UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

	FORM	10-K
\boxtimes	ANNUAL REPORT PURSUANT TO SECTION 13 OR 15	(d) OF THE SECURITIES EXCHANGE ACT OF 193
	For the fiscal year ended	l December 31, 2017
	OR	
	TRANSITION REPORT PURSUANT TO SECTION 13 O 1934	R 15(d) OF THE SECURITIES EXCHANGE ACT OF
	For the transition period from	to
	Commission file nur	nber 000-23486
	NN, I (Exact name of registrant as	
	Delaware (State or other jurisdiction of incorporation or organization)	62-1096725 (I.R.S. Employer Identification Number)
	207 Mockingbird Lane	rachuncation (value)
	Johnson City, Tennessee (Address of principal executive offices)	37604 (Zip Code)
	(423) 434	
	(Registrant's telephone numb	
	Securities registered pursuant	to Section 12(b) of the Act:
	Title of each class Common Stock, par value \$0.01	Name of each exchange on which registered The Nasdaq Stock Market LLC
	Securities registered pursuant	to Section 12(g) of the Act:
	None (Title of c	
Indi	cate by check mark if the registrant is a well-known seasoned issuer, as define	ed in Rule 405 of the Securities Act. Yes □ No ⊠
Indi	cate by check mark if the registrant is not required to file reports pursuant to S	Section 13 or Section 15(d) of the Act. Yes □ No ⊠
	cate by check mark whether the registrant (1) has filed all reports required to ng the preceding 12 months (or for such shorter period that the registrant was	

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes \boxtimes No \square

requirements for the past 90 days. Yes ⊠ No □

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.							
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 definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.							
Large accelerated filer □	Accelerated filer	\boxtimes					
Non-accelerated filer \Box (Do not check if a smaller reporting company)	Smaller reporting company						
	Emerging growth company						
If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. \Box							
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes	」 No ⊠						
The aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant was approximately \$473 million as of June 30, 2017, the last business day of the registrant's most recently completed second fiscal quarter, computed using the closing price of the registrant's common stock as quoted on the Nasdaq Stock Market LLC on that date of \$27.45. Solely for purposes of making this calculation, shares of the registrant's common stock held by named executive officers, directors and 5% or greater stockholders of the registrant as of such date have been excluded because such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for any other purposes.							
As of March 27, 2018, there were 27,579,873 shares of the registrant's common stock, par value \$0.01 per share, outstand	ling.						
DOCUMENTS INCORPORATED BY REFERENCE							
Portions of the Proxy Statement with respect to the 2018 Annual Meeting of Stockholders are incorporated by reference in Part III, Items 10 to 14 of this Annual Report on Form 10-K as indicated herein. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days of the registrant's fiscal year ended December 31, 2017.							

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PART I

Forward-Looking Statements

This Annual Report on Form 10-K contains forward-looking statements that are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These statements may discuss goals, intentions and expectations as to future trends, plans, events, results of operations or financial condition, or state other information relating to NN, Inc., based on current beliefs of management as well as assumptions made by, and information currently available to, management. Forward-looking statements generally will be accompanied by words such as "anticipate," "believe," "could," "estimate," "expect," "forecast," "guidance," "intend," "may," "possible," "potential," "predict," "project" or other similar words, phrases or expressions. Forward-looking statements involve a number of risks and uncertainties that are outside of management's control and that may cause actual results to be materially different from such forward-looking statements. Such factors include, among others, general economic conditions and economic conditions in the industrial sector, competitive influences, risks that current customers will commence or increase captive production, risks of capacity underutilization, quality issues, availability of raw materials, currency and other risks associated with international trade, our dependence on certain major customers, the impact of acquisitions and divestitures, unanticipated difficulties integrating acquisitions and realizing anticipated cost savings and operating efficiencies, risks associated with joint ventures, new laws and governmental regulations, and other risk factors and cautionary statements listed from time to time in our periodic reports filed with the Securities and Exchange Commission. We disclaim any obligation to update any such factors or to publicly announce the result of any revisions to any of the forward-looking statements included herein or therein to reflect future events or developments.

Except for per share data or as otherwise noted, all dollar amounts presented in tables that follow are in thousands of U.S. dollars.

Item 1. Business

Introduction

We are a global diversified industrial company that combines advanced engineering and production capabilities with in-depth materials science expertise to design and manufacture high-precision solutions, components and assemblies for the medical, aerospace and defense, electrical, automotive and general industrial markets. We have 44 facilities in North America, Europe, South America and China.

On August 17, 2017, we completed the sale of our global precision bearing components business (the "PBC Business") to TSUBAKI NAKASHIMA Co., Ltd. for approximately \$388.5 million. We intend to reinvest the after-tax proceeds of the sale of the PBC Business with acquisitions and strategic investments in our highest-growth and highest-margin end market, medical, and to a lesser extent our aerospace and defense, electrical, automotive, and general industrial end markets.

In January 2018, we implemented a new enterprise and management structure designed to accelerate growth and further balance our portfolio by aligning our strategic assets and businesses. Our businesses were reorganized into the Mobile Solutions, Power Solutions and Life Sciences divisions and are based principally on the end markets they serve. The Life Sciences division is focused on growth in the medical end market. The Power Solutions division is focused on growth in the electrical and aerospace and defense end markets. The Mobile Solutions division is focused on growth in the industrial and automotive end markets. Beginning in the first quarter of 2018, we will report our financial results based on these new segments. However, for purposes of this annual report we have presented our business as it was conducted during the year ended December 31, 2017.

Our business as conducted in 2017, products and recent acquisition activity are described further below.

Acquisition Activity

On October 2, 2017, we completed the acquisition of DRT Medical, LLC, which was subsequently named NN Life Sciences – Vandalia, LLC ("Vandalia"), a supplier of precision manufactured medical instruments and orthopedic implants, from DRT Holdings, Inc. ("DRT Holdings"). Vandalia is a supplier of precision manufactured medical instruments and orthopedic implants with locations in Ohio and Pennsylvania.

On October 19, 2015, we completed the acquisition (the "PEP Acquisition") of Precision Engineered Products Holdings, Inc. ("PEP"). As a result of the PEP Acquisition, PEP became a wholly owned subsidiary of NN. PEP is a global manufacturer of highly engineered precision customized solutions serving the medical, electrical, automotive, general industrial and aerospace and defense end markets. PEP combines materials science expertise with advanced engineering and production capabilities to design and manufacture a broad range of high-precision metal and plastic components, assemblies and finished devices. Following the PEP Acquisition, we combined the operations of PEP with our Plastics and Rubber Components Group and renamed the group as the Precision Engineered Products Group.

On May 29, 2015, we completed the acquisition of Caprock Manufacturing, Inc. and Caprock Enclosures, LLC (collectively referred to as "Caprock"). Caprock was a privately held plastic components supplier located in Lubbock, Texas. Caprock serves multiple end markets; including aerospace and defense, medical and life sciences and general industrial. The acquisition provided further balancing of our end markets and represented the first step in our strategic plan related to transforming our plastics business. The results of Caprock have been consolidated with NN since the date of acquisition as part of the Precision Engineered Products Group.

Business Segments and Products

Autocam Precision Components Group

Within our Autocam Precision Components Group, we manufacture highly engineered, difficult-to-manufacture precision metal components and subassemblies for the automotive and general industrial end markets. Our entry into the precision metal components market began in 2006 with the acquisition of Whirlaway Corporation. We dramatically expanded the segment in 2014 with the acquisitions of Autocam and V-S Industries. These acquisitions furthered our strategy to diversify our end markets and build upon our core manufacturing competency of high-precision metal machining.

We sell a wide range of highly engineered, extremely close tolerance, precision-machined metal components and subassemblies primarily to the automotive and general industrial end markets. We have developed an expertise in manufacturing highly complex, system critical components for fuel systems, engines and transmissions, power steering systems and electromechanical motors on a high-volume basis. This expertise has been gained through investment in technical capabilities, processes and systems, and skilled program management and product launch capabilities.

Precision Engineered Products Group

Within our Precision Engineered Products Group, we combine materials science expertise with advanced engineering and production capabilities to design and manufacture a broad range of high-precision metal and plastic components, assemblies and finished devices for the medical and life sciences, electrical, automotive, general industrial and aerospace and defense end markets.

We manufacture a variety of components, assemblies and instruments, such as surgical knives, bio-resorbable implants, surgical staples, orthopedic system tools, laparoscopic devices, drug delivery devices and catheter components for the medical and life sciences end market; electrical contacts, connectors, contact assemblies and precision stampings for the electrical end market; precision components, assemblies and electrical contacts and precision plastic components for the automotive and general industrial end markets; and a variety of engineered materials for the aerospace and defense end markets, including optical grade plastics, thermally conductive plastics, and titanium, Inconel, magnesium and gold electroplating.

Competitive Strengths

High-precision manufacturing capabilities

We believe our ability to produce high-precision parts at high production volumes is among the best in the market. Our technology platform consists of high precision machining, progressive stamping, injection molding, laser welding, material science, assembly and design optimization. Unique specialty machine building capabilities, in-house tool design and process know-how create trade secrets that enable consistent production tolerances of less than one micron while producing millions of parts per day. Parts are manufactured to application-specific, customer design and co-design standards that are developed for a specific use. The high-precision capabilities are part of our zero-defect design process, which seeks to eliminate variability and manufacturing defects throughout the entire product lifecycle. We believe our production capabilities provide a competitive advantage as few other manufacturers are capable of meeting tolerance demands at any level requested by our customers. As the need for tight-tolerance precision parts, subassemblies, and devices continue to increase, we believe that our production capabilities will place us at the forefront of the industry. We have differentiated ourselves among our competitors by providing customers engineered solutions and a broad reach and breadth of manufacturing capabilities. We believe it is for these reasons, and because of our proven ability to produce high-quality, precision parts and components on a cost-effective basis, that customers choose us to meet their manufacturing needs.

Differentiated, system-critical products

The tight-tolerance and high-quality nature of our precision products are specifically suited for use in the most demanding applications that require superior reliability. Our products are critical components to the operation and reliability of larger mechanical systems. Precision parts are difficult to manufacture and achieve premium pricing in the marketplace as the high cost of failure motivates our customers to focus on quality. Our products are developed for specific uses within critical systems and are typically designed in conjunction with the system designer. Our parts are often qualified for, or specified in, customer designs, reducing the ability for customers to change suppliers.

