Its ability to continue as a going concern is dependent on generating profitable operating results, having sufficient liquidity, maintaining compliance with the covenants and other requirements under the Wells Fargo Credit Agreement (the "Wells Fargo Credit Agreement") with Wells Fargo Bank, N.A. ("Wells Fargo") and the Unsecured Senior Notes (the "Unsecured Senior Notes"), and refinancing or repaying the indebtedness outstanding under those agreements. The current Wells Fargo Credit Agreement maturity date is the earlier of March 31, 2021, or 60 days prior to the final maturity of the Unsecured Senior Notes, which currently mature on June 30, 2020, resulting in a current maturity date of May 1, 2020 for the Wells Fargo Credit Agreement.

As noted above, the Company will need to refinance, extend the maturity of or repay the indebtedness outstanding under the Unsecured Senior Notes no later than April 30, 2020 to avoid acceleration of the Wells Fargo Credit Agreement. There can be no assurance that it will be able to effect a financing on acceptable terms or repay this outstanding indebtedness, when required or if at all. If the Company does not have sufficient liquidity to fund its business activities, it may be forced to limit its business activities or be unable to continue as a going concern, which would have a material adverse effect on its results of operations and financial condition.

Furthermore, if the Company cannot raise capital on acceptable terms, it may not, among other things, be able to:

- Continue to expand the Company's research and product investments and sales and marketing organization;
- Expand operations both organically and through acquisitions; and
- Respond to competitive pressures or unanticipated working capital requirements.

The Company has experienced substantial net losses in recent fiscal years and may continue to experience net losses.

The Company has experienced substantial net losses in fiscal years 2018 and 2017 and has negative stockholders' equity as of December 31, 2018. The net losses experienced in 2018 and 2017 are principally attributable to unfavorable gross margin levels resulting from manufacturing productivity challenges, increased warranty claims on certain product lines, failure to pass cost increases on to customers through pricing actions and significant unrecovered costs associated with the transportation product line, along with a noncash valuation loss associated with the issuance of the Weichai Warrant, substantial legal and professional expenses associated with efforts to restate the Company's financial statements, respond to the government investigations and defend the lawsuits related to the restatements, high outstanding debt, borrowing costs and loss on the extinguishing of debt. The Company expects that many of these costs will remain significant in future periods. Continued losses could reduce cash available from operations to service or refinance the Company's indebtedness as necessary, as well as limit the Company's ability to finance future growth in its business and implement its strategies.

The Company has a significant amount of indebtedness and is highly leveraged. Its existing debt or any potential new debt could adversely affect its business and growth prospects.

As of September 30, 2019, the Company's total debt obligations under the Wells Fargo Credit Agreement and the Unsecured Senior Notes were approximately \$92 million, with available borrowing capacity of approximately \$20 million under the Wells Fargo Credit Agreement. The Company has a significant amount of indebtedness and is highly leveraged. The Company's debt arrangements contain and may contain in the future certain requirements, including specific financial and other covenants or restrictions. The failure or the inability to meet such obligations under existing debt or any new debt could materially and adversely affect the Company's business and financial condition. In addition, the Company's debt obligations could make it more vulnerable to adverse economic and industry conditions and could limit its flexibility in planning for or reacting to changes in its business and the industries in which it operates. The Company's indebtedness and the cash flow needed to satisfy its debt obligations and the covenants contained in current and potential future debt agreements could have important consequences, including the following:

- Limiting funds available for borrowing through the imposition of availability blocks;
- Limiting funds otherwise available for financing capital expenditures by requiring dedication of a portion of cash flows from operating activities to the repayment of debt and the interest on such debt;
- Limiting the ability to incur additional indebtedness;
- Limiting the ability to capitalize on significant business opportunities, including mergers, acquisitions and other strategic transactions;
- Making the Company more vulnerable to rising interest rates or higher interest rates; and
- Making the Company more vulnerable in the event of a downturn in its business.

The Company's current debt arrangements place limitations on its ability to make acquisitions and restrict its ability to incur additional indebtedness. Any failure by the Company to comply with the financial covenants set forth in its current credit agreements in the future, if not cured or waived, could result in the acceleration of debt maturities or prevent the Company from accessing availability under its credit facility. If the maturity of the indebtedness is accelerated, the Company may not have sufficient cash resources, or have the ability to obtain financing through alternative resources, to satisfy its debt obligations, and the Company may not be able to continue as a going concern.

The introduction of new products, including new engines that the Company develops, and the continued expansion of products in the energy and transportation markets may not succeed or achieve widespread acceptance.

The Company's growth depends on its ability to develop and/or acquire new products and/or refine existing products and power system technology, to complement and enhance the breadth of its power system offerings with respect to engine class and the OEM market categories into which the Company supplies its products. The Company will generally seek to develop or acquire new products, or enhance existing products and power system technology, if it believes such acquisitions or enhancements will provide significant additional sales and favorable profit margins. However, the Company cannot know beforehand whether any new or enhanced products will successfully penetrate target markets. There can be no assurance that newly developed or acquired products will perform as well as the Company expects, or that such products will gain widespread adoption among the Company's customers.

Additionally, there are greater design and operational risks associated with new products. The inability of the Company's suppliers to produce technologically sophisticated components for new engines and power systems, the discovery of any product or process defects or failures associated with production of any new products, and any related product returns could each have a material adverse effect on the Company's business and its results of operations. If new products that the Company expends significant resources to develop or acquire are not successful, or do not achieve the required production volume and scale, its business could be adversely affected.

The Company's strategy includes production of in-house developed and manufactured engines used by OEM customers, including large transportation OEMs. The costs and regulations involved with developing and certifying an engine for transportation

applications are significant and may be higher and more stringent than expected. Additionally, the stresses and demands on engines and power systems used for transportation applications could result in unexpected issues. The discovery of any significant problems with these engines could result in recall campaigns, increased warranty costs, potential product liability claims, and reputational and brand risks. Sales of the Company's internally developed engines could lead to significantly higher warranty costs to service these engines if they do not perform to expectations.

The Company could incur restructuring and impairment charges as it evaluates its portfolio of assets and identifies opportunities to restructure its business in an effort to optimize its cost structure.

The Company continuously evaluates its portfolio of assets and its operational structure in an effort to identify opportunities to optimize its cost structure. These actions could result in restructuring and related charges, including but not limited to asset impairments and employee termination costs, any of which could be significant and could adversely affect the Company's results of operations.

The Company has substantial amounts of long-lived assets, including goodwill and intangible assets, which are subject to periodic impairment analysis and review. Identifying and assessing whether impairment indicators exist, or if events or changes in circumstances have occurred, including market conditions, operating results, competition and general economic conditions, requires significant judgment. Declines in profitability due to changes in volume, market pricing, cost or the business environment could result in charges that could have an adverse effect on the Company's results of operations.

The Company is dependent on third-party suppliers, and the partial or complete loss of one of these key suppliers, or the failure to find replacement suppliers or manufacturers in a timely manner, could result in supply shortages.

The Company sources engines, components and replacement parts used in the assembly of its power systems and aftermarket sales from various third-party suppliers. Much of the technology incorporated into the components that the Company sources from a limited number of suppliers is technologically sophisticated, and the Company does not believe that its competitors have access to some of this sophisticated technology. The Company's business could be harmed by adverse changes in its relationships with these suppliers, including through the management of the timing of payables, or if its competitors gain access to such technology. The viability of certain key third-party suppliers, or the exiting by certain suppliers of certain business lines, could require the Company to find other suppliers for materials or components. Some components cannot be quickly or inexpensively re-sourced to another supplier due to long lead times and contractual commitments that might be required by another supplier in order to provide the components or materials. Any extended delay in receiving engines or other critical components, or the inability of third-party suppliers to meet the Company's quality, quantity or cost requirements, could impair or prohibit the Company's ability to deliver products to its OEM customers.

The loss of certain of the Company's exclusive supply and distribution agreements, coupled with the Company's inability to manufacture or source alternative products, could have a material adverse impact on its financial results.

The Company is the exclusive supplier and distributor of certain engine products sourced from certain engine manufacturers. The agreements provide the Company with the exclusive rights to distribute the associated products in certain geographic regions. The Company may not be able to extend the agreements or may not achieve acceptable pricing. For example, the Company is an exclusive supplier of the GM 6.0L engine to OEMs and GM is discontinuing the engine. The Company does not have an agreement with GM to supply on-highway OEMs with GM's successor product to the 6.0L engine. If the Company is not able to maintain the arrangements or achieve competitive pricing, then it may need to find alternative products through either alternative supply sources or the design and manufacture of competitive products to meet customer demands. The loss of the any of the exclusive supply agreements and failure to source alternative products could have a materially adverse impact on the Company's financial results. In addition, the exclusive agreements often include minimum purchase requirements. The failure to reach the minimum purchase requirements could result in financial penalties or the loss of exclusivity that could be material to the Company.

The Company may be impacted by volatility of oil and gas prices and/or fuel price differentials.

The prices of various fuel alternatives are subject to fluctuation, based upon many factors, including changes in resource base, pipeline transportation capacity for natural gas, refining capacity for crude oil, and government excise and fuel tax policies. The price differential among various fuel alternatives can impact OEMs and their decisions on which, if any, power systems they purchase from the Company. Furthermore, if OEMs do decide to purchase the Company's power systems, relative fuel prices may affect which power systems they purchase, and the margins can vary significantly among the Company's various power systems.

The Company may be affected by the price of oil and gas. For example, when the price of oil declines, oil becomes a more favorable source of fuel in the short term, and alternative fuel and energy producers suffer as a result. This volatility, as with any commodity, will occur from time to time and may adversely affect the Company's business.

Also, certain of the Company's products are used in the oil and gas industry, primarily in support of operating wells. At times of severely depressed energy prices, oil and gas producers have curtailed capital expenditures, sometimes sharply. In addition, oil and gas producers may cease or suspend production at well sites that have or are likely to become unprofitable. As a result, sales

of the Company's products could be severely impacted during periods of a prolonged depression in energy prices, which could have a material adverse effect on the Company's results of operations.

The Company is exposed to political, economic and other risks, in addition to various laws and regulations that arise from operating a multinational business.

The Company sells products internationally and sources a significant amount of materials from foreign suppliers. Accordingly, the Company is subject to the political, economic and other risks that are inherent in operating a multinational company, including risks related to the following:

- General economic conditions;
- The imposition of tariffs and other import or export barriers;
- Compliance with regulations governing import and export activities;
- Import and export duties and restrictions;
- Currency fluctuations and exchange restrictions;
- Transportation delays and interruptions;
- Potentially adverse income tax consequences;
- Political and economic instability;
- Terrorist activities;
- Labor unrest;
- Natural disasters; and
- Public health concerns.

Any of these factors could have a material adverse effect on the Company's business and results of operations.

Also, the Company is subject to, and may become subject to, various state, federal and international laws and regulations governing its business, environmental, labor, trade and tax practices. These laws and regulations, particularly those applicable to the Company's international operations, are or may be complex, extensive and subject to change. The Company needs to ensure that it and its OEM customers and suppliers timely comply with such laws and regulations, which may result in increased operating costs. Other legislation has been, and may in the future be, enacted in other locations in which the Company manufactures or sells its products. If the Company or its component suppliers fail to timely comply with applicable legislation, its customers may refuse to purchase its products, or it may face increased operating costs as a result of taxes, fines or penalties. In connection with complying with such environmental laws and regulations as well as with industry environmental initiatives, the standards of business conduct required by some of its customers and its commitment to sound corporate citizenship in all aspects of its business, the Company could incur substantial compliance and operating costs and be subject to disruptions to its operations and logistics. In addition, if the Company were found to be in violation of these laws or noncompliant with these initiatives or standards of conduct, it could be subject to governmental fines, liability to its customers and damage to its reputation and corporate brand, any of which could cause its financial condition or results of operations to suffer.

Lastly, the Company's overseas sales are subject to numerous stringent U.S. and foreign laws, including the Foreign Corrupt Practices Act ("FCPA") and comparable foreign laws and regulations, which prohibit improper payments or offers of payments to foreign governments and their officials and political parties by U.S. and other business entities for the purpose of obtaining or retaining business. Safeguards that the Company implements to discourage these practices could prove to be ineffective, and violations of the FCPA and other laws may result in severe criminal or civil sanctions, or other liabilities or proceedings against the Company, including class action lawsuits and enforcement actions from the SEC, the USAO and overseas regulators. Any of these factors, or any other international factors, could impair the Company's ability to effectively sell its power systems, or other products or services that it may develop, outside of the United States.

The Company utilizes a global supply chain to source products, including engines, components and materials, which may subject it to tariffs, including U.S. tariffs imposed on imports from China. The Company also sells its products on a global basis, and therefore its export sales could be impacted by tariffs.

Several of the Company's products are sourced internationally, including from China, where the United States has imposed tariffs on specified products imported from China. These tariffs have an impact on the Company's material costs and have the potential to have an even greater impact, depending on the outcome of current trade negotiations, which have been protracted and recently resulted in increases in U.S. tariff rates on specified products imported from China. The Company is evaluating U.S. government policy, which is subject to change in the current negotiating environment, pricing, its supply chain and its operational strategies to mitigate the impact of these tariffs; however, there can be no assurances that any mitigation strategies employed will remain available under government policy or that the Company will be able to offset tariff-related costs or maintain competitive pricing of its products. Further, the imposition of tariffs on imports from China and other countries has the potential to materially and adversely impact the Company's sales, profitability and future product launches. The Company also sells its products on a global basis; and, therefore, its export sales could be impacted by the tariffs. Any material reduction in sales may have a material adverse effect on the Company's results of operations.

The Company and its products are subject to numerous environmental and regulatory policies, including emission and fuel economy rules.

The Company's business is affected by government environmental policies, mandates and regulations around the world, most significantly with respect to emission standards in the United States. Examples of such regulations include those that (i) restrict the sale of power systems that do not meet emission standards and (ii) impose penalties on sellers of noncompliant power systems.

The Company generally must obtain product certification from both the EPA and the CARB to sell its products in the United States. The Company may attempt to expand sales of its certified power systems to OEMs that sell their products in other countries, which may also have stringent emissions requirements. Accordingly, future sales of the Company's products will depend upon its products being certified to meet the existing and future air quality and energy standards imposed by the relevant regulatory agencies. While the Company incurs significant research and development costs to ensure that its products comply with emission standards and meet certification requirements in the regions in which its products are sold, the Company cannot provide assurance that its products will continue to meet those standards. The failure to comply with certification requirements would not only adversely affect future sales but could result in the recall of products or the imposition of civil or criminal penalties.

The adoption of new, more stringent and burdensome government emissions regulations, whether at the foreign, federal, state or local level, in markets in which the Company supplies power systems may require modification of emission certification and other manufacturing processes for its power systems. The Company might incur additional and/or unanticipated expenses in meeting future compliance requirements, and it may be required to increase its research and product development expenditures. Increases in such costs and expenses could necessitate increases in the prices the Company charges for its power systems, which could adversely affect demand for such power systems. There are no assurances that the Company will have adequate financial or technical resources in the future to maintain compliance with government emissions standards.

The Company's products currently qualify for an exemption for Phase I Greenhouse Gas Emissions under Title 40 of the Code of Federal Regulation Section 1036.150(d). Starting in 2020, certain of the Company's engines will need to meet Phase 1 GHG standards as a result of the Weichai ownership change in 2019 as the Company's products will no longer qualify for the exemption. The Company has developed a plan to address the impact of the regulation requirements. New EPA Phase 2 GHG regulations will start in 2021 and the Company's engines will need to meet Phase 2 GHG standards. Future changes to the regulations and/or failure of the Company to comply with the regulations could have a material adverse effect on the Company's results of operations.

The Company is subject to price increases in some of the key components in its power systems.

The prices of some of the key components of the Company's power systems are subject to fluctuation due to market forces, including changes in the costs of raw materials incorporated into these components. Such price increases occur from time to time due to spot shortages of commodities, increases in labor costs or longer-term shortages due to market forces. In particular, the prices of certain precious metals used in emissions-control systems fluctuate frequently and often significantly. Substantial increases in the prices of raw materials used in components that the Company sources from suppliers may result in increased prices charged by suppliers. If the Company incurs price increases from suppliers for key components in its power systems, production costs will increase, and given competitive market conditions, the Company may not be able to pass all or any of those cost increases on to OEM customers in the form of higher sales prices. To the extent that its competitors do not suffer comparable component cost increases, the Company may have even greater difficulty passing along price increases, and the Company's competitive position may be harmed. As a result, increases in costs of key components may adversely affect the Company's margins and otherwise adversely affect its results of operations.

The market for alternative-fueled spark-ignited power systems may not continue to develop as expected.

The continued growth of the market for efficient alternative-fueled spark-ignited power systems, including natural gas, propane and gasoline, is a key tenet of the Company's growth strategy. The impact of diesel emission regulations is expected to increase the cost and complexity of diesel power systems, but this may not materialize to the expected extent or at all. Also, customers, or potential customers, may not substitute natural gas-, propane- and gasoline-powered power systems for diesel power systems in response to these regulations. In addition, to the extent that diesel power system manufacturers develop the ability to design and produce emission-compliant diesel power systems that are more competitive than the Company's alternative-fueled power systems, customers and potential customers may be less likely to substitute alternative-fueled power systems for diesel power systems. Furthermore, if alternative-fueled power systems are substituted for diesel power systems, there can be no assurance that the Company's power systems would capture any portion of the potential market increase. If the industrial OEM market generally, or more specifically any of the OEM categories that represent a significant portion of the Company's business or in which it anticipates significant growth opportunities for its power systems, fails to develop or develops more slowly than the Company anticipates, its business could be materially adversely affected.

Many of the Company's power systems involve long and variable design and sales cycles.

The design and sales cycle for customized power systems, from initial contact with potential OEM customers to the commencement of shipments, may be lengthy. Customers generally consider a wide range of solutions before making a decision to purchase power systems. Before an OEM commits to purchase power systems, they often require a significant technical review, assessment of competitive products and approval at a number of management levels within their organization. During the time the Company's customers are evaluating its products, the Company may incur substantial sales and marketing, engineering, and research and development expenses to customize the power systems to the customer's needs.

Failure to keep pace with technological developments may adversely affect the Company's operations.

The Company is engaged in an industry that will be affected by future technological developments. The Company's success will depend upon its ability to develop and introduce, on a timely and cost-effective basis, new products, applications and processes that keep pace with technological developments and address increasingly sophisticated customer requirements. The Company may not be successful in identifying, developing and marketing new products, applications and processes, and product or process enhancements. The Company may experience difficulties that could delay or prevent the successful development, introduction and marketing of product or process enhancements or new products, applications or processes. The Company's products, applications or processes may not adequately meet the requirements of the marketplace and achieve market acceptance. If the Company were to incur delays in developing new products, applications or processes, or product or process enhancements, or if its products do not gain market acceptance, its results of operations could be materially adversely affected.

The Company currently faces, and will continue to face, significant competition.

The market for the Company's products and related services is highly competitive, subject to rapid change and sensitive to new-product and service introductions and changes in technical requirements. New developments in power system technology may negatively affect the development or sale of some or all of the Company's power systems or make them uncompetitive or obsolete. Other companies, some of which have longer operating histories, greater name recognition and significantly greater financial and marketing resources than the Company, are currently engaged in the development of products and technologies that are similar to, or may be competitive with, certain of the Company's products and power system technologies. If the markets for its products grow as the Company anticipates, competition may intensify, as existing and new competitors identify opportunities in such markets.

The Company faces competition from companies that employ current power system technologies, and it may face competition in the future from additional companies as new power system technologies are adopted. Additionally, the Company may face competition from companies developing technologies such as cleaner diesel engines, biodiesel, fuel cells, advanced batteries and hybrid battery/internal combustion power systems. The Company may not be able to incorporate such technologies into its product offerings, or it may be required to devote substantial resources to do so. The success of its business depends in large part on its ability to provide single assembly, integrated, comprehensive, technologically sophisticated power systems to its customers. The development or enhancement by its competitors of similar capabilities could adversely affect the Company's business.

The Company could suffer warranty claims or be subject to product liability claims, both of which could materially adversely affect its business.

The Company's power systems are sophisticated and complex, and the success of the power systems is dependent, in part, upon the quality and performance of key components, such as engines, fuel systems, generators, breakers, and complex electrical components and associated software. The Company may incur liabilities for warranty claims as a result of defective products or components, including claims arising from defective products or components provided by its suppliers that are integrated into its power systems.

The provisions the Company makes for warranty accrual may not be sufficient, or it may be unable to rely on a warranty provided by a third-party manufacturer or recover costs incurred associated with defective components or products provided by its suppliers. The Company may recognize additional expenses as a result of warranty claims in excess of its current expectations. Such warranty claims may necessitate a redesign, re-specification, a change in manufacturing processes and/or a recall of its power systems, which could have a material adverse impact on the Company's financial condition and results of operations and on existing or future sales of its power systems and other products. Even in the absence of any warranty claims, a product deficiency such as a manufacturing defect or a safety issue may necessitate a product recall, which could have a material adverse impact on the Company's financial condition and results of operations and on existing or future sales.

The Company is exposed to potential product liability claims that are inherent to natural gas, propane, gasoline and diesel and products that use these fuels. Natural gas, propane, diesel and gasoline are flammable and are potentially dangerous products. Any accidents involving the Company's power systems could materially impede widespread market acceptance and demand for its power systems. In addition, the Company may be subject to a claim by end-users of its OEM customers' products or others alleging that they have suffered property damage, personal injury or death because its power systems or the products of its customers into which its power systems are integrated did not perform adequately. Such a claim could be made whether or not the Company's

power systems perform adequately under the circumstances. From time to time, the Company may be subject to product liability claims in the ordinary course of business, and it carries a limited amount of product liability insurance for this purpose. However, current insurance policies may not provide sufficient or any coverage for such claims, and the Company cannot predict whether it will be able to maintain insurance coverage on commercially acceptable terms.

The Company's OEM customers may not continue to outsource their power system needs.

The purchasers of the Company's power systems are OEMs that manufacture a wide range of applications and equipment that includes standby and prime power generation, demand response, microgrid, combined heat and power, utility power, arbor equipment, material handling (including forklifts), agricultural and turf, construction, pumps and irrigation, compressors, utility vehicles, light- and medium-duty vocational trucks, and school and transit buses. As a result of the significant resources and expertise required to develop and manufacture emission-certified power systems, certain of these customers have historically chosen to outsource production of power systems to the Company. To a significant extent, the Company depends on OEMs continuing to outsource design and production of power systems, power system components and subsystems. OEM customers may not continue to outsource as much or any of their power system production in the future. Increased levels of OEM vertical integration could result from a number of factors, such as shifts in the Company's customers' business strategies, acquisition by a customer of a power system manufacturer or the emergence of low-cost production opportunities in foreign countries. Any number of these factors could have an adverse impact on the Company's business.

The Company could fail to adequately protect its intellectual property rights or could face claims of intellectual property infringement by third parties.

The Company believes that the success of its business depends, in substantial part, upon its proprietary technology, information, processes and know-how. The Company does not own any material patents and relies on a combination of trademark and trade secret laws, along with confidentiality agreements, contractual provisions and licensing arrangements, to establish and protect its intellectual property rights. Despite the Company's efforts to protect its intellectual property rights, existing laws afford only limited protection, and the Company's actions may be inadequate to protect its rights or to prevent others from claiming violations of their proprietary rights. In addition, the laws of some foreign countries may not protect the Company's proprietary rights as fully or in the same manner as the laws of the United States. The unauthorized use of the Company's intellectual property rights and proprietary technology by others could materially harm its business.

In addition, the Company cannot be certain that its products, services and power system technologies, including any intellectual property licensed from third parties for use therein or incorporated into components that it sources from its suppliers, do not, or in the future will not, infringe or otherwise violate the intellectual property rights of third parties. The Company may in the future be subject to infringement claims that may result in litigation. Successful infringement claims against the Company could result in substantial monetary liability, require it to enter into royalty or licensing arrangements, or otherwise materially disrupt the conduct of its business. In addition, even if the Company prevails in the defense of any such claims, any such litigation could be time-consuming and expensive to defend or settle and could materially adversely affect its business.

The Company is exposed to, and may be adversely affected by, potential security breaches or other disruptions to its information technology systems and data security.

The Company relies on its information technology systems and networks in connection with many of its business activities. The Company's operations routinely involve receiving, storing, processing and transmitting sensitive information pertaining to its business, customers, dealers, suppliers, employees and other sensitive matters. Cyber incidents could materially disrupt operational systems, result in loss of trade secrets or other proprietary or competitively sensitive information, compromise personally identifiable information regarding customers or employees, and jeopardize the security of the Company's facilities. A cyber incident could be caused by malicious outsiders using sophisticated methods to circumvent firewalls, encryption and other security defenses. Because techniques used to obtain unauthorized access or to sabotage systems change frequently and generally are not recognized until they are launched against a target, the Company may be unable to anticipate these techniques or to implement adequate preventive measures. Information technology security threats, including security breaches, computer malware and other cyber-attacks, are increasing in both frequency and sophistication and could create financial liability, subject the Company to legal or regulatory sanctions, or damage its reputation with customers, dealers, suppliers and other stakeholders. The Company continuously seeks to maintain a robust program of information security and controls, but the impact of a material information technology event could have a material adverse effect on its reputation and results of operations.

Failure to attract and retain qualified personnel could affect the Company's business results.

The Company's success depends on its ability to attract, retain and motivate a highly skilled and diverse management team and workforce. Failure to ensure that the Company has the depth and breadth of personnel with the necessary skill set and experience could impede its ability to deliver growth objectives and execute its strategy. Competition for qualified employees among companies that rely heavily upon engineering and technology is at times intense, and the loss of qualified employees could hinder the Company's ability to conduct research activities successfully and develop marketable products. As the Company continues to expand, it will

need to promote or hire additional staff, and it may be difficult to attract or retain such individuals as a result of increased compensation and benefit mandates without incurring significant additional costs.

Risks Related to Ownership of the Company's Stock

Ownership of the Company's stock is concentrated among certain current and former employees and Weichai, therefore limiting other stockholders' ability to influence corporate matters.

As of December 2, 2019, Weichai beneficially owned 51.4% of the Company's outstanding shares of Common Stock. Additionally, Gary S. Winemaster, the Company's founder, former Chairman of the Board, Chief Executive Officer, and President and nonexecutive Chief Strategy Officer, beneficially owned approximately 16.1% of the Company's outstanding shares of Common Stock, and Kenneth J. Winemaster, the Company's co-founder and Executive Vice President, beneficially owned approximately 9.7% of the Company's outstanding shares of Common Stock. Each of these stockholders, by virtue of their significant equity ownership in the Company, may be able to significantly influence, and, in the case of Weichai, control the outcome of, all matters requiring stockholder approval, including the election and removal of Directors and any merger or other significant corporate transactions. The interests of these stockholders may not coincide with the interests of other stockholders. The concentration of ownership might also have the effect of delaying or preventing a change of control of the Company that other stockholders may view as beneficial. With the exercise of the Weichai Warrant, Weichai alone owns a majority of the outstanding shares of Common Stock and, therefore, it possesses voting control over the Company sufficient to prevent any change of control from occurring.

Weichai also maintains certain rights through its Investor Rights Agreement with the Company.

Weichai entered into an Investor Rights Agreement (the "Rights Agreement") with the Company upon execution of the SPA. The Rights Agreement provides Weichai with representation on the Company's Board and management representation rights. Weichai currently has three representatives on the Board. According to the Rights Agreement, with Weichai exercising the Weichai Warrant and becoming the majority owner of the Company's outstanding shares of Common Stock calculated on a fully-diluted as-converted basis (excluding certain excepted issuances), the Company is required to cause the appointment to the Board of an additional individual designated by Weichai, and Weichai shall thereafter have the right to nominate for election four Directors and any additional number of designees necessary to ensure that its designees constitute the majority of the Directors serving on the Board. According to the Rights Agreement, during any period when the Company is a "controlled company" within the meaning of the NASDAQ Listing Rules, it will take such measures as to avail itself of the "controlled company" exemptions available under Rule 5615 of the NASDAQ Listing Rules of Rules 5605(b), (d) and (e). With Weichai becoming a majority beneficial owner of the Company's outstanding shares of its Common Stock, Weichai will be able to exercise control over matters requiring stockholders' approval, including the election of the Directors, amendment of the Company's Charter and approval of significant corporate transactions. This control could have the effect of delaying or preventing a change of control of the Company or changes in management and will make the approval of certain transactions impractical without the support of Weichai.

A change in ownership or a failure to generate sufficient taxable income may limit the Company's ability to use net operating loss ("NOL") carryforwards to reduce future tax payments.

The Company has NOL carryforwards with which to offset its future taxable income for U.S. federal income tax reporting purposes. As of December 31, 2018, there was no annual limitation on the Company's ability to use U.S. federal NOLs to reduce future income taxes. However, the Company may be subject to substantial annual limitations provided by the Internal Revenue Code (the "IRC") if an "ownership change," as defined in Section 382 of the IRC, occurs with respect to the Company's capital stock. Generally, an ownership change occurs if certain persons or groups increase their aggregate ownership of the Company's total capital stock by more than 50 percentage points in a three-year period. If an ownership change occurs, the Company's ability to use domestic pre-change in ownership NOLs to reduce taxable income is generally limited to an annual amount based on (i) the fair market value of its stock immediately prior to the ownership change multiplied by the long-term tax-exempt interest rate plus (ii) under certain circumstances, realized built-in gains on certain assets held prior to the ownership change for the first five years after the ownership change. Although pre-change in ownership NOLs that exceed the Section 382 limitation in any year continue to be allowed as carryforwards for the remainder of the 20-year carryforward period (indefinite carryforward period for NOLs generated in taxable years ended after December 31, 2017) and can be used to offset taxable income for years within the carryforward period subject to the limitation in each year, the use of the remaining pre-change in ownership NOLs for the loss year will be prohibited if the carryforward period for any loss year expires. If the Company should fail to generate a sufficient level of taxable income prior to the expiration of the NOL carryforward periods, then it will lose the ability to apply the NOLs as offsets to future taxable income. Similar limitations also apply to certain U.S. federal tax credits. In April 2019, Weichai exercised the Weichai Warrant resulting in Weichai becoming the majority owner of the outstanding shares of the Company's Common Stock. The Company believes that this will constitute an "ownership change" as defined in Section 382 of the IRC and is currently quantifying the potential impact.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

The Company's operations are located in 11 leased facilities in the United States, totaling approximately 1.0 million square feet of floor space. The Company's corporate headquarters is located in Wood Dale, Illinois, a suburb of Chicago.

The Company's primary manufacturing, assembly, engineering, research and development, sales and distribution facilities are located in suburban Chicago, Illinois, and Darien, Wisconsin.

The Company believes that all of its facilities have been adequately maintained, are in good operating condition and are suitable for its current needs. These facilities are expected to meet the Company's needs in the foreseeable future.

Item 3. Legal Proceedings.

See Note 9. *Commitments and Contingencies*, included in Part II, Item 8. *Financial Statements and Supplementary Data*, for a discussion of legal proceedings, which are incorporated herein by reference.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

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

The Company's Common Stock traded on the NASDAQ under the symbol "PSIX" from May 28, 2013 through April 18, 2017. The Company's Common Stock was suspended from trading on NASDAQ effective at the open of business on April 19, 2017 (and subsequently delisted) and began trading through the facilities of the OTC Markets Group, Inc. ("OTC Market") on that date.

As of December 2, 2019, the sale price for the Company's Common Stock, as reported by the OTC Market, was \$5.00 per share.

Dividend Policy

The Company has not paid any cash dividends on its Common Stock to date. The payment of dividends is currently restricted by the Wells Fargo Credit Agreement and the indenture governing the Company's Unsecured Senior Notes. The Company intends to retain its future earnings to support operations and to finance expansion. See *Current Liquidity and Capital Resources* section, included in Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations*, for additional information regarding restrictions on the payment of dividends under the Company's credit facility and indenture.

Securities Authorized for Issuance under Compensation Plans

See Note 12. *Stock-Based Compensation*, included in Item 8. *Financial Statements and Supplementary Data*.

Issuer Purchases of Equity Securities

During 2018 and 2017, the Company did not repurchase any equity securities.

Item 6. Selected Financial Data.

The Company is a smaller reporting company as defined by Rule 12b-2 of the Exchange Act, and it is not required to provide the information under this item.

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

The following discussion and analysis includes forward-looking statements about the Company's business and consolidated results of operations for the fiscal years ended December 31, 2018 and 2017, including discussions about management's expectations for the Company's business. These statements represent projections, beliefs and expectations based on current circumstances and conditions and in light of recent events and trends, and you should not construe these statements either as assurances of performance or as promises of a given course of action. Instead, various known and unknown factors are likely to cause the Company's actual performance and management's actions to vary, and the results of these variances may be both material and adverse. A description of material factors known to the Company that may cause its results to vary, or may cause management to deviate from its current plans and expectations, is set forth under "Risk Factors." See "Forward-Looking Statements." The following discussion should also be read in conjunction with the Company's consolidated financial statements and the related Notes included in this report. As discussed further herein, the Company adopted Accounting Standards Update 2014-09, Revenue from Contracts with Customers (Topic 606), effective January 1, 2018 using a modified retrospective approach. The 2017 results were not restated and are not comparative to 2018; however, the Company does not believe the impact is material. See Item 8. Note 2. Revenue, for further discussion.

Executive Overview

The Company designs, engineers, manufactures, markets and sells a broad range of advanced, emission-certified engines and power systems that run on a wide variety of fuels, including natural gas, propane, gasoline, diesel and biofuels, within the energy, industrial and transportation end markets with primary manufacturing, assembly, engineering, R&D, sales and distribution facilities located in suburban Chicago, Illinois, and Darien, Wisconsin. The Company provides highly engineered, comprehensive solutions designed to meet specific customer application requirements and technical specifications, including those imposed by environmental regulatory bodies, such as the EPA, the CARB and the MEE.

The Company's products are primarily used by global OEM and end-user customers across a wide range of applications and equipment that includes standby and prime power generation, demand response, microgrid, combined heat and power, arbor care, material handling (including forklifts), agricultural and turf, construction, pumps and irrigation, compressors, utility vehicles, light- and medium-duty vocational trucks, school and transit buses, and utility power. The Company manages the business as a single reporting segment.

For 2018, the Company's net sales increased \$79.4 million from 2017 to \$496.0 million, the result of increased sales volumes across all of its end markets, with the energy, transportation and industrial end markets accounting for \$26.7 million, \$42.2 million, and \$10.5 million of the increase, respectively. Notwithstanding the increase in net sales and an improvement in product mix, the

Company's gross profit improvement was negated by net warranty costs of \$18.6 million, including \$3.8 million of charges for adjustments to pre-existing warranties, which increased by approximately \$13.2 million as compared to warranty costs of \$5.4 million last year primarily associated with the transportation end market. The 2018 warranty costs included \$3.0 million of charges related to specific engine supplier quality issues, for which the Company is actively seeking cost reimbursement. Other factors negatively impacting gross profit include unrecovered costs associated with the ramp up of production of the 8.8L PSI produced engine and operational inefficiencies. Collectively, these factors had a significant negative impact on gross margin, which declined 0.4% in 2018. In addition, the Company's 2018 net income was unfavorably impacted by increased selling, general and administrative ("SG&A") expenses (largely driven by restatement-related expenses of \$24.2 million); increased research, development and engineering expenses; increased loss from change in fair value of warrants; and an asset impairment charge. Partially offsetting the impact of these items were the favorable impact of an absence of charges for debt extinguishment and modifications; lower interest expense; and an improvement in other expense (income), net.

Net sales by geographic area and by end market for 2018 and 2017 are presented below:

Geographic Area	For the Year Ended December 31, 2018		For the Year Ended December 31, 2017	
	\$	% of Total	\$	% of Total
North America	436,068	88%	355,268	86%
Pacific Rim	42,071	8%	42,221	10%
Europe	13,743	3%	14,205	3%
Others	4,156	1%	4,922	1%
Total	\$ 496,038	100%	\$ 416,616	100%

End Market	For the Year Ended December 31, 2018		For the Year Ended December 31, 2017	
	\$	% of Total	\$	% of Total
Industrial	201,196	41%	190,724	46%
Energy	185,685	37%	159,008	38%
Transportation	109,157	22%	66,884	16%
Totals	\$ 496,038	100%	\$ 416,616	100%

Weichai Transaction

In March 2017, the Company and Weichai entered into a number of transactions (see Note 3. *Weichai Transactions*, included in Item 8. *Financial Statements and Supplementary Data*, for additional information), including the issuance of Common and Preferred Stock and a stock purchase warrant to Weichai for aggregate proceeds of \$60.0 million. The stock purchase warrant issued to Weichai was exercisable for any number of additional shares of Common Stock such that Weichai, upon exercise, would hold 51.5% of the Common Stock then outstanding, on terms and subject to adjustments as provided in the SPA. On April 23, 2019, Weichai exercised the Weichai Warrant and increased its ownership to 51.5% of the Company's outstanding Common Stock.

Through the Weichai Transaction, the Company was also looking to expand its range of products and its presence in the Pacific Rim.

The Company and Weichai also executed the Collaboration Arrangement in order to achieve their respective objectives, enhance the cooperation alliance and share experiences, expertise and resources. Among other things, the Collaboration Arrangement established a joint steering committee, permitted Weichai to second a limited number of technical, marketing, sales, procurement and finance personnel to work at the Company and established several collaborations related to stationary natural-gas applications and Weichai diesel engines. The Collaboration Arrangement also provides for the steering committee to create various subcommittees with operating roles and otherwise governs the treatment of intellectual property of parties prior to the collaboration and the intellectual property developed during the collaboration. The Collaboration Arrangement has a term of three years. For the year ended December 31, 2018, sales to Weichai were insignificant. The Company purchased \$3.5 million of inventory from Weichai during 2018. Sales and purchases in 2017 were insignificant.

Restatement and Government Investigations

Since August 2016, the Company has experienced a substantial and disruptive diversion of management resources to address various accounting, financial reporting and financial issues. During that time, the Company determined that it was necessary to

restate financial results for 2015 and 2014 as well as the first quarter of 2016 and, since then, has also focused on bringing current all of its SEC financial reporting requirements. Additionally, the SEC and the USAO are conducting investigations into the Company's financial reporting, revenue recognition practices and related conduct, as more fully described in the financial statement footnotes. Restatement related expenses including fees and reserves related to the SEC and USAO investigations, strategic and financing options, and key employee retention-related expenses included in 2018 and 2017 operating results, were \$27.0 million and \$19.0 million, respectively.

Recent Trends and Business Outlook

Outlook: Projected sales for the full year of 2019 are expected to be above the \$496 million level achieved in 2018, marking the Company's third consecutive year of annual sales growth, and up considerably from sales of \$339 million in 2016. Gross profit is anticipated to improve substantially versus 2018 due to healthy sales growth, favorable mix, strategic pricing actions, lower warranty costs and operational productivity improvements, which collectively are expected to drive a strong gross margin improvement. In addition, the Company's operating income is expected to be favorably impacted by lower selling, general and administrative expenses primarily as a result of a decline in restatement-related expenses. As a result, the Company also expects its profitability to show a major improvement versus 2018. In 2020, the Company expects to incur significant third-party professional fees primarily for legal costs in connection with its obligations to indemnify certain former employees, in addition to its internal control remediation efforts. However, the Company currently believes that its aggregate spending on professional fees in 2020 will be lower as compared to 2019, primarily due to an absence of expenses related to the restatement and audit of the 2017 and prior period financial statements, which was completed in May 2019.

GM 6.0L Engine Offering: The Company has an exclusive agreement with Freightliner through December 31, 2020 to distribute 6.0L engines to on-highway customers. With the GM announcement that it will discontinue its production of the 6.0L engine, the Company has been conducting last time buys of this engine to ensure adequate supply to Freightliner and other customers. In relation to these last time buys, the Company had a net positive cash impact from customer prepayments of approximately \$11 million as of September 30, 2019. The Company expects a net positive cash impact from customer prepayments to continue into 2020. The Company does not have a supply agreement with GM for its successor product to the 6.0L engine. However, it is actively exploring opportunities to identify engine alternatives for this product.

Hyster-Yale Supply Arrangement: The Company had a multi-year supply agreement with Hyster-Yale, which ended December 31, 2018, for the supply of a range of engines at certain specified volume levels. Since the beginning of 2019, the Company has continued to supply products to Hyster-Yale while the two parties continued to negotiate a new agreement. The Company is nearing the completion of a renewed supply agreement; however, Hyster-Yale has indicated that it will be obtaining alternative supply beginning in 2021 for several high-volume engines that the Company currently provides, including the 2.0L and 2.4L engines sourced from the Company's supplier SAME. As a result of this, coupled with the discontinuation of a certain engine that the Company provides this customer during 2020, the Company anticipates that its sales volumes to Hyster-Yale may begin to decline in 2020, with further declines expected in 2021 and 2022. The Company believes it is positioned to continue its relationship in a moderated capacity with this customer in 2022 and beyond.

Strategic Initiatives/Growth Strategies: The Company has initiated a set of business objectives aimed at improving profitability, streamlining processes, strengthening the business and focusing on achieving growth in higher-return product lines. Central to this plan is the Company's increased emphasis on energy product offerings through new product development and investments, in addition to leveraging the Company's relationship with Weichai. With the introduction of numerous natural gas and diesel engines in 2018 and 2019, coupled with its existing strong product lineup, the Company believes that it has a solid foundation to achieve long-term growth within the energy market.

Results of Operations

Results of operations for the year ended December 31, 2018 compared with the year ended December 31, 2017:

(in thousands, except per share amounts)

	For the Year Ended December 31,		Change	% Change
	2018	2017		
Net sales	\$ 496,038	\$ 416,616	\$ 79,422	19 %
Cost of sales	437,269	365,623	71,646	20 %
Gross profit	58,769	50,993	7,776	15 %
<i>Gross margin %</i>	11.8%	12.2%	(0.4)%	
Operating expenses:				
Research, development and engineering expenses	28,601	19,944	8,657	43 %
<i>Research, development and engineering expenses as a % of sales</i>	5.8%	4.8%	1.0 %	
Selling, general and administrative expenses	59,631	44,256	15,375	35 %
<i>Selling, general and administrative expenses as a % of sales</i>	12.0%	10.6%	1.4 %	
Asset impairment charges	2,234	1	2,233	NM
Amortization of intangible assets	5,008	4,838	170	4 %
Total operating expenses	95,474	69,039	26,435	38 %
Operating loss	(36,705)	(18,046)	(18,659)	(103)%
Other expense (income):				
Interest expense	7,628	10,841	(3,213)	(30)%
Loss from change in fair value of warrants	10,400	4,000	6,400	NM
Loss on debt extinguishment and modifications	—	11,921	(11,921)	(100)%
Other expense (income), net	(176)	2,361	(2,537)	(107)%
Total other expense (income)	17,852	29,123	(11,271)	(39)%
Loss before income taxes	(54,557)	(47,169)	(7,388)	(16)%
Income tax expense	169	443	(274)	(62)%
Net loss	(54,726)	(47,612)	(7,114)	(15)%
Deemed dividend on Series B convertible preferred stock *	—	(37,860)	\$ 37,860	100 %
Net loss available to common stockholders	\$ (54,726)	\$ (85,472)	\$ 30,746	36 %
Loss per common share:				
Basic	\$ (2.94)	\$ (6.20)	\$ 3.25	53 %
Diluted	\$ (2.94)	\$ (6.20)	\$ 3.25	53 %
EBITDA	\$ (36,725)	\$ (26,856)	\$ (9,869)	(37)%
Adjusted EBITDA	\$ 4,181	\$ 7,622	\$ (3,441)	(45)%

NM Not meaningful

* See Note 3. *Weichai Transactions* for additional information.

Net Sales

Net sales increased \$79.4 million, or 19%, in 2018 compared to 2017, as a result of higher sales across all major end markets with transportation and energy accounting for 53% and 34%, respectively, of the net increase. The increased sales within the transportation end market were primarily attributable to increased demand for engines used in school buses and within light- and medium-duty trucks. The increased sales within energy were primarily attributable to increased demand for power generation products, particularly within the oil and gas market, in addition to an increase in demand for the Company's demand response product.

Gross Profit

Gross margin was 11.8% and 12.2% in 2018 and 2017, respectively. Gross profit increased in 2018 by \$7.8 million, or 15%, compared to 2017 primarily due to the sales growth noted above, coupled with an improvement in product mix. However, the improvement in gross profit was negated by warranty costs of \$18.6 million (net of supplier recoveries of \$1.1 million), including \$3.8 million of charges for adjustments to pre-existing warranties, which increased by approximately \$13.2 million as compared

to warranty costs of \$5.4 million last year, primarily associated with the transportation end market. The 2018 warranty costs included \$3.0 million of charges related to specific engine supplier quality issues, for which the Company is actively seeking cost reimbursement. Other factors negatively impacting gross profit include unrecovered costs associated with the ramp up of production of the 8.8L PSI produced engine and operational inefficiencies. Collectively, these factors had a significant negative impact on gross margin, which declined 0.4% in 2018.

Research, Development and Engineering Expenses

Research, development and engineering expenses in 2018 were \$28.6 million, an increase of \$8.7 million, or 43%, from 2017 levels primarily as a result of increased spending for projects primarily related to the Company's strategic initiatives.

Selling, General and Administrative Expenses

Selling, general and administrative expenses increased in 2018 by \$15.4 million, or 35%, compared to 2017. The increase in SG&A expenses are largely attributable to higher restatement-related expenses which were \$24.2 million in 2018, an increase of \$10.9 million, as compared to \$13.3 million in 2017. The increase in restatement-related expenses were primarily due to an increase in professional services and legal expenses related to the restatement and audit of the 2017 and prior year restated financial statements filed in May 2019, and the SEC and USAO investigations. In addition, SG&A expenses were impacted by higher wages and benefits in 2018 compared to 2017 as a result of increased headcount. These increases were offset by a decrease in expenses of \$2.1 million in strategic alternatives and strategic review expenses and \$0.8 million related to the key employee retention program. As a percentage of Net sales, SG&A expenses were 12.0% and 10.6% in 2018 and 2017, respectively.

Asset Impairment Charges

Asset impairment charges increased in 2018 by \$2.2 million. In the fourth quarter of 2018, based on uncertainty of the market for the conversion of certain gasoline engines to alternative fuel engines, the Company concluded that the forecasted future cash flows were not sufficient to recover the carrying value of certain developed technology intangible assets acquired from AGA Systems, LLC ("AGA"). As a result, the Company recorded an impairment charge of \$2.2 million to write off the remaining book value of the intangible assets. The Company recorded an immaterial amount of impairment charges in 2017 related to certain fixed assets retired from service during the year.

Interest Expense

Interest expense declined \$3.2 million to \$7.6 million in part due to the extinguishment of the TPG Term Loan in March 2017, which had a significantly higher interest rate (London Interbank Offered Rate - "LIBOR" – plus 9.8% per annum) than the borrowings under the Wells Fargo Credit Agreement.

The Wells Fargo Base and LIBOR interest rates were 7.3% and 6.0% per annum, respectively, at December 31, 2018, and the Base and LIBOR interest rates were 6.0% and 4.5% at December 31, 2017, respectively.

Loss from Change in Fair Value of Warrants

The Company recognized a loss of \$10.4 million and \$4.0 million in 2018 and 2017, respectively, from the change in the fair value of the Weichai Warrant. See Note 7. *Fair Value of Financial Instruments*, included in Item 8. *Financial Statements and Supplementary Data*, for additional information.

Loss on Debt Extinguishment

In March 2017, the Company repaid the TPG Term Loan (the "TPG Term Loan") using the proceeds of the Weichai investment as discussed in Note 3. *Weichai Transactions*, included in Item 8. *Financial Statements and Supplementary Data*. At that time, the Company recorded an \$11.9 million loss on the debt repayment, which was primarily attributable to the write-off of unamortized financing costs.

Other (Income) Expense, Net

Other expense decreased by \$2.5 million in 2018 principally as a result of a legal settlement in 2017 with the former owners of Professional Power Products, Inc. ("3PI") which did not recur in 2018. See Note 9. *Commitments and Contingencies*, included in Item 8. *Financial Statements and Supplementary Data*, for additional information.

Income Tax Expense

The Company recorded income tax expense of \$0.2 million in 2018, as compared to \$0.4 million for 2017. The Company's pretax loss was \$54.6 million in 2018 compared to a pretax loss of \$47.2 million in 2017. There was no significant change in the Company's tax provision as the Company continues to incur pre-tax losses and record a valuation allowance against deferred tax assets. See Note 10. *Income Taxes*, included in Item 8. *Financial Statements and Supplementary Data*, for additional information related to the Company's income tax provision.

EBITDA and Adjusted EBITDA

In addition to the results provided in accordance with U.S. GAAP above, this report includes non-GAAP financial measures of the Company's earnings before interest expense, income taxes, depreciation and amortization ("EBITDA") and Adjusted EBITDA. The Company is presenting EBITDA and Adjusted EBITDA so that both management and financial statement users can use these non-GAAP financial measures to better understand and evaluate the Company's performance period over period and to analyze the underlying trends of the business.

The Company believes that EBITDA and Adjusted EBITDA provide relevant and useful information, which is widely used by analysts, investors and competitors in its industry as well as by the Company's management in assessing the performance of the Company. EBITDA provides the Company with an understanding of earnings before the impact of investing and financing charges and income taxes. Adjusted EBITDA further excludes the effects of other non-cash and certain other items that do not reflect the ordinary earnings of the Company's operations.

EBITDA and Adjusted EBITDA are used by management for various purposes, including as a measure of performance of its operations and as a basis for strategic planning and forecasting. Adjusted EBITDA may be useful to an investor because this measure is widely used to evaluate companies' operating performance without regard to items excluded from the calculation of such measure, which can vary substantially from company to company depending on the accounting methods, the book value of assets, the capital structure and the method by which the assets were acquired, among other factors. They are not, however, intended as an alternative measure of operating results or cash flow from operations as determined in accordance with U.S. GAAP.

Non-GAAP financial measures provide insight into selected financial information and should be evaluated in the context in which they are presented. These non-GAAP financial measures have limitations as analytical tools and should not be considered in isolation from, or as a substitute for, financial information presented in compliance with U.S. GAAP, and non-GAAP financial measures as reported by the Company may not be comparable to similarly titled amounts reported by other companies. The non-GAAP financial measures should be considered in conjunction with the consolidated financial statements, including the related notes, and Management's Discussion and Analysis of Financial Condition and Results of Operations included in this report. Management does not use these non-GAAP financial measures for any purpose other than the reasons stated above.

The following table presents a reconciliation from net loss to EBITDA and Adjusted EBITDA:

	For the Year Ended December 31,	
	2018	2017
Net loss	\$ (54,726)	\$ (47,612)
Interest expense	7,628	10,841
Income tax expense	169	443
Depreciation	5,196	4,634
Amortization of intangible assets	5,008	4,838
EBITDA	\$ (36,725)	\$ (26,856)
Change in valuation of warrants ¹	10,400	4,000
Stock-based compensation ²	1,229	(480)
Asset impairment charges ³	2,234	1
Loss on debt extinguishment and modifications ⁴	—	11,921
Key employee retention program ⁵	2,567	3,388
Strategic alternatives and strategic review expenses ⁶	247	2,306
Restatement-related expenses ⁷	24,229	13,342
Adjusted EBITDA	\$ 4,181	\$ 7,622

1. Amounts consist of non-cash changes in fair value of the Company's Weichai Warrant.
2. Amounts reflect non-cash stock-based compensation expense (2018 and 2017 amounts excludes \$1.4 million and \$1.0 million associated with the retention programs, see note 5 below).
3. Amount in 2018 primarily reflects impairment of developed technology assets acquired from AGA as discussed further in Item 8. Note 5. Goodwill and Other Intangibles.
4. Amounts primarily consist of charges related to the extinguishment of the TPG Term Loan with TPG Specialty Lending, Inc. ("TPG") in 2017 coupled with other debt modification-related charges.
5. Amount represents incremental compensation costs (including \$1.4 million and \$1.0 million in 2018 and 2017, respectively, of stock-based compensation) incurred to provide retention benefits to certain employees.
6. Represents professional services expenses incurred in connection with the evaluation of strategic alternatives and financing options.
7. Amounts represent professional services fees related to the Company's restatement efforts as well as fees and reserves related to the SEC and USAO investigations.

Cash Flows

Cash was impacted as follows:

(in thousands)

	For the Year Ended December 31,		Change	% Change
	2018	2017		
Net cash used in operating activities	\$ (6,168)	\$ (7,695)	\$ 1,527	(20)%
Net cash used in investing activities	(10,239)	(5,165)	(5,074)	98 %
Net cash provided by financing activities	16,461	10,568	5,893	56 %
Net increase (decrease) in cash and restricted cash	\$ 54	\$ (2,292)	\$ 2,346	(102)%
Capital expenditures	\$ (3,645)	\$ (5,061)	\$ 1,416	(28)%

2018 Cash Flows

Cash Flow from Operating Activities

Net cash used in operations was \$6.2 million in 2018 compared to net cash used in operations of \$7.7 million in 2017 resulting in a decrease of \$1.5 million in cash used in operating activities year over year. This was primarily due to improvement in working capital requirements of \$10.7 million partially offset by an increase in the net loss of \$7.1 million. During 2018, working capital requirements resulted in a cash inflow of \$19.5 million compared to a cash inflow of \$8.8 million in 2017. This increase was primarily driven by higher accounts payable partially offset by higher inventories. The increases in accounts payable and inventory were driven by forecasted customer demand in early 2019 as well as last time buys of the GM 6.0L engines for Freightliner as discussed above.

Cash Flow from Investing Activities

Net cash used in investing activities was \$10.2 million in 2018 compared to net cash used in investing activities of \$5.2 million in 2017 resulting in an increase of \$5.1 million of net cash used in investing activities year over year. Cash flows from investing activities in 2018 primarily consisted of expenditures on asset acquisitions of \$6.6 million offset by lower capital expenditures.

Cash Flow from Financing Activities

The Company generated \$16.5 million in cash from financing activities in 2018 compared to \$10.6 million in cash generated by financing activities in 2017 resulting in an increase of \$5.9 million generated by financing activities year over year. Primary cash inflows in 2018 included \$17.6 million in net borrowings from the revolving line of credit.

Current Liquidity and Capital Resources

The current Wells Fargo Credit Agreement maturity date is the earlier of March 31, 2021, or 60 days prior to the final maturity of the Unsecured Senior Notes, which currently mature on June 30, 2020, resulting in a current maturity date of May 1, 2020 for the Wells Fargo Credit Agreement.

The Company will need to refinance, extend the maturity of or repay the indebtedness outstanding under the Unsecured Senior Notes before the May 1, 2020 maturity date to avoid acceleration of the Wells Fargo Credit Agreement, unless it is able to negotiate an extension of the maturity date. The Company continues to manage the timing of payables to improve its periodic cash position which it may not be able to continue over the long-term. There can be no assurance that the Company will be able to successfully complete a refinancing on acceptable terms or repay this outstanding indebtedness when required. If the Company does not have sufficient liquidity to fund its business activities, it may be forced to limit its business activities or be unable to continue as a going concern, which would have a material adverse effect on its results of operations and financial condition. These conditions raise substantial doubt about the Company's ability to continue as a going concern.

As of September 30, 2019, the Company's total debt obligations under the Wells Fargo Credit Agreement and the Unsecured Senior Notes were approximately \$92 million with available borrowing capacity of approximately \$20 million under the Wells Fargo Credit Agreement. In relation to last time buys of GM 6.0L engines, the Company had a net positive impact from customer prepayments of approximately \$11 million as of September 30, 2019.

The Wells Fargo Credit Agreement contains certain covenants for which a failure to satisfy can result in a default under the Credit Agreement. See Item 8. Note 6. *Debt* for additional information related to a waiver obtained from Wells Fargo on May 16, 2019 that waived the failure to satisfy financial information covenants through December 31, 2019.

Off-Balance Sheet Arrangements

The Company does not have any obligations that meet the definition of an off-balance sheet arrangement, which are reasonably likely to have a material effect on its Consolidated Statements of Operations, other than non-cancelable operating leases (see Note

4. *Property, Plant and Equipment, and Leases*, included in Item 8. *Financial Statements and Supplementary Data*, for additional information regarding non-cancelable operating leases).

At December 31, 2018, the Company had outstanding letters of credit totaling \$1.6 million.

Commitments and Contingencies

Legal matters are further discussed in Note 9. *Commitments and Contingencies*, included in Item 8. *Financial Statements and Supplementary Data*. See Part I. Item 1A. *Risk Factors* for further discussion of legal risks to the Company.

Critical Accounting Policies and Estimates

The Company's consolidated financial statements are prepared in accordance with U.S GAAP. Preparation of these financial statements requires the Company to make estimates, assumptions and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. The Company's most critical accounting policies and estimates are those most important to the portrayal of its financial condition and results of operations and which require the Company to make its most difficult and subjective judgments, often as a result of the need to make estimates regarding matters that are inherently uncertain. The Company has identified the following as its most critical accounting policies and judgments. Although management believes that its estimates and assumptions are reasonable, they are based on information available when they are made and, therefore, may differ from estimates made under different assumptions or conditions.

The Company's significant accounting policies are discussed in Note 1. *Summary of Significant Accounting Policies and Other Information*, included in Item 8. *Financial Statements and Supplementary Data*, and should be reviewed in connection with the following discussion of accounting policies that require difficult, subjective and complex judgments.

Revenue Recognition

The Company determines the amount of revenue to be recognized through the following steps:

- Identification of the contract, or contracts with a customer;
- Identification of the performance obligations in the contract;
- Determination of the transaction price;
- Allocation of the transaction price to the performance obligations in the contract; and
- Recognition of revenue when, or as, the Company satisfies the performance obligations.

Revenue for the Company is generated from contracts that may include a single performance obligation or multiple performance obligations. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer and is the unit of account for revenue recognition. Revenue is measured at the transaction price which is based on the amount of consideration that the Company expects to receive in exchange for transferring the promised goods or services to the customer. The transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. The Company is required to estimate the total consideration expected to be received from contracts with customers. The consideration expected to be received may be variable based on the specific terms of the contract and the Company's past practices.

For contracts with multiple performance obligations, the Company allocates the total transaction price to distinct performance obligations based on directly observable data, if available, or the Company's best estimate of stand-alone selling price of each distinct performance obligation. The primary method used to estimate stand-alone selling price is the cost plus a margin approach.

The Company applies significant judgment in order to identify and determine the number of performance obligations, determine the total transaction price, allocate the transaction price to each performance obligation, and determine the appropriate timing of revenue recognition.

The Company's payment terms are less than one year and its sales arrangements do not contain any significant financing components.

Timing of revenue recognition. The Company recognizes revenue related to performance obligations in its contracts with customers when control passes to the customer. Control passes to the customer when the customer has the ability to direct the use of and obtain substantially all of the remaining benefits from the asset. For the majority of the Company's products, revenue is recognized at a point in time when the products are shipped or delivered to the customer based on the shipping terms as that is the point in time when control passes to the customer. For the year ended December 31, 2018, the Company recognized revenue of \$449.8 million related to products shipped or delivered at a point in time.

The Company also recognizes revenue over time primarily when the Company's performance obligation includes: enhancing a customer-controlled asset (generally when an engine is provided by the customer) or constructing an asset with no alternative future use and the Company has an enforceable right to payment throughout the period as the services are performed. The Company recognizes revenue throughout the manufacturing process in these scenarios based on labor hours incurred because the customer receives the benefit of the asset as the product is constructed. The Company believes labor hours incurred relative to total estimated

labor hours at completion faithfully depicts the transfer of control to the customer. For the year ended December 31, 2018, the Company recognized revenue of \$46.2 million for products manufactured over time.

Variable consideration. Variable consideration primarily includes rebates and discounts. The Company estimates the projected amount of rebates and discounts based on current assumptions, customer-specific information and historical experience. Variable consideration is recorded as a reduction of revenue to the extent that it is probable that there will not be significant changes to the Company's estimate of variable consideration when any uncertainties are settled.

Allowance for Doubtful Accounts

The carrying amount of accounts receivable is reduced by a valuation allowance that reflects the Company's management's best estimate of the amounts that will not be collected. The Company's management specifically reviews all past-due accounts receivable balances and, based on historical experience and an assessment of current creditworthiness, estimates the portion, if any, of the balance that will not be collected.

Inventories

The Company's inventories consist primarily of engines and parts. Engines are valued at the lower of cost plus estimated freight-in, as determined by specific serial number identification, or net realizable value. Parts are valued at the lower of cost (first-in, first out) or net realizable value. Net realizable value approximates replacement cost.

It is the Company's policy to review inventories on a continuous basis for obsolete, excess and slow-moving items and to record valuation adjustments for such items in order to eliminate non-recoverable costs from inventory. The Company writes down inventory for an estimated amount equal to the difference between the cost of the inventory and the estimated realizable value. Additionally, an inventory reserve is provided based upon the Company's estimate of future demand for the quantity of inventory on hand. In determining an estimate of future demand, multiple factors are taken into consideration, including (i) customer purchase orders and customer forecasted demand, (ii) historical sales/usage for each inventory item and (iii) utilization within a current or anticipated future power system. These factors are primarily based upon quantifiable information, and therefore the Company has not experienced significant differences in inventory valuation due to variances in the Company's estimation of future demand. The Company estimates that, in 2018, a 10% variance between the estimated net realizable value of such inventory and its actual realizable amount would have an immaterial impact on the Company's cost of goods sold and the value of the Company's inventories.

Goodwill and Other Intangibles

The Company amortizes its intangible assets with finite lives, other than goodwill which is separately tested for impairment, on an accelerated basis over their respective estimated useful lives and will review for impairment whenever impairment indicators exist. The Company's intangible assets consist of goodwill, customer relationships, developed technology, and trade names and trademarks.

Goodwill represents the excess of purchase price and related costs over the values assigned to the net tangible and identifiable intangible assets of businesses acquired. Goodwill is not amortized, but instead it is tested for impairment annually, or more frequently if circumstances indicate that a possible impairment may exist.

The discounted cash flow method involves the Company's management making estimates with respect to a variety of factors that will significantly impact the future performance of the business, including the following:

- Future volume projections;
- Estimated margins on sales;
- Estimated growth rate for SG&A costs;
- Future effective tax rate for the Company; and
- Weighted-average cost of capital ("WACC") used to discount future performance of the Company.

Because these estimates form a basis for the determination of whether or not the impairment charge should be recorded, these estimates are considered to be critical accounting estimates.

As of December 31, 2018, the Company has \$29.8 million of goodwill. Future goodwill impairment charges may be required for certain reporting units if the units suffer declines in profitability due to changes in volume, market pricing, cost or the business environment. Significant adverse changes to the Company's business environment and future cash flows could cause the recognition of impairment charges, which could be material, in future periods.

Impairment of Long-Lived Assets

The long-lived assets, other than goodwill which is separately tested for impairment, are evaluated for impairment whenever events indicate that the carrying amount of such assets may not be recoverable. Potential indicators of impairment may include deteriorating business climate, an asset remaining idle for more than a short period of time, advances in technology, or plans to discontinue use of, or change, the business model for the operation in which a long-lived asset is used. The Company evaluates long-lived assets

for impairment by comparing the carrying value of the long-lived assets with the estimated future net undiscounted cash flows expected to result from the use of the assets, including cash flows from disposition. If the future net undiscounted cash flows are less than the carrying value, the Company then calculates an impairment loss. The impairment loss is calculated by comparing the long-lived asset's carrying value with its estimated fair value, which may be based on estimated future discounted cash flows. The Company also periodically reevaluates the useful lives of its long-lived assets due to advances and changes in its technologies.

The Company's impairment loss calculations contain critical estimates because they require the Company's management to make assumptions and to apply judgment to estimate future cash flows and long-lived asset fair values, including forecasting useful lives of the long-lived assets and selecting discount rates.

If actual results are not consistent with the assumptions used, the Company could experience an impairment triggering event and be exposed to losses that could be material.

During 2018, the Company recognized an impairment charge of \$2.2 million which primarily related to developed technology acquired in the AGA acquisition. See Note 5. *Goodwill and Other Intangibles*, included in Item 8. *Financial Statements and Supplementary Data*.

Warranty

The Company offers a standard limited warranty on the workmanship of its products that in most cases covers defects for a defined period. Warranties for certified emission products are mandated by the EPA and/or the CARB and are longer than the Company's standard warranty on certain emission-related products. The Company's products may also carry limited warranties from suppliers. The Company's warranties generally apply to engines fully manufactured by the Company and to the modifications the Company makes to supplier base products. Costs related to the supplier warranty claims are generally borne by the supplier and passed through to the end customer. The Company estimates and records a liability and related charges to income for its warranty program at the time products are sold to customers. Estimates are based on historical experience and reflect management's best estimates of expected costs at the time products are sold. As of December 31, 2018, the Company had warranty reserves of \$23.1 million.

The Company records adjustments to pre-existing warranties for changes in its estimate of warranty costs for products sold in prior fiscal years in the period in which it is determined that actual costs may differ from the Company's initial or previous estimates. Such adjustments typically occur when new information received by the Company indicates claims experience deviates from historic and expected trends. During 2018, the Company recognized charges for adjustments to pre-existing warranties of \$3.8 million.

When the Company identifies cost effective opportunities to address issues in products sold or corrective actions for safety issues, it initiates product recalls or field campaigns. As a result of the uncertainty surrounding the nature and frequency of product recalls and field campaigns, the liability for such actions is generally recorded when the Company commits to a product recall or field campaign. In each subsequent quarter after a recall or field campaign is initiated, the recorded warranty liability balance is analyzed, reviewed, and adjusted, if necessary, to reflect any changes in the anticipated average cost of repair or number of repairs to be completed prospectively.

When collection is reasonably assured, the Company also estimates the amount of warranty claim recoveries to be received from its suppliers. Warranty costs and recoveries are included in *Cost of sales* in the Consolidated Statement of Operations.

Weichai Warrants

The Weichai warrants were measured at fair value based on unobservable inputs and, therefore, were classified as Level 3 in the fair-value hierarchy.

The Weichai Warrant was issued in March 2017 and is further discussed in Note 3. *Weichai Transactions*, included in Item 8. *Financial Statements and Supplementary Data*. The monetary value of the Weichai Warrant is dependent both on variations in the fair value of the Company's Common Stock and on the estimated number of shares required to settle its terms. The fair value of the Weichai Warrant liability is estimated using the Black-Scholes option pricing model and Monte Carlo simulations. Significant inputs into the valuation include the market value of the Company's Common Stock, the estimated exercise price of the warrant (including a price adjustment) and the estimated price volatility. Given the unobservable nature of certain inputs to the valuation of the Weichai Warrant, the Weichai Warrant is classified as Level 3 in the fair-value hierarchy. Significant changes in the estimates of these inputs could result in material changes to the liability, with the changes in value recorded in the Consolidated Results of Operations. The Weichai Warrant was exercised in April 2019.

Stock-Based Compensation

The Company has an incentive compensation plan (the "2012 Plan"), which authorizes the granting of a variety of different types of awards including, but not limited to, nonqualified stock options, incentive stock options, Restricted Stock Awards ("RSAs"), Stock Appreciation Rights ("SARs"), deferred stock and performance units to its executive officers, employees, consultants and Directors. To date, the Company's granted awards have generally been either RSAs or SARs.

RSAs represent Common Stock issued subject to forfeiture or other restrictions that will lapse upon satisfaction of specified conditions. RSAs are valued based on the fair value of the Common Stock at grant date, with compensation expense for employees recognized over the vesting period based on the date of the award, primarily in SG&A expense.

SAR awards entitle the recipients to receive, upon exercise, a number of shares of the Company's Common Stock equal to (i) the number of shares for which the SARs are being exercised multiplied by the value of one share of the Company's Common Stock on the date of exercise (determined as provided in the SARs award agreement), less (ii) the number of shares for which the SARs are being exercised multiplied by the applicable exercise price, divided by (iii) the value of one share of the Company's Common Stock on the date of exercise (determined as provided in the SARs award agreement).

The Company accounts for SARs based on the grant date fair value of the award. The cost is recognized as an expense over the requisite service period, which is generally the vesting period of the respective award. The Black-Scholes option-pricing model is used to determine the estimated fair value of SARs. Critical inputs into the Black-Scholes option-pricing model include the following:

- **Expected Volatility.** The expected volatility is a measure of the amount by which a financial variable such as a share price is expected to fluctuate during a period. The Company considers the historical volatility of its stock price over a term similar to the expected life of the related awards in determining expected volatility.
- **Expected Term.** The expected terms are determined based upon the simplified approach, which assumes that the stock awards will be exercised evenly from vesting to expiration.
- **Risk-Free Interest Rate.** The risk-free interest rate is based on the yields of U.S. Treasury securities with maturities similar to the expected term of the related award.
- **Dividend Yield.** The Company has never declared or paid any cash dividends and does not presently plan to pay cash dividends in the foreseeable future. Consequently, the expected dividend yield is zero.

If any of the assumptions used in the Black-Scholes model change significantly, stock-based compensation expense for future awards may differ materially compared with the awards previously granted. The inputs that create the most sensitivity in the Company's award valuation are the volatility and expected term. See Note 12. *Stock-Based Compensation*, included in Item 8. *Financial Statements and Supplementary Data*, for additional information regarding the assumptions used in the Black-Scholes model.

Deferred Tax Asset Valuation Allowance

The Company accounts for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial statements and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to be settled or realized. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

The Company records net deferred tax assets to the extent that the Company believes the assets will more likely than not be realized. In making such a determination, the Company considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax-planning strategies and results of recent operations. Valuation allowances are established when, based on currently available information, it is more likely than not that all or a portion of a deferred tax asset will not be realized. The ultimate recovery of deferred tax assets is dependent upon the amount and timing of future taxable income and other factors such as the taxing jurisdiction in which the asset is to be recovered. A high degree of judgment is required to determine if, and the extent to which, valuation allowances should be recorded against deferred tax assets.

As of December 31, 2018 and 2017, the Company recorded a deferred tax asset valuation allowance of \$44.4 million and \$32.0 million, respectively. Although the Company believes that its approach to estimates and judgments as described herein is reasonable, actual results could differ, and the Company may be exposed to increases or decreases in income taxes that could be material. See Note 10. *Income Taxes*, included in Item 8. *Financial Statements and Supplementary Data*, for additional information regarding the deferred tax valuation allowance.

Uncertain Tax Positions

The Company records uncertain tax positions on the basis of a two-step process whereby (i) the Company determines whether it is more likely than not that the tax positions will be sustained based on the technical merits of the position and (ii) for those tax positions that meet the more-likely-than-not recognition threshold, the Company recognizes the largest amount of tax benefit that is greater than 50% likely to be realized upon ultimate settlement with the related tax authority. The Company recognizes interest and penalties related to uncertain tax positions as part of the income tax expense. As of December 31, 2018 and 2017, the Company had unrecognized tax benefits of \$1.4 million, and \$1.3 million, respectively, for uncertain tax positions. See Note 10. *Income Taxes*, included in Item 8. *Financial Statements and Supplementary Data*, for additional information regarding uncertain tax

provisions.

Impact of New Accounting Standards

For information about recently issued accounting pronouncements, see Note 1. *Summary of Significant Accounting Policies and Other Information*, included in Item 8. *Financial Statements and Supplementary Data*.

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

The Company is a smaller reporting company as defined by Rule 12b-2 of the Exchange Act and is not required to provide the information under this item.

Item 8. Financial Statements and Supplementary Data.

The following consolidated financial statements are included in Item 8 of this Form 10-K.