Our ability to make products with tight-tolerance and extreme precision requirements enables our customers to satisfy the critical functionality and performance requirements of their products. We are included in customer designs and deployed in critical systems that involve high cost of failure applications and significant regulatory certification processes, including those for the Food and Drug Administration ("FDA"), UL and the National Aerospace and Defense Contractors Accreditation Program ("NADCAP").

Complete product lifecycle focus

Our engineering expertise and deep knowledge of precision manufacturing processes adds proprietary value throughout the complete lifecycle of our products. Our in-house engineering team works closely with our customers to provide parts that meet specific design specifications for a given application. The relationship with the customer begins early in the conceptual design process when we provide feedback on potential cost, manufacturability and estimated reliability of metal parts. Part designs are then prototyped, tested and qualified in coordination with the customer design process before going to full-scale production. The close working relationship with our customers early in the product lifecycle helps to secure business, increase industry knowledge and develop significant trade secrets. Performance verification, product troubleshooting and post-production engineering services further deepen relationships with our customers as well as provide additional industry knowledge that is applicable to future design programs and provide continuous manufacturing process improvement.

Prototype products are developed for testing and process validation procedures are instituted. In many instances, we will file for regulatory production approval and include the customer's proprietary processes, further discouraging supplier changes. We will assist the customer with continuous supply chain management, comprehensive customer support for the lifetime of the product and continuously seek to identify new operational efficiencies to reduce the product's cost and improve its quality. Once our solution is designed into a platform, it is often embedded through the multi-year manufacturing lifecycle and has a competitive advantage in supporting subsequent platforms. As an added benefit, customers generally fund development, prototypes and manufacturing tooling expenses. This discourages supplier changes and drives recurring revenue for the company.

Long-term blue-chip customer base

We maintain relationships with hundreds of customers around the world. Our customers are typically sophisticated, engineering-driven, mechanical systems manufacturers with long histories of product development and reputations for quality. We have no significant retail exposure, which limits volatility and provides enhanced sales visibility. Relationships with our top ten customers, in terms of revenue, average more than ten years. We have significant exposure to emerging markets in Asia, South America and Eastern Europe through these global customers as well as key local manufacturers. The diverse nature, size and reach of our customer base provides resistance to localized market and geographic fluctuations and help stabilizes overall product demand.

Strategic global footprint

Our 44 facilities, on four continents, are strategically located to serve our customer base and provide local service and expertise. Our global footprint provides flexibility to locally supply identical products for global customers, reducing shipping time and expense, allowing us to match costs to revenue and to capitalize on industry localization trends. In total, we operate more than 2.4 million square feet of manufacturing space in six countries. North America constitutes the largest portion of our manufacturing operations with facilities in the U.S. and Mexico. The North American facilities are strategically located to serve major customers in the United States and Mexico. Our foreign facilities are located in regional manufacturing hubs in France, Poland, China and Brazil, and primarily serve global customers in those local markets. The Asian and South American facilities, we believe, have significant growth potential as local customer bases expand and the markets for high-precision products grow in those regions.

Proven and experienced management team

We believe that we are led by one of the strongest management teams in our industry, with significant proven experience in precision manufacturing and the diversified industrial sector. Rich Holder was named Chief Executive Officer and director in 2013. Mr. Holder joined us from Eaton Corporation, where he served as President of Eaton Electrical Components Group, and brings to us a proven record of leadership, successful team building and relevant experience in both organic and acquisition growth. He has since assembled a strong management team through retention of key talent, recent acquisitions and new hires. Thomas C. Burwell, Jr., our Chief Financial Officer, has been with us since 2005, has over 25 years of service in various finance and strategic development roles. Our management team has successfully executed and integrated into our business eight acquisitions over the last four years, increasing revenue by more than 150% since 2013. We believe that our current management team has the necessary talent and experience to lead our efforts with respect to our organic and acquisition growth goals.

Research and Development and Product Engineering

Our research and development and product engineering efforts focus on enhancing our existing products and developing patented products, particularly in the medical industry, that can be presented to and sold by our customers. Our Precision Engineered Products Group has developed a portfolio of patented and branded medical products that we manufacture for customers and that are sold through their channel. Our Autocam Precision Products Group engineering team focuses on working closely with our customers to develop engineered solutions to improve our customers' products.

Customers

Our products are supplied primarily to manufacturers for use in a broad range of industrial applications, including automotive; electrical; agricultural; construction; residential devices and equipment; medical; aerospace and defense; heating, ventilation, and air conditioning; fluid power and diesel engines. Sales to each of our top ten customers are made to multiple customer locations and divisions throughout the world. In 2017, our top ten customers accounted for approximately 46% of our net sales. In 2017, 78% of our products were sold to customers in North America, 6% to customers in Europe, 10% to customers in Asia and the remaining 6% to customers in South America. Excluding the PBC Business, we did not have any customer that accounted for 10% or more of total net sales.

We sell our products to most of our largest customers under either sales contracts or agreed upon commercial terms. In general, we pass through material cost fluctuations when incurred to our customers in the form of changes in selling prices. We ordinarily ship our products directly to customers within 60 days, and in many cases, during the same calendar month of the date on which a sales order is placed. Accordingly, we generally have an insignificant amount of open (backlog) orders from customers at month end.

Sales and Marketing

A primary emphasis of our marketing strategy is to expand key customer relationships by offering high quality, high-precision, application-specific customer solutions with the value of a single supply chain partner for a wide variety of products and components. Due to the technical nature of many of our products, our engineers and manufacturing management personnel also provide technical sales support functions, while internal sales employees handle customer orders and other general sales support activities. Our marketing strategy is to offer custom manufactured, high quality, precision products to markets with high value-added characteristics at competitive price levels. This strategy focuses on relationships with key customers that require the production of technically difficult parts and assemblies, enabling us to take advantage of our strengths in custom product development, equipment and tool design, component assembly and machining processes.

Employees

As of December 31, 2017, we employed a total of 3,884 full-time employees and 523 full time equivalent temporary workers. Of our total employment, 16% are management/staff/government/statutory employees and 84% are production employees. The employees of the France, Brazil, and Brainin de Mexico plants are unionized. A small group of employees at our Bridgeport, Connecticut plant are also unionized. We believe we have a good working relationship with our employees and the unions that represent them.

Competition

Autocam Precision Components Group

In the market in which our Autocam Precision Components Group operates, internal production of components by our customers can impact our business as the customers weigh the risk of outsourcing strategically critical components or producing in-house. Our primary outside competitors are Anton Häring KG, A. Berger Holding Gmbh & Co. KG, C&A Tool Engineering, Inc., American Turned Products, Inc., Camcraft, Inc., IMS Gear, and Brovedani. We generally win new business on the basis of technical competence and our proven track record of successful product development.

Precision Engineered Products Group

Our Precision Engineered Products Group operates in intensely competitive but very fragmented supply chains. We must compete with numerous companies in each industry market segment.

Our primary competitors in the medical device market are Tecomet, Inc., Lake Region Medical, Inc. and Vention Medical, Inc. Our primary competitors in the electrical market are Deringer-Ney, Inc., Doduco GmbH and Metalor Technologies International. Our primary competitors in the automotive and aerospace and defense market are Interplex Industries, Inc. and Accu-Mold, LLC.

We believe that competition within the medical device, electrical, automotive and aerospace and defense end markets is based principally on quality, price, design capabilities and speed of responsiveness and delivery. We believe that our competitive strengths are product development, tool design, fabrication, tight tolerance processes, and customer solutions. With these strengths, we have built our reputation in the marketplace as a quality producer of technically difficult products.

Raw Materials

Autocam Precision Components Group

The Autocam Precision Components Group produces products from a wide variety of metals in various forms from various sources located in the North America, Europe, South America and Asia. Basic types include hot rolled steel, cold rolled steel (both carbon and alloy), stainless, extruded aluminum, die cast aluminum, gray and ductile iron castings, hot and cold forgings and mechanical tubing. Some material is purchased directly under contracts, some is consigned by the customer, and some is purchased directly from the steel mills.

Precision Engineered Products Group

The Precision Engineered Products Group uses a wide variety of metals in various forms, including precious metals like gold, silver, palladium and platinum, as well as plastics. Through our diverse network of suppliers, we minimize supplier concentration risk and provide a stable supply of raw materials at competitive pricing. This group also procures resins and metal stampings from several domestic and foreign suppliers.

For the Precision Engineered Products Group, we base purchase decisions on quality, service and price. Generally, we do not enter into written supply contracts with our suppliers or commit to maintain minimum monthly purchases of materials. However, we carefully manage raw material price volatility, particularly with respect to precious metals, through the use of consignment agreements. In effect, we contract the precious metals for our own stock and buy the raw materials on the same day customer shipments are priced, thereby eliminating speculation.

In each of our segments, we have historically been affected by upward price pressure on steel principally due to general increases in global demand. In general, we pass through material cost fluctuations to our customers in the form of changes in selling price.

Patents, Trademarks and Licenses

We have several U.S. patents, patent applications and trademarks for various trade names. Furthermore, we intend to develop patented products that can be presented to and sold by our customers. However, we cannot be certain that we would be able to protect and enforce our intellectual property rights against third parties, and if we cannot do so, we may face increased competition and diminished net sales.

Furthermore, third parties may assert infringement claims against us based on their patents or other intellectual property, and we may have to pay substantial damages and/or redesign our products if we are ultimately found to infringe. Even if such intellectual property claims against us are without merit, investigating and defending these types of lawsuits takes significant time, may be expensive and may divert management attention from other business concerns.

Additionally, we rely on certain data and processes, including trade secrets and know-how, and the success of our business depends, to some extent, on such information remaining confidential. Each officer is subject to a non-competition and confidentiality agreement that seeks to protect this information. Additionally, all employees are subject to company code of ethics policies that prohibit the disclosure of information critical to the operations of our business.