Index to Consolidated Financial Statements

	Page
Consolidated Financial Statements of Power Solutions International, Inc.	
Report of Independent Registered Public Accounting Firm	36
Consolidated Balance Sheets as of December 31, 2018 and 2017	37
Consolidated Statements of Operations for 2018 and 2017	38
Consolidated Statements of Convertible Preferred Stock and Stockholders' (Deficit) Equity for 2018 and 2017	39
Consolidated Statements of Cash Flows for 2018 and 2017	40
Notes to Consolidated Financial Statements	41

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Stockholders and Board of Directors
Power Solutions International, Inc.
Wood Dale, Illinois

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Power Solutions International, Inc. (the “Company”) as of December 31, 2018 and 2017, the related consolidated statements of operations, convertible preferred stock and stockholders’ (deficit) equity, and cash flows for the years then ended, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2018 and 2017, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Going Concern Uncertainty

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has suffered recurring losses from operations and significant uncertainties exist about the Company’s ability to refinance, extend, or repay outstanding indebtedness, the circumstances of which raise substantial doubt about the Company’s ability to continue as a going concern. Management’s plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Change in Accounting Method Related to Revenue Recognition

As discussed in Note 1 to the consolidated financial statements, the Company has changed its method for revenue recognition in 2018 due to the adoption of the new revenue standard.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits, also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ BDO USA, LLP

We have served as the Company’s auditor since 2018.

Chicago, Illinois

December 27, 2019

POWER SOLUTIONS INTERNATIONAL, INC.
CONSOLIDATED BALANCE SHEETS

(in thousands)

	As of December 31,	
	2018	2017 (As Revised)
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 54	\$ —
Accounts receivable, net of allowances of \$2,596 and \$1,820 for 2018 and 2017, respectively	86,471	68,660
Income tax receivable	973	1,018
Inventories, net	105,614	86,724
Prepaid expenses and other current assets	22,917	14,359
Total current assets	216,029	170,761
Property, plant and equipment, net	24,266	18,960
Intangible assets, net	17,010	21,491
Goodwill	29,835	29,835
Other noncurrent assets	2,742	5,972
TOTAL ASSETS	\$ 289,882	\$ 247,019
LIABILITIES AND STOCKHOLDERS' (DEFICIT) EQUITY		
Current liabilities:		
Accounts payable	\$ 85,218	\$ 51,225
Revolving line of credit	54,613	37,055
Warrant liability	35,100	—
Other accrued liabilities	45,700	34,332
Total current liabilities	220,631	122,612
Deferred income taxes	647	703
Warrant liability	—	24,700
Long-term debt	54,712	54,439
Other noncurrent liabilities	32,470	12,393
TOTAL LIABILITIES	\$ 308,460	\$ 214,847
STOCKHOLDERS' (DEFICIT) EQUITY		
Preferred stock – \$0.001 par value. Shares authorized: 5,000. No shares issued and outstanding at all dates.	\$ —	\$ —
Common stock – \$0.001 par value; 50,000 shares authorized; 19,067 and 19,067 shares issued; 18,638 and 18,433 shares outstanding at December 31, 2018 and 2017, respectively	19	19
Additional paid-in capital	126,412	123,838
Accumulated deficit	(135,160)	(82,147)
Treasury stock, at cost, 429 and 634 shares at December 31, 2018 and 2017, respectively	(9,849)	(9,538)
TOTAL STOCKHOLDERS' (DEFICIT) EQUITY	(18,578)	32,172
TOTAL LIABILITIES AND STOCKHOLDERS' (DEFICIT) EQUITY	\$ 289,882	\$ 247,019

See Notes to Consolidated Financial Statements

POWER SOLUTIONS INTERNATIONAL, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except per share amounts)

	For the Year Ended December 31,	
	2018	2017
Net sales	\$ 496,038	\$ 416,616
Cost of sales	437,269	365,623
Gross profit	58,769	50,993
Operating expenses:		
Research, development and engineering expenses	28,601	19,944
Selling, general and administrative expenses	59,631	44,256
Asset impairment charges	2,234	1
Amortization of intangible assets	5,008	4,838
Total operating expenses	95,474	69,039
Operating loss	(36,705)	(18,046)
Other expense (income):		
Interest expense	7,628	10,841
Loss from change in fair value of warrants	10,400	4,000
Loss on debt extinguishment and modifications	—	11,921
Other expense (income), net	(176)	2,361
Total other expense (income)	17,852	29,123
Loss before income taxes	(54,557)	(47,169)
Income tax expense	169	443
Net loss	(54,726)	(47,612)
Deemed dividend on Series B convertible preferred stock	—	(37,860)
Net loss available to common stockholders	\$ (54,726)	\$ (85,472)
Weighted-average common shares outstanding:		
Basic	18,585	13,787
Diluted	18,585	13,787
Loss per common share:		
Basic	\$ (2.94)	\$ (6.20)
Diluted	\$ (2.94)	\$ (6.20)

See Notes to Consolidated Financial Statements

POWER SOLUTIONS INTERNATIONAL, INC.

CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' (DEFICIT) EQUITY

(in thousands)

	Series B Convertible Preferred Stock	Common Stock	Additional Paid- in Capital	Treasury Stock	Accumulated Deficit	Total Stockholders' (Deficit) Equity
Balance at December 31, 2016	\$ —	\$ 12	\$ 86,764	\$ (11,581)	\$ (34,535)	\$ 40,660
Net loss	—	—	—	—	(47,612)	(47,612)
Settlement of equity-related acquisition consideration	—	—	(712)	—	—	(712)
Stock-based compensation expense	—	—	(860)	2,043	—	1,183
Payment of withholding taxes for net settlement of stock-based awards	—	—	(42)	—	—	(42)
Issuance of common stock to Weichai, net of fees	—	2	14,076	—	—	14,078
Issuance of Series B convertible preferred stock, net of fees	24,617	—	—	—	—	—
Deemed dividend on Series B convertible preferred stock	37,860	—	(37,860)	—	—	(37,860)
Conversion of Series B convertible preferred stock to common stock	(62,477)	5	62,472	—	—	62,477
Balance at December 31, 2017	\$ —	\$ 19	\$ 123,838	\$ (9,538)	\$ (82,147)	\$ 32,172
Net loss	—	—	—	—	(54,726)	(54,726)
Stock-based compensation expense	—	—	2,974	(311)	—	2,663
Payment of withholding taxes for net settlement of stock-based awards	—	—	(400)	—	—	(400)
Cumulative effect of adoption of ASC 606	—	—	—	—	1,713	1,713
Balance at December 31, 2018	\$ —	\$ 19	\$ 126,412	\$ (9,849)	\$ (135,160)	\$ (18,578)

See Notes to Consolidated Financial Statements

POWER SOLUTIONS INTERNATIONAL, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)

	For the Year Ended December 31,	
	2018	2017 (As Revised)
Cash used in operating activities		
Net loss	\$ (54,726)	\$ (47,612)
Adjustments to reconcile net loss to net cash used in operating activities:		
Amortization of intangible assets	5,008	4,838
Depreciation	5,196	4,634
Change in valuation of warrants	10,400	4,000
Stock compensation expense	2,662	473
Amortization of financing fees	1,497	4,117
Deferred income taxes	(56)	239
Loss on extinguishment of debt	—	11,921
Asset impairment charges	2,234	1
Other non-cash adjustments, net	2,086	924
Changes in operating assets and liabilities:		
Trade accounts receivable, net	(17,890)	(8,391)
Inventory, net	(26,202)	13,366
Prepaid expenses and other assets	(886)	(2,284)
Trade accounts payable	33,968	(1,198)
Income taxes refundable	125	6,508
Accrued expenses	11,630	7,839
Other noncurrent liabilities	18,786	(7,070)
Net cash used in operating activities	(6,168)	(7,695)
Cash used in investing activities		
Capital expenditures	(3,645)	(5,061)
Asset acquisitions	(6,595)	(300)
Other uses, net	1	196
Net cash used in investing activities	(10,239)	(5,165)
Cash provided by financing activities		
Repayments of long-term debt	—	(71,400)
Net proceeds from stock offering and warrants	—	59,396
Proceeds from revolving line of credit	516,440	436,228
Repayments of revolving line of credit	(498,881)	(411,948)
Other uses, net	(1,098)	(1,708)
Net cash provided by financing activities	16,461	10,568
Net increase (decrease) in cash and restricted cash	54	(2,292)
Cash at beginning of the year	—	2,292
Cash at end of the year	\$ 54	\$ —

See Notes to Consolidated Financial Statements

POWER SOLUTIONS INTERNATIONAL, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1. Summary of Significant Accounting Policies and Other Information

Nature of Business Operations

Power Solutions International, Inc. (“Power Solutions,” “PSI” or “the Company”), a Delaware corporation, is a global producer and distributor of a broad range of high-performance, certified low-emission power systems, including alternative-fueled power systems for original equipment manufacturers (“OEMs”) of off-highway industrial equipment and certain on-road vehicles and large custom-engineered integrated electrical power generation systems.

The Company’s customers include large, industry-leading and multinational organizations. The Company’s products and services are sold predominantly to customers throughout North America as well as to customers located throughout the Pacific Rim and Europe. The Company’s power systems are highly engineered, comprehensive systems which, through the Company’s technologically sophisticated development and manufacturing processes, including its in-house design, prototyping, testing and engineering capabilities and its analysis and determination of the specific components to be integrated into a given power system (driven in large part by emission standards and cost considerations), allow the Company to provide its customers with power systems customized to meet specific OEM application requirements, other technical customers’ specifications and requirements imposed by environmental regulatory bodies.

The Company’s power system configurations range from a basic engine integrated with appropriate fuel system components to completely packaged power systems that include any combination of cooling systems, electronic systems, air intake systems, fuel systems, housings, power takeoff systems, exhaust systems, hydraulic systems, enclosures, brackets, hoses, tubes and other assembled componentry. The Company also designs and manufactures large, custom engineered integrated electrical power generation systems for both standby and prime power applications. The Company purchases engines from third-party suppliers and produces internally-designed engines, all of which are then integrated into its power systems.

Of the other components that the Company integrates into its power systems, a substantial portion consist of internally designed components and components for which it coordinates significant design efforts with third-party suppliers, with the remainder consisting largely of parts that are sourced off-the-shelf from third-party suppliers. Some of the key components (including purchased engines) embody proprietary intellectual property of the Company’s suppliers. As a result of its design and manufacturing capabilities, the Company is able to provide its customers with a power system that can be incorporated into a customer’s specified application. In addition to the certified products described above, the Company sells diesel, gasoline and non-certified power systems and aftermarket components.

In March 2017, the Company executed a share purchase agreement (the “SPA”) with Weichai America Corp., a wholly owned subsidiary of Weichai Power Co., Ltd. (HK2338, SZ000338) (herein collectively referred to as “Weichai”). Under the terms of the SPA, Weichai invested \$60.0 million in the Company purchasing a combination of newly issued Common and Preferred Stock as well as a stock purchase warrant (the “Weichai Warrant”).

Stock Ownership and Control

With the exercise of the Weichai Warrant in April 2019, Weichai owns a majority of the outstanding shares of the Company's Common Stock. As a result, Weichai is able to exercise control over matters requiring stockholders’ approval, including the election of the Directors, amendment of the Company’s Charter and approval of significant corporate transactions. This control could have the effect of delaying or preventing a change of control of the Company or changes in management and will make the approval of certain transactions impractical without the support of Weichai.

Weichai entered into an Investor Rights Agreement (the “Rights Agreement”) with the Company upon execution of the SPA. The Rights Agreement provides Weichai with representation on the Company’s Board of Directors (the “Board”) and management representation rights. Weichai currently has three representatives on the Board. According to the Rights Agreement, with Weichai exercising the Weichai Warrant and becoming the majority owner of the outstanding shares of the Company's Common Stock calculated on a fully-diluted as-converted basis (excluding certain excepted issuances), the Company is obligated to appoint to the Board an additional individual designated by Weichai, and Weichai thereafter has the right to nominate for election four Directors and any additional number of designees necessary to ensure that its designees constitute the majority of the Directors serving on the Board. According to the Rights Agreement, during any period when the Company is a “controlled company” within the meaning of the NASDAQ Stock Market (“NASDAQ”) Listing Rules, it will take such measures as to avail itself of the “controlled company” exemptions available under Rule 5615 of the NASDAQ Listing Rules of Rules 5605(b), (d) and (e).

Going Concern Considerations

The Company’s management has concluded that, due to uncertainties surrounding the Company’s ability to amend or refinance its current debt agreements and the uncertainty as to whether it will have sufficient liquidity to fund its business activities, substantial doubt exists as to its ability to continue as a going concern within one year after the date that these financial statements are issued. The Company’s plans to alleviate the substantial doubt about its ability to continue as a going concern may not be successful, and

it may be forced to limit its business activities or be unable to continue as a going concern, which would have a material adverse effect on its results of operations and financial condition.

The consolidated financial statements included herein have been prepared assuming that the Company will continue as a going concern and contemplating the realization of assets and the satisfaction of liabilities and commitments in the normal course of business. The Company's ability to continue as a going concern is dependent on generating profitable operating results, having sufficient liquidity, maintaining compliance with the covenants and other requirements under the Wells Fargo Credit Agreement (the "Wells Fargo Credit Agreement") with Wells Fargo Bank, N.A. ("Wells Fargo") and the Unsecured Senior Notes (the "Unsecured Senior Notes"), and refinancing or repaying the indebtedness outstanding under those agreements. The current Wells Fargo Credit Agreement maturity date is the earlier of March 31, 2021, or 60 days prior to the final maturity of the Unsecured Senior Notes, which currently mature on June 30, 2020, resulting in a current maturity date of May 1, 2020 for the Wells Fargo Credit Agreement.

Based on the Company's current forecasts, without additional financing, the Company anticipates that it will not have sufficient cash and cash equivalents to repay the Unsecured Senior Notes by May 1, 2020. Management plans to seek additional liquidity from other lenders before May 1, 2020 to avoid acceleration of the Wells Fargo Credit Agreement. There can be no assurance that the Company's management will be able to successfully complete a financing on acceptable terms or repay this outstanding indebtedness, when required or if at all. The consolidated financial statements included in this Form 10-K do not include any adjustments that might result from the outcome of the Company's efforts to address these issues.

Furthermore, if the Company cannot raise capital on acceptable terms, it may not, among other things, be able to:

- Continue to expand the Company's research and product investments and sales and marketing organization;
- Expand operations both organically and through acquisitions; and
- Respond to competitive pressures or unanticipated working capital requirements.

Basis of Presentation and Consolidation

The Company is filing this Annual Report on Form 10-K for the year ended December 31, 2018, which contains audited consolidated financial statements as of and for the years ended December 31, 2018 and 2017.

The consolidated financial statements include the accounts of Power Solutions International, Inc. and its wholly owned subsidiaries. The Company's consolidated financial statements were prepared in accordance with generally accepted accounting principles in the United States ("U.S. GAAP") and include the assets, liabilities, sales and expenses of all wholly owned subsidiaries and majority-owned subsidiaries in which the Company exercises control. All intercompany balances and transactions have been eliminated in consolidation.

The Company operates as one business and geographic operating segment. Operating segments are defined as components of a business that can earn revenues and incur expenses for which discrete financial information is available that is evaluated on a regular basis by the chief operating decision maker ("CODM"). The Company's CODM is its principal executive officer, who decides how to allocate resources and assess performance. A single management team reports to the CODM, who manages the entire business. The Company's CODM reviews Consolidated Statements of Operations to make decisions, allocate resources and assess performance, and the CODM does not evaluate the profit or loss from any separate geography or product line.

Immaterial Revision to Prior Year Period Financial Statements

Subsequent to the issuance of the 2017 financial statements, a misclassification was identified within the Company's Consolidated Balance Sheet related to the product warranty accrual. The Company previously presented the product warranty accrual within current liabilities as a component of *Other accrued liabilities* on the Consolidated Balance Sheets. After further evaluation, the Company determined it appropriate to reflect the portion of the Company's product warranty accrual that is expected to be settled beyond the twelve months following the respective balance sheet date to other noncurrent liabilities. The Company assessed the materiality of the misclassification considering both qualitative and quantitative factors and determined that as of and for the year ended December 31, 2017, the three-month period ended March 31, 2017, the six-month period ended June 30, 2017, and the nine-month period ended September 30, 2017, the adjustments were immaterial. The Company has decided to correct the prior year presentation to also provide comparability to the 2018 financial statements.

The adjustments had no impact to total liabilities, total cash flows from operating activities, the Consolidated Statements of Operations, or the Statements of Convertible Preferred Stock and Stockholders' (Deficit) Equity.

The effects of the adjustments on the line items within the Company's Consolidated Balance Sheet at December 31, 2017 and Consolidated Statement of Cash Flows for the year ended December 31, 2017, are as follows:

Consolidated Balance Sheet

(in thousands)	December 31, 2017 (As Previously Reported)	Adjustment	December 31, 2017 (As Revised)
Other accrued liabilities	\$ 38,362	\$ (4,042)	\$ 34,320
Total current liabilities	126,654	(4,042)	122,612
Other noncurrent liabilities	8,351	4,042	12,393

Consolidated Statement of Cash Flows

(in thousands)	December 31, 2017 (As Previously Reported)	Year-Ended Adjustment	December 31, 2017 (As Revised)
Changes in operating assets and liabilities:			
Accrued expenses	\$ 6,029	\$ 1,810	\$ 7,839
Other noncurrent liabilities	(5,260)	(1,810)	(7,070)

The effects of the adjustments on the line items within the Company's unaudited Consolidated Balance Sheet and Statement of Cash Flows as of and for the three-month period ended March 31, 2017, the six-month period ended June 30, 2017, and the nine-month period ended September 30, 2017, are as follows:

Consolidated Balance Sheet (unaudited)

(in thousands)	March 31, 2017 (As Previously Reported)	Adjustment	March 31, 2017 (As Revised)
Other accrued liabilities	\$ 35,234	\$ (6,425)	\$ 28,809
Total current liabilities	119,318	(6,425)	112,893
Other noncurrent liabilities	13,328	6,425	19,753

(in thousands)	June 30, 2017 (As Previously Reported)	Adjustment	June 30, 2017 (As Revised)
Other accrued liabilities	\$ 35,379	\$ (5,269)	\$ 30,110
Total current liabilities	116,281	(5,269)	111,012
Other noncurrent liabilities	12,438	5,269	17,707

(in thousands)	September 30, 2017 (As Previously Reported)	Adjustment	September 30, 2017 (As Revised)
Other accrued liabilities	\$ 41,393	\$ (4,098)	\$ 37,295
Total current liabilities	136,940	(4,098)	132,842
Other noncurrent liabilities	13,312	4,098	17,410

Consolidated Statement of Cash Flows (unaudited)

(in thousands)	Three Months Ended		
(in thousands)	March 31, 2017 (As Previously Reported)	Adjustment	March 31, 2017 (As Revised)
Changes in operating assets and liabilities:			
Accrued expenses	\$ 2,432	\$ (571)	\$ 1,861
Other noncurrent liabilities	(121)	571	450

(in thousands)	Six Months Ended		
	June 30, 2017 (As Previously Reported)	Adjustment	June 30, 2017 (As Revised)
Changes in operating assets and liabilities:			
Accrued expenses	\$ 3,242	\$ 584	\$ 3,826
Other noncurrent liabilities	(894)	(584)	(1,478)

(in thousands)	Nine Months Ended		
	September 30, 2017 (As Previously Reported)	Adjustment	September 30, 2017 (As Revised)
Changes in operating assets and liabilities:			
Accrued expenses	\$ 8,867	\$ 1,755	\$ 10,622
Other noncurrent liabilities	(821)	(1,755)	(2,576)

Reclassifications

Certain amounts recorded in the prior-period consolidated financial statements presented have been reclassified to conform to the current-period financial statement presentation. These reclassifications had no effect on previously reported results of operations.

Concentrations

The following table presents customers individually accounting for more than 10% of the Company's net sales:

	For the Year Ended December 31,	
	2018	2017
Customer A	15%	16%
Customer B	11%	10%

The following table presents customers individually accounting for more than 10% of the Company's accounts receivable:

	As of December 31,	
	2018	2017
Customer A	15%	18%
Customer B	**	13%
Customer C	25%	**

The following table presents suppliers individually accounting for more than 10% of the Company's purchases:

	For the Year Ended December 31,	
	2018	2017
Supplier A	19%	21%
Supplier B	13%	**

** Less than 10% of the total

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires that management make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. Significant estimates and assumptions include the valuation of allowances for uncollectible receivables, inventory reserves, warranty reserves, Weichai warrants, stock-based compensation, evaluation of goodwill, other intangibles, plant and equipment for impairment, and determination of useful lives of long-lived assets. Actual results could materially differ from those estimates.

Cash and Cash Equivalents

Cash equivalents consist of short-term, highly liquid investments that mature within three months or less. Such investments are stated at cost, which approximates fair value. The Company's revolving credit agreement with Wells Fargo currently includes a

“lockbox” arrangement that receives all receipts and from which the Company can request increases in the revolver borrowings. See Note 6. *Debt* for additional information regarding the Wells Fargo Credit Agreement.

Stock-Based Compensation

The Company accounts for stock-based compensation expense based on the grant date fair value of the award with the cost recognized over the requisite service period, which is generally the vesting period of the respective award. See Note 12. *Stock-Based Compensation* for additional information.

Research and Development

Research and development (“R&D”) expenses are expensed when incurred. R&D expenses consist primarily of wages, materials, testing and consulting related to the development of new engines, parts and applications. These costs were \$26.8 million and \$18.4 million for 2018 and 2017, respectively.

Income Taxes

The Company accounts for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to be settled or realized. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

The Company records net deferred tax assets to the extent that it believes these assets will more likely than not be realized. In making such a determination, the Company considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax-planning strategies and results of recent operations. As of December 31, 2018 and 2017, the Company had a valuation allowance of \$44.4 million and \$32.0 million, respectively.

The Company records uncertain tax positions in accordance with accounting guidance, on the basis of a two-step process whereby (i) it determines whether it is more likely than not that the tax positions will be sustained based on the technical merits of the position and (ii) for those tax positions that meet the more-likely-than-not recognition threshold, the Company recognizes the largest amount of tax benefit that is greater than 50 percent likely to be realized upon ultimate settlement with the related tax authority. Tax benefits related to uncertain tax positions taken or expected to be taken on a tax return are recorded when such benefits meet a more-likely-than-not threshold. Otherwise, these tax benefits are recorded when a tax position has been effectively settled, which means that the appropriate taxing authority has completed its examination even though the statute of limitations remains open, or the statute of limitation has expired. Interest and penalties related to uncertain tax positions are recognized as part of income tax expense and are accrued beginning in the period that such interest and penalties would be applicable under relevant tax law until such time that the related tax benefits are recognized. As of December 31, 2018 and 2017, the Company had an unrecognized tax benefit of \$1.4 million and \$1.3 million, respectively, for uncertain tax positions excluding interest and penalties.

On December 22, 2017, the President of the United States signed into law the Tax Cuts and Jobs Act (the “Tax Act”). The Tax Act included a number of changes to existing U.S. tax laws that impact the Company, most notably a reduction of the U.S. federal corporate income tax rate from 34 percent to 21 percent for tax years beginning after December 31, 2017. The Tax Act also provides for the acceleration of depreciation for certain assets placed into service after September 27, 2017 as well as prospective changes beginning in 2018, including repeal of the domestic manufacturing deduction and additional limitations on executive compensation. The Company recognized the income tax effects of the Tax Act in its 2017 financial statements. The Company analyzed the Tax Act, and remeasured its U.S. deferred tax balances to reflect the new U.S. corporate income tax rate as of December 31, 2017.

Accounts Receivable and Allowance for Doubtful Accounts

Trade accounts receivable represent amounts billed to customers and not yet collected. Trade accounts receivable are recorded at the invoiced amount, which approximates net recoverable value, and generally do not bear interest. The allowance for doubtful accounts is the Company’s best estimate of the amount of probable credit losses in the existing accounts receivable and is established through a charge to Selling, general and administrative expenses. The allowance is primarily determined based on historical collection experience and reviews of customer creditworthiness. Trade accounts receivable and the allowance for doubtful accounts are reviewed on a regular basis. When necessary, an allowance for the full amount of specific accounts deemed uncollectible is recorded. Accounts receivable losses are deducted from the allowance and the account balance is written off when the customer receivable is deemed uncollectible. Recoveries of previously written off balances are recognized when received. An allowance associated with anticipated future sales returns is also included in the allowance for doubtful accounts.

Insurance Recoveries

The Company records insurance recoveries related to amounts recorded as estimated losses on events covered by the Company's insurance policies when management determines that the recovery is probable and the amount can be reasonably determined.

Inventories

Inventories are stated at the lower of cost or net realizable value, which approximates current replacement cost. Cost is principally determined using the first-in, first-out method and includes material, labor and manufacturing overhead. It is the Company's policy to review inventories on a continuing basis for obsolete, excess and slow-moving items and to record valuation adjustments for such items in order to eliminate non-recoverable costs from inventory. Valuation adjustments are recorded in an inventory reserve account and reduce the cost basis of the inventory in the period in which the reduced valuation is determined. Inventory reserves are established based on quantities on hand, usage and sales history, customer orders, projected demand and utilization within a current or future power system. Specific analysis of individual items or groups of items is performed based on these same criteria, as well as on changes in market conditions or any other identified conditions.

Inventories consist of the following:

(in thousands)	As of December 31,	
	2018	2017
Inventories		
Raw materials	\$ 90,877	\$ 71,732
Work in process	2,390	4,535
Finished goods	18,077	16,684
Total inventories	111,344	92,951
Inventory allowance	(5,730)	(6,227)
Inventories, net	\$ 105,614	\$ 86,724

Activity in the Company's inventory allowance was as follows:

(in thousands)	For the Year Ended December 31,	
	2018	2017
Inventory Allowance		
Balance at beginning of period	\$ 6,227	\$ 10,082
Charged to expense	2,153	421
Write-offs	(2,650)	(4,276)
Balance at end of year	\$ 5,730	\$ 6,227

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of the following:

(in thousands)	As of December 31,	
	2018	2017
Prepaid Expenses and Other Current Assets		
Insurance proceeds receivable	\$ 15,989	\$ 10,563
Prepaid expenses	3,260	3,710
Contract assets	2,926	—
Other	742	86
Total	\$ 22,917	\$ 14,359

Estimated insurance recoveries related to litigation reserves in *Other accrued liabilities* are reflected as assets in the Company's Consolidated Balance Sheets when it is determined that the receipt of such amounts is probable, and the amount can be reasonably determined.

Property, Plant and Equipment

Property, plant and equipment is carried at cost and presented net of accumulated depreciation and impairments. Depreciation is computed using the straight-line method over the estimated useful lives of the assets. Property, plant and equipment is evaluated periodically to determine if an adjustment to depreciable lives is warranted. Such evaluation is based principally on the expected utilization of the long-lived assets.

Repairs and maintenance costs are charged directly to expense as incurred. Major renewals or replacements that substantially extend the useful life of an asset are capitalized and depreciated.

Estimated useful lives by each type of asset category are as follows:

	Years
Buildings	Up to 39
Leasehold improvements	Lesser of (i) expected useful life of improvement or (ii) life of lease (including likely extension thereof)
Machinery and equipment	1 to 10

Intangible Assets

The Company's intangible assets include customer relationships, developed technology, trade names and trademarks. Intangible assets are amortized on an accelerated basis over a period of time that approximates the pattern over which the Company expects to gain the estimated economic benefits, and such period generally ranges between 3 years and 15 years. The useful life of intangible assets is assessed and assigned based on the facts and circumstances specific to the acquisition.

Impairment of Long-Lived Assets

The Company assesses potential impairments to its long-lived assets or asset groups, excluding goodwill, which is separately tested for impairment, whenever events indicate that the carrying amount of such assets may not be recoverable. Long-lived assets are evaluated for impairment by comparing the carrying value of the asset or asset group with the estimated future net undiscounted cash flows expected to result from the use of the asset or asset group, including cash flows from disposition. If the future net undiscounted cash flows are less than the carrying value, an impairment loss is calculated. An impairment loss is determined by the amount that the asset's or asset group's carrying value exceeds its estimated fair value. Estimated fair value is generally measured by discounting estimated future cash flows. If an impairment loss is recognized, the adjusted balance becomes the new cost basis and is depreciated (amortized) over the remaining useful life. The Company also periodically reassesses the useful lives of its long-lived assets due to advances and changes in technologies.

In the fourth quarter of 2018, the Company recognized an impairment charge of \$2.2 million related to developed technology.

Goodwill

Goodwill represents the excess of the cost of an acquired business over the amounts assigned to the net acquired assets. Goodwill is not amortized but is tested for impairment at the reporting unit level, on an annual basis or more frequently, if events occur or circumstances change indicating potential impairment. The Company annually tests goodwill for impairment on October 1st.

In evaluating goodwill for impairment, the Company may first assess qualitative factors to determine whether it is more likely than not (i.e., there is a likelihood of more than 50%) that the Company's fair value is less than its carrying amount. Qualitative factors that the Company considers include, but are not limited to, macroeconomic and industry conditions, overall financial performance and other relevant entity-specific events. If the Company bypasses the qualitative assessment, or if the Company concludes that it is more likely than not that the fair value of a reporting unit is less than its carrying value, then the Company performs a two-step goodwill impairment test to identify potential goodwill impairment and measures the amount of goodwill impairment it will recognize, if any.

In the first step of the two-step goodwill impairment test, the Company compares the estimated fair value of the reporting unit with its related carrying value. The Company has two reporting units: PSI and Professional Power Products, Inc. ("3PI"). If the estimated fair value exceeds the carrying amount, no further analysis is needed. If, however, the reporting unit's estimated fair value is less than its carrying amount, the Company proceeds to the second step and calculates the implied fair value of goodwill to determine whether any impairment is required.

The Company calculates its estimated fair value using the income and market approaches when feasible, or an asset approach when neither the income nor the market approach has sufficient data. For the income approach, a discounted cash flow method, the Company uses internally developed discounted cash flow models that include the following assumptions, among others: projections of revenues, expenses and related cash flows based on assumed long-term growth rates and demand trends, expected future investments to grow new units, and estimated discount rates. The Company based these assumptions on its historical data and experience, third-party appraisals, industry projections, and micro and macro general economic condition projections and expectations. The market approach, also called the Guideline Public Company Approach, compares the value of an entity to similar publicly traded companies. The asset approach estimates the selling price the unit could achieve under assumed market conditions.

If the fair value of a reporting unit exceeds its carrying amount, goodwill of the reporting unit is considered not impaired, and the second step of the impairment test is unnecessary. If the carrying amount of a reporting unit exceeds its fair value, the second step of the goodwill impairment test is performed to measure the amount of impairment loss, if any. The second step compares the

implied fair value of the reporting unit goodwill with the carrying amount of that goodwill. If the carrying amount of reporting unit goodwill exceeds the implied fair value of that goodwill, an impairment loss is recognized in an amount equal to that excess.

During the years ended December 31, 2018 and 2017, the estimated fair value of the reporting units exceeded the carrying value; as such, no impairment charges were recognized.

Other Accrued Liabilities

Other accrued liabilities consisted of the following:

(in thousands)	As of December 31,	
	2018	2017 (As Revised)
Other Accrued Liabilities		
Accrued product warranty*	\$ 9,767	\$ 8,585
Litigation reserves **	16,139	12,137
Contract liabilities (deferred revenue)	4,897	2,822
Accrued compensation and benefits	4,520	2,593
Professional services	27	1,974
Accrued interest expense	1,175	686
Other	9,175	5,535
Total	\$ 45,700	\$ 34,332

* The Company recorded adjustments to reflect a portion of the accrued product warranty liability previously in *Other accrued expenses* at December 31, 2017 to correct the presentation error and to conform to the current period presentation. See above for additional discussion of the adjustment.

** As of December 31, 2018 and 2017, litigation reserves primarily consisted of accruals for the settlement of the Securities Litigation, Federal Derivative Litigation, and the Cohen matter. The Company concluded that insurance recovery was probable related to \$14.0 million of the litigation reserves and recognized full recovery of the settlement amounts in *Prepaid expenses and other current assets*. See Note 9, *Commitments and Contingencies* for additional information.

Warranty Costs

The Company offers a standard limited warranty on the workmanship of its products that in most cases covers defects for a defined period. Warranties for certified emission products are mandated by the U.S. Environmental Protection Agency (the “EPA”) and/or the California Air Resources Board (the “CARB”) and are longer than the Company’s standard warranty on certain emission-related products. The Company’s products also carry limited warranties from suppliers. The Company warranties generally apply to engines fully manufactured by the Company and to the modifications the Company makes to supplier base products. Costs related to supplier warranty claims are generally borne by the supplier and passed through to the end customer.

Warranty estimates are based on historical experience and represent the projected cost associated with the product. A liability and related expense are recognized at the time products are sold. The Company adjusts estimates when it is determined that actual costs may differ from initial or previous estimates.

The Company records adjustments to pre-existing warranties for changes in its estimate of warranty costs for products sold in prior fiscal years in the period in which new information is received and the information indicates that actual costs may differ from the Company’s initial or previous estimates. Such adjustments typically occur when claims experience deviates from historic and expected trends. During 2018, the Company recognized charges for adjustments to pre-existing warranties of \$3.8 million.

When the Company identifies cost effective opportunities to address issues in products sold or corrective actions for safety issues, it initiates product recalls or field campaigns. As a result of the uncertainty surrounding the nature and frequency of product recalls and field campaigns, the liability for such actions is generally recorded when the Company commits to a product recall or field campaign. In each subsequent quarter after a recall or field campaign is initiated, the recorded warranty liability balance is analyzed, reviewed, and adjusted, if necessary, to reflect any changes in the anticipated average cost of repair or number of repairs to be completed prospectively.

When collection is reasonably assured, the Company also estimates the amount of warranty claim recoveries to be received from its suppliers. Warranty costs and recoveries are included in *Cost of sales* in the Consolidated Statements of Operations.

Accrued product warranty activities are presented below:

(in thousands)	For the Year Ended December 31,	
	2018	2017
Accrued Product Warranty		
Balance at beginning of year	\$ 12,628	\$ 10,200
Current year provision	15,840	5,405
Changes in estimates for preexisting warranties *	3,842	—
Payments made during the period	(9,208)	(2,977)
Balance at end of year	\$ 23,102	\$ 12,628
Less: Current portion	9,767	8,585
Noncurrent accrued product warranty	13,335	4,043

* Change in estimates for pre-existing warranties reflect changes in the Company's estimate of warranty costs for products sold in prior periods. Such adjustments typically occur when claims experience deviates from historic and expected trends. The Company's warranty liability is generally affected by failure rates, repair costs and the timing of failures. Future events and circumstances related to these factors could materially change the estimates and require adjustments to the warranty liability. In addition, new product launches require a greater use of judgment in developing estimates until historical experience becomes available. In the first quarter of 2018, the Company recorded charges for changes in estimates of \$3.8 million, or \$0.21 per diluted share.

Revenue Recognition

On January 1, 2018, the Company adopted the new revenue recognition guidance, Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 606, *Revenue from Contracts with Customers* ("ASC 606"), on a modified retrospective basis. The comparative information for 2017 has not been restated and continues to be reported under ASC 605, *Revenue Recognition* ("ASC 605"). See Note 2. *Revenue* for additional information regarding the required disclosures related to the impact of adopting ASC 606 and a discussion of the Company's policy related to revenue recognition.

During 2017, prior to the adoption of ASC 606, the Company recognized revenue upon transfer of title and risk of loss to the customer, typically when products are shipped, provided there is persuasive evidence of an arrangement, the sales price is fixed or determinable, and management believes collectibility is reasonably assured. Customer orders sometimes include multiple products that are delivered at different times. In these situations, revenue associated with the delivered components is recognized based on their relative stand-alone value which is generally considered to be the quoted price in the contract.

The Company classifies shipping and handling charges billed to customers as revenue. Shipping and handling costs paid to others are classified as a component of cost of sales when incurred.