Seasonal Nature of Business

General economic conditions impact our business and financial results, and certain of our businesses experience seasonal and other trends related to the industries and end markets that they serve. For example, European sales are often weaker in the summer months, medical device sales are often stronger in the third and fourth calendar quarter and sales to original equipment manufacturers ("OEMs") are often stronger immediately preceding and following the launch of new products. However, as a whole, we are not materially impacted by seasonality.

Environmental Compliance

Our operations and products are subject to extensive federal, state and local regulatory requirements both domestically and abroad relating to pollution control and protection of the environment. These laws and regulations govern, among other things, discharges to air or water, the generation, storage, handling, and use of automotive hazardous materials and the handling and disposal of hazardous waste generated at our facilities. Under such laws and regulations, we are required to obtain permits from governmental authorities for some of our operations. If we violate or fail to comply with these laws, regulations or permits, we could be fined or otherwise sanctioned by regulators. Under some environmental laws and regulations, we could also be held responsible for all the costs relating to any contamination at our past or present facilities and at third-party waste disposal sites. We maintain a compliance program to assist in preventing and, if necessary, correcting environmental problems.

Based on information compiled to date, management believes that our current operations are in substantial compliance with applicable environmental laws and regulations, the violation of which could have a material adverse effect on our business and financial condition. We have assessed conditional asset retirement obligations and have found them to be immaterial to our consolidated financial statements. We cannot assure that currently unknown matters, new laws and regulations, or stricter interpretations of existing laws and regulations will not materially affect our business or operations in the future. More specifically, although we believe that we dispose of waste in material compliance with applicable environmental laws and regulations, we cannot be certain that we will not incur significant liabilities in the future in connection with the clean-up of waste disposal sites.

FDA Compliance

As a manufacturer of medical devices, certain of our subsidiaries, including PEP, are required to register as such with FDA. Each of our facilities that manufacture finished medical devices is registered with the FDA. To maintain our registration, we deploy a robust quality management system across all of our manufacturing facilities.

With respect to medical and life sciences products that we are specifically developing to sell to our customers, before these devices can be marketed, we will seek to obtain a marketing clearance from the FDA under Section 510(k) of the United States Federal Food, Drug, and Cosmetic Act. The FDA typically grants a 510(k) clearance if the applicant can establish that the device is substantially equivalent to a predicate device. Clearance under Section 510(k) typically takes about four months from the date of submission.

Executive Officers of the Registrant

Our executive officers are:

Name	Age	Position
Richard D. Holder	55	President and Chief Executive Officer
Thomas C. Burwell, Jr.	49	Senior Vice President – Chief Financial Officer
Matthew S. Heiter	57	Senior Vice President and General Counsel
D. Gail Nixon	47	Senior Vice President and Chief Human Resources Officer
Warren A. Veltman	56	Executive Vice President – Mobile Solutions
J. Robert Atkinson	37	Executive Vice President – Life Sciences
Christopher J. Qualters	50	Executive Vice President – Power Solutions

Richard D. Holder joined us as President and Chief Executive Officer in June 2013. Prior to joining us, Mr. Holder served as President of Eaton Electrical Components Group of Eaton Corporation's Electrical Sector from 2010 to 2013, Executive Vice President of the Eaton Business Systems from 2007 to 2010, Vice President and General Manager of the Power Distribution and Assemblies Division from 2004 to 2006 and Vice President Supply Chain and Operational Excellence from 2001 to 2004. Prior to joining Eaton, Mr. Holder served as Director of Aircraft & Technical Purchasing for US Airways from 1999 to 2001. Prior to this position, Mr. Holder held a variety of leadership positions at Allied Signal Corporation, an aerospace, automotive and engineering company, and Parker Hannifin Corporation, a global motion and control technology manufacturer. Mr. Holder serves on the board of directors of Actuant Corporation, a publicly held diversified industrial company.

Thomas C. Burwell, Jr. joined us as Corporate Controller in September 2005. He was promoted to Vice President Chief Accounting Officer and Corporate Controller in 2011, and to Senior Vice President and Chief Financial Officer in November 2016. Prior to joining us, Mr. Burwell held various positions at Coats, PLC from 1997 to 2005 ultimately becoming the Vice President of Finance for the U.S. Industrial Division. From 1992 to 1997, Mr. Burwell held various positions at the international accounting firm BDO Seidman, LLP. Mr. Burwell is a Certified Public Accountant.

Matthew S. Heiter joined us as Senior Vice President and General Counsel in July 2015. Prior to joining us, Mr. Heiter was a shareholder in the law firm of Baker, Donelson, Bearman, Caldwell and Berkowitz, PC from May 1996 to December 1999 and from July 2002 to July 2015, where he served as chairman of the firm's Securities and Corporate Governance Practice Group. From January 2000 to July 2002, Mr. Heiter served as the Executive Vice President, General Counsel and Secretary of Internet Pictures Corporation, a publicly traded internet technology company.

D. Gail Nixon joined us in 2007 and was appointed Senior Vice President and Chief Human Resources Officer in January 2018. She previously served as our Vice President of Human Resources as well as Corporate Human Resources Manager. Ms. Nixon is a member of the Society for Human Resource Management and World at Work and has earned her Senior Professional in Human Resources designation. From 2000-2007, she held various accounting and human resources positions with a multi-state healthcare organization, ultimately serving as its corporate human resources director.

Warren A. Veltman joined us as Senior Vice President and General Manager of our Autocam Precision Components Group in September 2014. Mr. Veltman served as Chief Financial Officer of Autocam Corporation from 1990 and Secretary and Treasurer since 1991. In January 2018, Mr. Veltman was appointed Executive Vice President of our Mobile Solutions business. Prior to Mr. Veltman's service at Autocam, Mr. Veltman was an Audit Manager with Deloitte & Touche LLP.

J. Robert Atkinson was appointed Executive Vice President of our Life Sciences division in January 2018. Mr. Atkinson joined us as Vice President, Corporate Treasurer and Manager of Investor Relations in April 2014 and served as our Vice President, Strategy & Investor Relations from April 2017 to December 2017. Prior to joining us, Mr. Atkinson was with Regions Bank where he served as vice president and commercial relationship manager in Regions Corporate Bank Group, where he was responsible for marquee corporate relationships, developing treasury management solutions and negotiating terms and conditions for new and renewal credit facilities. Prior to that position, he served as Vice President of business services. Mr. Atkinson also served as a project coordinator for the Electrical Group of Eaton Corporation. Mr. Atkinson is a member of the Association of Financial Professions and earned his certified treasury professional designation.

Christopher J. Qualters was appointed Executive Vice President of the Power Solutions division in January 2018, and previously served as our Vice President and Chief Commercial Officer. Mr. Qualters joined us as part of the Autocam acquisition in 2014, where he served as Vice President of sales and marketing. Prior to joining Autocam in 2008, he held several leadership positions in sales, marketing and product management at Robert Bosch. From 1990 to 2000, Mr. Qualters held the position of sales engineer at The Torrington Company, where he was responsible for anti-friction bearing solutions for the general industrial and automotive industries.

Item 1A. Risk Factors

The following are risk factors that affect our business, prospects, financial condition, results of operations, and cash flows, some of which are beyond our control. These risk factors should be considered in connection with evaluating the forward-looking statements contained in this Annual Report on Form 10-K. If any of the events described below were to actually occur, our business, prospects, financial condition, results of operations, or cash flows could be adversely affected, and results could differ materially from expected and historical results.

Risks Related to Our Operations

We depend heavily on a relatively limited number of customers, and the loss of any major customer would have a material adverse effect on our business.

During 2017, sales to various U.S. and foreign divisions of our ten largest customers accounted for approximately 46% of our consolidated net sales. The loss of all or a substantial portion of sales to these customers would cause us to lose a substantial portion of our revenue and would lower our operating profit margin and cash flows from operations.

Work stoppages or similar difficulties could significantly disrupt our operations, reduce our revenues and materially affect our earnings.

A work stoppage at one or more of our facilities could have a material adverse effect on our business, prospects, financial condition, results of operations, or cash flows. Also, if one or more of our customers were to experience a work stoppage, that customer would likely halt or limit purchases of our products, which could have a material adverse effect on our business, prospects, financial condition, results of operations, or cash flows.

We operate in and sell products to customers outside the U.S. and are subject to several risks related to doing business internationally.

We obtain a majority of our raw materials from overseas suppliers, actively participate in overseas manufacturing operations and sell to a large number of international customers. During the year ended December 31, 2017, sales to customers located outside of the U.S. accounted for approximately 30% of our consolidated net sales. As a result of doing business internationally, we face risks associated with the following:

· changes in tariff regulations, which may make our products more costly to export or import;

- changes in monetary and fiscal policies, laws and regulations, and other activities of governments, agencies and similar organizations;
- · recessions or marked declines specific to a particular country or region;
- the potential imposition of trade restrictions or prohibitions;
- the potential imposition of import tariffs or other duties or taxes;
- · difficulties establishing and maintaining relationships with local original equipment manufacturers, distributors and dealers;
- · difficulty in staffing and managing geographically diverse operations; and
- · unstable governments or legal systems in countries in which our suppliers, manufacturing operations, and customers are located.

These and other risks may also increase the relative price of our products compared to those manufactured in other countries, thereby reducing the demand for our products in the markets in which we operate, which could have a material adverse effect on our business, prospects, financial condition, results of operations, or cash flows.

In addition, we could be adversely affected by violations of the Foreign Corrupt Practices Act (the "FCPA") and similar worldwide anti-bribery laws, as well as export controls and economic sanction laws. The FCPA and similar anti-bribery laws in other jurisdictions generally prohibit companies and their intermediaries from making improper payments to non-U.S. officials for the purpose of obtaining or retaining business. Our policies mandate compliance with these laws. We operate in many parts of the world that have experienced governmental corruption to some degree and, in certain circumstances, strict compliance with anti-bribery laws may conflict with local customs and practices. We cannot assure you that our internal controls and procedures will always protect us from the improper acts committed by our employees or agents. If we are found to be liable for FCPA, export control or sanction violations, we could suffer from criminal or civil penalties or other sanctions, including loss of export privileges or authorization needed to conduct aspects of our international business, which could have a material adverse effect on our business, prospects, financial condition, results of operations, or cash flows.

In addition, in June 2016, voters in the United Kingdom approved an advisory referendum to withdraw from the European Union, commonly referred to as "Brexit." This referendum has created political and economic uncertainty, particularly in the United Kingdom and the European Union, and this uncertainty may persist for years. The withdrawal could significantly disrupt the free movement of goods, services, and people between the United Kingdom and the European Union, and result in increased legal and regulatory complexities, as well as potential higher costs of conducting business in Europe. The United Kingdom's vote to exit the European Union could also result in similar referendums or votes in other European countries in which we do business. The uncertainty surrounding the terms of the United Kingdom's withdrawal and its consequences could adversely impact consumer and investor confidence, and the level of consumer purchases of discretionary items and retail products, including our products. Any of these effects, among others, could materially adversely affect our business, results of operations, and financial condition.

In addition, the prices we pay for raw materials used in our products may be impacted by tariffs. On March 8, 2018, the Trump Administration signed an order that will impose an import tariff of 25% on steel. As a result of this tariff, if we are unable to obtain raw materials, including steel, at historical prices, it could have a material adverse effect on our business, prospects, financial condition, results of operations, or cash flows.

Failure of our products could result in a product recall.

The majority of our products are components of our customers' products that are used in critical industrial applications. A failure of our components could lead to a product recall. If a recall were to happen as a result of our components failing, we could bear a substantial part of the cost of correction. In addition to the cost of fixing the parts affected by the component, a recall could result in the loss of a portion of or all of the customer's business and damage our reputation. A successful product recall claim requiring that we bear a substantial part of the cost of correction or the loss of a key customer could have a material adverse effect on our business, prospects, financial condition, results of operations, or cash flows.

Our markets are highly competitive, and many of our competitors have significant advantages that could adversely affect our business.

We face substantial competition in the sale of system assemblies and finished devices in the vertical end markets into which we sell our products. Our competitors are continuously exploring and implementing improvements in technology and manufacturing processes in order to improve product quality, and our ability to remain competitive will depend, among other things, on whether we are able to keep pace with such quality improvements in a cost-effective manner. Due to this competitiveness, we may not be able to increase prices for our products to cover cost increases. In many cases we face pressure from our customers to reduce prices, which could adversely affect our business, prospects, financial condition, results of operations, or cash flows. In addition, our customers may choose to purchase products from one of our competitors rather than pay the prices we seek for our products, which could adversely affect our business, prospects, financial condition, results of operations, or cash flows.

Any loss of key personnel and the inability to attract and retain qualified employees could have a material adverse impact on our operations.

We are dependent on the continued services of key executives and personnel. The departure of our key personnel without adequate replacement could severely disrupt our business operations. Additionally, we need qualified managers and skilled employees with technical and manufacturing industry experience to operate our businesses successfully. From time to time, there may be shortages of skilled labor, which may make it more difficult and expensive for us to attract and retain qualified employees. If we are unable to attract and retain qualified individuals or our costs to do so increase significantly, our operations would be materially adversely affected.

Damage to our reputation could harm our businesses, including our competitive position and business prospects.

Our ability to attract and retain customers, supplier, investors and employees is impacted by our reputation. Harm to our reputation can arise from various sources, including employee misconduct, security breaches, unethical behavior, litigation or regulatory outcomes, the suitability or harm, which could, among other consequences, increase the size and number of litigation claims and damages asserted or subject us to enforcement actions, fines and penalties and cause us to incur related costs and expenses.

Risks Related to Legal and Regulatory Compliance

Environmental, health and safety laws and regulations impose substantial costs and limitations on our operations, environmental compliance may be more costly than we expect, and any adverse regulatory action may materially adversely affect our business.

We are subject to extensive federal, state, local and foreign environmental, health and safety laws and regulations concerning matters such as air emissions, wastewater discharges, solid and hazardous waste handling and disposal and the investigation and remediation of contamination. The risks of substantial costs, liabilities and limitations on our operations related to compliance with these laws and regulations are an inherent part of our business, and future conditions may develop, arise or be discovered that create substantial environmental compliance or remediation liabilities and costs.

Compliance with environmental, health and safety legislation and regulatory requirements may prove to be more limiting and costly than we anticipate. To date, we have committed significant expenditures in our efforts to achieve and maintain compliance with these requirements at our facilities, and we expect that we will continue to make significant expenditures related to such compliance in the future. From time to time, we may be subject to legal proceedings brought by private parties or governmental authorities with respect to environmental matters, including matters involving alleged noncompliance with or liability under environmental, health and safety laws, property damage or personal injury. New laws and regulations, including those which may relate to emissions of greenhouse gases, stricter enforcement of existing laws and regulations, the discovery of previously unknown contamination or the imposition of new clean-up requirements could require us to incur costs or become the basis for new or increased liabilities that could have a material adverse effect on our business, prospects, financial condition, results of operations, or cash flows.

Our medical devices are subject to regulation by numerous government agencies, including the FDA and comparable agencies outside the U.S. To varying degrees, each of these agencies requires us to comply with laws and regulations governing the development, testing, manufacturing, labeling, marketing and distribution of our medical devices. We cannot guarantee that we will be able to obtain marketing clearance for our new products or enhancements or modifications to existing products. If such approval is obtained, it may:

· take a significant amount of time;

- require the expenditure of substantial resources;
- involve stringent clinical and pre-clinical testing, as well as increased post-market surveillance;
- involve modifications, repairs or replacements of our products; and
- result in limitations on the proposed uses of our products.

Both before and after a product is commercially released, we have ongoing responsibilities under FDA regulations. We are also subject to periodic inspections by the FDA to determine compliance with the FDA's requirements, including primarily the quality system regulations and medical device reporting regulations. The results of these inspections can include inspectional observations on FDA's Form-483, warning letters, or other forms of enforcement. Since 2009, the FDA has significantly increased its oversight of companies subject to its regulations, including medical device companies, by hiring new investigators and stepping up inspections of manufacturing facilities. The FDA has also significantly increased the number of warning letters issued to companies. If the FDA were to conclude that we are not in compliance with applicable laws or regulations, or that any of our medical devices are ineffective or pose an unreasonable health risk, the FDA could ban such medical devices, detain or seize adulterated or misbranded medical devices, order a recall, repair, replacement or refund of such devices, refuse to grant pending pre-market approval applications or require certificates of foreign governments for exports, and/or require us to notify health professionals and others that the devices present unreasonable risks of substantial harm to the public health. The FDA may also impose operating restrictions on a company-wide basis, enjoin and/or restrain certain conduct resulting in violations of applicable law pertaining to medical devices, and assess civil or criminal penalties against our officers, employees, or us. The FDA may also recommend prosecution to the Department of Justice. Any adverse regulatory action, depending on its magnitude, may restrict us from effectively marketing and selling our products.

Foreign governmental regulations have become increasingly stringent and more common, and we may become subject to more rigorous regulation by foreign governmental authorities in the future. Penalties for a company's non-compliance with foreign governmental regulation could be severe, including revocation or suspension of a company's business license and criminal sanctions. Any domestic or foreign governmental law or regulation imposed in the future may have a material adverse effect on us.

Changes in U.S. tax laws could have a material adverse effect on our business, cash flow, results of operations and financial conditions.

On December 22, 2017, the U.S. government enacted comprehensive Federal tax legislation commonly referred to as the Tax Cuts and Jobs Act of 2017 (the "U.S. Tax Cuts and Jobs Act of 2017"). The U.S. Tax Cuts and Jobs Act of 2017 introduces significant changes to U.S. income tax law that will have a meaningful impact on our provision for income taxes. Accounting for the income tax effects of the U.S. Tax Cuts and Jobs Act of 2017 requires significant judgments and estimates in the interpretation and calculations of the provisions of the U.S. Tax Cuts and Jobs Act of 2017.

Due to the timing of the enactment and the complexity involved in applying the provisions of the U.S. Tax Cuts and Jobs Act of 2017, we made reasonable estimates of the effects and recorded provisional amounts in our financial statements for the year ended December 31, 2017. The U.S. Treasury Department, the Internal Revenue Service ("IRS"), and other standard-setting bodies may issue guidance on how the provisions of the U.S. Tax Cuts and Jobs Act of 2017 will be applied or otherwise administered that is different from our interpretation. As we collect and prepare necessary data and interpret the U.S. Tax Cuts and Jobs Act of 2017 and any additional guidance issued by the IRS or other standard-setting bodies, we may make adjustments to the provisional amounts that could materially affect our financial position and results of operations as well as our effective tax rate in the period in which the adjustments are made.

We have identified material weaknesses in our internal control over financial reporting which could, if not remediated, result in material misstatements in our financial statements.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) under the Exchange Act. As disclosed in Item 9A, management identified certain material weaknesses in our internal control over financial reporting during 2016 that remained unremediated as of December 31, 2016. Although we undertook efforts to remediate these material weaknesses throughout 2017, we were unsuccessful in fully remediating them. These material weaknesses in internal control resulted in errors to our previously reported financial statements which were corrected through the revision of our annual and interim financial statements in 2016 and 2017 as described in Item 9A. Because of these material weaknesses and the additional material weakness identified in 2017, our management concluded that we did not maintain effective internal control over financial reporting as of December 31, 2017. With the oversight of senior management and the audit committee, we have begun taking steps to remediate the underlying cause of these material weaknesses and improve the design of controls. Until remediated, these material weaknesses could result in future errors to our financial statements.

While we expect to take the measures necessary to address the underlying causes of these material weaknesses, we cannot at this time estimate how long it will take and our efforts may not prove to be successful in remediating these material weaknesses. While we have not incurred and do not expect to incur material expenses specifically related to the remediation of these material weaknesses, actual expenses may exceed our current estimates and overall costs of compiling the system and processing documentation necessary to assess the effectiveness of our internal control over financial reporting may be material.