The Company may provide various sales incentives to its customers, including rebate opportunities and price incentives for attaining specified volumes during a particular quarter or year. The Company accrues for the expected amount of these sales incentives as a reduction of revenue at the time of the original sale and updates its accruals as needed based on the best estimate of the volume levels the customer will reach during the measurement period. The Company also from time to time offers incentives with respect to the launch of new products.

Recently Issued Accounting Pronouncements – Adopted

In January 2016, the FASB issued Accounting Standards Update ("ASU") 2016-01, *Financial Instruments – Overall: Recognition and Measurement of Financial Assets and Financial Liabilities*. This guidance requires disclosures to compare carrying values to fair values of financial assets and liabilities, with some exceptions. This guidance is effective for annual and interim periods in 2018 but was early adopted by the Company on January 1, 2017. The adoption of this ASU did not have an impact on the Consolidated Balance Sheets or the Consolidated Statements of Operations.

In May 2014, the FASB issued ASU 2014-09, which created ASC 606, *Revenue from Contracts with Customers (Topic 606)*. See Note 2. *Revenue*, for the impact of adoption of ASC 606.

Recently Issued Accounting Pronouncements – Not Yet Adopted

In August 2018, the FASB issued ASU 2018-15, *Intangibles - Goodwill and Other - Internal Use Software: Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That is a Service Contract*. This guidance requires the use of existing accounting guidance applicable to software developed for internal use to be applied to cloud computing service contracts' implementation costs. The costs capitalized would be amortized over the life of the agreement, including renewal option periods likely to be used. This guidance is effective for fiscal 2020, with early adoption permitted. The Company does not plan to early adopt the guidance and plans to implement it upon the effective date. The Company does not anticipate that this guidance will have a material impact on its Consolidated Balance Sheet and Consolidated Statement of Operations.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement: Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement*, which both reduces and expands selected disclosure requirements. The principal changes expected to impact the Company's disclosure are requirements to disclose the range and weighted average of each of the significant unobservable items and the way the weighted average of a range is calculated for items in the "table of significant unobservable inputs." The guidance also requires disclosure of changes in unrealized gains and losses in other comprehensive income and removes requirements regarding, among other items, disclosure of the valuation process for Level 3 measurements. This guidance is effective for all fiscal years and for interim periods within those years, beginning in fiscal 2020. The Company plans to implement the guidance when it becomes effective and does not currently anticipate that this guidance will have a material impact on its Consolidated Balance Sheet and Consolidated Statement of Operations.

In January 2017, the FASB issued ASU 2017-04, *Intangibles - Goodwill and Other: Simplifying the Test for Goodwill Impairment*, which eliminated the requirement to calculate the implied fair value of goodwill to measure a goodwill impairment charge. Instead, entities will record an impairment charge based on the excess of a reporting unit's carrying amount over its fair value. The ASU is effective for annual and interim impairment tests performed in periods beginning after December 15, 2019; early adoption is permitted for annual and interim goodwill impairment testing dates after January 1, 2017. The amendments in this ASU are to be applied on a prospective basis. The Company currently plans on adopting the standard on January 1, 2020 when it becomes effective and does not expect the guidance to have a material impact on its financial statements.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments - Credit Losses: Measurement of Credit Losses on Financial Instruments*, which applies primarily to the Company's accounts receivable impairment loss allowances. The guidance provides a revised model whereby the current expected credit losses are used to compute impairment of financial instruments. The new model requires evaluation of historical experience and various current and expected factors, which may affect the estimated amount of losses and requires determination of whether the affected financial instruments should be grouped in units of account. The guidance, as originally issued, was effective for fiscal years beginning after December 15, 2019. In November 2019, the FASB issued ASU 2019-10, *Financial Instruments - Credit Losses (Topic 326), Derivatives and Hedging (Topic 815), and Leases (Topic 842) Effective Dates*, which deferred the effective dates of these standards for certain entities. Based on the guidance, the effective date of ASU 2016-13 is deferred for the Company until fiscal year 2023. The Company currently plans to adopt the guidance on January 1, 2023 when it becomes effective. The Company is continuing to assess the impact of the standard on its financial statements.

In February 2016, the FASB issued ASU 2016-02, *Leases*, which created ASC Topic 842, *Leases* and superseded the existing guidance in ASC 840, *Leases*. The core principle of ASU 2016-02 is that an entity should recognize on its balance sheets assets and liabilities arising from a lease. In accordance with that principle, ASU 2016-02 required that a lessee recognize a liability to make lease payments (the lease liability) and a right-of-use asset representing its right to use the underlying leased asset for the lease term. The recognition, measurement and presentation of expenses and cash flows arising from a lease by a lessee will depend on the lease's classification as a finance or operating lease. This new accounting guidance is effective for fiscal years beginning after December 15, 2018 under a modified retrospective approach, and early adoption is permitted. In July 2018, the FASB issued ASU 2018-11, which modified the transition guidance in ASU 2016-02 to provide preparers the option to adopt the ASU as of the effective date instead of adjusting prior periods under the modified retrospective approach. The Company will adopt the guidance effective January 1, 2019 and expects to elect to adopt the standard as of that date as provided for in ASU 2018-11.

The Company is finalizing its evaluation of the impact the adoption of this guidance will have on its financial statements. The Company completed an assessment of its portfolio of leases and has compiled a central repository of all active leases. It is also in the process of designing the future lease process and drafting a policy to address the new standard requirements. Key lease data elements are being evaluated. The Company has implemented a software solution to track and account for leases under ASU 2016-02 and is finalizing implementation of the solution. While the Company has not yet completed its evaluation of the impact the new lease accounting standard will have on its financial statements, the Company will recognize material right-of-use assets and lease liabilities for its operating leases in the Consolidated Balance Sheet upon the effective date.

Note 2. Revenue

On January 1, 2018, the Company adopted ASC 606 using the modified retrospective approach for all contracts that were not completed as of January 1, 2018. Results for reporting periods beginning after January 1, 2018 are presented under ASC 606, while prior period amounts are not adjusted and continue to be reported under the accounting standards in effect for the prior period.

Upon adoption of ASC 606, recognition of revenue and costs of sales for certain power systems used in standby and prime power generation was changed from recognition at the time the power system shipped from the Company's facilities (or was delivered to the customer depending on shipping terms) to recognition over time as the product was constructed. The cumulative effects of the changes made to the Consolidated Balance Sheet as of January 1, 2018 for the adoption of ASC 606 were as follows:

(in thousands)	As Reported		As Restated
	December 31, 2017	Adjustments due to ASC 606	January 1, 2018
Assets			
Inventories, net	\$ 86,724	(5,159)	81,565
Prepaid expenses and other current assets	14,359	6,166	20,525

Liabilities and Stockholders' Equity			
Other accrued liabilities*	\$ 34,332	(706)	33,626
Accumulated deficit	(82,147)	1,713	(80,434)

* The Company recorded adjustments to reflect a portion of the accrued product warranty liability within *Other accrued liabilities* to *Other noncurrent liabilities* at December 31, 2017 to conform the presentation to the current period. See Note 1. *Summary of Significant Accounting Policies and Other Information* for additional discussion of the adjustment. The adjustment had no impact on the adoption of ASC 606.

Impact on Consolidated Financial Statements

The following table summarizes the effects of the adoption of ASC 606 on selected line items within the Consolidated Statement of Operations for the year ended December 31, 2018:

(in thousands)	As Reported ASC 606		Impact of ASC 606	ASC 605
Net sales	\$ 496,038	\$ (1,995)	\$ 498,033	
Cost of sales	437,269	(573)	437,842	
Gross profit	58,769	(1,422)	60,191	
Operating loss	(36,705)	(1,422)	(35,283)	
Loss before income taxes	(54,557)	(1,422)	(53,135)	
Net loss	(54,726)	(1,422)	(53,304)	
Net loss available to common stockholders	(54,726)	(1,422)	(53,304)	
Net loss per common share:				
Basic	(2.94)	(0.08)	(2.86)	
Diluted	(2.94)	(0.08)	(2.86)	

The following table summarizes the effects of the adoption of ASC 606 on selected line items within the Consolidated Balance Sheet as of December 31, 2018:

(in thousands)	As Reported ASC 606		Impact of ASC 606	ASC 605
Assets				
Inventories, net	\$ 105,614	\$ (4,586)	\$ 110,200	
Prepaid expenses and other current assets	22,917	2,926	19,991	
Liabilities and Stockholders' Equity				
Other accrued liabilities	\$ 45,700	\$ (1,952)	\$ 47,652	
Accumulated deficit	(135,160)	292	(135,452)	

The adoption of ASC 606 had no impact on net cash provided by or (used in) operating, financing or investing activities on the Company's Consolidated Statement of Cash Flows.

Revenue Recognition

The Company determines the amount of revenue to be recognized through the following steps:

- Identification of the contract, or contracts with a customer;
- Identification of the performance obligations in the contract;
- Determination of the transaction price;
- Allocation of the transaction price to the performance obligations in the contract; and

- Recognition of revenue when, or as, the Company satisfies the performance obligations.

Revenue for the Company is generated from contracts that may include a single performance obligation (generally, a single type of engine) or multiple performance obligations (which may include an engine with aftermarket parts, different types of engines, etc.). A performance obligation is a promise in a contract to transfer a distinct good or service to the customer and is the unit of account for revenue recognition. Revenue is measured at the transaction price which is based on the amount of consideration that the Company expects to receive in exchange for transferring the promised goods or services to the customer. The transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. The Company is required to estimate the total consideration expected to be received from contracts with customers. The consideration expected to be received may be variable based on the specific terms of the contract and the Company's past practices.

For contracts with multiple performance obligations, the Company allocates the total transaction price to distinct performance obligations based on directly observable data, if available, or the Company's best estimate of stand-alone selling price of each distinct performance obligation. The primary method used to estimate stand-alone selling price is the cost plus a margin approach.

The Company applies significant judgment in order to identify and determine the number of performance obligations, determine the total transaction price, allocate the transaction price to each performance obligation, and determine the appropriate timing of revenue recognition.

Taxes collected from customers and remitted to governmental authorities are presented on a net basis; that is, such taxes are excluded from revenues.

The Company's payment terms are generally 60 days or less and its sales arrangements do not contain any significant financing components.

Timing of revenue recognition. The Company recognizes revenue related to performance obligations in its contracts with customers when control passes to the customer. Control passes to the customer when the customer has the ability to direct the use of and obtain substantially all of the remaining benefits from the asset. For the majority of the Company's products, revenue is recognized at a point in time when the products are shipped or delivered to the customer based on the shipping terms as that is the point in time when control passes to the customer. For the year ended December 31, 2018, the Company recognized revenue of \$449.8 million related to products shipped or delivered at a point in time.

The Company also recognizes revenue over time primarily when the Company's performance obligation includes: enhancing a customer-controlled asset (generally when an engine is provided by the customer) or constructing an asset with no alternative future use and the Company has an enforceable right to payment throughout the period as the services are performed. The Company recognizes revenue throughout the manufacturing process in these scenarios based on labor hours incurred because the customer receives the benefit of the asset as the product is constructed. The Company believes labor hours incurred relative to total estimated labor hours at completion faithfully depicts the transfer of control to the customer. For the year ended December 31, 2018, the Company recognized revenue of \$46.2 million for products manufactured over time.

Shipping and handling costs. The Company accounts for shipping and handling costs as fulfillment costs which are recorded in *Cost of sales* in the Consolidated Statements of Operations. This includes shipping and handling costs incurred after control of the asset has transferred to the customer as the Company has elected the practical expedient in ASC 606.

Variable consideration. Variable consideration primarily includes rebates and discounts. The Company estimates the projected amount of rebates and discounts based on current assumptions, customer-specific information and historical experience. Variable consideration is recorded as a reduction of revenue to the extent that it is probable that there will not be significant changes to the Company's estimate of variable consideration when any uncertainties are settled.

Costs to obtain and fulfill a contract. The Company has elected the practical expedient in ASC 606 to recognize incremental costs to obtain a contract (primarily commissions) as expense when incurred since the amortization period of the asset that the Company otherwise would have recognized is one year or less.

Disaggregation of Revenue

The following table summarizes net sales by end market:

(in thousands) End Market	For the Quarter Ended (Unaudited)				For the Year Ended
	March 31,	June 30,	September 30,	December 31,	December 31,
	2018	2018	2018	2018	2018
Industrial	\$ 45,719	\$ 48,051	\$ 52,367	\$ 55,059	\$ 201,196
Energy	38,567	52,014	48,481	46,623	185,685
Transportation	10,127	27,008	35,470	36,552	109,157
Total	\$ 94,413	\$ 127,073	\$ 136,318	\$ 138,234	\$ 496,038

The following table summarizes net sales by geographic area:

(in thousands) Geographic Area	For the Quarter Ended (Unaudited)				For the Year Ended
	March 31,	June 30,	September 30,	December 31,	December 31,
	2018	2018	2018	2018	2018
North America	\$ 79,947	\$ 111,444	\$ 120,955	\$ 123,722	\$ 436,068
Pacific Rim	10,339	11,516	10,913	9,303	42,071
Europe	3,315	3,621	3,012	3,795	13,743
Other	812	492	1,438	1,414	4,156
Total	\$ 94,413	\$ 127,073	\$ 136,318	\$ 138,234	\$ 496,038

Contract Balances

The timing of revenue recognition may differ from the time of invoicing to customers and these timing differences result in contract assets, or contract liabilities on the Company's Consolidated Balance Sheet. Contract assets include amounts related to the contractual right to consideration for completed performance when the right to consideration is conditional. The Company records contract liabilities when cash payments are received or due in advance of performance. Contract assets and contract liabilities are recognized at the contract level.

(in thousands)	December 31, 2018	January 1, 2018
Short-term contract assets (included in <i>Prepaid expenses and other current assets</i>)	\$ 2,926	\$ 6,166
Short-term contract liabilities (included in <i>Other accrued liabilities</i>)	(4,897)	(1,299)
Long-term contract liabilities (included in <i>Other noncurrent liabilities</i>)	(14,611)	(2,767)
Net contract assets (liabilities)	\$ (16,582)	\$ 2,100

During the year ended December 31, 2018, the Company recognized \$1.2 million of revenue upon satisfaction of performance obligations. These amounts were included in the net contract asset (liability) balance as of January 1, 2018.

Remaining Performance Obligations

The Company has elected the practical expedient to not disclose remaining performance obligations that have expected original durations of one year or less. For performance obligations that extend beyond one year, the Company had \$13.9 million of remaining performance obligations as of December 31, 2018. The Company expects to recognize revenue related to these remaining performance obligations in 2020.

Note 3. Weichai Transactions

In March 2017, the Company and Weichai executed the SPA in which the Company issued stock and a warrant to Weichai for aggregate proceeds of \$60.0 million (the "Weichai Transaction"), comprised of:

- 2,728,752 shares of Common Stock;
- 2,385,624 shares of Series B Redeemable Convertible Preferred Stock ("Series B Convertible Preferred Stock") convertible on a two-for-one basis into 4,771,248 shares of Common Stock; and
- The Weichai Warrant as discussed further below.

The Company used proceeds from the sale of the above securities pursuant to the SPA and borrowings under the Wells Fargo Credit Agreement to pay off the outstanding TPG Term Loan (the "TPG Term Loan") with TPG Specialty Lending, Inc. ("TPG"), discussed in Note 6. *Debt*.

In August 2017, Gary S. Winemaster, former Chairman of the Board, Chief Executive Officer and President, and nonexecutive Chief Strategy Officer, separately sold 200,000 additional shares of Common Stock to Weichai.

Series B Convertible Preferred Stock

The Series B Convertible Preferred Stock was automatically convertible into Common Stock upon stockholder approval, as defined in the SPA. Commencing on September 30, 2017, Weichai was entitled to cumulative dividends at a stated rate of 10% per share, payable quarterly upon declaration by the Board, or as a liquidation preference for the Series B Convertible Preferred Stock. Any unpaid and deferred cash dividends would be deemed canceled and null upon conversion of the Series B Convertible Preferred Stock.

In the event of liquidation, dissolution or winding-up of the Company, the holders of the Series B Convertible Preferred Stock would have been entitled to receive out of the assets of the Company available for distribution to stockholders of the Company,

before any distributions on the Common Stock or any other junior stock, an amount equal to the greater of the liquidation preference (\$16.00 per share), plus accrued and unpaid dividends, or the amount that would otherwise be payable on an as-converted basis assuming the conversion of the Series B Convertible Preferred Stock into Common Stock.

The Series B Convertible Preferred Stock also included a \$23.1 million contingent beneficial conversion feature (“BCF”) that was considered to be “in the money” and “contingently beneficial” to Weichai, the warrant holder, upon the actual exercise of the Weichai Warrant, at Weichai’s option at the commitment date, March 31, 2017, as the Company’s stock price was greater than the conversion price at the commitment date. The Series B Convertible Preferred Stock and the Common Stock were assigned value based on their relative fair values after reducing the net proceeds from the Weichai Transaction by the fair value of the Weichai Warrant, as required by accounting guidance. The resulting discount on the Series B Convertible Preferred Stock was accreted, with the remaining unaccreted amount included in the deemed dividend discussed below under “Deemed Dividend and Beneficial Conversion Feature.”

In November 2017, the Company entered into a Securities Exchange Agreement (the “Exchange Agreement”) with Weichai that resulted in conversion of the 2,385,624 shares of Series B Convertible Preferred Stock into 4,771,248 shares of Common Stock.

Weichai Warrant

The Weichai Warrant was exercisable for a ninety (90) day period from September 30, 2018 to December 31, 2018 at a price per share of Common Stock equal to 85% of the Volume-Weighted Average Price (“VWAP”) during the 20-day trading period immediately preceding the warrant exercise date or at a price per share of Common Stock equal to 50% of such preceding VWAP if the Company was delisted from NASDAQ as of September 30, 2018. The Weichai Warrant exercise price was subject to further reduction pursuant to a formula that provided for such adjustment in case the Company’s 2017 adjusted earnings before interest expense, income taxes, depreciation and amortization (“EBITDA”) (as defined within the SPA) was less than \$22.0 million, or its net book value per share as of December 31, 2016 was less than \$8.00, provided that the aggregate amount of such downward adjustments would not exceed \$15.0 million.

The Exchange Agreement executed on November 30, 2017 amended the Weichai Warrant (the “Restated Warrant”) in addition to converting the Series B Convertible Preferred Stock to Common Stock as noted above. Under the Exchange Agreement, the Restated Warrant (i) was exercisable for Common Stock without obtaining stockholder approval, (ii) was no longer exercisable for Series B Convertible Preferred Stock and (iii) permitted the Company to accelerate the exercise of the Restated Warrant prior to September 30, 2018, to the extent that the Company required additional financing for any reason.

In September 2018, the Weichai Warrant was amended under the terms of a second amended and restated warrant (“Amended and Restated Warrant”) to defer its exercise date to a 90-day period commencing April 1, 2019, to adjust the exercise price to a price per share of the Company’s Common Stock equal to the lesser of (i) 50% of the VWAP during the 20 consecutive trading day period preceding October 1, 2018 and (ii) 50% of the VWAP during the 20 consecutive trading day period preceding the date of exercise, subject to an adjustment that could reduce the exercise price by up to \$15.0 million. In the event that the adjustment exceeded the exercise price, the excess would be due to the warrant holder.

On April 23, 2019, Weichai exercised the Weichai Warrant resulting in the Company issuing 4,049,759 shares of the Company’s Common Stock and Weichai becoming the owner of 51.5% of the outstanding shares of the Company’s Common Stock. The exercise proceeds for the warrants of \$1.6 million were based on 50% of the VWAP during the 20 consecutive trading day period preceding April 23, 2019 and \$15.0 million reduction in the exercise price described above. The Company recorded expense of \$1.4 million related to the Weichai Warrant during 2019 including the impact of the exercise.

Valuation and Accounting for Issuance and Conversion to Common Stock, Series B Convertible Preferred Stock (and Related Beneficial Conversion Feature) and Weichai Warrant

Detachable warrants issued in a bundled transaction with debt and equity offerings should be accounted for separately. If the warrants are classified as a liability recorded at fair value, then the total proceeds from the transaction are first allocated to the warrants based on their fair value, and residual proceeds are allocated to the remaining instruments based on their relative fair value.

The Weichai Warrant is a freestanding derivative financial instrument that is not indexed solely to the Company’s Common Stock due to the Weichai Warrant’s exercise terms. Therefore, the Weichai Warrant is presented at fair value in the Company’s Consolidated Balance Sheets in *Warrant liability* for \$35.1 million and \$24.7 million at December 31, 2018 and 2017, respectively. Changes in fair value of a loss of \$10.4 million and \$4.0 million, respectively, are reported in *Loss from change in fair value of warrants* in the Company’s 2018 and 2017 Consolidated Statements of Operations. See Note 7. *Fair Value of Financial Instruments* for additional details and assumptions used in valuing the Weichai Warrant, as well as the 2018 and 2017 fair value adjustments.

The carrying values of the Common Stock and the Series B Convertible Preferred Stock were determined based on their relative fair values to the \$39.3 million in aggregate remaining proceeds: \$14.3 million was allocated to Common Stock and \$25.0 million was allocated to the Series B Convertible Preferred Stock.

Deemed Dividend and Beneficial Conversion Feature

The difference between the stated proceeds related to the Common Stock and the Series B Convertible Preferred Stock of \$38.7 million, pursuant to the SPA, and the net proceeds allocated to the Series B Convertible Preferred Stock based on relative fair value of \$24.6 million (net of \$0.4 million in transaction costs), is a discount of \$14.1 million related to the Series B Convertible Preferred Stock, which was fully accreted onto the Consolidated Balance Sheet as part of the deemed dividend of \$37.9 million, which was recorded in additional paid-in capital, as the Company had no retained earnings from the issuance date on March 31, 2017 until November 30, 2017, the date the Series B Convertible Preferred Stock was converted into Common Stock. The remaining portion of the deemed dividend was comprised of the \$23.1 million BCF, which was recorded on the conversion date.

Additionally, the Company recorded the exercise of the conversion option by reclassifying the \$62.5 million carrying value of the Series B Convertible Preferred Stock to Common Stock, par value of \$0.001 per share, with the remainder to Additional paid-in capital.

Deemed dividends on Series B Convertible Preferred Stock were considered for calculations of loss per common share on in 2017. See Note 13. *Loss Per Share*.

The Series B Convertible Preferred Stock also included a nondetachable contingent BCF that was considered to be “in the money” and “contingently beneficial” to Weichai, the warrant holder, upon the actual exercise of the warrant, at Weichai’s option at the commitment date, March 31, 2017, as the Company’s stock price was greater than the conversion price at the commitment date.

The contingent BCF was recognized when the Series B Convertible Preferred Stock was converted into Common Stock. The carrying value for the contingent BCF was determined to be \$23.1 million, based on conversion of 4,771,248 shares and a per-share value of \$4.85. The contingent BCF was included in *Deemed dividend on Series B Convertible Preferred Stock* in the Company’s Statement of Operations and Statement of Stockholders’ Equity when converted in November 2017.

Weichai Collaboration Arrangement

The Company and Weichai executed a strategic collaboration agreement (the “Collaboration Agreement”) on March 20, 2017, in order to achieve their respective strategic objectives and enhance the strategic cooperation alliance to share experiences, expertise and resources. Among other things, the collaboration arrangement established a joint steering committee, permitted Weichai to second a limited number of certain technical, marketing, sales, procurement and finance personnel to work at the Company and established several collaborations, related to stationary natural-gas applications and Weichai diesel engines. The collaboration arrangement provided for the steering committee to create various sub-committees with operating roles and otherwise governs the treatment of intellectual property of parties prior to the collaboration and the intellectual property developed during the collaboration. The collaboration arrangement has a term of three years.

The Company evaluates whether an arrangement is a collaborative arrangement at its inception based on the facts and circumstances specific to the arrangement. The Company also reevaluates whether an arrangement qualifies or continues to qualify as a collaborative arrangement whenever there is a change in either the roles of the participants or the participants’ exposure to significant risks and rewards dependent on the ultimate commercial success of the endeavor. For those collaborative arrangements where it is determined that the Company is the principal participant, costs incurred and revenue generated from third parties are recorded on a gross basis in the financial statements. For the year ended December 31, 2018, sales to Weichai were insignificant. The Company purchased \$3.5 million of inventory from Weichai during 2018. Sales and purchases in 2017 were insignificant.

Note 4. Property, Plant and Equipment, and Leases

Property, plant and equipment by type were as follows:

(in thousands)	As of December 31,	
	2018	2017
Property, Plant and Equipment		
Leasehold improvements	\$ 6,405	\$ 6,320
Machinery and equipment	38,454	27,379
Construction in progress	1,241	2,036
Total property, plant and equipment, at cost	46,100	35,735
Accumulated depreciation	(21,834)	(16,775)
Property, plant and equipment, net	\$ 24,266	\$ 18,960

In April 2018, the Company finalized the purchase of emissions testing assets and the sublease of an emissions testing facility from Ricardo, Inc., a subsidiary of the strategic engineering and environmental consultancy, Ricardo Plc., for \$5.6 million in cash. The Company accounted for the acquisition as an asset acquisition and recorded property, plant and equipment of \$6.9 million,

included within machinery and equipment in the table above, and an asset retirement obligation of \$1.3 million as a result of the transaction. The fair value of the asset retirement obligation was estimated using Level 3 inputs. The asset retirement obligation is recorded in *Other non-current liabilities* in the Company's Consolidated Balance Sheet.

Leases

The Company leases certain buildings and equipment under various non-cancelable operating leases and a capital lease. Rent expense under operating leases approximated \$5.1 million and \$4.7 million for 2018 and 2017, respectively. Rent expense is recorded on a straight-line basis over the period of the lease term. The Company recognized the capital lease obligation of \$0.4 million and related leased equipment based on the present value of the minimum lease payments at lease inception.

The future minimum lease payments due under operating and capital leases in effect, as amended and extended, as of December 31, 2018, were as follows:

(in thousands)	Year Ending December 31,	
	Operating	Capital
2019	\$ 5,071	\$ 80
2020	5,175	63
2021	4,724	67
2022	4,681	50
2023	3,104	13
2024 and beyond	3,694	—
Total	\$ 26,449	\$ 273

Note 5. Goodwill and Other Intangibles

Goodwill

The carrying amount of goodwill at both December 31, 2018 and December 31, 2017 was \$29.8 million. Accumulated impairment losses at both December 31, 2018 and December 31, 2017 were \$11.6 million.

Other Intangible Assets

In March 2018, the Company acquired intellectual property ("IP") from AGA Systems, LLC ("AGA") for the conversion of certain gasoline engines to alternative fuel engines. The Company paid cash of \$1.5 million (\$1.0 million in 2018 and \$0.5 million in 2017) to acquire the IP assets and provided a minimum guaranteed payment of an additional \$1.2 million to be paid over a three-year period from the date of acquisition. If certain milestones related to future sales are met, the Company could pay up to an additional \$3.3 million to AGA. The acquisition was accounted for as an asset acquisition because the gross assets acquired were concentrated within a group of similar identifiable assets. The Company recorded developed technology of \$2.7 million related to the acquired IP and a liability of \$1.2 million related to the guaranteed payment. The sales-based milestone payments will be recorded as they are earned and the milestones are probable of being achieved. The developed technology was being depreciated over an estimated useful life of approximately three years. In the fourth quarter of 2018, based on uncertainty of the market for the conversion of certain gasoline engines to alternative fuel engines, the Company concluded that the forecasted future cash flows were not sufficient to recover the carrying value of the assets. As a result, the Company recorded an impairment charge of \$2.2 million to write off the remaining book value of the intangible assets.

Components of intangible assets are as follows:

(in thousands)

	As of December 31, 2018		
	Gross Carrying Value	Accumulated Amortization	Net Book Value
Customer relationships	\$ 34,940	\$ (18,816)	\$ 16,124
Developed technology	700	(537)	163
Trade names and trademarks	1,700	(977)	723
Total	\$ 37,340	\$ (20,330)	\$ 17,010

(in thousands)

	As of December 31, 2017		
	Gross Carrying Value	Accumulated Amortization	Net Book Value
Customer relationships	\$ 34,940	\$ (14,915)	\$ 20,025
Developed technology	1,000	(434)	566
Trade names and trademarks	1,700	(800)	900
Total	\$ 37,640	\$ (16,149)	\$ 21,491

Estimated future amortization expense for intangible assets as of December 31, 2018 is as follows:

(in thousands)

Year Ending December 31,	Estimated Amortization
2019	\$ 3,638
2020	3,053
2021	2,535
2022	2,124
2023	1,746
2024 and beyond	3,914
Total	\$ 17,010

Note 6. Debt

The Company's outstanding debt consisted of the following:

(in thousands)

Description of Debt	As of December 31,	
	2018	2017
Short-Term Debt:		
Wells Fargo Revolving Credit Facility	\$ 54,613	\$ 37,055
Long-Term Debt:		
Unsecured Senior Notes	\$ 55,000	\$ 55,000
Less Unamortized Debt Issuance Costs *	(288)	(561)
Total Long-Term Debt	\$ 54,712	\$ 54,439

* Unamortized financing costs and deferred fees on the Wells Fargo Revolving Credit Facility are not presented in the above table as they are classified in *Prepaid expenses and other current assets* on the Consolidated Balance Sheets. Debt issuance costs incurred, including gross waiver fees (primarily paid to the lenders), were \$1.0 million and \$0.9 million in 2018 and 2017, respectively.

The Company paid \$6.1 million and \$7.8 million in cash for interest in 2018 and 2017, respectively.

The Company's debt includes restrictive covenants that, if not met, could lead to renegotiation of its revolving credit facility, notes and indentures, a requirement to repay the Company's borrowings and/or a significant increase in the cost of financing. These restrictive covenants may include, among other items, financial covenants pertaining to availability, permitted indebtedness, restrictions on dividends and various events of default.

Certain events of default (including delinquent filing of annual and periodic reports with the Securities and Exchange Commission ("SEC"), failure to maintain EBITDA requirements, material weaknesses in the control environment and failure to disclose litigation) occurred with respect to the Company's credit agreements. While waivers were obtained or debt was renegotiated with the respective lenders, in particular after March 31, 2017, absent such waivers, the debt would have been in breach of covenants. The Company and its subsidiaries pledged substantially all of their tangible and intangible assets, including inventory, receivables and fixed assets, as collateral under the Wells Fargo Credit Agreement.

The schedule of remaining principal maturities of long-term debt is as follows:

(in thousands)

Year Ending December 31,	Maturities of Long-Term Debt	
2019	\$	—
2020		55,000
Total	\$	55,000

Wells Fargo Credit Agreement

In June 2013, the Company entered into the Wells Fargo Credit Agreement. The Wells Fargo Credit Agreement enabled the Company to borrow under a revolving credit facility secured by substantially all of the Company's tangible and intangible assets, including inventory, receivables and fixed assets. The Wells Fargo Credit Agreement has been amended several times since June 28, 2013, including in June 2016 when the agreement was amended and restated. Below are some of the current key terms of the Wells Fargo Credit Agreement:

- Matures on the earlier of March 31, 2021 or 60 days prior to the final maturity of the Unsecured Senior Notes (which currently mature on June 30, 2020 resulting in a current maturity date of May 1, 2020 for the Wells Fargo Credit Agreement);
- Includes a maximum \$75.0 million revolving line of credit to the Company less a reserve of \$9.0 million;
- Bears interest at Wells Fargo's prime rate plus a margin ranging from 1.25% to 1.75% per annum or at the London Interbank Offered Rate ("LIBOR") plus a margin ranging from 2.75% to 3.25% per annum at the Company's option;
- Interest rate margin will decrease by 1% per annum upon the Company completing all filings required to be made with the SEC;
- Has an unused line fee of 0.25%;
- Contains restrictive covenants that, among other things, limit the ability of the Company and its subsidiaries to incur additional debt, prepay subordinated indebtedness, or make certain distributions on capital stock;
- Limits borrowings to the lesser of the maximum revolving line of credit and the borrowing base, which is defined as a percentage of the Company's eligible accounts receivable and inventory.

Information regarding amounts borrowed under the Wells Fargo Credit Agreement includes the following:

(in thousands, except interest rate)

Description	Year ended December 31,	
	2018	2017
Average borrowings under Wells Fargo Revolving Credit Facility	\$ 47,031	\$ 26,662
Average Interest Cost on Wells Fargo Revolving Credit Facility	6.51%	6.85%

(in thousands, except interest rate)

Description	As of December 31,	
	2018	2017
Accrued and unpaid interest	\$ 174	\$ 90
LIBOR loan interest rate	5.97%	4.51%
Wells Fargo Prime Rate (Base Rate) loan interest rate	7.25%	6.00%

As of December 31, 2018 and 2017, the Company had adjusted available borrowing capacity under the revolving line of credit of approximately \$8.9 million and \$13.0 million, respectively.

The most significant changes to the Wells Fargo Credit Agreement since January 1, 2017 are summarized in the table below:

Amendment Date and Title	Reason for Amendment	Significant Changes to the Wells Fargo Credit Agreement
February 10, 2017, effective as of February 6, 2017. Limited Waiver Agreement to the June 28, 2016 Agreement (“Limited Waiver”)	To consider implications of various events of default	<ul style="list-style-type: none"> • Provided waiver for various events of default including identified material weaknesses in internal control through February 28, 2017; • Wells Fargo reserved the right to increase the interest rate by 200 basis points (2%) effective January 27, 2017, though the interest rate was not increased; • Provided Wells Fargo with access to additional financial information including cash flow forecasts and budgets.
February 28, 2017, effective as of February 6, 2017. First Amendment to Limited Waiver	To refine provisions of Limited Waiver to June 28, 2016 Agreement	<ul style="list-style-type: none"> • Established minimum financial metrics related to liquidity and cash which were required to be maintained through March 3, 2017; • Extended the Limited Waiver to March 3, 2017.
March 9, 2017, effective as of February 6, 2017. Second Amendment to Limited Waiver	To refine provisions of Limited Waiver to June 28, 2016 Agreement	<ul style="list-style-type: none"> • Extended the Limited Waiver to March 10, 2017.
March 31, 2017, effective as of February 7, 2017. Third Amendment to Limited Waiver	To facilitate changes necessary due to Weichai SPA	<ul style="list-style-type: none"> • Modified certain changes in control and other definitions to permit issuance of securities to Weichai and pay off TPG Term Loan; • Increased the interest rate by 200 basis points (2%) effective April 1, 2017 until the Company’s restated 2016 audited financial statements are filed; • Reduced available borrowing under the revolving credit facility to \$40.0 million (maximum borrowing amount of \$65.0 million less a reserve of \$25.0 million); • Deferred loan maturity date to March 31, 2018 (or February 15, 2018 if Series B Convertible Preferred Stock issued to Weichai has not converted into Common Stock); • Made certain adjustments to the borrowing base provisions to the assets against which borrowings may be made; • Permanently waived certain representations, required information and other defaults; • Extended the deadline for the Company to file delinquent SEC periodic and annual reports; • Required the Company to retain third-party adviser to assist with developing and providing certain financial data; • The Company paid an amendment fee of \$0.7 million.
July 17, 2017. Fourth Amendment to the June 28, 2016 Agreement	To facilitate changes to availability, commitment fee and interest rate terms	<ul style="list-style-type: none"> • Increases available borrowing under the revolving credit facility to \$52.5 million (maximum borrowing amount of \$65.0 million less a reserve of \$12.5 million); • Reduced the incremental interest rate by 100 basis points (1%) from 200 basis points (2%) until the Company’s 2016 audited financial statements have been provided.
October 3, 2017. Consent and Fifth Amendment to the June 28, 2016 Agreement	To facilitate an acquisition	<ul style="list-style-type: none"> • Increased available borrowing under the revolving credit facility to \$58.75 million (maximum borrowing amount of \$65.0 million less a reserve of \$6.25 million).
March 29, 2018. Sixth Amendment and Waiver to the June 28, 2016 Agreement	To consider implications of various events of default	<ul style="list-style-type: none"> • Increased the maximum borrowing under the revolving credit facility to \$75.0 million from \$65.0 million; • Modified the reserve against the maximum borrowing under the revolving credit facility to the greater of \$6.5 million and 10% of borrowing base, but no more than \$7.5 million on or prior to September 30, 2018 and thereafter equal to \$9.0 million; • Extended the maturity date of the facility to the earlier of March 31, 2021 or 60 days prior to the final maturity of the Unsecured Senior Notes, which were extended to January 1, 2020, resulting in a maturity date of November 2, 2019 on the Wells Fargo revolving credit facility. • The revolving credit facility will continue to bear interest at a per annum rate equal to 100 basis points (1%) above the per annum rate otherwise applicable under the credit agreement until the Company has completed all filings required to be made with the SEC; • The Company paid an amendment fee of \$0.8 million.
May 16, 2019. Waiver to the June 28, 2016 Agreement	To consider implications of various events of default	<ul style="list-style-type: none"> • Waived any defaults that would arise from the failure to timely deliver annual audited financial statements for the fiscal year ended December 31, 2018 and the associated compliance certificate and the information required with it; provided that the financial statements and compliance certificate are delivered on or before December 31, 2019.