If we are unable to successfully remediate these material weaknesses in our internal control over financial reporting, or if we identify any additional material weaknesses that may exist, the accuracy and timing of our financial reporting may be adversely affected. On August 10, 2017, we filed with the SEC a notification of late filing informing the SEC that due to the identification of a required revision in previously issued financial statements, we could not timely file our Quarterly Report on Form 10-Q for the quarter ended June 30, 2017. On March 19, 2018, we filed with the SEC a notification of late filing informing the SEC that we could not timely file our Annual Report on Form 10-K for the fiscal year ended December 31, 2017, because the Company required additional time to complete its review procedures, primarily with respect to its accounting for income taxes and financial reporting. Our failure to file periodic and certain current reports with the SEC in a timely manner, among other things, could in the future preclude or delay us from being eligible to use a short form registration statement on Form S-3 to register certain sales of our common stock by us or our stockholders and could even result in the suspension of trading of our common stock on the Nasdaq Stock Market LLC ("Nasdaq") and/or the revocation of our registration by the SEC. Any of these consequences may have a material adverse effect on our business and results of operations.

Risks Related to Our Capitalization

Our indebtedness could adversely affect our business, prospects, financial condition, results of operations, or cash flows.

As of December 31, 2017, we had approximately \$828.6 million of indebtedness outstanding and an additional \$97.6 million available for borrowing under our debt agreements. Our high degree of leverage could have important consequences, including:

- increasing our vulnerability to adverse economic, industry, or competitive developments;
- requiring a substantial portion of our cash flows from operations to be dedicated to the payment of principal and interest on our indebtedness, therefore reducing our ability to use our cash flows to fund operations, capital expenditures, and future business opportunities;
- exposing us to the risk of increased interest rates, which could cause our debt service obligations to increase significantly;
- making it more difficult for us to satisfy our obligations with respect to our indebtedness, and any failure to comply with the obligations of any of our debt instruments, including restrictive covenants and borrowing conditions, could result in an event of default under our debt agreements;
- restricting us from making strategic acquisitions or causing us to make non-strategic divestitures;
- limiting our ability to obtain additional financing for working capital, capital expenditures, product and service development, debt service requirements, acquisitions, and general corporate or other purposes; and
- limiting our flexibility in planning for, or reacting to, changes in our business or market conditions and placing us at a competitive disadvantage compared to our competitors who are less highly leveraged and who, therefore, may be able to take advantage of opportunities that our leverage may prevent us from exploiting.

If any one of these events were to occur, our business, prospects, financial condition, results of operations, or cash flows could be materially and adversely affected. For more information regarding our indebtedness, please see "Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources."

Despite our high indebtedness level, we will still be able to incur substantial additional amounts of debt, which could further exacerbate the risks associated with our substantial indebtedness.

We and our subsidiaries may be able to incur substantial additional indebtedness in the future. Although our debt agreements contain restrictions on the incurrence of additional indebtedness, these restrictions are subject to a number of significant qualifications and exceptions, and under certain circumstances, the amount of indebtedness that could be incurred in compliance with these restrictions could be substantial. If new debt is added to our and our subsidiaries' debt levels, the related risks that we now face could increase.

Our debt agreements contain restrictions that will limit our flexibility in operating our business.

Our debt agreements contain various incurrence covenants that limit our ability to engage in specified types of transactions. These incurrence covenants will limit our ability to, among other things:

- incur additional indebtedness or issue certain preferred equity;
- pay dividends on, repurchase, or make distributions in respect of our capital stock, prepay, redeem, or repurchase certain debt or make other restricted payments;
- make certain investments and acquisitions;
- create certain liens;
- enter into agreements restricting our subsidiaries' ability to pay dividends to us;
- consolidate, merge, sell or otherwise dispose of all or substantially all of our assets;
- · alter our existing businesses; and
- enter into certain transactions with our affiliates.

In addition, the incurrence covenants in our debt agreements require us to meet specified financial ratios and satisfy other financial condition tests. Our ability to meet those financial ratios and tests will depend on our ongoing financial and operating performance, which, in turn, will be subject to economic conditions and to financial, market, and competitive factors, many of which are beyond our control. A breach of any of these covenants could result in a default under one or more of our debt agreements and permit our lenders to cease making loans to us under our credit facility (as defined below). Furthermore, if we were unable to repay the amounts due and payable under our secured debt agreements, our secured lenders could proceed against the collateral granted to them to secure our borrowings. Such actions by the lenders could also cause cross defaults under our other debt agreements.

We may not be able to generate sufficient cash to service all of our indebtedness, and we may not be able to refinance our debt obligations as they mature.

Our ability to make scheduled payments on or to refinance our debt obligations depends on our financial condition and operating performance, which is subject to prevailing economic and competitive conditions and to certain financial, business and other factors beyond our control. We may not be able to maintain a level of cash flows from operating activities sufficient to permit us to pay the principal, premium, if any, and interest on our indebtedness.

We regularly review our capital structure, various financing alternatives and conditions in the debt and equity markets in order to opportunistically enhance our capital structure. In connection therewith, we may seek to refinance or retire existing indebtedness, incur new or additional indebtedness or issue equity or equity-linked securities, in each case, depending on market and other conditions. As our debt obligations mature or if our cash flows and capital resources are insufficient to fund our debt service obligations, we may be forced to reduce or delay investments and capital expenditures, or to sell assets, seek additional capital, or restructure or refinance our indebtedness. Our ability to restructure or refinance our debt will depend on the condition of the capital markets and our financial condition at such time. Any refinancing of our debt could be at higher interest rates and may require us to comply with more onerous covenants, which could further restrict our business operations. The terms of our existing or future debt instruments may restrict us from adopting some of these alternatives. In addition, any failure to make payments of interest and principal on our outstanding indebtedness on a timely basis would likely result in a reduction of our credit rating, which could harm our ability to incur additional indebtedness. These alternative measures may not be successful and may not permit us to meet our scheduled debt service obligations.

We have international operations that are subject to foreign economic uncertainties and foreign currency fluctuation.

Approximately 29% of our revenues are denominated in foreign currencies, which may result in additional risk of fluctuating currency values and exchange rates and controls on currency exchange. Changes in the value of foreign currencies could increase our U.S. dollar costs for, or reduce our U.S. dollar revenues from, our foreign operations. Any increased costs or reduced revenues as a result of foreign currency fluctuations could affect our profits. In 2017, the U.S. dollar weakened compared to the euro, which favorably affected our revenue by \$2.0 million. In contrast, a strengthening of the U.S. dollar may adversely affect our business, prospects, financial condition, results of operations, or cash flows.

The price of our common stock may be volatile.

The market price of our common stock could be subject to significant fluctuations and may decline. Among the factors that could affect our stock price are:

- macro or micro-economic factors;
- our operating and financial performance and prospects;
- quarterly variations in the rate of growth of our financial indicators, such as earnings per share, net income and revenues;
- changes in revenue or earnings estimates or publication of research reports by analysts;
- · loss of any member of our senior management team;
- speculation in the press or investment community;
- strategic actions by us or our competitors, such as acquisitions or restructuring;
- sales of our common stock by stockholders;
- · general market conditions;
- · domestic and international economic, legal and regulatory factors unrelated to our performance;
- loss of a major customer; and
- the declaration and payment of a dividend.

The stock markets in general have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. These broad market fluctuations may adversely affect the trading price of our common stock. In addition, due to the market capitalization of our stock, our stock tends to be more volatile than large capitalization stocks that comprise the Dow Jones Industrial Average or Standard and Poor's 500 Index.

Provisions in our charter documents and Delaware law may inhibit a takeover, which could adversely affect the value of our common stock.

Our certificate of incorporation and bylaws, as well as Delaware corporate law, contain provisions that could delay or prevent a change of control or changes in our management that a stockholder might consider favorable and may prevent shareholders from receiving a takeover premium for their shares. These provisions include, for example, a classified board of directors and the authorization of our board of directors to issue up to five million preferred shares without a stockholder vote. In addition, our certificate of incorporation provides that stockholders may not call a special meeting.

We are a Delaware corporation subject to the provisions of Section 203 of the Delaware General Corporation Law, an anti-takeover law. Generally, this statute prohibits a publicly-held Delaware corporation from engaging in a business combination with an interested stockholder for a period of three years after the date of the transaction in which such person became an interested stockholder, unless the business combination is approved in a prescribed manner. A business combination includes a merger, asset sale or other transaction resulting in a financial benefit to the stockholder. We anticipate that the provisions of Section 203 may encourage parties interested in acquiring us to negotiate in advance with our board of directors, because the stockholder approval requirement would be avoided if a majority of the directors then in office approve either the business combination or the transaction that results in the stockholder becoming an interested stockholder.

These provisions apply even if the offer may be considered beneficial by some of our stockholders. If a change of control or change in management is delayed or prevented, the market price of our common stock could decline.

Risks Related to Acquisitions and Divestitures

Acquisitions may constitute an important part of our future growth strategy.

Acquiring businesses that complement or expand our operations has been and may continue to be a key element of our business strategy. We regularly evaluate acquisition transactions, sign non-disclosure agreements, and participate in processes with respect to acquisitions, some of which may be material to us. We cannot assure you that we will be successful in identifying attractive acquisition candidates or completing acquisitions on favorable terms in the future. In addition, we may borrow funds or issue equity to acquire other businesses, increasing our interest expense and debt levels or diluting our existing stockholders' ownership interest in us. Our inability to acquire businesses, or to operate them profitably once acquired, could have a material adverse effect on our business, financial position, results of operations and cash flows. Our borrowing agreements limit our ability to complete acquisitions without prior approval of our lenders. Although our previous acquisitions have been successful from a business perspective, we have had difficulty with purchase accounting and other aspects related to the accounting for our acquisitions. Future acquisitions are likely to exacerbate these issues and make remediation of our material weaknesses more challenging. See also the Risk Factor "We have identified material weaknesses in our internal control over financial reporting which could, if not remediated, result in material misstatements in our financial statements."

We may not realize all of the anticipated benefits from completed acquisitions or any future strategic portfolio acquisition, or those benefits may take longer to realize than expected.