The aforementioned amendments, consents and waivers related to the Wells Fargo Credit Agreement in 2017 and 2018 were accounted for as debt modifications. As a result of the debt modifications, the Company accelerated the recognition of previously deferred debt issuance costs and third-party fees totaling \$0.1 million in 2017. There was no accelerated recognition of deferred debt issuance costs and no third-party costs incurred in 2018. In addition, the Company incurred fees of \$0.8 million and \$0.7

million in 2018 and 2017, respectively, to Wells Fargo which were deferred and amortized through the anticipated maturity date of the Wells Fargo Credit Agreement.

The Wells Fargo revolving credit facility is presented as a “current liability” on the Consolidated Balance Sheets as of December 31, 2018 and 2017 because of a subjective acceleration clause and a “lockbox” arrangement that sweeps cash receipts to pay down the revolver balance, without requiring the Company’s specific consent, and provides advances up to current limits to cover outlays.

Unsecured Senior Notes

In April 2015, the Company entered into an agreement with certain institutional investors for a private sale of its Unsecured Senior Notes for the aggregate amount of \$55.0 million with an interest rate of 5.50% per annum. Concurrently, in connection with the issuance of the Unsecured Senior Notes, the Company entered into an indenture agreement (“Indenture”), by and among the Company and its subsidiaries as guarantors and the Bank of New York Mellon, as Trustee. The Company received net proceeds of \$53.5 million after financing costs of \$1.5 million. As discussed previously in Note 1, *Summary of Significant Accounting Policies and Other Information*, the Company has presented issuance costs associated with its Unsecured Senior Notes as a direct deduction from the carrying value of the obligation on its Consolidated Balance Sheets.

The Unsecured Senior Notes are unsecured debt of the Company and are effectively subordinated to its existing and future secured debt, including the debt in connection with the Wells Fargo Credit Agreement. The following are some of the current key provisions of the Unsecured Senior Notes:

- Matures on June 30, 2020;
- Accrues interest at 8.50% per annum, payable semiannually in arrears on May 1 and November 1 of each year with a reduction in the annual interest rate to 7.50% per annum upon filing the 2017 Form 10-K (which occurred in May 2019);
- Redeemable at the Company’s option, in whole or in part, at any time on or after May 1, 2016, together with accrued and unpaid interest to the date of redemption (expressed as percentages of the principal amount), at 101% plus a “make whole” premium as further defined in the Unsecured Senior Notes;
- Redeemable by the holders in whole or in part upon a change in control at a purchase price of 101% of the principal amount, plus accrued and unpaid interest;
- Contains restrictive covenants that, among other things, limit the ability of the Company and its subsidiaries to incur additional debt, prepay subordinated indebtedness, pay dividends or make other distributions on capital stock; and
- Provides for customary events of default (subject in certain cases to customary grace and cure periods).

The most significant amendments to the Unsecured Senior Notes since January 1, 2017 are included in the table below:

Amendment Date and Title	Reason for Amendment	Significant Changes to the Unsecured Senior Notes
March 31, 2017. Third Supplemental Indenture	To facilitate the changes necessary due to the Weichai SPA	<ul style="list-style-type: none"> • Extended maturity date to January 1, 2019; • Amended certain provisions to permit the issuance of the securities to Weichai under the SPA, and provisions to permit ongoing transactions with an affiliate of Weichai under the Collaboration Arrangement; • Waived any defaults occurring prior to March 31, 2017 with respect to the failure to file periodic and annual reports; • Extended the deadline for the Company to file its delinquent SEC periodic and annual reports; • The Company paid a consent fee of \$0.2 million and legal fees of \$0.1 million.
April 19, 2018. Fourth Supplemental Indenture	To amend certain covenants and waive certain events of default	<ul style="list-style-type: none"> • Extended the maturity date to January 1, 2020; • Waived defaults with respect to the failure to file with the Trustee and the SEC for 2015 through 2019; • Increased the interest rate from 6.50% to 8.50% per annum effective October 1, 2018. The interest rate decreased to 7.50% per annum upon filing the 2017 Form 10-K with the SEC; • The Company paid a consent fee of \$0.3 million.
October 30, 2019. Fifth Supplemental Indenture	To extend the maturity date	<ul style="list-style-type: none"> • Extended maturity date to June 30, 2020; • The Company paid a fee of \$0.3 million.

As a result of the supplemental indenture amendments, charges of \$0.1 million were incurred in 2017 related to legal fees and other third-party costs, which were expensed to *Loss on debt extinguishment and modifications* in the Consolidated Statement of Operations. Additional debt issuance costs of \$0.3 million and \$0.2 million incurred in 2018 and 2017, respectively, were deferred and amortized to interest expense through the anticipated maturity date of the Unsecured Senior Notes.

The interest rate on the Unsecured Senior Notes decreased to 7.50% per annum upon filing the 2017 Form 10-K with the SEC in May 2019. In addition, on October 30, 2019, the maturity date of the Unsecured Senior Notes was extended to June 30, 2020. By extending the maturity date of the Unsecured Senior Notes, the maturity date of the Wells Fargo Credit Agreement is extended to May 1, 2020.

The Unsecured Senior Notes are presented as a non-current liability on the Consolidated Balance Sheets. As of December 31, 2018 and 2017, the accrued, but unpaid, interest on the Unsecured Senior Notes was \$0.8 million and \$0.6 million, respectively.

TPG Term Loan

In June 2016, the Company entered into a \$135.0 million senior secured credit facility, which consisted of a \$60.0 million TPG Term Loan and a \$75.0 million revolving credit facility with Wells Fargo, as discussed in the Wells Fargo Credit Agreement section above. A related “Side Letter” was also executed at the time, in which the Company agreed to meet certain borrowing limit calculations.

In February 2017, the TPG Term Loan was amended to facilitate the waiver of various events of default triggered by the resignation of the Company’s auditor and removal of the audit opinion on the Company’s 2015 and 2014 consolidated financial statements. In addition, the amendment provided TPG with the right to charge additional interest of 2.00% per annum even though the events of default had been waived and the parties agreed that the outstanding principal of the TPG Term Loan was \$71.4 million which was comprised of the original principal amount of \$60.0 million and \$11.4 million in fees associated with amendments to the loan made in 2016. Third-party fees of \$0.4 million were incurred in 2017. These costs were expensed to *Loss on debt extinguishment and modifications* in the Consolidated Statement of Operations.

In March 2017, the Company repaid the TPG Term Loan using the proceeds of the Weichai investment as discussed in Note 3. *Weichai Transactions*. In conjunction with this repayment, the Company recorded an \$11.9 million (including third-party fees of \$0.4 million mentioned above) loss on debt extinguishment based on the difference between the amount repaid to the lender and the net carrying value of the TPG Term Loan immediately preceding repayment, including accrued and unpaid interest. This item is reflected within *Loss on debt extinguishment and modifications* in the Company’s 2017 Consolidated Statement of Operations.

Note 7. Fair Value of Financial Instruments

For assets and liabilities measured at fair value on a recurring and nonrecurring basis, a three-level hierarchy of measurements based upon observable and unobservable inputs is used to arrive at fair value. Observable inputs are developed based on market data obtained from independent sources, while unobservable inputs reflect the Company’s assumptions about valuation based on the best information available in the circumstances. Depending on the inputs, the Company classifies each fair-value measurement as follows:

- Level 1 — based on quoted prices in active markets for identical assets or liabilities;
- Level 2 — based on other significant observable inputs for the assets or liabilities through corroborations with market data at the measurement date; and
- Level 3 — based on significant unobservable inputs that reflect management’s best estimate of what market participants would use to price the assets or liabilities at the measurement date.

Financial Instruments Measured at Carrying Value

Current Assets

Cash and cash equivalents are measured at carrying value, which approximates fair value because of the short-term maturities of these instruments.

Debt

The Company measures its Wells Fargo revolving credit facility and the Unsecured Senior Notes at original carrying value including accrued interest, net of unamortized deferred financing costs and fees. The fair value of the revolving credit facility approximates carrying value, as it consists of short-term variable rate loans.

The Unsecured Senior Notes were issued on April 29, 2015, and the fair-value measurement of these financial liabilities subsequent to issuance was defined as Level 3 in the three-level fair value hierarchy, as the inputs to their valuation are not all market observable.

(in thousands)

	As of December 31, 2018			
	Carrying Value	Fair Value		
		Level 1	Level 2	Level 3
Wells Fargo revolving credit facility	\$ 54,613	\$ —	\$ 54,613	\$ —
Unsecured Senior Notes	55,000	—	—	52,700

(in thousands)

	As of December 31, 2017			
	Carrying Value	Fair Value		
		Level 1	Level 2	Level 3
Wells Fargo revolving credit facility	\$ 37,055	\$ —	\$ 37,055	\$ —
Unsecured Senior Notes	55,000	—	—	50,000

Other Financial Assets and Liabilities

In addition to the methods and assumptions used for the financial instruments discussed above, accounts receivable, net, income tax receivable and accounts payable are measured at carrying value, which approximates fair value because of the short-term maturities of these instruments.

Financial Instruments Measured at Fair Value

The Company's warrant liability was measured at fair value based on unobservable inputs and was, thus, considered a Level 3 financial instrument in the three-level valuation hierarchy.

(in thousands)

	As of December 31, 2018			
	Carrying Value	Fair Value		
		Level 1	Level 2	Level 3
Weichai Warrant liability	\$ 35,100	\$ —	\$ —	\$ 35,100

(in thousands)

	As of December 31, 2017			
	Carrying Value	Fair Value		
		Level 1	Level 2	Level 3
Weichai Warrant liability	\$ 24,700	\$ —	\$ —	\$ 24,700

Warrants

The following table summarizes changes in the estimated fair value of the Company's warrant liability:

(in thousands)

	As of December 31,	
	2018	2017
Balance at beginning of year	\$ 24,700	\$ —
Issuance of warrants	—	20,700
Increase in value*	10,400	4,000
Balance at end of year	\$ 35,100	\$ 24,700

* Loss related to the change in fair value of the warrant liability for each year is presented in *Loss from change in fair value of warrants* in the Company's Consolidated Statements of Operations.

Weichai Warrant Liability

The Company estimated the fair value of the Weichai Warrant financial instrument using a publicly traded stock pricing approach with a Black-Scholes option pricing model and a Monte Carlo simulation. Given the unobservable nature of the inputs to the pricing models, the Weichai Warrant was classified as a Level 3 instrument.

The inputs of the Black-Scholes option pricing model were as follows:

Assumptions	As of December 31,	
	2018	2017
Market value of the Common Stock	\$ 9.25	\$ 7.50
Exercise price	varies	varies
Risk-free interest rate	2.6%	1.8%
Estimated price volatility	55.0%	95.0%
Contractual term	0.5 years	1.0 year
Dividend yield	—	—

The estimated price volatility represents the upper end of the range of implied volatility of publicly traded call options of benchmark companies.

Note 8. Defined Contribution Plans

During 2017, the Company had two defined contribution plans for the benefit of its employees meeting certain eligibility requirements. Under the plans, participants could choose from various investment options and could contribute an amount of their eligible compensation annually as defined by the applicable plan documents, subject to Internal Revenue Service (“IRS”) limitations. The Company contributed \$0.1 million to these plans in 2017. Subsequent to December 31, 2017, the Company merged its defined contribution plans into a single plan, sponsored by the Company, with the final merger effective December 1, 2018. As of December 31, 2018, the Company had not contributed to the plans and recorded a liability of \$0.7 million for 2018 contributions.

Note 9. Commitments and Contingencies

Legal Contingencies

The legal matters discussed below and others could result in losses, including damages, fines, civil penalties and criminal charges, which could be substantial. The Company records accruals for these contingencies to the extent the Company concludes that a loss is both probable and reasonably estimable. The Company also records an accrual for legal fees related to these contingencies. Regarding the matters disclosed below, unless otherwise disclosed, the Company has determined that liabilities associated with these legal matters are reasonably possible; however, unless otherwise stated, the liabilities cannot be reasonably estimated. Given the nature of the litigation and investigations and the complexities involved, the Company is unable to reasonably estimate a possible loss for all such matters until the Company knows, among other factors:

- What claims, if any, will survive dispositive motion practice;
- The extent of the claims, particularly when damages are not specified or are indeterminate;
- How the discovery process will affect the litigation;
- The settlement posture of the other parties to the litigation; and
- Any other factors that may have a material effect on the litigation or investigation.

However, the Company could incur judgments, enter into settlements or revise its expectations regarding the outcome of certain matters, and such developments could have a material adverse effect on the Company’s results of operations in the period in which the amounts are accrued and/or liquidity in the period in which the amounts are paid.

Carl Trent, Kenneth Trent, and CKT Holdings, Inc. vs. 3PI and the Company

In October 2014, Carl Trent and Kenneth Trent (the “Trents”) filed a complaint in Circuit Court in Walworth County, Wisconsin against the Company and its subsidiary, 3PI, asserting that the Company breached their employment contracts and seeking declaratory judgment with regard to the stock purchase agreement entered into by and between the Company and the Trents in April 2014 relating to the Company’s acquisition of 3PI. As part of the Trents’ claim for breach of their employment agreements, they sought damages of between \$0.5 million and \$1.0 million. As part of the Trents’ claim for declaratory judgment, the Trents sought judgment against the Company obligating the Company to calculate and issue certain accelerated payments and an earnout described in the stock purchase agreement.

In April 2015, together with 3PI, the Company filed an amended answer and affirmative defenses to the complaint, along with a counterclaim against the Trents alleging that they had breached their employment contracts, fraudulently induced the Company to enter into the employment agreements, breached their fiduciary duties, converted 3PI property and confidential business information, conspired to interfere with and steal 3PI’s confidential and proprietary business information and misappropriated trade secrets belonging to 3PI. By way of the counterclaim, the Company and 3PI sought compensatory damages in the amount

of \$20.0 million, consequential damages, punitive damages in excess of \$20.0 million and also an injunction prohibiting the Trents from continuing to retain 3PI's confidential business information and other equitable relief.

In June 2016, the Trents amended their complaint to additionally allege that the Company and 3PI breached the stock purchase agreement by failing to maintain the assets and properties of 3PI in good working order and condition, failed to operate 3PI in good faith, took actions to reduce 3PI's EBITDA used in connection with determining the number of shares issuable to the Trents as part of the earn-out described in the stock purchase agreement, and failed to make a tax gross-up payment to the Trents as mandated by the stock purchase agreement. The Trents sought additional damages for these alleged breaches in the amount of \$0.35 million for the tax gross-up payment and \$9.3 million for the equity payment under the stock purchase agreement.

In June 2017, the Company settled this matter for \$3.0 million in return for full and final mutual releases of all claims, predicated on the Company making a payment of \$1.75 million on June 30, 2017 and the remaining \$1.25 million in 12 equal monthly installment payments with the final payment being made in June 2018.

Securities and Exchange Commission and United States Attorney's Office for the Northern District of Illinois Investigations

The Chicago Regional Office of the SEC has been conducting an investigation focused on, among other things, the Company's financial reporting, misapplication of U.S. GAAP, revenue recognition practices and related conduct, which resulted in the accounting errors giving rise to the financial restatements reported in prior SEC filings. The United States Attorney's Office for the Northern District of Illinois (the "USAO") also is conducting a parallel investigation regarding these matters. The Company is fully cooperating with the SEC and the USAO in their investigations. The Company is engaged in ongoing discussions with the SEC and the USAO regarding resolutions of these matters, however, at this time the Company is unable to predict the ultimate outcome of these matters. If the SEC or the USAO determines that the Company violated federal securities or other laws and institutes civil enforcement or criminal proceedings, the Company may become subject to civil or criminal sanctions, including, but not limited to, criminal or civil charges, fines, other monetary penalties, injunctive relief and compliance conditions imposed by a court or agreement, which may have a material adverse effect on the financial condition, results of operations or cash flows of the Company.

Securities Litigation

In August 2016, Sumit Gupta filed a putative stockholder class-action complaint against the Company, Gary S. Winemaster, Michael P. Lewis and Daniel P. Gorey in the U.S. District Court for the Northern District of Illinois (the "*Gupta Action*"). The complaint alleged violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, arising from public filings made between May 2015 and August 2016. In October 2016, Peter Stout initiated a second suit, asserting similar claims against the same defendants (the "*Stout Action*").

In January 2017, the Court consolidated the *Gupta Action* and the *Stout Action* and appointed Richard Giunta as lead plaintiff. The consolidated case is captioned *Giunta v. Power Solutions International, Inc.*, No. 1:16-cv-09599 (N.D. Ill.) (the "*Giunta Action*"). The plaintiffs then filed an Amended Class Action Complaint (the "Amended Complaint") against the Company and certain current and former officers and directors. The Amended Complaint alleges violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 arising from public filings, press releases and conference calls between February 2014 and February 2017. In January 2019, the parties executed a Stipulation and Agreement of Settlement (the "Settlement") to resolve the *Giunta Action*. Under the terms of the Settlement, a payment of \$8.5 million would be made by the Company and/or its insurers in exchange for the release of claims against the defendants and other released parties by the lead plaintiff and all settlement class members and for the dismissal of the *Giunta Action* with prejudice. The payment of the \$8.5 million was made by the Company's insurers in February 2019. In May 2019, the court granted final approval of the settlement. The Company accrued for the settlement in *Other accrued liabilities* and for the full insurance recovery of the settlement amount in *Prepaid expenses and other current assets* as of December 31, 2018. See Note 1. *Summary of Significant Accounting Policies and Other Information* for additional information related to the Company's insurance proceeds receivable and litigation reserves. No further action or impact to the Company's results of operations, financial condition or cash flows is expected.

Federal Derivative Litigation

In February 2017, Travis Dorvit filed a putative stockholder derivative action in the U.S. District Court for the Northern District of Illinois, captioned *Dorvit v. Winemaster, et al.*, No. 1:17-cv-01097 (N.D. Ill.) (the "*Dorvit Action*"), against certain of the Company's current and former officers and directors. The complaint asserted claims for breach of fiduciary duty and unjust enrichment arising from the same matters at issue in the *Giunta Action*. In April 2018, Michael Martin filed a second putative stockholder derivative action, captioned *Martin v. Winemaster, et al.*, No. 18-CV-2386 (N.D. Ill.) (the "*Martin Action*"), in the same court against certain of the Company's current and former officers and directors. In July 2018, the court consolidated the *Martin Action* and the *Dorvit Action*.

In July 2018, the plaintiffs in the consolidated *Dorvit* and *Martin Actions* filed an amended consolidated complaint (the "Second Amended Complaint") against certain of the Company's current and former officers and directors, who are indemnified by the Company as to their legal fees and defense costs. The Second Amended Complaint asserts claims for breach of fiduciary duty,

unjust enrichment, corporate waste and failure to hold an annual stockholders' meeting, and it seeks an unspecified amount of damages, an order compelling the Company to hold an annual stockholders' meeting and an award of costs, including reasonable attorneys' fees and expenses. In April 2019, the parties reached an agreement in principle to settle the litigation for approximately \$1.9 million ("Settlement Amount"), half of which will be used to pay certain defense costs on behalf of the Company, and the remaining half of which the plaintiffs sought as an award of their attorney's fees and expenses in connection with the benefit conferred by the settlement. The settlement was approved by the court in August 2019 over two objections, including from the plaintiffs in the *McClenney* Action (defined below). Plaintiffs in the *McClenney* Action have appealed the court's order approving the settlement and their opening brief was filed in November 2019. The Company's response brief was filed on December 19, 2019. The Plaintiff's reply brief is currently due on January 9, 2020. The Company's insurers made a payment of half of the Settlement Amount in September 2019 toward the fulfillment of the plaintiff's award of attorney's fees and expenses, and the insurers have allocated the remaining half of the Settlement Amount toward the payment of certain defense costs consistent with the terms of the settlement. The Company had accrued for the settlement in *Other accrued liabilities* and for the full insurance recovery of the Settlement Amount in *Prepaid expenses and other current assets* as of December 31, 2018. If the order approving the settlement is affirmed on appeal, the settlement would not have a material impact on the Company's results of operations, financial condition or cash flows.

State Derivative Litigation

In May 2017, Lewis McClenney filed a putative stockholder derivative action in the Chancery Division of the Circuit Court of Cook County, Illinois, captioned *McClenney v. Winemaster, et al.*, No. 2017-CH-06481 (the "*McClenney* Action"), against certain of the Company's current and former officers and directors. The *McClenney* Action asserted claims for breach of fiduciary duty, unjust enrichment, abuse of control, gross mismanagement and corporate waste arising from the same matters at issue in the *Giunta* Action. On the same day that the *McClenney* Action was filed, Sara Rebscher also filed a putative stockholder derivative action in the same court, captioned *Rebscher v. Winemaster, et al.*, No. 2017-CH-06517 (the "*Rebscher* Action"). The *Rebscher* Action asserts claims for breach of fiduciary duty and unjust enrichment against certain of the Company's current and former officers and directors, arising from the same matters at issue in the *Giunta* Action. Additionally, the complaint in the *Rebscher* Action asserts a claim for professional negligence and accounting malpractice against the Company's former auditor, RSM U.S. LLP ("RSM"). In July 2017, the court consolidated the *McClenney* Action and the *Rebscher* Action. Subsequently, the court appointed Rebscher as lead plaintiff and designated the *Rebscher* Action as the operative complaint. In November 2018, the court granted the Company's motion to dismiss the consolidated case with prejudice on the grounds that it is duplicative of the *Dorvit* and *Martin* Actions. Plaintiffs moved for reconsideration of the Court's decision, which the Court denied in January 2019. In February 2019, plaintiffs filed a notice of appeal from the Court's order dismissing the case. On December 20, 2019, the Illinois Appellate Court affirmed the dismissal of the *McClenney* Action. Plaintiffs have until January 10, 2020 to seek rehearing in the Illinois Appellate Court and, assuming Plaintiffs do not seek rehearing, until January 24, 2020 to petition for leave to appeal to the Illinois Supreme Court. If the settlement of the consolidated *Dorvit* and *Martin* Actions is affirmed on appeal by the federal appellate court, the settlement will release the claims alleged by Rebscher against the Company and its current and former officers and directors.

Eric Cohen vs. The Company

In May 2016, the Company announced that Eric A. Cohen would no longer serve as its Chief Operating Officer effective as of the close of business May 16, 2016, and that he had left the Company. In November 2016, Mr. Cohen filed an administrative charge with the U.S. Department of Labor, and in June 2017, Mr. Cohen filed a complaint against the Company in the U.S. District Court for the Northern District of Illinois alleging statutory violations of the Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act ("DFA"), and the Illinois Whistleblower Act, common-law claims of retaliatory discharge and fraudulent inducement and a claim for breach of his employment agreement and Stock Appreciation Rights agreements. Due to Mr. Cohen electing to proceed with his case in federal court rather than before the Secretary of Labor, his administrative charge with the U.S. Department of Labor was dismissed in July 2017.

In November 2017, the Company filed a motion for partial judgment on the pleadings seeking to dismiss Mr. Cohen's DFA claim and his retaliatory-discharge claim. After the parties fully briefed this motion, the U.S. Supreme Court issued a conclusive decision regarding the DFA in *Digital Realty Trust, Inc. v. Somers*. As a result, Cohen withdrew his opposition to the Company's motion regarding the DFA claim (Count II), and the court granted judgment in favor of the Company regarding Count II. In April 2018, the court also granted judgment on the pleadings in the Company's favor with regard to Cohen's common-law claim for retaliatory discharge (Count IV). In September 2019, the Company settled the remaining claims for \$3.0 million which was paid by the Company's insurers. The Company accrued for the settlement in *Other accrued liabilities* and for the full insurance recovery of the settlement amount in *Prepaid expenses and other current assets* as of December 31, 2018.

Jerome Treadwell v. The Company

In October 2018, a putative class-action complaint was filed against the Company and NOVAtime Technology, Inc. ("NOVAtime") in the Circuit Court of Cook County, Illinois. In December 2018, NOVAtime removed the case to the U.S. District Court for the Northern District of Illinois, Eastern Division under the Class Action Fairness Act. Plaintiff has since voluntarily dismissed

NOVAtime from the lawsuit without prejudice and filed an amended complaint in April 2019. The operative, amended complaint asserts violations of the Illinois Biometric Information Privacy Act (“BIPA”) in connection with employees’ use of the time clock to clock in and clock out using a finger scan and seeks statutory damages, attorneys’ fees, and injunctive and equitable relief. An aggrieved party under BIPA may recover (i) \$1,000 per violation if the Company is found to have negligently violated BIPA or (ii) \$5,000 per violation if the Company is found to have intentionally or recklessly violated BIPA plus reasonable attorneys’ fees. In May 2019, the Company filed its motion to dismiss the Plaintiff’s amended complaint. On December 16, 2019, the court denied the Company’s motion to dismiss. The Company intends to vigorously defend against this action. At this time, the Company is unable to predict the outcome of this matter or meaningfully quantify how the final resolution of this matter may impact its results of operations, financial condition or cash flows.

Other Commitments

Letters of Credit

At December 31, 2018, the Company had five outstanding letters of credit totaling \$1.6 million.

Guaranteed Minimum Commission Payment

As a result of the AGA asset acquisition discussed in Note 5. *Goodwill and Other Intangibles*, the Company agreed to make quarterly commission payments to the former owners with a guaranteed minimum commission payment of \$1.2 million. At December 31, 2018, \$1.0 million remained outstanding related to the guaranteed minimum commission payment.

Note 10. Income Taxes

Income tax expense was as follows:

(in thousands)

	For the Year Ended December 31,	
	2018	2017
Current tax expense		
Federal	\$ 198	\$ 127
State	27	77
Total current tax expense	\$ 225	\$ 204
Deferred tax (benefit) expense		
Federal	(149)	\$ 100
State	93	139
Total deferred tax (benefit) expense	(56)	239
Total tax expense	\$ 169	\$ 443

The Company received net cash refunds for income taxes of \$0.2 million and \$6.3 million in 2018 and 2017, respectively.

A reconciliation between the Company's effective tax rate on loss before income taxes and the statutory tax rate is as follows:

(in thousands)

	For the Year Ended December 31,			
	2018		2017	
	Amount	Percent	Amount	Percent
Income tax benefit at federal statutory rate	\$ (11,457)	21.0 %	\$ (16,037)	34.0 %
State income tax benefit, net of federal tax effect	(1,762)	3.2 %	(2,283)	4.8 %
Non-deductible warrants expense	2,184	(4.0)%	1,360	(2.9)%
Other permanent differences	70	(0.1)%	106	(0.2)%
Research and development tax credits	(1,058)	1.9 %	(426)	0.9 %
Other tax credits	(934)	1.7 %	(419)	0.9 %
Tax reserve reassessment	196	(0.4)%	104	(0.2)%
Federal tax rate change	—	— %	10,899	(23.1)%
Change in valuation allowance	12,856	(23.5)%	4,956	(10.4)%
3PI Settlement	—	— %	1,976	(4.2)%
Other, net	74	(0.1)%	207	(0.5)%
Income tax expense	\$ 169	(0.3)%	\$ 443	(0.9)%

For the year ended December 31, 2018, the Company recognized a pretax loss of \$54.6 million, which included \$10.4 million of permanently excludable loss associated with the change in the valuation of the Weichai Warrant. For the year ended December 31, 2017, the Company recognized a pretax loss of \$47.2 million, which included \$4.0 million of permanently excludable loss associated with the change in the valuation of the Weichai Warrant.

On December 22, 2017, the President of the United States signed the Tax Act, which made broad and complex changes to the U.S. Tax Code, including, but not limited to, (i) reducing the U.S. federal corporate income tax rate from 34 percent to 21 percent, (ii) requiring companies to pay a one-time transitional tax on certain un-repatriated earnings of foreign subsidiaries, (iii) generally eliminating U.S. federal income tax on dividends from foreign subsidiaries of U.S. corporations, (iv) repealing the domestic production activity deduction, (v) providing for the full expensing of qualified property, (vi) adding a new provision designed to tax global intangible low-taxed income ("GILTI"), (vii) revising the limitation imposed on deductions for executive compensation paid by publicly traded companies, (viii) eliminating the corporate alternative minimum tax ("AMT") and changing how existing AMT credits can be utilized, (ix) creating a base erosion-anti-abuse tax ("BEAT"), a new minimum tax on payments made by certain U.S. corporations to related foreign parties, (x) imposing a new limitation on the deductibility of interest expense, (xi) allowing for a deduction related to foreign-derived intangible income ("FDII") and (xii) changing the rules related to the uses and limitations of net operating loss carryforwards generated in tax years beginning after December 31, 2017.

The Company calculated the impact of the Tax Act in accordance with its understanding of the act and guidance available as of December 31, 2017, and, as a result, recorded \$10.9 million as additional income tax expense, offset with an \$11.3 million tax benefit from the change in the valuation allowance in the fourth quarter of 2017, the period in which the legislation was enacted.

The Company generates R&D tax credits as a result of its R&D activities, which reduce the Company's effective income tax rate. In general, these credits are general business credits and may be carried forward up to 20 years to be offset against future taxable income.

Significant components of deferred income tax assets and liabilities consisted of the following:

(in thousands)

	As of December 31,	
	2018	2017
Deferred tax assets:		
Net operating loss carryforwards	\$ 19,006	\$ 15,399
Research and development credits	3,858	2,806
Other state credits	1,923	989
Inventory	2,203	2,560
Allowances and bad debts	840	596
Accrued warranty	5,732	3,387
Accrued wages and benefits	413	351
Other accrued expenses	5,281	2,906
Stock-based compensation	649	645
Capitalized research and development costs	770	1,090
Intangible amortization	2,240	1,734
Contract liabilities (deferred revenue)	495	339
Other	2,490	152
Total deferred tax assets	45,900	32,954
Valuation allowance	(44,405)	(31,992)
Total deferred tax assets, net of valuation allowance	\$ 1,495	\$ 962
Deferred tax liabilities:		
Tax depreciation in excess of book depreciation on property, plant and equipment	(2,142)	(1,665)
Total deferred tax liabilities	\$ (2,142)	\$ (1,665)
Net deferred tax liability	\$ (647)	\$ (703)

The Company's net deferred tax liability is presented as a separate line item in the Consolidated Balance Sheets.

In preparing the Consolidated Statements of Operations, the Company has assessed the likelihood that its deferred income tax assets will be realized from future taxable income. In evaluating the ability to recover its deferred income tax assets, the Company considers all available evidence, positive and negative, including the Company's operating results, ongoing tax planning and forecasts of future taxable income on a jurisdiction-by-jurisdiction basis. A valuation allowance is established if it is determined that it is more likely than not that some portion or all of the net deferred income tax assets will not be realized. The Company exercises significant judgment in determining its income tax expense, its deferred income tax assets and liabilities, and its future taxable income for purposes of assessing its ability to utilize any future tax benefit from its deferred income tax assets.

Although the Company believes that its tax estimates are reasonable, the ultimate tax determination involves significant judgments that could become subject to audit by tax authorities in the ordinary course of business. As of each reporting date, the Company considers new evidence, both positive and negative, that could impact the Company's view with regard to future realization of deferred tax assets.

During the second quarter of 2016, the Company considered both the positive and the negative evidence available in order to assess the realizability of its deferred tax assets. As a result of this evaluation, the Company concluded that the negative evidence outweighed the positive evidence and recorded a full valuation allowance of \$17.8 million against its net deferred tax assets. The Company continues to maintain a full valuation allowance of \$44.4 million and \$32.0 million on its deferred tax assets as of December 31, 2018 and 2017, respectively. The Company's net deferred tax liability of \$0.6 million and \$0.7 million as of December 31, 2018 and 2017, respectively, represents the deferred tax liability related to indefinite-lived assets which cannot serve as a source of income for the realization of deferred tax assets.

As of December 31, 2018, the Company has, on a tax-effected basis, \$5.8 million in R&D and state tax credit carryforwards which begin to expire in 2020. The Company has \$13.6 million and \$5.4 million of federal and state (tax effected, net of federal tax benefit) that are available to offset taxable income in the future. The federal and state net operating loss carryforwards begin to expire in 2037 and 2026, respectively. As of December 31, 2018, there was no annual limitation on the Company's ability to use U.S. federal net operating losses to reduce future income taxes. However, the Company may be subject to substantial annual limitations provided by the Internal Revenue Code (the "IRC") if an "ownership change," as defined in Section 382 of the IRC,

occurs with respect to the Company's capital stock. On April 23, 2019, Weichai exercised the Weichai Warrant resulting in the Company issuing 4.0 million shares of the Company's Common Stock and Weichai becoming the owner of 51.5% of the outstanding shares of the Company's Common Stock. The Company believes that this will constitute an "ownership change" as defined in Section 382 of the IRC and is currently quantifying the potential impact.

The change in unrecognized tax benefits excluding interest and penalties were as follows:

(in thousands)	For the Year Ended December 31,	
	2018	2017
Balance at beginning of year	\$ 1,307	\$ 1,202
Additions based on tax positions related to the current year	193	105
Reductions for tax positions of prior years	(79)	—
Balance at end of year	\$ 1,421	\$ 1,307

The Company recognizes interest and penalties related to unrecognized tax benefits in *Income tax expense*. As of December 31, 2018 and 2017, the amount accrued for interest and penalties was not material. The Company reflects the liability for unrecognized tax benefits as *Other noncurrent liabilities* in its Consolidated Balance Sheets. The amounts included in "reductions for tax positions of prior years" represent decreases in the unrecognized tax benefits relating to settlements reached with taxing authorities during each year shown.

As of December 31, 2018, the Company believes the liability for unrecognized tax benefits, excluding interest and penalties, could decrease by \$0.1 million in 2019 due to lapses in the statute of limitations. Due to the various jurisdictions in which the Company files tax returns, it is possible that there could be other significant changes in the amount of unrecognized tax benefits in 2019, but the amount cannot be estimated.

With few exceptions, the major jurisdictions subject to examination by the relevant tax authorities and open tax years, stated as the Company's fiscal years, are as follows:

Jurisdiction	Open Tax Years
U.S. Federal	2014 - 2018
U.S. States	2013 - 2018

The Company is currently under federal income tax audit for tax years 2014, 2015 and 2016. The Company is currently under Illinois income tax audit for tax years 2013 and 2014.

Note 11. Stockholders' Equity

Common and Treasury Stock

The changes in shares of Common and Treasury Stock are as follows:

(in thousands)	Common Shares Issued	Treasury Stock Shares	Common Shares Outstanding
Balance as of December 31, 2016	11,567	645	10,922
Net shares issued for stock awards	—	(11)	11
Shares issued to Weichai *	2,729	—	2,729
Shares converted from Series B Convertible Preferred Stock *	4,771	—	4,771
Balance as of December 31, 2017	19,067	634	18,433
Net shares issued for Stock awards	—	(205)	205
Balance as of December 31, 2018	19,067	429	18,638

* See Note 3. *Weichai Transactions* for additional information.