We either may not realize all of the anticipated benefits from completed acquisitions or any future strategic portfolio acquisition, or it may take longer to realize such benefits. Achieving those benefits depends on the timely, efficient and successful execution of a number of post-acquisition events, including integrating the acquired businesses into our existing businesses. The integration process may disrupt the businesses and, if implemented ineffectively, would preclude the realization of the full anticipated benefits. The difficulties of combining the operations of acquired companies include, among others:

- the diversion of management's attention to integration matters;
- difficulties in the integration of operations and systems, including, without limitation, the complexities associated with managing the expanded operations of a significantly larger and more complex company, addressing possible differences in corporate cultures and management philosophies and the challenge of integrating complex systems, technology, networks and other assets of each of the acquired companies;
- difficulties in achieving anticipated cost savings, synergies, business opportunities and growth prospects from combining the acquired businesses with our own;
- the inability to implement effective internal controls, procedures and policies for acquired businesses as required by the Sarbanes-Oxley Act of 2002 within the time periods prescribed thereby;
- the exposure to potential unknown liabilities and unforeseen increased expenses or delays associated with acquired businesses;
- challenges in keeping existing customers and obtaining new customers;
- · challenges in attracting and retaining key personnel; and
- the disruption of, or the loss of momentum in, ongoing operations or inconsistencies in standards, controls, procedures and policies.

Many of these factors will be outside of our control and any one of them could result in increased costs, decreases in the amount of expected revenues and diversion of management's time and energy, which could materially impact our business, prospects, financial condition, results of operations, or cash flows.

Additionally, we incurred a significant amount of debt in connection with our acquisitions in the past few years. Finally, in relation to such acquisitions, we have significantly higher amounts of intangible assets, including goodwill. These intangible assets will be subject to impairment testing, and we could incur a significant impact to our financial statements in the form of an impairment if assumptions and expectations related to our acquisitions are not realized.

We have and will continue to incur expenses related to our acquisitions and the integration of our acquired companies.

We have and will continue to incur expenses related to our acquisitions and the integration of our acquired companies. While we have assumed that a certain level of expenses will be incurred, there are many factors beyond our control that could affect the total amount or the timing of the integration expenses. Moreover, many of the expenses that will be incurred are, by their nature, difficult to estimate accurately. These integration expenses may result in us taking charges against earnings, and the amount of any future charges are uncertain at present.

We may be unable to realize the anticipated cost or capital expenditure savings or may incur additional and/or unexpected costs in order to realize them.

There can be no assurance that we will be able to realize the anticipated cost or capital expenditure savings from our acquisitions in the anticipated amounts or within the anticipated timeframes or at all. With respect to each acquisition, we anticipate implementing a series of cost savings initiatives that we expect to result in recurring, annual run-rate cost savings. These or any other cost or capital expenditure savings that we realize may differ materially from our estimates. We cannot provide assurances that these anticipated savings will be achieved or that our programs and improvements will be completed as anticipated or at all. In addition, any cost savings that we realize may be offset, in whole or in part, by reductions in revenues or through increases in other expenses.

Our projections and assumptions related to cost savings are based on our current estimates, but they involve risks, uncertainties, projections and other factors that may cause actual results, performance or achievements to be materially different from any future results, performance or achievements, express or implied. Neither our independent registered public accounting firm nor any other independent auditors, have examined, compiled or performed any procedures with respect to these projections, nor have they expressed any opinion, or any other form of assurance on such information or their achievability. Assumptions relating to our projections involve subjective decisions and judgments with respect to, among other things, the estimated impact of certain operational adjustments, including Six Sigma/OpEx optimization programs, product grouping and rationalization, facility rationalization and shared services cost savings and other cost and savings adjustments, as well as future economic, competitive, industry and market conditions and future business decisions, all of which are inherently uncertain and may be beyond the control of our management.

Failure to realize the expected costs savings and operating synergies related to our acquisitions could result in increased costs and have an adverse effect on our business, prospects, financial condition, results of operations, or cash flows.

Our future results could suffer if we cannot effectively manage our expanded operations, which are significantly larger and more complex following our acquisitions.

As a result of our acquisitions over the past few years, the size and scope of our operations were significantly increased. Our future success depends, in part, upon our ability to manage the expanded operations, which will pose challenges for management, including challenges related to the management and monitoring of new operations and associated increased costs and complexity. We may not have the expertise, experience and resources to pursue or successfully operate all of our businesses at once. The administration of our businesses requires implementation and oversight of appropriate operations, management, compliance and financial reporting systems and controls. We may experience difficulties in effectively implementing and overseeing these and other systems. Such implementation and initial oversight will require the focused attention of our management team, including a significant commitment of its time and resources. The need for management to focus on these matters could have a material and adverse impact on our revenues and operating results. There can be no assurance that we will be successful or that we will realize any operating efficiencies, cost savings, revenue enhancements or other benefits currently anticipated from our acquisitions.

The indemnification provisions of acquisition agreements by which we have acquired companies may not fully protect us and may result in unexpected liabilities.

Certain of the acquisition agreements from past acquisitions require the former owners to indemnify us against certain liabilities related to the operation of each of their companies before we acquired it. In most of these agreements, however, the liability of the former owners is limited in amount and duration and certain former owners may not be able to meet their indemnification responsibilities. These indemnification provisions may not fully protect us, and as a result we may face unexpected liabilities that adversely affect our profitability and financial position.

Our participation in joint ventures could expose us to additional risks from time to time.

We currently have a 49% investment in a Chinese joint venture and may participate in additional joint ventures from time to time. Our participation in joint ventures is subject to risks that may not be present with other methods of ownership, including:

• our joint venture partners could have investment and financing goals that are not consistent with our objectives, including the timing, terms and strategies for any investments, and what levels of debt to incur or carry;

- we could experience an impasse on certain decisions because we do not have sole decision-making authority, which could require us to expend additional resources on resolving such impasses or potential disputes, including litigation or arbitration;
- · our ability to transfer our interest in a joint venture to a third party may be restricted and the market for our interest may be limited;
- our joint venture partners might become bankrupt, fail to fund their share of required capital contributions or fail to fulfill their obligations as a joint venture partner, which may require us to infuse our own capital into the venture on behalf of the partner despite other competing uses for such capital; and
- · our joint venture partners may have competing interests in our markets that could create conflict of interest issues.

Any divestitures and discontinued operations could negatively impact our business, and retained liabilities from businesses that we may sell could adversely affect our financial results.

As part of our portfolio management process, we review our operations for businesses which may no longer be aligned with our strategic initiatives and long-term objectives. Divestitures pose risks and challenges that could negatively impact our business, including required separation or carve-out activities and costs, disputes with buyers or potential impairment charges. We may also dispose of a business at a price or on terms that are less than we had previously anticipated. After reaching an agreement with a buyer for the disposition of a business, we are also subject to satisfaction of pre-closing conditions, as well as necessary regulatory and governmental approvals on acceptable terms, which may prevent us from completing a transaction. Dispositions may also involve continued financial involvement, as we may be required to retain responsibility for, or agree to indemnify buyers against contingent liabilities related to businesses sold, such as lawsuits, tax liabilities, lease payments, product liability claims or environmental matters. Under these types of arrangements, performance by the divested businesses or other conditions outside of our control could affect future financial results.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

As of March 1, 2018, we owned or leased 44 facilities in a total of six countries, which includes a 49% equity interest in a manufacturing joint venture in China. Utilization of these sites may vary with product mix and economic, seasonal, and other business conditions. Our plants generally have sufficient capacity for existing needs and expected near-term growth. These plants are generally well maintained, in good operating condition, and suitable and adequate for their use. The following table lists the locations of our facilities by segment.

Autocam Precision Components Group

Location	General Character	Country	Owned or Leased
Dowagiac, Michigan	Plant	U.S.A.	Owned
Kentwood, Michigan	Plant 1	U.S.A.	Leased
Kentwood, Michigan	Plant 2	U.S.A.	Leased
Kentwood, Michigan	Plant 3, Warehouse	U.S.A.	Leased
Kentwood, Michigan	Office	U.S.A.	Owned
Marshall, Michigan	Plant 1	U.S.A.	Leased
Marshall, Michigan	Plant 2	U.S.A.	Leased
Wellington, Ohio	Plant 1	U.S.A.	Leased
Wellington, Ohio	Plant 2	U.S.A.	Leased
Kamienna Gora	Plant	Poland	Owned
Marnaz	Plant	France	Owned
Wuxi	Plant	China	Leased
Juarez	Plant	Mexico	Leased
Boituva	Plant	Brazil	Leased
Campinas	Office	Brazil	Leased
Sao Joao da Boa Vista	Plant 1	Brazil	Leased
Sao Joao da Boa Vista	Plant 2	Brazil	Leased

Precision Engineered Products Group

Location	General Character	Country	Owned or Leased
Algonquin, Illinois	Plant	U.S.A.	Owned
Attleboro, Massachusetts	Plant 1	U.S.A.	Owned
Attleboro, Massachusetts	Plant 2	U.S.A.	Leased
Attleboro, Massachusetts	Plant 3	U.S.A.	Owned
Attleboro, Massachusetts	Office	U.S.A.	Leased
Aurora, Illinois	Plant	U.S.A.	Leased
Bridgeport, Connecticut	Plant 1	U.S.A.	Owned
Bridgeport, Connecticut	Plant 2	U.S.A.	Owned
East Providence, Rhode Island	Plant	U.S.A.	Leased
Fairfield, Ohio	Plant	U.S.A.	Owned
Franklin, Massachusetts	Plant	U.S.A.	Leased
Hatfield, Pennsylvania	Plant	U.S.A.	Leased
Hingham, Massachusetts	Plant	U.S.A.	Leased
Irvine, California	Plant	U.S.A.	Leased
Lubbock, Texas	Plant	U.S.A.	Owned
Mansfield, Massachusetts	Plant	U.S.A.	Leased
Mansfield, Massachusetts	Warehouse	U.S.A.	Leased
North Attleboro, Massachusetts	Plant	U.S.A.	Owned
Palmer, Massachusetts	Plant	U.S.A.	Leased
Wallingford, Connecticut	Plant	U.S.A.	Leased
Warsaw, Indiana	Plant	U.S.A.	Leased
Vandalia, Ohio	Plant	U.S.A.	Leased
Foshan City	Plant	China	Leased
Mexico City	Plant	Mexico	Owned

Joint Venture

			Owned or Leased
Location	General Character	Country	by Joint Venture
Wiixi	Plant	China	Leased

In addition to these manufacturing plants, we lease an office building in Johnson City, Tennessee, which currently serves as our corporate office. We are in the process of moving our global headquarters to a leased office building in Charlotte, North Carolina. We expect to complete this move to Charlotte in the first half of 2018.