Preferred Stock

The Company is authorized to issue 5,000,000 shares of Preferred stock, par value \$0.001 per share. The Preferred stock may be designated into one or more series as determined by the Board. As of December 31, 2018, the Board had authorized two series of Preferred stock. At December 31, 2018 and 2017, there were no shares of Preferred stock outstanding.

Series B Convertible Preferred Stock and Weichai Warrant

In March 2017, the Company issued 2,385,624 shares of Series B Convertible Preferred Stock to Weichai that were converted into 4,771,248 shares of the Company's Common Stock in November 2017. On April 23, 2019, Weichai exercised the Weichai Warrant resulting in the Company issuing 4,049,759 shares of the Company's Common Stock and Weichai becoming the owner of 51.5% of the outstanding shares of the Company's Common Stock. See Note 3. *Weichai Transactions* for additional information.

Note 12. Stock-Based Compensation

The Company has an incentive compensation plan (the "2012 Plan"), which authorizes the granting of a variety of different types of awards including, but not limited to, non-qualified stock options, incentive stock options, Stock Appreciation Rights ("SARs"), Restricted Stock Awards ("RSAs"), deferred stock and performance units to its executive officers, employees, consultants and Directors. The 2012 Plan is administered by the Compensation Committee of the Board.

Under the 2012 Plan, 830,925 shares were initially made available for awards, with 700,000 additional shares added to the 2012 Plan in 2013. Forfeited shares are added back to the pool of shares available for future awards.

As of December 31, 2018, the Company had 495,558 shares available for issuance of future awards.

SAR Award Agreements

SAR awards entitle the recipients to receive, upon exercise, a number of shares of Common Stock equal to (i) the number of shares for which the SAR is being exercised multiplied by the value of one share of Common Stock on the date of exercise (determined as provided in the SAR award agreement), less (ii) the number of shares for which the SAR is being exercised multiplied by the applicable exercise price, divided by (iii) the value of one share of Common Stock on the date of exercise (determined as provided in the SAR award agreement). The exercised SAR is to be settled only in whole shares of Common Stock, and the value of any fractional share of Common Stock is forfeited.

For all SAR award assumptions, the Company used rates on the grant date of zero-coupon government bonds with maturities over periods covering the term of the awards. The Company considered the historical volatility of its stock price over a term similar to the expected life of the awards in determining expected volatility. The expected term is the period that the awards granted are expected to remain outstanding. The Company has never declared or paid a cash dividend on its Common Stock and has no plans to pay cash dividends in the foreseeable future.

SAR Awards

In 2017, the Company granted 5,000 SAR awards. The assumptions used for valuing the 2017 SARs included the following:

Assumptions	2017 SARs
Market closing price of the Common Stock	\$ 7.37
Exercise price	\$ 7.37
Risk-free interest rate	2.1%
Estimated price volatility	58.5%
Expected term	6.00 years
Dividend yield	—%

The resulting fair value was \$4.10 per underlying share. The SAR awards vest ratably over 2 years, with half of the shares becoming exercisable on each of the first two anniversaries of the grant. In 2018 and 2017, the Company recognized an immaterial amount of compensation expense related to the 2017 SAR awards.

In 2018, the Company granted 60,000 SAR awards. The assumptions used for valuing the 2018 SARs included the following:

Assumptions	2018 SARs
Market closing price of the Common Stock	\$ 7.92
Exercise price	\$ 7.92
Risk-free interest rate	2.6%
Estimated price volatility	78.5%
Expected term	6.58 years
Dividend yield	—%

The resulting fair value was \$5.63 per underlying share. The SAR awards vest over 3.17 years. In 2018, the Company recognized \$0.1 million of compensation expense related to the 2018 SAR awards.

SAR activity consisted of the following:

Number of Shares under SARs	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2016	152,600	\$ 16.55	9.02	\$ —
Granted	5,000	7.37		—
Exercised	—	—		—
Forfeited	(67,130)	23.16		—
Expired	(6,750)	12.68		—
Outstanding at December 31, 2017	83,720	11.02	8.21	1
Exercisable at December 31, 2017	39,360	\$ 11.25	8.15	\$ —

Number of Shares under SARs	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2017	83,720	\$ 11.02	8.21	\$ 1
Granted	60,000	7.92		—
Exercised	—	—		—
Forfeited	(1,000)	11.25		—
Expired	(4,700)	11.25		—
Outstanding at December 31, 2018	138,020	9.66	8.05	89
Exercisable at December 31, 2018	87,370	\$ 11.14	6.21	\$ 5

Restricted Stock Awards

RSA grants represent Common Stock issued subject to forfeiture or other restrictions that will lapse upon satisfaction of specified conditions. RSAs are valued based on the fair value of the Common stock at grant date, with compensation expense for recipients recognized over the vesting period based on the date of the award, primarily recognized in *Selling, general and administrative expenses*.

Restricted stock activity consisted of the following:

	Shares	Weighted-Average Grant Date Fair Value
December 31, 2016	104,340	\$ 41.61
Granted	437,472	8.13
Forfeited	(29,144)	38.33
Vested	(16,395)	44.19
December 31, 2017	496,273	\$ 12.20
Granted	50,000	10.92
Forfeited	(32,547)	25.95
Vested	(254,440)	10.14
Balance as of December 31, 2018	259,286	\$ 12.25

In 2018 and 2017, the Company recognized \$2.5 million and \$1.4 million, respectively, of compensation expense, net of forfeitures, in connection with the RSAs. The original grant date fair value of restricted stock that vested during 2018 and 2017 was \$2.6 million and \$0.7 million, respectively. Unrecognized compensation expense related to RSAs as of December 31, 2018 and 2017 was \$1.7 million and \$4.6 million, respectively. As of December 31, 2018, the weighted-average period over which the unrecognized compensation cost is expected to be recognized was approximately two years.

2017 Retention Program

The RSA information above includes retention awards granted in July 2017. As part of the Company's efforts to retain certain employees, 379,472 RSAs with a total value of \$2.9 million were granted along with \$3.3 million of cash awards. Half of the shares granted vested in March 2018, and the second half vested in March 2019. Half of the cash awards were paid in quarterly installments commencing in July 2017, with the remaining half paid in 2019.

Other Equity Award

In 2012, the Company entered into an employment agreement that included an award of \$0.5 million of restricted stock with a put option for the recipient to have the Company repurchase the related restricted stock for \$2.0 million upon vesting at December 31, 2020. In the first quarter of 2017, the award was forfeited, and \$1.0 million of previously recognized expense was reversed.

Note 13. Loss Per Share

The Company computes basic loss per share by dividing Net loss available to common stockholders by the weighted-average common shares outstanding during the year. Diluted loss per share is calculated to give effect to all potentially dilutive common shares that were outstanding during the year. Weighted-average diluted common shares outstanding primarily reflect the additional shares that would be issued upon the assumed exercise of stock options and the assumed vesting of unvested share awards. The treasury stock method has been used to compute diluted EPS for 2018 and 2017. For 2017, the Company recognized deemed dividends on the Series B Convertible Preferred Stock issued to Weichai and subsequently converted to Common Stock.

The Company issued warrants that represent the right to purchase shares of Common Stock, SARs and RSAs, all of which have been evaluated for their potentially dilutive effect under the treasury stock method. See Note 3. *Weichai Transactions* for additional information on the Weichai Warrants and Note 12. *Stock-Based Compensation* for additional information on the SARs and the RSAs.

The computations of basic and diluted loss per share are as follows:

(in thousands, except per share basis)

	For the Year Ended December 31,	
	2018	2017
Numerator:		
Net loss	\$ (54,726)	\$ (47,612)
Less: Deemed dividend on Series B convertible preferred stock	—	(37,860)
Net loss available to common stockholders - basic and diluted	\$ (54,726)	\$ (85,472)
Denominator:		
Shares used in computing net loss per share:		
Weighted-average basic shares outstanding	18,585	13,787
Effect of dilutive securities	—	—
Weighted-average common shares outstanding — diluted	18,585	13,787
Loss per common share:		
Loss per share of common stock - basic	\$ (2.94)	\$ (6.20)
Loss per share of common stock - diluted	\$ (2.94)	\$ (6.20)

For 2018 and 2017, SAR and RSA grants were not included in the diluted loss per share calculation, as they would have been anti-dilutive due to the losses reported in the Consolidated Statements of Operations. Additionally, for all periods, certain SAR grants were excluded from the diluted loss per share calculation, as the Company's average stock price was less than their respective exercise prices.

For 2018 and 2017, the Weichai Warrant and, for 2017, the Series B Convertible Preferred Stock were excluded from the diluted loss per share calculation, as they would have been anti-dilutive.

The aggregate shares excluded from the diluted loss per share calculations, as they would have been anti-dilutive, were 3.9 million and 6.3 million shares in 2018 and 2017, respectively.

Note 14. Related Party Transactions

Weichai Transactions

See Note 3. *Weichai Transactions* for information regarding the Weichai SPA and Collaboration Agreement.

Transactions with Joint Ventures

MAT-PSI Holdings, LLC

In December 2012, the Company and MAT Holdings, Inc. (“MAT”) entered into an agreement to create MAT-PSI Holdings, LLC (“MAT-PSI”), which was intended to be a holding company of its 100% Chinese wholly-owned foreign entity, referred to as Green Power. The Company invested \$0.9 million for its 50% share of MAT-PSI, which was formed to manufacture, assemble and supply natural gas, gas and alternative-fueled power systems to Chinese and Asian forklift customers. The venture established a production facility in Dalian and also sourced base engines from a local Chinese factory. As MAT-PSI was not profitable, the venture was closed in 2017. The Company’s investment was accounted for under the equity method of accounting.

Doosan-PSI, LLC

In 2015, the Company and Doosan Infracore Co., Ltd. (“Doosan”), a subsidiary of Doosan Group, entered into an agreement to form Doosan-PSI, LLC. The Company invested \$1.0 million to acquire 50% of the venture, which was formed to operate in the field of developing, designing, testing, manufacturing, assembling, branding, marketing, selling, distributing and providing support for industrial gas engines and all components and materials required for assembly of the gas engines to the global power generation market outside of North America and South Korea.

Sterling and Wilson Cogen Solutions, LLC

On April 13, 2016, the Company and Sterling and Wilson Power Systems Inc. (“SW”) entered into an agreement for the formation and operation of Sterling and Wilson Cogen Solutions, LLC. The Company invested \$0.2 million for its 49% share of the venture. Effective May 31, 2017, the Company sold its 49% membership interest in the venture to SW for \$0.2 million pursuant to the agreement.

Joint Venture Operating Results

The Company’s investments in joint ventures are accounted for under the equity method of accounting. The Company’s Consolidated Statement of Operations included a gain from these investments of \$0.2 million in 2018. In 2017, the gain was immaterial. The joint venture operating results are presented in *Other expense (income), net* in the Company’s Consolidated Statements of Operations.

Transactions with Related Individuals

William D. Winemaster

William D. Winemaster, the father of Gary S. Winemaster, former Chairman of the Board, Chief Executive Officer and President and nonexecutive Chief Strategy Officer, and Kenneth J. Winemaster, Executive Vice President, served as an employee performing consulting and advisory-type services, for which he was paid a salary, an amount for automobiles and related insurance premiums, mobile-telephone services and a bonus. The Company paid to William D. Winemaster \$0.2 million in 2017. Additionally, in 2018, William D. Winemaster retired and for his service was awarded a \$0.1 million founders award.

Industrial Electronic Controls

The Company purchased \$0.4 million of products in 2018 from Industrial Electronic Controls, a supplier of custom throttles, sensors, and custom electronics. Gary S. Winemaster, former Chairman of the Board, Chief Executive Officer and President and non-executive Chief Strategy Officer owned 50% of Industrial Electronic Controls during 2018.

Note 15. Selected Quarterly Financial Data (unaudited)

Set forth below is unaudited quarterly financial data for 2018 and 2017.

POWER SOLUTIONS INTERNATIONAL, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS

(in thousands)

	As of		
	March 31, 2018	June 30, 2018	September 30, 2018
ASSETS			
Current assets:			
Cash and cash equivalents	\$ —	\$ 2	\$ 2,014
Accounts receivable, net	58,870	70,324	71,639
Income tax receivable	1,018	1,018	1,018
Inventories, net	91,689	95,957	112,392
Prepaid expenses and other current assets	20,555	26,644	26,905
Total current assets	172,132	193,945	213,968
Property, plant and equipment, net	18,474	24,931	24,536
Intangible assets, net	23,175	21,854	20,534
Goodwill	29,835	29,835	29,835
Other noncurrent assets	4,957	3,552	3,818
TOTAL ASSETS	\$ 248,573	\$ 274,117	\$ 292,691
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)			
Current liabilities:			
Accounts payable	\$ 55,221	\$ 64,422	\$ 88,798
Revolving line of credit	36,662	54,334	52,491
Warrant liability	—	33,700	43,900
Other accrued liabilities	38,697	41,884	44,762
Total current liabilities	130,580	194,340	229,951
Deferred income taxes	427	495	616
Warrant liability	27,200	—	—
Long-term debt, net	54,575	54,604	54,781
Other noncurrent liabilities	15,311	15,753	16,612
TOTAL LIABILITIES	\$ 228,093	\$ 265,192	\$ 301,960
STOCKHOLDERS' EQUITY (DEFICIT)			
Preferred stock	\$ —	\$ —	\$ —
Common stock	19	19	19
Additional paid-in capital	124,981	125,272	125,938
Accumulated deficit	(94,638)	(106,443)	(125,262)
Treasury stock	(9,882)	(9,923)	(9,964)
TOTAL STOCKHOLDERS' EQUITY (DEFICIT)	20,480	8,925	(9,269)
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)	\$ 248,573	\$ 274,117	\$ 292,691

POWER SOLUTIONS INTERNATIONAL, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(As Revised)

(in thousands)

	As of		
	March 31, 2017	June 30, 2017	September 30, 2017
ASSETS			
Current assets:			
Cash and cash equivalents	\$ 342	\$ —	\$ —
Accounts receivable, net	64,305	56,673	60,811
Income tax receivable	6,829	1,996	841
Inventories, net	97,286	103,335	113,074
Prepaid expenses and other current assets	15,291	12,453	14,536
Total current assets	184,053	174,457	189,262
Property, plant and equipment, net	19,230	19,050	18,974
Intangible assets, net	24,819	23,610	22,401
Goodwill	29,835	29,835	29,835
Other noncurrent assets	5,053	4,518	6,035
TOTAL ASSETS	\$ 262,990	\$ 251,470	\$ 266,507
LIABILITIES, MEZZANINE EQUITY AND STOCKHOLDERS' EQUITY			
Current liabilities:			
Accounts payable	\$ 67,167	\$ 55,610	\$ 54,195
Contingent consideration	30	29	20
Revolving line of credit	16,887	25,263	41,332
Other accrued liabilities*	28,809	30,110	37,295
Total current liabilities	112,893	111,012	132,842
Deferred income taxes	933	1,066	1,210
Warrant liability	20,700	21,500	23,200
Long-term debt, net	54,046	54,168	54,306
Other noncurrent liabilities*	19,753	17,707	17,410
TOTAL LIABILITIES	\$ 208,325	\$ 205,453	\$ 228,968
MEZZANINE EQUITY			
Series B convertible preferred stock, net	\$ 24,617	\$ 27,807	\$ 31,410
STOCKHOLDERS' EQUITY			
Preferred stock	\$ —	\$ —	\$ —
Common stock	14	14	14
Additional paid-in capital	100,686	96,543	91,737
Accumulated deficit	(59,070)	(66,817)	(76,018)
Treasury stock	(11,582)	(11,530)	(9,604)
TOTAL STOCKHOLDERS' EQUITY	30,048	18,210	6,129
TOTAL LIABILITIES, MEZZANINE EQUITY AND STOCKHOLDERS' EQUITY	\$ 262,990	\$ 251,470	\$ 266,507

* The Company recorded adjustments to reflect a portion of the accrued product warranty liability previously in *Other accrued expenses* at March 31, June 30 and September 30 to correct the presentation error and to conform to the current period presentation. See Note 1. *Summary of Significant Accounting Policies and Other Information* for additional discussion of the adjustment.

POWER SOLUTIONS INTERNATIONAL, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except per share amounts)

	For the Quarter Ended			
	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018
Net sales	\$ 94,413	\$ 127,073	\$ 136,318	\$ 138,234
Cost of sales	84,540	109,006	117,510	126,213
Gross profit	9,873	18,067	18,808	12,021
Operating expenses:				
Research, development and engineering expenses	6,021	6,962	7,708	7,910
Selling, general and administrative expenses	13,254	13,276	16,374	16,727
Asset impairment charges	—	—	—	2,234
Amortization of intangible assets	1,045	1,321	1,321	1,321
Total operating expenses	20,320	21,559	25,403	28,192
Operating loss	(10,447)	(3,492)	(6,595)	(16,171)
Other expense (income):				
Interest expense	1,623	1,828	1,974	2,203
Loss (gain) from change in fair value of warrants	2,500	6,500	10,200	(8,800)
Other expense (income), net	(94)	(95)	(68)	81
Total other expense (income)	4,029	8,233	12,106	(6,516)
Loss before income taxes	(14,476)	(11,725)	(18,701)	(9,655)
Income tax (benefit) expense	(272)	80	118	243
Net loss	\$ (14,204)	\$ (11,805)	\$ (18,819)	\$ (9,898)
Weighted-average common shares outstanding:				
Basic	18,483	18,594	18,625	18,638
Diluted	18,483	18,594	18,625	22,360
Loss per common share:				
Basic	\$ (0.77)	\$ (0.63)	\$ (1.01)	\$ (0.53)
Diluted	\$ (0.77)	\$ (0.63)	\$ (1.01)	\$ (0.84)

POWER SOLUTIONS INTERNATIONAL, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except per share amounts)

	For the Quarter Ended			
	March 31, 2017	June 30, 2017	September 30, 2017	December 31, 2017
Net sales	\$ 84,265	\$ 100,922	\$ 99,953	\$ 131,476
Cost of sales	74,497	88,443	86,702	115,981
Gross profit	9,768	12,479	13,251	15,495
Operating expenses:				
Research, development and engineering expenses	3,950	3,848	5,687	6,459
Selling, general and administrative expenses	10,209	10,688	12,062	11,297
Asset impairment charges	—	—	—	1
Amortization of intangible assets	1,209	1,209	1,210	1,210
Total operating expenses	15,368	15,745	18,959	18,967
Operating loss	(5,600)	(3,266)	(5,708)	(3,472)
Other expense (income):				
Interest expense	6,080	1,404	1,654	1,703
Loss from change in fair value of warrants	—	800	1,700	1,500
Loss on debt extinguishment and modifications	11,921	—	—	—
Other expense (income), net	455	2,142	(10)	(226)
Total other expense	18,456	4,346	3,344	2,977
Loss before income taxes	(24,056)	(7,612)	(9,052)	(6,449)
Income tax expense (benefit)	479	135	149	(320)
Net loss	(24,535)	(7,747)	(9,201)	(6,129)
Deemed dividend on Series B convertible preferred stock	—	(3,190)	(3,603)	(31,067)
Net loss available to common stockholders	\$ (24,535)	\$ (10,937)	\$ (12,804)	\$ (37,196)
Weighted-average common shares outstanding:				
Basic	11,018	13,697	13,659	16,774
Diluted	11,018	13,697	13,659	16,774
Loss per common share:				
Basic	\$ (2.23)	\$ (0.80)	\$ (0.94)	\$ (2.22)
Diluted	\$ (2.23)	\$ (0.80)	\$ (0.94)	\$ (2.22)

POWER SOLUTIONS INTERNATIONAL, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)

(in thousands)

	Common Stock	Additional Paid-in Capital	Treasury Stock	Accumulated Deficit	Total Stockholders' Equity (Deficit)
Balance at December 31, 2017	\$ 19	\$ 123,838	\$ (9,538)	\$ (82,147)	\$ 32,172
Net loss	—	—	—	(14,204)	(14,204)
Stock-based compensation expense	—	1,143	(344)	—	799
Cumulative Impact of ASC 606	—	—	—	1,713	1,713
Balance at March 31, 2018	\$ 19	\$ 124,981	\$ (9,882)	\$ (94,638)	\$ 20,480
Net loss	—	—	—	(11,805)	(11,805)
Stock-based compensation expense	—	660	(41)	—	619
Payment of withholding taxes for net settlement of stock-based awards	—	(369)	—	—	(369)
Balance at June 30, 2018	\$ 19	\$ 125,272	\$ (9,923)	\$ (106,443)	\$ 8,925
Net loss	—	—	—	(18,819)	(18,819)
Stock-based compensation expense	—	586	(41)	—	545
Payment of withholding taxes for net settlement of stock-based awards	—	80	—	—	80
Balance at September 30, 2018	\$ 19	\$ 125,938	\$ (9,964)	\$ (125,262)	\$ (9,269)
Net loss	—	—	—	(9,898)	(9,898)
Stock-based compensation expense	—	585	115	—	700
Payment of withholding taxes for net settlement of stock-based awards	—	(111)	—	—	(111)
Balance at December 31, 2018	<u>\$ 19</u>	<u>\$ 126,412</u>	<u>\$ (9,849)</u>	<u>\$ (135,160)</u>	<u>\$ (18,578)</u>

POWER SOLUTIONS INTERNATIONAL, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY

(in thousands)

	Preferred Stock	Common Stock	Additional Paid-in Capital	Treasury Stock	Accumulated Deficit	Total Stockholders' Equity
Balance at December 31, 2016	\$ —	\$ 12	\$ 86,764	\$ (11,581)	\$ (34,535)	\$ 40,660
Net loss	—	—	—	—	(24,535)	(24,535)
Stock-based compensation expense	—	—	(154)	(1)	—	(155)
Issuance of common stock to Weichai, net of fees	—	2	14,076	—	—	14,078
Issuance of Series B convertible preferred stock, net of fees	24,617	—	—	—	—	—
Balance at March 31, 2017	\$ 24,617	\$ 14	\$ 100,686	\$ (11,582)	\$ (59,070)	\$ 30,048
Net loss	—	—	—	—	(7,747)	(7,747)
Settlement of equity-related acquisition consideration	—	—	(712)	—	—	(712)
Stock-based compensation expense	—	—	(214)	52	—	(162)
Payment of withholding taxes for net settlement of stock-based awards	—	—	(27)	—	—	(27)
Deemed dividend on Series B convertible preferred stock	3,190	—	(3,190)	—	—	(3,190)
Balance at June 30, 2017	\$ 27,807	\$ 14	\$ 96,543	\$ (11,530)	\$ (66,817)	\$ 18,210
Net loss	—	—	—	—	(9,201)	(9,201)
Stock-based compensation expense	—	—	(1,195)	1,926	—	731
Payment of withholding taxes for net settlement of stock-based awards	—	—	(8)	—	—	(8)
Deemed dividend on Series B convertible preferred stock	3,603	—	(3,603)	—	—	(3,603)
Balance at September 30, 2017	\$ 31,410	\$ 14	\$ 91,737	\$ (9,604)	\$ (76,018)	\$ 6,129
Net loss	—	—	—	—	(6,129)	(6,129)
Stock-based compensation expense	—	—	705	66	—	771
Payment of withholding taxes for net settlement of stock-based awards	—	—	(9)	—	—	(9)
Deemed dividend on Series B convertible preferred stock	31,067	—	(31,067)	—	—	(31,067)
Conversion of Series B convertible preferred stock to common stock	(62,477)	5	62,472	—	—	62,477
Balance at December 31, 2017	\$ —	\$ 19	\$ 123,838	\$ (9,538)	\$ (82,147)	\$ 32,172

POWER SOLUTIONS INTERNATIONAL, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)

	For the Year to Date Period Ended		
	March 31, 2018	June 30, 2018	September 30, 2018
Cash provided by (used in) operating activities			
Net loss	\$ (14,204)	\$ (26,009)	\$ (44,828)
Adjustments to reconcile net loss to net cash used in operating activities:			
Amortization of intangible assets	1,045	2,366	3,687
Depreciation	1,196	2,524	3,849
Change in valuation of warrants	2,500	9,000	19,200
Stock compensation expense	799	1,418	1,963
Amortization of financing fees	341	659	947
Deferred income taxes	(276)	(208)	(87)
Other non-cash adjustments, net	(350)	325	1,661
Changes in operating assets and liabilities:			
Trade accounts receivable, net	9,710	(1,739)	(3,058)
Inventories, net	(9,822)	(14,825)	(32,657)
Prepaid expenses and other assets	(76)	(4,815)	(5,387)
Trade accounts payable	3,748	13,200	37,355
Income taxes refundable	8	(2)	7
Accrued expenses	4,757	7,914	10,773
Other noncurrent liabilities	2,902	2,000	2,901
Net cash provided by (used in) operating activities	2,278	(8,192)	(3,674)
Cash used in investing activities			
Capital expenditures	(467)	(1,588)	(2,321)
Asset acquisitions	(1,029)	(6,595)	(6,595)
Net cash used in investing activities	(1,496)	(8,183)	(8,916)
Cash (used in) provided by financing activities			
Proceeds from revolving line of credit	106,216	240,698	372,557
Repayments of revolving line of credit	(106,608)	(223,419)	(357,121)
Other uses, net	(390)	(902)	(832)
Net cash (used in) provided by financing activities	(782)	16,377	14,604
Net increase in cash and restricted cash	—	2	2,014
Cash at beginning of the year	—	—	—
Cash at end of the period	\$ —	\$ 2	\$ 2,014

POWER SOLUTIONS INTERNATIONAL, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(As Revised)

(in thousands)

	For the Year to Date Period Ended		
	March 31, 2017	June 30, 2017	September 30, 2017
Cash provided by (used in) operating activities			
Net loss	\$ (24,535)	\$ (32,282)	\$ (41,483)
Adjustments to reconcile net loss to net cash used in operating activities:			
Amortization of intangible assets	1,209	2,419	3,628
Depreciation	1,172	2,342	3,502
Change in valuation of warrants	—	800	2,500
Stock compensation expense	(865)	(1,028)	(297)
Amortization of financing fees	3,109	3,441	3,778
Deferred income taxes	469	602	746
Loss on extinguishment of debt	11,921	11,921	11,921
Provision for doubtful accounts	48	131	216
Provision for inventory obsolescence	146	539	882
Loss on disposal of fixed assets	10	66	115
Other non-cash adjustments, net	137	200	190
Changes in operating assets and liabilities:			
Trade accounts receivable, net	(4,017)	3,532	(691)
Inventories, net	3,122	(3,326)	(13,408)
Prepaid expenses and other assets	(1,624)	1,238	(1,359)
Trade accounts payable	15,186	3,244	1,879
Income taxes refundable	298	5,135	6,293
Accrued expenses*	1,861	3,826	10,622
Other noncurrent liabilities*	450	(1,478)	(2,576)
Net cash provided by (used in) operating activities	8,097	1,322	(13,542)
Cash used in investing activities			
Capital expenditures	(1,896)	(2,669)	(3,856)
Other sources, net	—	245	245
Net cash used in investing activities	(1,896)	(2,424)	(3,611)
Cash (used in) provided by financing activities			
Repayments of long-term debt	(71,400)	(71,400)	(71,400)
Financing fees	(253)	(928)	(928)
Net proceeds from stock offering and warrants	59,396	59,396	59,396
Proceeds from revolving line of credit	85,945	209,082	324,416
Repayments of revolving line of credit	(81,833)	(196,593)	(295,859)
Acquisition of business contingent consideration payments	(6)	(9)	(19)
Other uses, net	—	(738)	(745)
Net cash (used in) provided by financing activities	(8,151)	(1,190)	14,861
Net (decrease) in cash and restricted cash	(1,950)	(2,292)	(2,292)
Cash at beginning of the year	2,292	2,292	2,292
Cash at end of the period	\$ 342	\$ —	\$ —

* The Company recorded adjustments to reflect a portion of the accrued product warranty liability previously in *Other accrued expenses* for the three-month period ended March 31, six-month period ended June 30, and nine-month period ended September 30 to correct the presentation error and to conform to the current period presentation. See Note 1. *Summary of Significant Accounting Policies and Other Information* for additional discussion of the adjustment.

Note 16. Subsequent Events

In October 2019, the Company entered into an addendum (the “Addendum”) to a supply agreement (the “Supply Agreement”), dated December 11, 2007, with a key supplier. The Addendum extends the Supply Agreement to December 31, 2023 with automatic annual extensions thereafter unless notice of termination is provided. The Addendum extends the Company’s exclusivity for the prescribed territory but carves out of the restriction the competing engine products supplied by General Motors Company and Weichai. The Company committed to maximize sales and service opportunities on both the key supplier and Weichai engine products, recognizing their different value proposition and target markets. The Addendum also updates the minimum product purchase commitments for the period 2019 through 2023 to \$40.0 million per year, subject to reductions based on market declines in oil prices and defined prescribed payments to the key supplier triggered by shortfalls in purchases made by the Company during each annual calendar period. The Company made product purchases of \$44.9 million and \$15.0 million in 2018 and 2017, respectively.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosures

On March 14, 2018, the Audit Committee appointed BDO USA, LLP as the Company’s new independent registered public accounting firm and dismissed Frazier & Deeter, LLC as the Company’s independent registered public accounting firm. The information contained in the second paragraph of the Company’s Current Report on Form 8-K as filed with the SEC on March 19, 2018, and in the third paragraph of the Company’s Current Report on Form 8-K/A as filed with the Commission on March 20, 2018, is herein incorporated by reference.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

The term “disclosure controls and procedures” is defined in Rule 13a-15(e) of the Securities Exchange Act of 1934 as “controls and other procedures of an issuer that are designed to ensure that information required to be disclosed by the issuer in the reports that it files or submits under the Act are recorded, processed, summarized and reported, within the time periods specified in the SEC rules and forms.” The Company’s disclosure controls and procedures are designed to ensure that material information relating to the Company and its consolidated subsidiaries is accumulated and communicated to its management, including its Chief Executive Officer and its Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosures.

The Company’s management, with the participation of its Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the effectiveness of its disclosure controls and procedures as of December 31, 2018. Based upon that evaluation, the Company’s Chief Executive Officer and Chief Financial Officer have concluded that the Company’s disclosure controls and procedures were not effective as of December 31, 2018, because of the previously reported material weaknesses in internal control over financial reporting described below.

Management’s Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. As defined in Rules 13a-15(f) and 15d(f) under the Exchange Act, internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of the Company’s financial reporting and the preparation of financial statements for external purposes in accordance with U.S. GAAP. Because of its inherent limitations, the Company’s internal control over financial reporting may not prevent or detect all misstatements, including the possibility of human error, the circumvention or overriding of controls, or fraud. Effective internal control can provide only reasonable assurance with respect to the preparation and fair presentation of financial statements. 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.

A material weakness is a control deficiency, or a combination of control deficiencies in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company’s annual or interim financial statements will not be prevented or detected on a timely basis.

Management assessed the effectiveness of the Company’s internal control over financial reporting as of December 31, 2018 based on the criteria established by the Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO Framework”).

As a result of management’s review of the Company’s financial and accounting records and the other work completed by the management team and its advisers, management concluded that, as of December 31, 2018, the Company had material weaknesses relating to certain internal controls. These material weaknesses are summarized below, and remediation efforts completed or underway are outlined in the “*Remediation of Material Weaknesses in Internal Control over Financial Reporting*” section below. All of these material weaknesses were previously reported in the Annual Report on Form 10-K for the fiscal year ended December 31 2017.

Control Environment, Risk Assessment, Information and Communication, and Monitoring

The Company's control environment, which is the responsibility of management and is subject to the oversight of the Audit Committee and the Board, establishes the tone of the organization, influences the control consciousness of its officers and employees, and is the foundation for all other components of internal control over financial reporting.

As of December 31, 2018, the Company did not maintain an effective control environment, primarily attributable to the following identified material weaknesses:

Control Environment: The Company was unable to demonstrate that it had maintained a corporate culture that (i) instilled an adequate enterprise-wide attitude of control consciousness supporting the Code of Business Conduct and Ethics, (ii) promoted accountability and timely communication across the organization and the Board and (iii) had sufficiently robust processes or focus to identify or address internal control weaknesses. This weakness in the control environment likely contributed to many of the other material weaknesses disclosed herein.

Skillset and Competency: The Company did not have sufficient resources with appropriate levels of technical accounting or information technology ("IT") knowledge, including the following:

- Technical accounting knowledge to reach accounting conclusions in accordance with U.S. GAAP, leading to issues including, but not limited to, properly accounting for revenue, capitalization, complex and nonroutine transactions and reserves.
- IT resources to adequately support the organization including, but not limited to, the design and implementation of robust IT general controls ("ITGC") to support internal control over financial reporting, the oversight of the Company's applications, systems and related training to the IT system user group.

Policies and Procedures: The Company did not maintain adequate policies or procedures, contributing to a breakdown in related controls, including the following:

- Accounting policies and procedures were not appropriately designed, established, published or maintained. There was no formalized process for determining, documenting, communicating, implementing and monitoring the Company's accounting policies and procedures, including updates for new accounting pronouncements and guidance.
- Enterprise-wide policies and procedures related to record retention and the delegation of authority policy were not updated, approved or communicated across the organization.
- IT policies and procedures were neither broadly enforced, nor did they directly support a sustainable ITGC framework.

Internal Control Function: The Company did not have an effective internal control program fully in place, including a robust risk assessment, and did not clearly communicate responsibilities to control owners, or consistently communicate deficiencies to the Audit Committee.

Segregation of Duties: The Company did not maintain effective policies, procedures or controls in aggregate to ensure adequate segregation of duties within its business processes, financial applications and IT systems. Specifically, the Company did not have appropriate controls in place to adequately assess the segregation of job responsibilities and system user access for initiating, authorizing and recording transactions. In addition, the Company did not have adequate mitigating or monitoring controls in place.

Control Activities

As of December 31, 2018, the material weaknesses described above contributed to the activity level material weaknesses described below:

Revenue Accounting: The Company did not maintain effective policies, procedures or controls to ensure that revenue recognition criteria were met prior to recognizing sales transactions. Specifically, the Company did not:

- Timely or accurately communicate information to the accounting department including, but not limited to, terms of sales agreements, including rebates and other contractual discounts.
- Perform adequate review and approval controls for recording manual revenue entries, including revenue-related reserves (such as sales allowances).

Capitalization: The Company did not have defined policies, procedures or controls to consistently review capitalization of costs incurred on capital asset projects and accounting treatment for research and development activities.

Complex and Nonroutine Transactions: The Company did not have defined policies, procedures or controls to identify and determine the appropriate accounting treatment for certain complex and nonroutine transactions, including but not limited to identification of reporting units and triggering events that could impact the assessment of potential impairments of plant, property

and equipment, intangibles and goodwill, accounting for debt transactions, purchase accounting for business combinations and lease classification.

Reserves and Accruals: The Company did not have sufficiently defined policies, procedures or controls to ensure consistent recognition of accrued liabilities and reserve balances, including but not limited to excess and obsolete inventory and warranty reserves.

Period-End Close / Accounting Documentation: The Company did not maintain effective policies, procedures or controls in aggregate over the period-end financial close and reporting process to enable timely reporting of complete and accurate financial information. Specifically, it lacked controls to define financial statement review thresholds, consistently review journal entries prior to posting, review procedures related to taxes and inventory in-transit, and consistently prepare, approve and retain adequate supporting documentation for balance sheet account reconciliations. Additionally, the Company did not have an effective Section 302 certification process to support the completeness and accuracy of required financial statement disclosures.

Information Technology: The Company's ITGC framework was not adequately designed and implemented to support the effective operation of internal control over financial reporting. Specifically, ITGCs were not designed to ensure that logical access was appropriately segregated and restricted based on business needs, and controls were not consistently implemented to support timely and effective changes to financial systems and applications. The aggregated IT deficiencies impact each ITGC domain and in-scope application, and the pervasive nature and lack of adequate compensating controls limited management's ability to rely on the completeness and accuracy of data processed by and reports generated from financial applications.

Data Maintenance: The Company did not have defined procedures or controls, in aggregate, to validate the completeness and accuracy of information maintained, input or edited within master and transaction files, including but not limited to customer and vendor master files, employee data files, perpetual inventory records, stock compensation agreements and debt arrangements. Additionally, the Company did not have compensating controls to review and validate the underlying data maintained.

Remediation of Material Weaknesses in Internal Control over Financial Reporting

Management is committed to the implementation of remediation efforts to address the material weaknesses. The remediation efforts summarized below, which have been or will be implemented, are intended both to address the identified material weaknesses and to enhance the Company's overall internal control environment.

Control Environment, Risk Assessment, Information and Communication, and Monitoring

Control Environment:

Since 2017, the Company has either replaced or appointed the new Board and the Audit Committee members, a Chief Executive Officer, a Chief Financial Officer and a Vice President, Internal Audit. These changes, along with the actions of these individuals and other senior management, have collectively improved the tone of integrity, transparency and support of the Company's updated Code of Business Conduct and Ethics.

The Company has updated its Code of Business Conduct and Ethics and has initiated an ongoing training program to help ensure employees understand and comply with the Code. The Company continues to enhance the program to provide extensive communications and training to employees across the entire organization regarding the importance of integrity and accountability.

The Company has established a process to identify and address internal control weaknesses through the Internal Control Function, described below.

Skillset and Competency:

In addition to the new Chief Executive Officer, Chief Financial Officer and Vice President, Internal Audit, the Company has either replaced or appointed personnel for critical accounting positions who are certified public accountants with the appropriate level of public-company experience, including, among others, a Corporate Controller, a Director of Accounting and a Director of Financial Reporting.

- The Company has hired additional accounting personnel and has continued to supplement existing accounting resources with temporary resources to assist with performing technical accounting activities. The Company has concluded that its technical accounting resources are now sufficient. The Company continues to evaluate its needs, and it will hire additional full-time employees with technical accounting expertise and public company experience, as needed.
- The Company continues to assess the level of and technical skills in the IT function to support the design and implementation of ITGCs. The IT function has been reorganized under the leadership of the Chief Financial Officer, and the Company is actively recruiting for a Chief Information Officer as well as certain technical IT positions.

Policies and Procedures:

- The Company has issued and begun implementing a revised delegation of authority policy that appoints tiered approvers based upon risk and materiality of the transaction.
- The Company has identified a central repository to maintain all the Company's policies, is providing training to users and is developing a framework to establish responsibility and accountability for executing and monitoring policies and procedures.
- The Company has drafted and is in the process of finalizing critical accounting, IT and record retention policies.
- The Company continues to create a culture of continuous improvement and design a framework for management to proactively and openly self-identify, document, reassess, report and remediate policies, procedures and control issues.

Internal Control Function:

The Company has developed and begun implementing a more comprehensive internal control program. The controls listed below, except the Internal Control Steering Committee, have been remediated subsequent to December 31, 2018:

- The Company has completed a more robust financial reporting risk assessment and review process to ensure that key internal controls over financial reporting were identified, designed and implemented appropriately;
- The Company has reviewed, analyzed and properly documented its processes related to internal control over financial reporting;
- The Company has implemented a testing program over the design and operating effectiveness of key internal controls over financial reporting and is tracking and communicating U.S. Sarbanes-Oxley Act of 2002 ("SOX") deficiencies and associated risks and remediation plans to management, the Internal Control Steering Committee (see below) and the Audit Committee.
- The Company has implemented a formal, enterprise-wide remediation plan, including detailed and prioritized action plans, owners and a phased timeline. This remediation plan is overseen by the Internal Control Steering Committee and progress is reported to the Audit Committee on a quarterly basis.
- The Company has implemented a SOX training program to educate Accounting, Sales, Operations, and IT on internal control concepts and responsibilities. This training program will be administered annually and will reinforce accountability and the importance of sustaining a strong internal control environment.
- The Company developed an Internal Control Steering Committee of which the charter includes the following members: Chief Executive Officer, Chief Financial Officer, General Counsel, Vice President, Internal Audit, Chief Information Officer, Corporate Controller and Executive Vice President.

Segregation of Duties:

- The Company is establishing policies governing the segregation of incompatible duties across the organization.
- The Company is designing various accounting processes and application and system controls to adequately segregate job responsibilities and system access throughout the organization and to implement applicable mitigating internal controls.
- The Company is in the process of a technical upgrade to its Enterprise Resource Planning System ("ERP System") and is redesigning system access roles across the Company to improve the segregation of incompatible duties.

Control Activities

As part of the overall remediation plan, the Company is designing and implementing review and approval controls over data utilized in various accounting processes. These controls will address the accuracy, timely recording and completeness of data used in the determination of significant accounting estimates, reserves and valuations as well as impacted presentation and disclosures in accordance with U.S. GAAP.

Revenue Accounting:

- The Company is designing and implementing policies and procedures to ensure that critical inputs affecting the accuracy and timeliness of revenue recognition and related reserves and sales allowances are communicated to the accounting department on a timely basis.
- The Company has established and has begun implementing improved review and approval controls across the Company to ensure that revenue, including that of nonroutine revenue transactions, is recognized consistently in accordance with U.S. GAAP.

- The Company has developed sales audit procedures to review certain key transaction attributes.

Capitalization:

The Company is designing and implementing policies, procedures and controls over capitalization, including, but not limited to, the capitalization of costs incurred on capital asset projects and accounting treatment for research and development activities.

Complex and Nonroutine Transactions:

The Company is designing and implementing policies, procedures and controls over the evaluation, review and approval of complex and nonroutine transactions, including, but not limited to, identification of reporting units and triggering events that could impact the assessment of potential impairments of plant, property and equipment, intangibles and goodwill, accounting for debt transactions, purchase accounting for business combinations and lease classification.

Reserves and Accruals:

The Company is designing and implementing policies, procedures and controls over the review and approval of key reserves and accruals, including, but not limited to, excess and obsolete inventory and warranty reserves.

Period-End Close / Accounting Documentation:

- The Company is designing and implementing policies, procedures and controls over the period-end close process and related documentation including, but not limited to, period-end checklists, review and approval of journal entries, taxes, inventory in-transit, account roll forwards and reconciliations, general-ledger account maintenance and financial statement analysis / thresholds.
- The Company has implemented a formal Section 302 disclosure and certification program that requires management to complete representation letters and disclosure sub-certification questionnaires in connection with SEC filings.

Information Technology:

- The Company has reconstructed its ITGC framework to focus on controls that mitigate key financial reporting risks.
- The Company has designed and is implementing controls over access, change management and IT operations to ensure that access rights are restricted to appropriate individuals, and that data integrity is maintained via effective change controls over system updates and over the flow of data between systems.
- The Company is planning both a technical upgrade as well as a re-implementation of its ERP System to further improve and automate ITGC's as well as other business process controls.

Data Maintenance:

- The Company is designing and implementing procedures and controls to appropriately identify and assess changes made to data repositories that could significantly impact data integrity and the internal control framework, including, but not limited to, (i) creating centralized, complete and accurate data repositories, (ii) maintaining customer and vendor master files, employee data files, perpetual inventory records, inventory cycle counts, stock compensation agreements and debt arrangements and (iii) communicating an enterprise data management policy and record retention policy.
- The Company is developing procedures to review and validate underlying data supporting the internal controls. When fully implemented and operational, the Company believes the measures described above will remediate the control deficiencies that have led to the material weaknesses it has identified and will strengthen its internal control over financial reporting. The Company is committed to continuing to improve its internal control processes and it will continue to review its financial reporting controls and procedures. As the Company continues to evaluate and work to improve its internal control over financial reporting, it may determine that a need exists to take additional measures to address control deficiencies or modify certain remediation measures described above.

Conclusion

As a result of the material weaknesses described above, management has concluded that, as of December 31, 2018, the Company's internal control over financial reporting was ineffective.

In light of these material weaknesses in internal control over financial reporting, prior to filing this Annual Report on Form 10-K, the Company completed substantive procedures, including extensive temporary manual procedures and other measures as needed, to assist with meeting the objectives otherwise fulfilled by effective internal control over financial reporting. These procedures included, but were not limited to, conducting additional analysis and substantive procedures. The Company also hired additional resources and retained outside consultants with relevant accounting experience, skills and knowledge, working under the Company's supervision and direction to assist with the account closing and financial statement preparation process. These additional procedures have allowed the Company to conclude that, notwithstanding the material weaknesses in its internal control over financial reporting

described above, the consolidated financial statements included herein fairly present, in all material respects, the Company's financial condition, results of operations and cash flows for the periods presented in conformity with U.S. GAAP.

Changes in Internal Control over Financial Reporting

Other than the ongoing remediation efforts described above, there have been no changes in the Company's internal control over financial reporting during the year ended December 31, 2018 that have materially affected, or are reasonably likely to materially affect, its internal control over financial reporting.

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Directors

Current Directors

Currently, the Company's Board consists of seven Directors. As more fully described in Item 1A. *Risk Factors*, included in Part I, and Item 12. *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters*, Weichai currently has three representatives on the Board. According to the Rights Agreement, with Weichai exercising the Weichai Warrant and becoming the majority owner of the outstanding shares of the Company's Common Stock, the Company is obligated to appoint to the Board an additional individual designated by Weichai, and Weichai thereafter has the right to nominate for election four Directors and any additional number of designees necessary to ensure that its designees constitute the majority of the Directors serving on the Board. With Weichai becoming a majority beneficial owner of the Company's outstanding shares of Common Stock, Weichai is able to exercise control over matters requiring the stockholders' approval, including the election of the Directors, amendment of the Company's Charter and approval of significant corporate transactions.

The table below sets forth a Director's position on the Board, the membership on the Board's Committees, the age and the year first elected or appointed as a Director for each Director of the Company. This information is as of December 2, 2019.

Name	Position	Committee	Age	Director Since	Weichai Designee
Shaojun Sun, Ph.D.	Chairman of the Board	Compensation; Nominating and Governance	53	2017	Yes
Leslie A. Coolidge	Director	Audit (Chair)	60	2017	No
Kui Jiang	Director	Nominating and Governance (Chair); Compensation	55	2017	Yes
Kenneth W. Landini	Director	Compensation (Chair); Nominating and Governance	63	2001	No
Guogang Wu	Director		41	2019	Yes
Frank P. Simpkins	Director	Audit; Nominating and Governance	56	2017	No
Hong He	Director	Audit	50	2019	No

The narrative descriptions below set forth the principal occupation, employment, position with the Company, if any, and directorships in other public corporations, for each of the seven Directors. Unless otherwise indicated, each Director has been engaged in the principal occupation or occupations described below for more than the past five years.

Shaojun Sun, Ph.D. has served as the Company's Chairman of the Board since April 1, 2017. In addition, he was appointed as a member of the Compensation and Nominating and Governance Committees.

Dr. Sun is currently a Director of Weichai Group Holdings Limited ("Weichai Group"), a multi-field and multi-industry international group which owns six business segments of powertrain, intelligent logistics, automotive, construction machinery, luxury yacht, and finance & after-services. Dr. Sun is an Executive Director and Executive President of Weichai Power Co., Ltd., a publicly traded company on the Hong Kong Stock Exchange and the Shenzhen Stock Exchange and leading global designer and manufacturer of diesel engines, as well as Chairman of Shandong Weichai Import and Export Co., Ltd., a wholesale distributor of industrial machinery and equipment, and Chairman of Weichai (Weifang) New Energy Technology Co., Ltd., an equity investment of Weichai Power. On January 1, 2019, Dr. Sun was appointed a Director of Ballard Power Systems Inc., a publicly traded company on the NASDAQ and Toronto Stock Exchanges that builds fuel cell products. Dr. Sun joined Weifang Diesel Engine Factory in 1988 and held various supervisory positions as a Chief Engineer of Weifang Diesel Engine Factory, and Director of Torch Automobile Group Co., Ltd.

Dr. Sun holds a Senior Engineer degree from Beijing Aviation College and a Doctorate degree in Engineering. Dr. Sun serves on the Company's Board as a Weichai designee.

Leslie A. Coolidge has served as a Director of the Company since July 13, 2017. She is the Chair of the Audit Committee.

Ms. Coolidge has over 35 years of public-company financial expertise. She was a national technical director of Riveron Consulting, LLC, a professional-services firm, from 2016 to 2017. From 2013 until 2015, Ms. Coolidge served as a consultant and chief financial officer adviser for Resources Global Professionals, a professional-services firm. From 1981 until 2009, Ms. Coolidge was employed by KPMG LLP ("KPMG"), where she retired as an audit and SEC reviewing partner. At KPMG, Ms. Coolidge led significant global audit engagements, serving major companies with their complex accounting, financial and strategic needs. During her 28 years at KPMG, Ms. Coolidge led client engagement teams auditing SEC registrants and concurrently served as concurring

reviewing partner. In addition to her client engagements, she served as a partner in KPMG's Department of Professional Practice as well as the firm's representative on the American Institute of CPAs' ("AICPA") Accounting Standards Executive Committee. Ms. Coolidge serves on the Board of the Chicago Academy of Sciences and its Peggy Notebaert Nature Museum and previously served on the Board of the International Crane Foundation.

She holds a Bachelor of Arts degree in Government from Harvard University and a Master of Science degree in Accounting from New York University. She is a member of the AICPA and a Certified Public Accountant in Illinois and New York. Ms. Coolidge qualifies as an "Audit Committee Financial Expert" under applicable SEC regulations and has substantial public-company audit experience gained from her tenure as a partner at KPMG LLP.

Kui Jiang has served as a Director of the Company since April 1, 2017. He is a member of the Compensation Committee and the Chair of the Board's Nominating and Governance Committee.

Mr. Jiang is a nonexecutive Director of Weichai Power Co., Ltd., a publicly traded company on the Hong Kong Stock Exchange and the Shenzhen Stock Exchange and leading global designer and manufacturer of diesel engines, and Sinotruk (Hong Kong) Limited, a truck manufacturer. He has held various positions including Chief Engineer and Deputy General Manager of Assembly Department of Shandong Bulldozer General Factory, Deputy General Manager of Shantui Import and Export Company, Deputy Director, Director of Manufacturing Department, Deputy General Manager and Director of Shantui Engineering Machinery Co., Ltd., Deputy General Manager of Shandong Construction Machinery Group Co., Ltd., Executive Deputy General Manager and Vice Chairman of Weichai Group Holdings Limited, Chairman of Strong Construction Machinery Co., Ltd. and Director of Shandong Heavy Industry Group Co., Ltd. He is now the General Manager of Shandong Heavy Industry Group Co., Ltd., a leading automobile and equipment manufacturing group, supervisor of KION Group AG, a publicly traded global leader in industrial trucks, related services and supply chain solutions, Director of Ferretti International Holdings S.p.A., a leader in the design, construction and sale of motor yachts and pleasure craft, and Chairman of Weichai Ballard Hydrogen Energy Technology Company Limited. On January 1, 2019, Mr. Jiang was appointed a Director of Ballard Power Systems Inc, a publicly traded company on the NASDAQ and Toronto Stock Exchanges that builds fuel cell products.

He graduated with a bachelor's degree in engineering from the Automobile Engineering Department of Tsinghua University and holds a master's degree in business management from Wright State University. Mr. Jiang serves on the Company's Board as a Weichai designee.

Kenneth W. Landini has served as a Director of the Company since 2001 and assisted in the development and growth of the business of the Company since 1985. On August 7, 2017, Mr. Landini was elected as the Chair of the Compensation Committee. He is also a member of the Nominating and Governance Committee.

Mr. Landini previously served as the Vice President of Finance for the Company's subsidiary, Power Great Lakes, Inc., from December 1985 to March 1988 and assisted the Company in establishing distributor relationships and expanding the territories into which the Company provides its power systems. Mr. Landini is a Partner and Co-founder of Landini, Reed & Dawson, P.C., a certified public accounting and consulting firm in southeastern Michigan, which was established in 1988.

He holds a Bachelor of Arts degree from Albion College and is a licensed Certified Public Accountant in the state of Michigan.

Guogang Wu has served as a Director of the Company since August 20, 2019.

Mr. Wu has served as the Chief Financial Officer, International Business of the Weichai Group and an affiliate of Weichai America Corp., since 2014. Mr. Wu also serves as a member of the board of directors of Weichai America Corp. and a number of Weichai America Corp. affiliates. Mr. Wu joined Weichai Group in 2012 and previously served as Senior Manager, International Business. Prior to joining Weichai Group, Mr. Wu was employed at PricewaterhouseCoopers in various roles of increasing seniority from 2003 until 2012.

Mr. Wu earned a Bachelor's Degree in International Business in July 2000 and a Master's Degree in Management in March 2003 from School of Management, University of Science and Technology Beijing, China. Mr. Wu serves on the Company's Board as a Weichai designee.

Frank P. Simpkins has served as a Director of the Company since July 13, 2017. He is a member of the Audit and Nominating and Governance Committees.

Mr. Simpkins has over 25 years of executive management and financial experience. From June 2016 to December 2016, he served as Chief Financial Officer of Emerson Network Power, part of Emerson Electric Co. From 2006 to 2015, Mr. Simpkins served as Vice President and Chief Financial Officer of Kennametal Inc., a global leader in the design and manufacture of engineered components, advanced materials and cutting tools. Prior to that role, Mr. Simpkins held various positions within Kennametal since 1995. Prior to Kennametal, he worked for PricewaterhouseCoopers from 1986 to 1995. Mr. Simpkins serves on the Board of Trustees at Seton Hill University, Greensburg and previously served on the Board of Trustees of Pennsylvania State University, New Kensington.

He holds a Bachelor of Science degree in Accounting from Pennsylvania State University. Mr. Simpkins qualifies as an "Audit Committee Financial Expert" under applicable SEC regulations and has substantial public-company reporting experience gained from his roles as Chief Financial Officer during his career.

Hong He has served as a Director of the Company since November 14, 2019. Mr. He is a member of the Audit Committee.

Mr. He has served as director of finance and reporting for Blackthorn Therapeutics, a clinical-stage biotechnology company, since June 2019. Prior to this, Mr. He served as the head of finance at GenapSys, Inc. from 2018 until May 2019. From 2014 until 2018, Mr. He was the finance director of SciClone Pharmaceuticals, Inc., a NASDAQ-listed specialty pharmaceutical company with main operations in China. From January to June 2014, Mr. He served as vice president of finance and the controller of Augmedix, Inc., a privately held technology-enabled medical documentation company. From October 2011 to December 2013, Mr. He was employed as vice president of finance at Baidu Leho.com, a private company backed by Baidu, a NASDAQ-listed company.

Mr. He earned his bachelors of science degree in accounting from Beijing University of Technology in July 1992 and his masters of business administration degree from University of Chicago Booth School of Business in December 2006. Mr. He is a U.S. certified management accountant and a China certified public accountant. Mr. He qualifies as an "Audit Committee Financial Expert" under applicable SEC regulations and has substantial public-company reporting experience gained from his roles as a financial officer and controller of public companies during his career.

Terms of Office

Each Director will continue to serve as a Director until the next annual meeting of stockholders and until his or her successor is duly elected and qualified.

Current Executive Officers

The table below sets forth the age, year first appointed as an executive officer and position with the Company for each current executive officer of the Company. This information is as of December 2, 2019.

Name	Age	Executive Officer Since	Present Position with the Company
John P. Miller	61	2017	Chief Executive Officer and President
Charles F. Avery, Jr.	55	2017	Chief Financial Officer
Kenneth J. Winemaster	55	2017	Executive Vice President
Jason Lin	65	2019	Chief Technical Officer
Donald P. Klein	45	2018	Corporate Controller
Lance Arnett	49	2019	Chief Commercial Officer

The narrative descriptions below set forth the employment and position with the Company, principal occupation and education for each of the six current executive officers:

John P. Miller was appointed as the Company's Chief Executive Officer and President effective May 17, 2017.

Mr. Miller has over 35 years of broad-based executive management experience in the manufacturing, distribution and transportation industries in both public and private equity companies. From 2008 until 2016, he served in operational and financial management positions of increasing responsibility at Navistar International Corporation, a global manufacturer of commercial and military trucks, school buses, diesel engines and provider of service parts for trucks and diesel engines, and most recently, from 2014, as a Senior Vice President of Operations and Corporate Finance. Mr. Miller's prior positions at Navistar included Vice President and General Manager for specialty business as well as Vice President and Chief Financial Officer for engine and parts. Prior thereto, he served in the role of Chief Financial Officer of Laidlaw Education Service, a provider of public transportation services, Chicago Metallic Corporation, a global manufacturer of suspended ceiling and metal products, Fleetpride, Inc., a distributor of heavy-duty truck parts, and Peapod, an online grocery delivery company.

Mr. Miller received his Bachelor of Arts degree in Economics from DePauw University and his master's degree in business administration from the University of Michigan.

Charles F. Avery, Jr. was appointed as the Company's Chief Financial Officer on July 31, 2017.

Mr. Avery has over 30 years of financial, information technology and strategic leadership experience in the industrial, manufacturing, distribution and consumer products industries at various public companies and has also served both private and public companies during his tenure in public accounting. From 2013 until 2016, he served as Chief Financial Officer, Vice President of Finance and Treasurer, at FreightCar America, Inc., a designer and builder of railroad freight cars, supplier of railcar parts and provider of railcar leasing. Prior to that role, from 2005 until 2013, he served in financial and information technology leadership positions,

including as Vice President, Corporate Controller and Chief Information Officer, at Federal Signal Corporation, a global designer and manufacturer of safety, signal and communications equipment and environmental and firefighting vehicles, serving governmental and commercial customers. Earlier in his career, he served in financial leadership roles at Home Products International, Inc. and in audit and business advisory roles at Arthur Andersen LLP.

Mr. Avery received his Bachelor of Science degrees in Accountancy and Computer Information Systems from Ferris State College and his Master's in Business Administration from the University of Notre Dame. He is a certified public accountant.

Kenneth J. Winemaster was appointed as Executive Vice President on November 28, 2017. Mr. Winemaster served as the Company's Senior Vice President from 2001 to 2017 and also served as the Company's Secretary from 2001 to 2013. In addition, Mr. Winemaster served as a Director of the Company from 2001 to 2011. Mr. Winemaster has significant management experience setting strategy and supporting operations and customer service.

Jason Lin was appointed as Chief Technical Officer on June 14, 2019 and is responsible for the oversight and management of various research and development and engineering groups including the Advanced Product Development, Design Engineering, Applied Engineering, Emissions & Certification, and On-highway Engineering groups. Mr. Lin also has oversight over certain aspects of program management and product strategic planning.

Mr. Lin has over three decades of Engineering and Executive Management experience in the engine development and manufacturing industries. From 2009 to July 2016, Mr. Lin served as Chief Executive Officer and President of Société Internationale des Moteurs Baudouin, a France-based marine engine manufacturing subsidiary of Weichai Power Co., Ltd. During this tenure, he also served as an Executive Technical Director and adviser to the Chairman of Weichai Power Co., Ltd. From February 2001 to July 2006, Mr. Lin was employed by International Truck and Engine Corporation, a truck, bus and diesel engine manufacturer subsidiary of Navistar International Corporation, in engineering management positions. Earlier in his career, Mr. Lin was employed in engineering positions by Cummins Engine Company and worked in Japan for Komatsu-Cummins Engine Company as Vice President.

Mr. Lin received his Bachelor of Science degree and Master of Science degree in Mechanical Engineering from National Cheng Kung University in Taiwan, and his Master of Science degree and PhD. in Mechanical Engineering from the University of Wisconsin – Madison. Mr. Lin previously served as a member of the Company's Board from May 2017 to June 2019.

Donald P. Klein has served as the Corporate Controller and Principal Accounting Officer since May 14, 2018.

Mr. Klein has over 20 years of experience in the areas of finance and accounting, including SEC reporting, accounting policies and procedures and internal controls. Prior to joining the Company, he served as Assistant Corporate Controller at Littelfuse, Inc., a publicly traded company, with customers in the electronics, automotive and industrial markets with products that include fuses, semiconductors, polymers, ceramics, relays and sensors. Prior to that role, from 2008 to 2017, Mr. Klein served in various positions of increasing responsibility within finance and accounting, including most recently as Assistant Corporate Controller, at Navistar International Corporation, a global manufacturer of commercial and military trucks, school buses, diesel engines and provider of service parts for trucks and diesel engines. Prior to Navistar, he worked for Hewitt Associates as manager of external reporting and at Ernst & Young LLP as a senior manager of assurance and advisory services.

Mr. Klein holds a Bachelor of Business Administration degree majoring in Accounting from the University of Wisconsin and is a certified public accountant.

Lance Arnett has served as the Company's Chief Commercial Officer since November 18, 2019.

Mr. Arnett has more than 25 years of sales, business development and operational experience. Prior to joining the Company, from January 2009 to November 2019, he worked at Cummins Inc., a publicly traded company that designs, manufactures, distributes and services a broad portfolio of power solutions. During his tenure, he served in various capacities for Cummins Central Region in Minnesota, most recently serving as director and chief of staff of their North American OEM Performance Cell. In this capacity, he oversaw direct strategy for their North American business including sales, engineering, assembly and upfit, pricing, marketing, and customer support. His previous roles at Cummins Central Region include serving as interim president, vice president of OEM business, vice president of OEM and customer care and executive director of operational effectiveness. Prior thereto, from 2006 to 2009, he worked as business development manager for PreVisor, Inc. and, from 2001 to 2006, he served as director, franchise sales and development at Mighty Distributing System of America (Mighty Auto Parts). Earlier in his career, he served in management and sales roles within the staffing industry.

Mr. Arnett received a bachelor's degree in economics from The Ohio State University and an MBA from the University of St. Thomas.

Previous Executive Officers

William A. Buzogany ended his tenure as the Company's General Counsel, Vice President of Human Resources and Executive Officer effective July 17, 2019. Mr. Buzogany had served the Company as an Executive Officer since January 11, 2018. Mr. Buzogany served as the General Counsel from September 1, 2016 and as Chief Legal Officer and Vice President of Human

Resources since February 2014. Mr. Buzogany entered into a consulting agreement, which is discussed further in Item 11. *Executive Compensation*, with the Company at the time of his resignation.

Family Relationships

Gary S. Winemaster, former Chairman of the Board, Chief Executive Officer and President, and nonexecutive Chief Strategy Officer, and Kenneth J. Winemaster, Executive Vice President, are brothers. There are no other family relationships among the members of the Board or the current or previous Executive Officers.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934 requires the Company's executive officers and directors and persons who own greater than 10% of the Company's Common Stock to file reports of ownership and changes in ownership with the SEC. Based solely on a review of the forms received and on written representations from certain reporting persons that no such forms were required for them, the Company believes that all Section 16 filing requirements applicable to its Executive Officers, Directors and 10% beneficial owners were complied with on a timely basis during 2018, except that Mr. Winemaster inadvertently failed to timely file a Form 4 reporting one transaction for the year ended December 31, 2018.

Corporate Governance

Although the Company's Common Stock is not currently listed on NASDAQ, the Company has endeavored to continue to operate in accordance with NASDAQ rules, which require that a majority of the Board's members consist of "independent directors" as defined in such corporate governance rules. The Board has determined that each of its Directors meets the applicable independence requirements for directors of The NASDAQ Marketplace Rule 4200(a) (15). For additional information on the Board and its Committees, see *Composition of the Board and Director Independence* section, included in Item 13. *Certain Relationships and Related Transactions, and Director Independence*.

The Company has a separately designated standing Audit Committee. The Audit Committee members are Leslie A. Coolidge, Frank P. Simpkins, and Hong He. Ms. Coolidge is the Chair of the Audit Committee and qualifies as an "audit committee financial expert" as defined in SEC rules under the SOX. Mr. Simpkins and Mr. He also qualify as "audit committee financial experts" as defined in SEC rules under the SOX. The designation of an "audit committee financial expert" does not impose on Ms. Coolidge, Mr. Simpkins, or Mr. He any duties, obligations or liabilities greater than those that are generally imposed on them as members of the Audit Committee and the Board. The Board has determined that each of Ms. Coolidge, Mr. Simpkins and Mr. He meets the independence requirements for audit committee members under NASDAQ rules.

The Board adopted the corporate governance documents described below:

- **Corporate Governance Guidelines.** The Corporate Governance Guidelines address, among other things, the Board's composition, qualifications and responsibilities, independence of directors, stock ownership guidelines, director compensation, and communications between stockholders and directors.
- **Audit Committee Charter.** The Charter for the Audit Committee addresses, among other things, the purpose, organization and responsibilities of the Audit Committee.
- **Compensation Committee Charter.** The Charter for the Compensation Committee addresses, among other things, the purpose, organization and responsibilities of the Compensation Committee.
- **Nominating and Governance Committee Charter.** The Charter for the Nominating and Governance Committee addresses, among other things, the purpose, organization and responsibilities of the Nominating and Governance Committee.
- **Code of Ethics for Principal and Senior Financial Officers.** The Code of Ethics for Principal and Senior Financial Officers articulates standards of business and professional ethics applicable to the Chief Executive Officer, Chief Operating Officer, Chief Financial Officer, Vice President of Finance and all other Senior Financial Executives of the Company. This Code functions as the "code of ethics for senior financial officers" under Section 406 of the SOX and "code of ethics" within the meaning of Item 406 of Regulation S-K.
- **Code of Business Conduct and Ethics.** The Code of Business Conduct and Ethics applies to all of the members of the Board, Executive Officers and employees and is designed to ensure that all such individuals observe the highest standards of ethics in the conduct of the Company's business, avoiding even the appearance of impropriety, and conduct themselves with the highest regard and respect for others.
- **Related Party Transaction Policy.** The Related Party Transaction Policy provides policies and procedures by which all transactions are required to be reviewed, approved and reported pursuant to and in accordance with Item 404 of Regulation S-K.

The full text of the Corporate Governance Guidelines, the Board's Committee charters, Code of Ethics for Principal and Senior Financial Officers, Code of Business Conduct and Ethics, and Related Party Transaction Policy are available on the corporate website at www.psiengines.com in the "Corporate Governance" section. The website also provides information on how to contact the Company and other items of interest to investors. The Company makes available on its website, free of charge, annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to these reports, as soon as practical after the Company files these reports with the SEC. In addition, the Company will describe on its website any amendments to, or waivers from, the provisions of the Code of Ethics for Principal and Senior Financial Officers.

Item 11. Executive Compensation.

Named Executive Officers

The named executive officers for the year ended December 31, 2018 were:

- John P. Miller, Chief Executive Officer and President,
- Charles F. Avery, Jr., Chief Financial Officer,
- Kenneth J. Winemaster, Executive Vice President,

Executive Compensation

The table below summarizes the compensation paid for the services rendered to the Company, in all capacities, by its named executive officers for the years ended December 31, 2018 and 2017.

Summary Compensation Table

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)	Option Awards (\$)	All Other Compensation (\$)	Total (\$)
John P. Miller ¹	2018	\$ 360,000	\$ 39,400	\$ —	\$ —	\$ —	\$ 399,400
<i>Chief Executive Officer and President</i>	2017	\$ 223,846	\$ 68,200	\$ 835,700 ²	\$ —	\$ — ³	\$ 1,127,746
Charles F. Avery, Jr. ⁴	2018	\$ 300,000	\$ —	\$ 360,000 ⁵	\$ —	\$ 12,675 ⁶	\$ 672,675
<i>Chief Financial Officer</i>	2017	\$ 126,154	\$ —	\$ —	\$ —	\$ — ³	\$ 126,154
Kenneth J. Winemaster ⁷	2018	\$ 325,000	\$ 10,900	\$ —	\$ —	\$ 13,320 ⁶	\$ 349,220
<i>Executive Vice President</i>	2017	\$ 285,625	\$ 32,700	\$ 348,353 ⁸	\$ —	\$ 38,304 ⁹	\$ 704,982

1. Appointed as Chief Executive Officer and President on May 17, 2017.

2. Represents the value of restricted stock awards of 36,000 shares on May 31, 2017 and 55,000 shares on July 12, 2017.

3. The amount for fiscal 2017 is below the annual reporting requirements per SEC Regulation S-K 229.402(c) (2) (ix).

4. Appointed as Chief Financial Officer effective July 31, 2017.

5. Represents the value of a restricted stock award of 30,000 shares on October 10, 2018.

6. The reported amount is for automobile-related payments.

7. Appointed as Executive Vice President effective November 28, 2017, served as Senior Vice President since 2001.

8. Represents the value of a restricted stock award of 45,223 shares on July 12, 2017.

9. The reported amount included \$19,980 for sporting events tickets, \$13,320 for automobile-related payments and \$5,004 for other miscellaneous reimbursements.

Outstanding Equity Awards at 2018 Year-End

The table below presents information relating to the awards granted under the Company's 2012 Plan, the Company's only equity incentive compensation plan, at December 31, 2018.

Name	Option Awards					Stock Awards	
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Number of Securities Underlying Unexercised Options (#)	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested	Market Value of Shares or Units of Stock That Have Not Vested (\$) (1)
John P. Miller	—	—	—	\$ —	—	45,500	\$ 420,875
Charles F. Avery, Jr.	—	—	—	—	—	15,000	138,750
Kenneth J. Winemaster	—	—	—	—	—	22,612	209,161

(1) Computed using the closing price of the Common Stock as reported by the OTC Market on December 31, 2018.

Potential Payments Upon Termination or Change-in-Control

Current Named Executive Officers

As of December 31, 2018, the Company had Employment Agreements with John P. Miller, Chief Executive Officer and President, Charles F. Avery, Jr., Chief Financial Officer, and Kenneth J. Winemaster, Executive Vice President, which provided for payments upon termination without cause.

The table below provides a quantitative analysis of the amount of compensation payable to Messrs. Miller, Avery, and Winemaster in each situation involving a termination of employment, assuming that each had occurred as of December 31, 2018.

Name	Termination w/o Cause	Termination with Cause	Change of Control
John P. Miller	\$ 360,000 ¹	\$ —	\$ —
Charles F. Avery, Jr.	300,000 ²	—	—
Kenneth J. Winemaster	325,000 ³	—	—

1. Amount presented was determined in accordance with the employment agreement of Mr. Miller and assumes that Mr. Miller executed and delivered a general release in favor of the Company. The amount is Mr. Miller's base salary of \$360,000.
2. Amount presented was determined in accordance with the employment agreement of Mr. Avery and assumes that Mr. Avery executed and delivered a general release in favor of the Company. The amount is Mr. Avery's base salary of \$300,000.
3. Amount presented was determined in accordance with the employment agreement of Mr. Winemaster and assumes that Mr. Winemaster executed and delivered a general release in favor of the Company. The amount is Mr. Winemaster's base salary of \$325,000.

Other than these arrangements and accelerated vesting of equity awards under the 2012 Plan, the Company currently does not have any compensatory plans or arrangements that provide for any payments or benefits upon the resignation, retirement or any other termination of any of its current executive officers, as the result of a change in control, or from a change in any executive officer's responsibilities following a change in control.

As part of the Company's federal derivative litigation settlement, the Company adopted a formal claw back policy covering specified incentive compensation of Officers (defined as only those individuals the Company has designated as subject to the reporting and liability provisions of Section 16 of the Securities Exchange Act of 1934). This provision shall be included in any new or amended employment agreements entered into with any existing or future Officers of the Company from April 11, 2019. The claw back shall provide that upon termination for Cause, an Officer shall automatically forfeit:

1. Any bonus to which the Officer might otherwise have been entitled pursuant to the Company's Key Performance Indicator ("KPI") Plan (i) related to the fiscal year prior to the fiscal year in which the Termination Date falls if the amount of such KPI Bonus has been determined by the Board but not yet paid; and (ii) for the fiscal year in which the separation takes place.
2. Any Stock Appreciation Rights and unexercised options (whether vested or unvested) awarded pursuant to the Company's Incentive Compensation Plan.