Item 3. Legal Proceedings

Prior to the Autocam acquisition, Autocam's Brazilian subsidiary received notification from the Brazilian tax authorities regarding ICMS (State Value Added Tax or VAT) tax credits claimed on intermediary materials (tooling and perishable items) used in the manufacturing process. The Brazilian tax authority notification disallowed state ICMS credits claimed on intermediary materials based on the argument that these items are not intrinsically related to the manufacturing processes. Autocam Brazil filed an administrative defense with the Brazilian tax authority arguing, among other matters, that it should qualify for ICMS tax credit, contending that the intermediary materials are directly related to the manufacturing process.

We believe that we have substantial legal and factual defenses, and we plan to defend our interests in this matter vigorously. While we believe a loss is not probable, we estimate the range of possible losses related to this assessment is from \$0 to \$6.0 million. No amount was accrued at December 31, 2017, for this matter. There was no material change in the status of this matter during 2017.

We are entitled to indemnification from the former shareholders of Autocam, subject to the limitations and procedures set forth in the agreement and plan of merger relating to the Autocam acquisition. Management believes the indemnification would include amounts owed for the tax, interest and penalties related to this matter.

All other legal proceedings are of an ordinary and routine nature and are incidental to our operations. Management believes that such proceedings should not, individually or in the aggregate, have a material adverse effect on our business, financial condition, results of operations, or cash flows. In making that determination, we analyze the facts and circumstances of each case at least quarterly in consultation with our attorneys and determine a range of reasonably possible outcomes. The procedures performed include reviewing attorney and plaintiff correspondence, reviewing any filings made and discussing the facts of the case with local management and legal counsel. We have not recognized any material loss contingencies at December 31, 2017, or at December 31, 2016.

Item 4. Mine Safety Disclosures

Not applicable.

Part II

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

Our common stock is traded on Nasdaq under the trading symbol "NNBR." As of March 19, 2018, there were approximately 5,557 beneficial owners of record of our common stock, and the closing per share stock price as reported by Nasdaq was \$24.80.

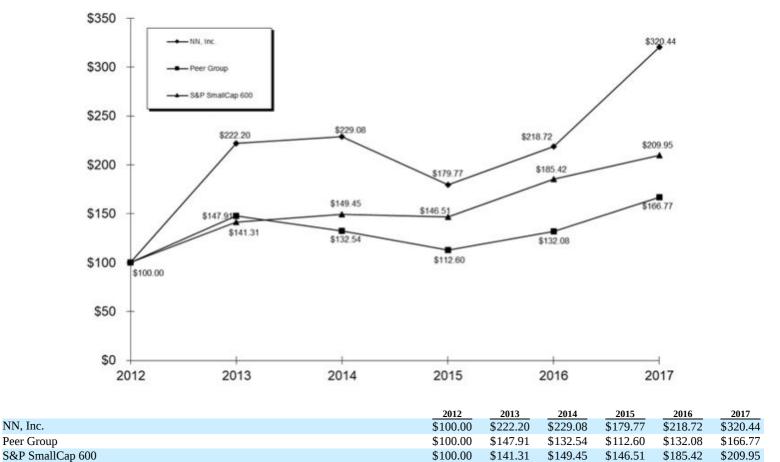
The following table sets forth the high and low closing sales prices of the common stock, as reported by Nasdaq for our two most recent fiscal years.

	Clos	se Price
	High	Low
<u>2017</u>		
First Quarter	\$25.20	\$17.60
Second Quarter	30.80	24.95
Third Quarter	30.30	24.80
Fourth Quarter	32.40	25.75
2016		
First Quarter	\$14.90	\$10.58
Second Quarter	19.16	12.77
Third Quarter	18.81	13.48
Fourth Quarter	20.21	13.65

The following graph and table compare the cumulative total shareholder return on our common stock with the cumulative total shareholder return of: (i) the S&P SmallCap 600 Index and (ii) a customized peer group, for the period from December 31, 2012, to December 31, 2017. The customized peer group consists of the following companies, which we believe are in similar lines of business: Actuant Corporation, Altra Industrial Motion Corp., Ametek Inc., CIRCOR International, Inc., Colfax Corporation, Crane, Kaman Corporation, Park-Ohio Holdings Corp. and Worthington Industries, Inc. (collectively, the "Peer Group"). The following graph and table assume that a \$100 investment was made at the close of trading on December 31, 2012, in our common stock and in the S&P SmallCap Index and the Peer Group. We cannot assure you that the performance of our common stock will continue in the future with the same or similar trend depicted on the graph.

Comparison of Five-Year Cumulative Total Return

NN Inc., Peer Group, and S&P SmallCap 600 Index (Performance results through 12/31/17)



Source: Value Line Publishing LLC

The declaration and payment of dividends are subject to the sole discretion of our Board of Directors and depend upon our profitability, financial condition, capital needs, credit agreement restrictions, future prospects and other factors deemed relevant by the Board of Directors. The following table sets forth the dividends per share paid during the last two fiscal years.

2017	Di	vidend
First Quarter	\$	0.07
Second Quarter	\$	0.07
Third Quarter	\$	0.07
Fourth Quarter	\$	0.07
2016	Di	vidend
2016 First Quarter	_	vidend 0.07
2016 First Quarter Second Quarter	_	
First Quarter	\$	0.07

See Part III, Item 12 – "Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters" of this Annual Report on Form 10-K for information required by Item 201 (d) of Regulation S-K.

Item 6. Selected Financial Data

The following selected financial data has been derived from our audited financial statements. The selected financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Item 7 and the audited Consolidated Financial Statements, including the Notes thereto, in Item 8.

	Year Ended December 31,									
		2017		2016 (1)		2015 (1)	2	014 (2)	2	013 (2)
Statement of Operations Data:										
Net sales	\$	619,793	\$	584,954	\$	405,443	\$2	10,575	\$1	13,747
Cost of sales (exclusive of depreciation and amortization)		459,080		428,843		320,632	1	69,263		90,566
Income (loss) from operations		33,114		34,779		58		(3,776)		965
Income (loss) from continuing operations		25,369		(9,490)		(24,375)	((12,788)		(408)
Income from discontinued operations, net of tax		137,688		16,153		17,889		21,005		17,586
Income (loss) from continuing operations per share, basic	\$	0.92	\$	(0.35)	\$	(1.15)	\$	(0.71)	\$	(0.02)
Income (loss) from continuing operations per share, diluted	\$	0.91	\$	(0.35)	\$	(1.15)	\$	(0.71)	\$	(0.02)
Dividends declared per common share	\$	0.28	\$	0.28	\$	0.28	\$	0.28	\$	0.18

	As of December 31,						
	2017	2016 (1)	2015 (1)	2014 (2)	2013 (2)		
Balance Sheet Data:			· <u> </u>				
Current assets	\$ 477,280	\$ 282,328	\$ 283,910	\$245,131	\$125,674		
Current liabilities	108,421	140,241	132,491	138,485	69,384		
Total assets	1,475,003	1,358,274	1,388,337	702,892	260,752		
Long-term obligations	792,499	788,953	802,011	327,759	24,350		
Stockholders' equity	486,104	309,391	312,431	172,989	152,760		

- (1) Includes the reclassification of discontinued operations and the effects of prior periods' revisions as disclosed in Note 2 and Note 21, respectively, of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report.
- (2) Includes the reclassification of discontinued operations as disclosed in Note 2 of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report. Net sales of discontinued operations were \$278.0 million and \$259.5 million in 2014 and 2013, respectively. Cost of sales of discontinued operations was \$215.6 million and \$204.6 million in 2014 and 2013, respectively. Income from operations attributable to discontinued operations was \$31.5 million and \$26.9 million in 2014 and 2013, respectively. Current assets of discontinued operations were \$106.3 million and \$92.6 million as of December 31, 2014 and 2013, respectively. Current liabilities of discontinued operations were \$54.9 million and \$48.4 million as of December 31, 2014 and 2013, respectively. Total assets of discontinued operations were \$214.3 million and \$198.0 million as of December 31, 2014 and 2013, respectively.

On August 17, 2017, we completed the sale of our PBC Business to Tsubaki for a base purchase price of \$375.0 million in cash, subject to certain adjustments. After working capital and other closing adjustments, the final cash purchase price was approximately \$388.5 million. We recorded an after-tax gain on sale of \$127.7 million, which is included in the "Income from discontinued operations, net of tax" line in the table above. The PBC Business included all our facilities that were engaged in the production of precision steel balls, steel rollers, and metal retainers and automotive specialty products used primarily in the bearing industry. The sale of the PBC Business furthers management's long-term strategy to build a diversified industrial business with a comprehensive geographic footprint in attractive high-growth market segments. The PBC Business represented all of the PBC reportable segment disclosed in our historical financial statements. The operating results of PBC are classified as discontinued operations. The presentation of discontinued operations includes revenues and expenses of the discontinued operations and gain on the disposition of the business, net of tax, as one line item. Note 2 of the Notes to Consolidated Financial Statements included in Item 8 provides a summary of the components of income from discontinued operations for the years ended December 31, 2017, 2016, and 2015.

On October 2, 2017, we acquired 100% of the membership interests of Vandalia for approximately \$38.7 million in cash, subject to certain post-closing adjustments. Vandalia is a supplier of precision manufactured medical instruments and orthopedic implants with locations in Ohio and Pennsylvania. Operating results of Vandalia after the acquisition date are reported in the Precision Engineered Products Group and represented a \$0.5 million loss from operations in 2017. Vandalia contributed \$6.7 million to net sales of our Precision Engineered Products Group in 2017.

The year ended December 31, 2015 was significantly impacted by the PEP Acquisition and to a lesser extent the Caprock acquisition completed in 2015, as well as the issuance of shares of our common stock. With these acquisitions, we acquired current assets and total assets of \$71.7 million and \$747.5 million, respectively, and assumed current liabilities and total liabilities of \$22.0 million and \$118.9 million, respectively. Beginning October 20, 2015, our Precision Engineered Products Group includes the results of the PEP Acquisition. Since the date of the PEP Acquisition, 2015 sales revenue of \$40.7 million and net loss from operations of \$5.1 million has been included in our Precision Engineered Products Group. The PEP Acquisition on October 19, 2015, was funded with new debt. See "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Note 12 of the Notes to Consolidated Financial Statements for more information about our debt instruments.