"Cause" means that the Company makes a good faith determination that the Officer has: (1) violated any Company policy or procedure that causes material harm or risk to the Company including, but not limited to, sexual harassment, misappropriation, or fraud; (2) been convicted of a crime which is injurious to the Company's operation or reputation; (3) engaged in a material breach of the Officer's employment agreement; (4) engaged in willful failure or willful inability to perform the Officer's duties under the Officer's employment agreement; (5) engaged in any act or omission, which in any material way impairs the reputation, goodwill or business position of the Company; or (6) the Officer is prohibited by order of a government agency or court from being employed by the Company or any Company affiliate in the role set forth in the Officer's employment agreement;

For purposes of subsections (3) and (4) of this definition, a termination will not be for "Cause" to the extent such conduct is curable, unless the Company shall have notified the Officer in writing describing such conduct and prescribing conduct required to cure such conduct and the Officer shall have failed to cure such conduct within thirty (30) business days after his or her receipt of such written notice. For purposes of this definition of Cause, no act or failure to act on the part of the Officer shall be considered willful if it is done, or omitted to be done, by the Officer in good faith and with a good-faith belief that the Officer's act or omission was in the best interests of the Company.

Retirement Agreement

On April 29, 2019, the Company entered into a retirement agreement with Gary Winemaster, the Company's then Chief Strategy Officer, pursuant to which he retired on May 3, 2019 and the Company agreed to pay \$600,000 in installments through February 28, 2020. The agreement provides for a mutual release. Mr. Winemaster agreed to cooperate with the Company as needed and to extend his non-compete period to three years.

Consulting Agreement

On July 10, 2019, William Buzogany resigned from the Company as General Counsel and Vice President of Human Resources. In connection with Mr. Buzogany's resignation, the Company entered into a consulting agreement and release with Mr. Buzogany dated July 17, 2019. Mr. Buzogany agreed to release certain claims he may have against the Company and other released parties and will receive payments from the Company, including (i) a severance payment equal to \$189,000, less applicable withholdings, in 12 equal monthly installments and (ii) a proportional share of COBRA premiums owed by Mr. Buzogany as if Mr. Buzogany were still employed by the Company for a period of 12 months. In addition, Mr. Buzogany agreed to provide certain consulting services to the Company and will be compensated at a rate of \$27,250 per month for his time. In addition, if Mr. Buzogany's consulting services are terminated by the Company without cause, Mr. Buzogany will be paid severance in six equal monthly installments of \$27,250.

Directors' Compensation

On July 10, 2017, the Board established new compensation and an expense reimbursement policy to provide Directors with reasonable expense reimbursement and compensation for their services as members of the Board:

- The Company pays each of the Board's nonemployee Directors \$50,000 per year (prior to July 10, 2017, Directors received an annual retainer of \$30,000);
- The Company pays the Chair of the Board and the Chair of the Audit Committee an additional \$25,000 per year;
- The Company awards 5,000 shares of restricted stock to each Director per year (prior to July 10, 2017, Directors did not receive shares of Restricted Stock). The 2018 awards to Directors vest in July 2019. In accordance with Weichai's internal policies, Dr. Sun and Messrs. Jiang, Liu and Wu have relinquished their rights to receive any stock-based compensation for their service as a Director;
- The Company pays meeting fees to each Director in the amount of \$1,000 per day for each in-person Board and Committee meeting and \$1,000 per day for each Board and Committee meeting by telephone conference; and
- The Company reimburses Directors for necessary and reasonable travel and other related expenses incurred in connection with the performance of their official duties of attendance at each meeting of the Board or any Committee.

The table below summarizes the compensation paid to each nonemployee Director for service on the Board for the year ended December 31, 2018:

Name	Fees Paid in Cash	Stock Awards	Total
Shaojun Sun	\$ — ¹	\$ —	\$ —
Kui Jiang	— ¹	—	—
Jason Lin ³	73,000	46,500 ²	119,500
Leslie A. Coolidge	98,000	46,500 ²	144,500
Frank P. Simpkins	73,000	46,500 ²	119,500
Kenneth W. Landini	63,000	46,500 ²	109,500
Huisheng Liu ⁴	— ¹	—	—

1. Director fees were not remitted to foreign directors in 2018. The non-resident directors are in the process of applying to the Internal Revenue Service to obtain individual U.S. taxpayer identification numbers.
2. The amount reported for 2018 represents a grant of 5,000 shares of restricted stock granted on November 28, 2018, computed according to Financial Accounting Standards Board ("FASB") guidance.
3. Mr. Lin served as a member of the Company's Board from May 2017 and as a member of the Audit Committee from June 2017 until his resignation in June 2019.
4. Mr. Liu served as a member of the Company's Board and a member of the Compensation Committee from July 2018 until his resignation in August 2019.

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

The following table sets forth information regarding the beneficial ownership of the Company's Common Stock as of December 2, 2019, by the following individuals or groups:

- Each person known by the Company to own beneficially more than 5% of the outstanding shares of its Common Stock;
- Each of the Company's Directors;
- Each of the Company's named Executive Officers; and
- All Directors and Executive Officers as a group.

Unless otherwise indicated, to the Company's knowledge, each person listed below has sole dispositive and voting power with respect to the shares of the Company's Common Stock shown below as beneficially owned by such person, except to the extent that authority is shared by spouses under applicable law and except for the shares of the Company's Common Stock set forth next

to the Directors and Executive Officers listed as a group. Beneficial ownership and percentage have been determined in accordance with Rule 13d-3 under the Exchange Act and generally include voting or investment power with respect to the securities. The information is not necessarily indicative of beneficial ownership for any other purpose.

As of December 2, 2019, 22,856,534 shares of the Company's Common Stock were outstanding.

Name and Address of Beneficial Owner ¹	Amount and Nature of Beneficial Owner ²	Percent of Class ²
Parties own beneficially more than 5% of the outstanding shares:		
Weichai ³	11,749,759	51.4%
Gary S. Winemaster	3,680,896	16.1%
Neil Gagnon ⁴	1,444,836	6.3%
Executive Officers:		
John P. Miller	76,006	*
Charles F. Avery, Jr.	20,781	*
Kenneth J. Winemaster	2,211,274	9.7%
Donald P. Klein	5,000	*
Jason Lin	40,000	*
Lance Arnett	—	—
Directors:		
Kui Jiang ⁵	—	—
Shaojun Sun ⁵	—	—
Kenneth W. Landini	34,000	*
Frank P. Simpkins	15,000	*
Leslie A. Coolidge	15,000	*
Guogang Wu	—	—
Hong He	—	—
All directors and executive officers as a group (13 listed above)	2,417,061	10.6%

* Denotes beneficial ownership of less than one percent.

1. Unless otherwise indicated, the address of each person or entity is c/o Power Solutions International, Inc., 201 Mittel Drive, Wood Dale, IL 60191.

2. The amounts and percentages of the Company's Common Stock beneficially owned are reported on the basis of the regulations of the SEC governing the determination of beneficial ownership of securities. Under these rules, a person is deemed to be a beneficial owner of a security if that person has or shares voting power, which includes the power to vote or to direct the voting of such security, or investment power, which includes the power to dispose of or to direct the disposition of such security. A person is also deemed to be a beneficial owner of any securities of which that person has a right to acquire beneficial ownership within 60 days. Under these rules, more than one person may be deemed to be a beneficial owner of the same securities. Share amounts are rounded to the nearest whole number.

3. On April 23, 2019, Weichai exercised the Weichai Warrant resulting in the Company issuing 4,049,759 shares of the Company's Common Stock and Weichai becoming the majority owner of the outstanding shares of the Company's Common Stock.

4. As reported by a Schedule 13G/A dated December 31, 2018 and filed January 18, 2019, Neil Gagnon has sole voting and dispositive power over 151,074 shares of the Company's Common Stock. In addition, Mr. Gagnon has shared voting power over 1,250,635 shares of Common Stock and shared dispositive power over 1,293,762 shares of Common Stock.

5. On November 10, 2017, the reporting person was granted 5,000 shares of restricted stock under the Company's 2012 Plan, as reported in a Form 4 filed by the reporting person on April 9, 2018. In accordance with Weichai's internal policies, the reporting person cannot accept the Company's Common Stock as compensation for serving on the Board. The grant was mutually rescinded on October 8, 2018. Both the grant and the mutual rescission were approved by the Board in accordance with the SEC Rule 16b-3(d).

Securities Authorized for Issuance under Incentive Compensation Plan

See Note 12. *Stock-Based Compensation*, included in Part II, Item 8. *Financial Statements and Supplementary Data*.

Changes in Control

On March 31, 2017, the Company and Weichai executed the SPA, pursuant to which the Company issued and sold to Weichai, and Weichai subscribed for and purchased from the Company: (i) 2,728,752 shares of Common Stock, (ii) 2,385,624 shares of the Company's Series B Convertible Preferred Stock, par value \$0.001 per share, which were subsequently converted on a two-to-one basis into 4,771,248 shares of Common Stock and (iii) the Weichai Warrant which was exercisable for such number of additional shares of Common Stock such that Weichai upon exercise would hold 51.5% of the shares of Common Stock then outstanding on a fully diluted basis. On April 23, 2019, Weichai exercised the Weichai Warrant resulting in the Company issuing 4,049,759 shares of the Company's Common Stock.

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

Certain Relationships and Related Party Transactions

See Note 3. *Weichai Transactions* and Note 14. *Related Party Transactions*, included in Part II, Item 8. *Financial Statements and Supplementary Data*, for additional information regarding related party transactions.

Composition of the Board and Director Independence

Weichai currently has three representatives on the Board. According to the Rights Agreement, with Weichai exercising the Weichai Warrant and becoming the majority owner of the Company's outstanding shares of Common Stock, the Company is obligated to appoint to the Board an additional individual designated by Weichai, and Weichai thereafter has the right to nominate for election four Directors and any additional number of designees necessary to ensure that its designees constitute the majority of the Directors serving on the Board.

The Company has a separately designated Audit Committee of its Board established in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934. The current members of the Audit Committee are Mr. He, Mr. Simpkins and Ms. Coolidge. Ms. Coolidge serves as the chair of the Audit Committee and qualifies as an "audit committee financial expert" as defined in SEC rules under the SOX. Mr. Simpkins and Mr. He also qualify as "audit committee financial experts" as defined in SEC rules under the SOX.

The current members of the Compensation Committee are Dr. Sun and Messrs. Jiang and Landini. Mr. Landini is the Chair of the Compensation Committee.

The current members of the Nominating and Governance Committee are Dr. Sun and Messrs. Jiang, Landini and Simpkins. Mr. Jiang is the Chair of the Nominating and Governance Committee.

In addition to the NASDAQ independence requirements, the Company also applies the independence guidelines set forth in its Corporate Governance Guidelines, which are available on the Company's website at www.psiengines.com in the "Corporate Governance" section which are substantially similar to the NASDAQ's director independence requirements.

In evaluating the composition of the Board, the Company may consider such factors as diversity of backgrounds, experience and competencies that the Board desires to have represented. These competencies may include: independence, adherence to ethical standards, the ability to exercise business judgment, industry knowledge and/or other relevant business or professional experience, the ability to offer the senior management meaningful advice and guidance based on that experience, and the ability to devote sufficient time and effort to serve as a Director. The Company believes that each of the members of the Board possesses these qualities and has demonstrated business acumen, the ability to exercise sound judgment as well as a commitment of service to the Company and the Board.

Item 14. Principal Accounting Fees and Services.

In March 2018, the Company engaged BDO USA, LLP ("BDO") as its independent registered public accounting firm to audit its annual consolidated financial statements for 2017, 2016, 2015 and 2014 and to review interim quarterly consolidated financial statements. BDO's audit fees totaled \$10.4 million for its services to audit the Company's annual consolidated financial statements for 2017, 2016, 2015 and 2014 and to review interim quarterly consolidated financial statements. It is not possible to break out the Audit Fees related to each of 2017, 2016, 2015 and 2014, and, therefore, the amounts represent fees for auditing all four years. The Company did not engage BDO for any other audit-related, tax or other consulting services during these periods.

BDO's audit fees totaled \$2.8 million for its services to audit the Company's annual consolidated financial statements for 2018 and to review interim quarterly consolidated financial information. The Company did not engage BDO for any other audit-related, tax or other consulting services during this period.

In accordance with its charter, the Audit Committee approves in advance all audit and non-audit services to be provided by the Company's independent registered public accounting firm. In certain cases, the Audit Committee can delegate the authority to pre-approve certain additional services to one or more designated Audit Committee members provided that such pre-approvals are communicated to the full Audit Committee at its next scheduled meeting.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

The following Financial Statements are filed as a part of this report:	Page
Reports of Independent Registered Public Accounting Firm	36
Consolidated Balance Sheets as of December 31, 2018 and 2017	37
Consolidated Statements of Operations for 2018 and 2017	38
Consolidated Statements of Convertible Preferred Stock and Stockholders' (Deficit) Equity for 2018 and 2017	39
Consolidated Statements of Cash Flows for 2018 and 2017	40
Notes to Consolidated Financial Statements	41
All other schedules for which provision is made in the applicable accounting regulations of the SEC are not required under the related instructions or are inapplicable and, therefore, have been omitted.	

EXHIBIT INDEX

The following documents listed below that have been previously filed with the SEC (1934 Act File No. 001-35944) are incorporated herein by reference:

Exhibit No.	Exhibit Description	Form	Exhibit	Filing Date	File No.
2.1	† Agreement and Plan of Merger dated April 29, 2011, by and among Format, Inc., PSI Merger Sub, Inc. and The W Group, Inc.	8-K	2.1	05/05/2011	000-52213
2.2	Stock Purchase Agreement, dated as of April 1, 2014, by and among Power Solutions International, Inc., Carl L. Trent, Kenneth C. Trent and CKT Holdings, Inc.	8-K	10.1	04/02/2014	001-35944
3.1	Certificate of Incorporation of Power Solutions International, Inc., a Delaware corporation, originally filed with the Secretary of State of the State of Delaware on August 12, 2011.	S-1/A	3.4	08/19/2011	333-174543
3.2	Amended and Restated Bylaws of Power Solutions International, Inc.	8-K	3.1	08/18/2015	001-35944
3.3	Form of Certificate of Designation of Series B Convertible Perpetual Preferred Stock of Power Solutions International, Inc.	8-K	3.1	03/27/2017	001-35944
4.1	Indenture dated as of April 29, 2015 by and among Power Solutions International, Inc., The Bank of New York Mellon, as Trustee, and the Guarantors party thereto, including form of 5.50% Senior Notes due 2018.	8-K	4.1	04/29/2015	001-35944
4.2	Osterweis Purchase Agreement dated as of April 29, 2015, by and among Power Solutions International, Inc. and the Osterweis Strategic Income Fund for purchase for cash of certain of Power Solutions International, Inc.'s Senior Notes due 2018.	8-K	10.1	04/29/2015	001-35944
4.3	First Supplemental Indenture dated as of November 2, 2015 to Indenture dated as of April 29, 2015 by and among Power Solutions International, Inc., The Bank of New York Mellon, as Trustee, and the Guarantors party thereto.	10-K	4.6	02/26/2016	001-35944
4.4	Second Supplemental Indenture dated as of April 1, 2016, to Indenture dated as of April 19, 2015, by and among Power Solutions International, Inc., The Bank of New York Mellon, as Trustee, and the Guarantors party thereto.	8-K	4.1	04/04/2016	001-35944
4.5	Third Supplemental Indenture, dated as of March 31, 2017, to the Indenture dated as of April 29, 2015, by and among Power Solutions International, Inc., The Bank of New York Mellon, as Trustee, and the Guarantors party thereto.	8-K	4.1	04/06/2017	001-35944
4.6	Fourth Supplemental Indenture, dated as of April 19, 2018, by and among Power Solutions International, Inc., The Bank of New York Mellon, as Trustee, and the Guarantors party thereto.	8-K	4.1	04/19/2018	001-35944
4.7	Form of Warrant to Purchase Shares of Power Solutions International, Inc.	8-K	10.2	03/27/17	001-35944
4.8	Amended and Restated Warrant to Purchase Shares of Power Solutions International, Inc., dated as of November 30, 2017.	8-K	10.2	12/05/17	001-35944
4.9	Second Amended and Restated Warrant to Purchase Shares of Power Solutions, Inc., dated as of September 30, 2018.	8-K	10.1	10/03/18	001-35944
4.10	Fifth Supplemental Indenture, dated as of October 30, 2019, by and among Power Solutions International, Inc., The Bank of New York Mellon, as Trustee, and the Guarantors party thereto.	8-K	4.1	10/31/2019	001-35944

Incorporated by Reference Herein

Exhibit No.	Exhibit Description	Form	Exhibit	Filing Date	File No.
10.1	†† Power Solutions International, Inc. 2012 Incentive Compensation Plan.	8-K	10.3	06/07/2012	000-52213
10.2	†† Amendment No. 1 to the Power Solutions International, Inc. 2012 Incentive Compensation Plan.	DEF14A	Appendix A	08/02/2013	001-35944
10.3	†† Form of Restricted Stock Agreement by and between Power Solutions International, Inc. and each eligible employee.	8-K	10.1	06/20/2013	001-35944
10.4	Guaranty and Security Agreement, dated as of June 28, 2013, by and among Wells Fargo, N.A. as agent for itself and other lenders party thereto, each of the lenders party thereto, Power Solutions International, Inc., The W Group, Inc., Power Solutions, Inc., Power Great Lakes, Inc., Auto Manufacturing, Inc., Torque Power Source Parts, Inc., Power Properties, L.L.C., Power Production, Inc., Power Global Solutions, Inc., PSI International, LLC and XI Sync LLC, and related documents.	8-K	10.2	07/02/2013	001-35944
10.5	Joinder No. 1 dated as of April 1, 2014 to Guaranty and Security Agreement dated as of June 28, 2013, by and among Wells Fargo Bank, N.A. as agent for itself and the other lenders party thereto, Power Solutions International, Inc., The W Group, Inc., Power Solutions, Inc., Power Great Lakes, Inc., Auto Manufacturing, Inc., Torque Power Source Parts, Inc., Power Properties, L.L.C., Power Production, Inc., Power Global Solutions, Inc., PSI International, LLC, XI Sync LLC, and Professional Power Products, Inc., joining Professional Power Products, Inc. as a party thereto.	8-K	10.4	04/02/2014	001-35944
10.6	Joinder No.2 dated as of November 2, 2015 to Guaranty and Security Agreement dated as of June 28, 2013, by and among Wells Fargo Bank, N.A. as agent for itself and the other lenders party thereto, Power Solutions International, Inc., The W Group, Inc., Power Solutions, Inc., Power Great Lakes, Inc., Auto Manufacturing, Inc., Torque Power Source Parts, Inc., Power Properties, L.L.C., Power Production, Inc., Power Global Solutions, Inc., PSI International, LLC, XI Sync LLC, Professional Power Products, Inc., and Bi-Phase Technologies, LLC and Powertrain Integration Acquisition, LLC, joining Bi-Phase Technologies, LLC and Powertrain Integration Acquisition, LLC.	10-K	10.6	05/16/2019	001-35944
10.7	First Amendment, dated as of June 28, 2016, to the Guaranty and Security Agreement dated as of June 28, 2013, by and among Wells Fargo Bank, N.A. as agent for itself and the other lenders party thereto, each of the lenders party thereto, Power Solutions International, Inc., The W Group, Inc., Power Solutions, Inc., Power Great Lakes, Inc., Auto Manufacturing, Inc., Torque Power Source Parts, Inc., Power Properties, L.L.C., Power Production, Inc., Power Global Solutions, Inc., PSI International, LLC, XI Sync LLC, Professional Power Products, Inc., Powertrain Integration Acquisition, LLC and Bi-Phase Technologies, LLC.	8-K	10.4	06/30/2016	001-35944
10.8	Credit Agreement, dated as of June 28, 2013, by and among Wells Fargo Bank, N.A. as agent for itself and the other lenders party thereto, each of the lenders party thereto, Power Solutions International, Inc., The W Group, Inc., Power Solutions, Inc., Power Great Lakes, Inc., Auto Manufacturing, Inc., Torque Power Source Parts, Inc., Power Properties, L.L.C., Power Production, Inc., Power Global Solutions, Inc., PSI International, LLC, and XI Sync LLC.	8-K	10.1	07/02/2013	001-35944
10.9	Amended and Restated Credit Agreement, dated as of April 1, 2014, by and among Wells Fargo Bank, N.A. as agent for itself and other lenders party thereto, each of the lenders party thereto, Power Solutions International, Inc., The W Group, Inc., Power Solutions, Inc., Power Great Lakes, Inc., Auto Manufacturing, Inc., Torque Power Source Parts, Inc., Power Properties, L.L.C., Power Production, Inc., Power Global Solutions, Inc., PSI International, LLC, XI Sync LLC and Professional Power Products, Inc.	8-K	10.3	04/02/2014	001-35944
10.10	First Amendment, dated as of September 30, 2014, to the Amended and Restated Credit Agreement, dated as of April 1, 2014, by and among Wells Fargo Bank, N.A. as agent for itself and other lenders party thereto, each of the lenders party thereto, Power Solutions International, Inc., The W Group, Inc., Power Solutions, Inc., Power Great Lakes, Inc., Auto Manufacturing, Inc., Torque Power Source Parts, Inc., Power Properties, L.L.C., Power Production, Inc., Power Global Solutions, Inc., PSI International, LLC, XI Sync LLC and Professional Power Products, Inc.	8-K	10.1	10/01/2014	001-35944

Incorporated by Reference Herein

Exhibit No.	Exhibit Description	Form	Exhibit	Filing Date	File No.
10.11	<u>Second Amendment, dated as of February 11, 2015, to the Amended and Restated Credit Agreement, dated as of April 1, 2014, by and among Wells Fargo Bank, N.A. as agent for itself and other lenders party thereto, each of the lenders party thereto, Power Solutions International, Inc., The W Group, Inc., Power Solutions, Inc., Power Great Lakes, Inc., Auto Manufacturing, Inc., Torque Power Source Parts, Inc., Power Properties, L.L.C., Power Production, Inc., Power Global Solutions, Inc., PSI International, LLC, XI Sync LLC and Professional Power Products, Inc.</u>	8-K	10.1	02/17/2015	001-35944
10.12	<u>Third Amendment, dated as of April 29, 2015, to the Amended and Restated Credit Agreement, dated as of April 1, 2014, by and among Wells Fargo Bank, N.A. as agent for itself and other lenders party thereto, each of the lenders party thereto, Power Solutions International, Inc., The W Group, Inc., Power Solutions, Inc., Power Great Lakes, Inc., Auto Manufacturing, Inc., Torque Power Source Parts, Inc., Power Properties, L.L.C., Power Production, Inc., Power Global Solutions, Inc., PSI International, LLC, XI Sync LLC and Professional Power Products, Inc.</u>	8-K	10.2	04/29/2015	001-35944
10.13	<u>Joinder to Amended and Restated Credit Agreement, dated as of November 2, 2015, by and among Wells Fargo Bank, National Association, as agent for itself and other lenders party thereto, each of the lenders party thereto, Power Solutions International, Inc., and Professional Power Products, Inc. and the original borrowers, Powertrain Integration Acquisition, LLC and Bi-Phase Technologies, LLC as the new borrowers.</u>	10-K	10.25	02/26/2016	001-35944
10.14	<u>Second Amended and Restated Credit Agreement, dated as of June 28, 2016, by and among Wells Fargo Bank, N.A. as agent for itself and other lenders party thereto, each of the lenders party thereto, Power Solutions International, Inc., Professional Power Products, Inc., Powertrain Integration Acquisition, LLC and Bi-Phase Technologies, LLC.</u>	8-K	10.3	06/30/2016	001-35944
10.15	<u>First Amendment and Waiver, dated as of August 22, 2016, to the Second Amended and Restated Credit Agreement, dated as of June 28, 2016, by and between Power Solutions International, Inc., Professional Power Products, Inc. and Wells Fargo Bank, National Association, as agent for the lenders party thereto.</u>	10-K	10.15	05/16/2019	001-35944
10.16	<u>Second Amendment and Waiver, dated December 19, 2016, to the Second Amended and Restated Credit Agreement, dated June 28, 2016, by and between Power Solutions International, Inc., Professional Power Products, Inc., and Wells Fargo Bank, National Association, as agent for the lenders party thereto.</u>	10-K	10.16	05/16/2019	001-35944
10.17	<u>Third Amendment, Consent and Waiver, dated as of March 31, 2017, to the Second Amended and Restated Credit Agreement, dated as of June 28, 2016, by and among Wells Fargo Bank, N.A. as agent for itself and other lenders party thereto, each of the lenders party thereto, Power Solutions International, Inc., Professional Power Products, Inc., Powertrain Integration Acquisition, LLC and Bi-Phase Technologies, LLC.</u>	8-K	10.1	04/06/2017	001-35944
10.18	<u>Fourth Amendment, dated as of July 17, 2017, to the Second Amended and Restated Credit Agreement, dated as of June 28, 2016, by and among Wells Fargo Bank National Association, as agent for itself and other lenders party thereto, each of the lenders party thereto, Power Solutions International, Inc., Professional Power Products, Inc., Powertrain Integration Acquisition, LLC and Bi-Phase Technologies, LLC.</u>	8-K	10.1	07/19/2017	001-35944
10.19	<u>Consent and Fifth Amendment, dated as of October 3, 2017, to the Second Amended and Restated Credit Agreement, dated as of June 28, 2016, by and among Power Solutions International, Inc., Professional Power Products, Inc., Powertrain Integration Acquisition, LLC and Bi-Phase Technologies, LLC and Wells Fargo Bank, National Association, as agent for the lenders party thereto and the lenders party thereto.</u>	8-K	10.1	10/10/2017	001-35944
10.20	<u>Consent, Sixth Amendment and Waiver, dated as of March 29, 2018, to the Second Amended and Restated Credit Agreement, dated as of June 28, 2016, by and among Power Solutions International, Inc., Professional Power Products, Inc. Powertrain Integration Acquisition, LLC and Bi-Phase Technologies, LLC and Wells Fargo Bank, National Association, as agent for the lenders party thereto, and the lenders party thereto.</u>	8-K	10.1	03/29/2018	001-35944
10.21	<u>First Amendment and Waiver, dated August 22, 2016, to Credit Agreement, dated as of June 28, 2016, by and among Power Solutions International, Inc., Professional Power Products, Inc., Powertrain Integration Acquisition, LLC and Bi-Phase Technologies, LLC, and TPG Specialty Lending, Inc. and the lenders party thereto.</u>	10-K	10.21	05/16/2019	001-35944

Incorporated by Reference Herein

Exhibit No.	Exhibit Description	Form	Exhibit	Filing Date	File No.
10.22	Second Amendment and Waiver, dated December 19, 2016, to Credit Agreement, dated as of June 28, 2016, by and among Power Solutions International, Inc., Professional Power Products, Inc., Powertrain Integration Acquisition, LLC and Bi-Phase Technologies, LLC, and TPG Specialty Lending, Inc. and the lenders party thereto.	10-K	10.22	05/16/2019	001-35944
10.23	†† Form of Indemnification Agreement by and between Power Solutions International, Inc. and certain Indemnitees.	8-K	10.1	01/09/2014	001-35944
10.24	Amended and Restated Lease Agreement, dated as of April 1, 2014, by and between Professional Power Products, Inc. and 448 W. Madison LLC.	8-K	10.2	04/02/2014	001-35944
10.25	Lease Agreement, dated as of October 1, 2014, by and between Power Solutions International, Inc. and Hamilton Lakes Commerce Center #4 Limited Partnership.	8-K	10.2	10/01/2014	001-35944
10.26	Lease Agreement, dated as of December 1, 2017, by and between Power Solutions International, Inc. and James Campbell Company LLC.	10-K	10.26	05/16/2019	001-35944
10.27	First Lease Amendment, dated as of July 11, 2018, by and between Power Solutions International, Inc. and Centerpoint Properties Trust, in connection with that certain Industrial Building Lease dated as of March 13, 2012, with respect to that certain premises located at 101 Mittel Drive (formerly 801 EC Drive) in Wood Dale, Illinois.	8-K	10.1	07/18/2018	001-35944
10.28	Second Lease Amendment, dated as of July 11, 2018, by and between Power Solutions International, Inc. and CenterPoint Properties Trust, in connection with that certain Industrial Building Lease dated as of February 28, 2012, as further amended by that certain First Lease Amendment dated June 1, 2012, with respect to that certain premises located at 201 Mittel Drive, Wood Dale, Illinois.	8-K	10.2	07/18/2018	001-35944
10.29	††† Addendum dated as of July 31, 2014, to Supply Agreement dated December 11, 2007, by and between Power Solutions International, Inc. and Doosan Infracore Co., Ltd., as amended.	8-K	10.1	08/06/2014	001-35944
10.30	Asset Purchase Agreement dated as of May 4, 2015 by and among Power Solutions International, Inc., Powertrain Integration Acquisition, LLC, as the Buyer, and Powertrain Integration, LLC and its principals, as the Seller.	8-K	10.1	05/06/2015	001-35944
10.31	Share Purchase Agreement dated as of March 20, 2017 among Power Solutions International, Inc. and Weichai America Corp., dated as of March 20, 2017.	8-K	10.1	03/27/2017	001-35944
10.32	Form of Investor Rights Agreement between Power Solutions International, Inc. and Weichai America Corp.	8-K	10.3	03/27/2017	001-35944
10.33	Shareholders Agreement by and among Power Solutions International, Inc., Weichai America Corp. and the Founding Stockholders, dated as of March 20, 2017.	8-K	10.4	03/27/2017	001-35944
10.34	††† Strategic Collaboration Agreement between Weichai Power Co. Ltd. and Power Solutions International, Inc., dated March 20, 2017.	8-K	10.5	03/27/2017	001-35944
10.35	Securities Exchange Agreement, dated as of November 30, 2017, by and among Power Solutions International, Inc., and Weichai America Corp.	8-K	10.1	12/05/2017	001-35944
10.36	†† Employment Agreement, dated June 15, 2017, by and between Power Solutions International, Inc. and John P. Miller.	8-K/A	10.1	06/21/2017	001-35944
10.37	†† Employment Agreement, dated November 28, 2017, by and between Power Solutions International, Inc. and Kenneth Winemaster.	8-K	10.1	12/04/2017	001-35944
10.38	†† Employment Agreement, dated January 11, 2018, by and between Power Solutions International, Inc. and William A. Buzogany.	10-K	10.38	05/16/2019	001-35944
10.39	†† Employment Agreement, dated October 10, 2018, by and between Power Solutions International, Inc. and Charles F. Avery, Jr.	8-K/A	10.1	10/11/2018	001-35944
10.40	Amendment to the Power Solutions International, Inc. 2012 Incentive Compensation Plan (As Amended July 31, 2013).	10-K	10.40	05/16/2019	001-35944
10.41	Waiver, dated May 16, 2019, to Second Amended and Restated Credit Agreement, dated June 28, 2016, by and between Power Solutions International, Inc., Professional Power Products, Inc., and Wells Fargo Bank, National Association, as agent for the lenders party thereto.	10-K	10.41	05/16/2019	001-35944
10.42	Addendum #10, dated as of September 16, 2019, to Supply Agreement, dated as of December 11, 2007, by and between Power Solutions International, Inc. and Doosan Infracore Co., Ltd., as amended.	8-K	10.1	10/02/2019	001-35944
14.1	Code of Business Conduct and Ethics	10-K	14.1	05/16/2019	001-35944

Incorporated by Reference Herein

Exhibit No.	Exhibit Description	Form	Exhibit	Filing Date	File No.
16.2	Letter of Frazier & Deeter, LLC, Independent Registered Public Accounting Firm, dated March 19, 2018.	8-K/A	16.1	03/20/2018	001-35944
21.1	* Subsidiaries of Power Solutions International, Inc.				
23.1	* Consent of BDO USA, LLP				
31.1	* Certification of Chief Executive Officer, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
31.2	* Certification of Chief Financial Officer, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
32.1	** Certification of Chief Executive Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
32.2	** Certification of Chief Financial Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
101.INS	* XBRL Instance Document.				
101.SCH	* XBRL Taxonomy Extension Schema Document.				
101.CAL	* XBRL Taxonomy Extension Calculation Linkbase Document.				
101.LAB	* XBRL Taxonomy Extension Labels Linkbase Document.				
101.PRE	* XBRL Taxonomy Extension Presentation Linkbase Document.				
101.DEF	* XBRL Taxonomy Definition Linkbase Document.				

* Filed with this Report.

** This exhibit shall not be deemed "filed" for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of that Section. Such exhibit shall not be deemed incorporated into any filing under the Securities Act of 1933, as amended, or the Exchange Act.

† Exhibits and schedules omitted pursuant to Item 601(b)(2) of Regulation S-K. The registrant agrees to furnish a supplemental copy of an omitted exhibit or schedule to the SEC upon request.

†† Management contract or compensatory plan or arrangement.

††† Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been separately filed with the SEC.

Item 16. Form 10-K Summary.

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized, on the 27th day of December, 2019.

POWER SOLUTIONS INTERNATIONAL, INC.

By: /s/ Charles F. Avery, Jr.

Name: **Charles F. Avery, Jr.**

Title: Chief Financial Officer (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 indicated on the 27th day of December, 2019.

<u>Signature</u>	<u>Title</u>
<u>/s/ John P. Miller</u> John P. Miller	Chief Executive Officer and President (Principal Executive Officer)
<u>/s/ Charles F. Avery, Jr.</u> Charles F. Avery, Jr.	Chief Financial Officer (Principal Financial Officer)
<u>/s/ Donald P. Klein</u> Donald P. Klein	Corporate Controller (Principal Accounting Officer)
<u>/s/ Shaojun Sun</u> Shaojun Sun	Chairman of the Board and Director
<u>/s/ Kui Jiang</u> Kui Jiang	Director
<u>/s/ Guogang Wu</u> Guogang Wu	Director
<u>/s/ Leslie A. Coolidge</u> Leslie A. Coolidge	Director
<u>/s/ Kenneth W. Landini</u> Kenneth W. Landini	Director
<u>/s/ Frank P. Simpkins</u> Frank P. Simpkins	Director
<u>/s/ Hong He</u> Hong He	Director

**Power Solutions International, Inc.
and Consolidated Subsidiaries
100% Owned Subsidiaries of the Registrant**

Name	Jurisdiction of Organization
Professional Power Products, Inc	An Illinois Corporation
Bi-Phase Technologies, LLC	A Minnesota Limited Liability Company
Powertrain Integration Acquisition, LLC	An Illinois Limited Liability Company
The W Group, Inc.	A Delaware Corporation

* Corporate joint ventures not shown by name in the above listing, if considered in the aggregate as a single subsidiary, would not constitute a significant subsidiary.

100% Owned Subsidiaries of The W Group, Inc.

Name	Jurisdiction of Organization
Power Solutions, Inc.	An Illinois Corporation
Power Great Lakes, Inc.	An Illinois Corporation
Auto Manufacturing, Inc.	An Illinois Corporation
Torque Power Source Parts, Inc.	An Illinois Corporation
Power Properties, LLC	An Illinois Limited Liability Company
Power Production, Inc.	An Illinois Corporation
Power Global Solutions, Inc.	An Illinois Corporation
PSI International, LLC	An Illinois Limited Liability Company
XI SYNC LLC	An Illinois Limited Liability Company

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Power Solutions International, Inc.
Wood Dale, Illinois

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-185096 and 333-191166) of Power Solutions International, Inc. of our report dated December 27, 2019, relating to the consolidated financial statements, which appears in this Form 10-K. Our report contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

/s/ BDO USA, LLP
Chicago, Illinois

December 27, 2019

**CERTIFICATION PURSUANT TO 17 CFR 240.13a-14 PROMULGATED UNDER
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Charles F. Avery, Jr., certify that:

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

Date: December 27, 2019

By: /s/ Charles F. Avery, Jr.

Name: **Charles F. Avery, Jr.**

Title: Chief Financial Officer

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

In connection with the Annual Report of Power Solutions International, Inc. (the "Company") on Form 10-K for the year ended December 31, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Charles F. Avery, Jr., Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. 1350, as adopted pursuant to 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: December 27, 2019

By: /s/ Charles F. Avery, Jr.

Name: **Charles F. Avery, Jr.**

Title: Chief Financial Officer

This certification accompanies each Report pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

A signed original of this written statement required by Section 906 has been provided by the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.