On July 1, 2015 we closed a registered follow-on offering of public common stock. We sold approximately 7.6 million shares of common stock at a public offering price of \$24.00 per share. The net proceeds received from the offering, after deducting underwriter discounts, commissions and offering expenses, were approximately \$173.1 million. Of these proceeds, \$148.7 million was used for repayment of principal and interest on existing debt.

The year ended December 31, 2014 was significantly impacted by the Autocam acquisition. In addition, we discontinued use of certain Autocam trade names and incurred a \$0.9 million impairment charge. The balance sheet as of December 31, 2014, includes the assets acquired and liabilities assumed during 2014. With the Autocam acquisition, we acquired current assets and total assets of \$87.3 million and \$407.8 million, respectively, and assumed current liabilities and total liabilities of \$41.3 million and \$119.3 million, respectively.

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

The following discussion should be read in conjunction with, and is qualified in its entirety by, the Consolidated Financial Statements and the Notes thereto and Selected Financial Data included elsewhere in this Annual Report on Form 10-K. Historical operating results and percentage relationships among any amounts included in the Consolidated Financial Statements are not necessarily indicative of trends in operating results for any future period. Unless otherwise noted herein, all amounts are in thousands, except per share numbers.

Overview and Management Focus

Our strategy and management focus is based upon the following long-term objectives

- · Organic and acquisitive growth within all our segments;
- Sales growth in adjacent markets;
- Sales growth through acquisitions; and
- Global expansion of our manufacturing base to better address the global requirements of our customers.

Management generally focuses on these trends and relevant market indicators

- · Global industrial growth and economics;
- Residential and non-residential construction rates;
- Global automotive production rates;
- Surgery rates and U.S. healthcare spending;
- Costs subject to the global inflationary environment, including, but not limited to:
 - · Raw materials;
 - Wages and benefits, including health care costs;
 - · Regulatory compliance; and
 - Energy;

- Trends related to the geographic migration of competitive manufacturing;
- · Regulatory environment for United States public companies and manufacturing companies;
- Currency and exchange rate movements and trends;
- Interest rate levels and expectations.
- Changes in tariff regulations, including, but not limited to, the Trump Administration's March 8, 2018, order that will impose an import tariff of 25% on steel.

Management generally focuses on the following key indicators of operating performance

- · Sales growth;
- Cost of sales;
- Selling, general and administrative expense;
- Earnings before interest, taxes, depreciation and amortization;
- Income from operations and adjusted income from operations;
- Net income and adjusted net income;
- Cash flow from operations and capital spending;
- Customer service reliability;
- · External and internal quality indicators; and
- · Employee development.

Critical Accounting Policies

Our significant accounting policies, including the assumptions and judgment underlying them, are disclosed in Note 1 of the Notes to Consolidated Financial Statements. These policies have been consistently applied in all material respects and address such matters as revenue recognition, inventory valuation and asset impairment recognition. Due to the estimation processes involved, management considers the following summarized accounting policies and their application to be critical to understanding our business operations, financial condition and results of operations. We cannot assure you that actual results will not significantly differ from the estimates used in these critical accounting policies.

Business Combinations

We allocate the total purchase price of tangible and intangible assets acquired and liabilities assumed based on their estimated fair values as of the business combination date, with the excess purchase price recorded as goodwill. The purchase price allocation process required us to use significant estimates and assumptions, including fair value estimates, as of the business combination date. Although we believe the assumptions and estimates we have made are reasonable and appropriate, they are based in part on historical experience and information obtained from management of the acquired company. Our assumptions and estimates are also partially based on valuation models that incorporate projections of expected future cash flows and operating plans and are inherently uncertain. Valuations are performed by management or third-party valuation specialists under management's supervision. In determining the fair value of assets acquired and liabilities assumed in business combinations, as appropriate, we may use one of the following recognized valuation methods: the income approach (including discounted cash flows from relief from royalty and excess earnings model), the market approach and/or the replacement cost approach.

Examples of significant estimates used to value certain intangible assets acquired include but are not limited to:

- sales volume, pricing and future cash flows of the business overall;
- future expected cash flows from customer relationships, and other identifiable intangible assets, including future price levels, rates of increase in revenue and appropriate attrition rate;

- the acquired company's brand and competitive position, royalty rate quantum, as well as assumptions about the period of time the acquired brand will continue to benefit to the combined company's product portfolio; and
- cost of capital, risk-adjusted discount rates and income tax rates.

Different assumptions regarding projected performance and other factors associated with the acquired assets may affect the amount recorded under each type of asset and liability. The valuations of property plant and equipment, intangibles assets, goodwill and deferred income tax liabilities depend heavily on assumptions. Subsequent assessment could result in future impairment charges. We refine these estimates over a measurement period not to exceed one year to reflect new information obtained surrounding facts and circumstances existing at acquisition date.

Goodwill and Other Indefinite Lived Intangible Assets

Goodwill is tested for impairment on an annual basis in the fourth quarter and between annual tests if a triggering event occurs. The impairment analysis is performed at the reporting unit level. We have the option to make a qualitative assessment of whether it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount before applying the two-step goodwill impairment test. If we conclude that it is more likely than not that the fair value of a reporting unit exceeds its carrying amount, then we do not need to perform the two-step impairment test. For the years ended, December 31, 2017 and 2016, we chose not to perform the qualitative assessment but rather performed only the first step in the annual impairment test. The decision to perform a qualitative assessment or proceed to the two-step impairment test is an annual decision made by management. Based on the results of performing the first step of the impairment test, the fair value of the reporting units exceeded the carrying value of the reporting units at December 31, 2017 and 2016.

If the qualitative assessment indicates it is more likely than not that the fair value is less than the carrying value, Generally Accepted Accounting Principles ("GAAP") prescribes a two-step process for testing for goodwill impairments. The first step is to determine if the carrying value of the reporting unit with goodwill is less than the related fair value of the reporting unit. We consider three main approaches to value (cost, market and income) the fair value of the reporting unit and market based multiples of earning and sales methods obtained from a grouping of comparable publicly trading companies. We believe this methodology of valuation is consistent with how market participants would value reporting units. The discount rate and market based multiples used are specifically developed for the unit tested regarding the level of risk and end markets served. Even though we do use other observable inputs (Level 2 inputs) the calculation of fair value for goodwill would be most consistent with Level 3 inputs.

If the carrying value of the reporting unit including goodwill is less than fair value of the reporting unit, the goodwill is not considered impaired. If the carrying value is greater than fair value then the potential for impairment of goodwill exists. The potential impairment is determined by allocating the fair value of the reporting unit among the assets and liabilities based on a purchase price allocation methodology as if the reporting unit was acquired in a business combination. The fair value of the goodwill is implied from this allocation and compared to the carrying value with an impairment loss recognized if the carrying value is greater than the implied fair value.

We base our fair value estimates, in large part, on management business plans and projected financial information which are subject to a high degree of management judgment and complexity. Actual results may differ from projections, and the differences may be material.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized. Provision has not been made for income taxes on unremitted earnings of foreign subsidiaries as these earnings are deemed to be permanently reinvested. We recognize income tax positions that meet the more likely than not threshold and accrue interest and potential penalties related to unrecognized income tax positions which are recorded as a component of the provision (benefit) for income taxes.

The calculation of tax assets, liabilities, and expenses under GAAP is largely dependent on management judgment of the current and future deductibility and utilization of taxable expenses and benefits using a more likely than not threshold. Specifically, the realization of deferred tax assets and the certainty of tax positions taken are largely dependent upon management weighting the current positive and negative evidence for recording tax benefits and expenses. Additionally, many of our positions are based on future estimates of

taxable income and deductibility of tax positions. Particularly, our assertion of permanent reinvestment of foreign undistributed earnings is largely based on management's future estimates of domestic and foreign cash flows and current strategic foreign investment plans. In the event that the actual outcome from future tax consequences differs from management estimates and assumptions or management plans and positions are amended, the resulting change to the provision for income taxes could have a material impact on the consolidated results of operations and financial position. (See Notes 1 and 11 of the Notes to Consolidated Financial Statements).

We did not record a U.S. deferred tax liability for the excess of the book basis over the tax basis of our investments in foreign subsidiaries to the extent the foreign earnings meet the indefinite reversal criteria. As of the year ended December 31, 2017, we consider the unremitted foreign earnings of our foreign subsidiaries to be reinvested indefinitely. We base this assertion on two factors. First, our intention to invest in foreign countries that are strategically important to our Autocam Precision Components Group and our customers. With the acquisitions completed in 2015 and 2014, we have expanded our domestic and international base of operations adding subsidiaries in Mexico and China, which will require more foreign investment. Second, we have sufficient access to funds in the U.S. through projected free cash flows and the availability of our credit facilities to fund currently anticipated domestic operational and investment needs.

Impairment of Long-Lived Assets

Long-lived tangible and intangible assets subject to amortization are tested for recoverability when changes in circumstances indicate the carrying value of these assets may not be recoverable. A test for recoverability is also performed when management has committed to a plan to dispose of a reporting unit or asset group. Assets to be held and used are tested for recoverability when indications of impairment are evident. Recoverability of a long-lived tangible or intangible asset is evaluated by comparing its carrying value to the future estimated undiscounted cash flows expected to be generated by the asset or asset group. If the asset is not recoverable, the asset is considered impaired and adjusted to fair value which is then depreciated or amortized over its remaining useful life. Assets to be disposed of are recorded at the lesser of carrying value or fair value less costs of disposal. In assessing potential impairment for long-lived assets, we consider forecasted financial performance based, in large part, on management business plans and projected financial information which are subject to a high degree of management judgment and complexity. Future adverse changes in market conditions or adverse operating results of the underlying assets could result in having to record additional impairment charges not previously recognized.

Critical Accounting Standards Not Yet Adopted

Revenue Recognition. In May 2014, the Financial Accounting Standards Board (the "FASB") issued a new standard that provides a single, comprehensive revenue recognition model for all contracts with customers and supersedes most of the existing revenue recognition requirements. Under the new guidance, revenue is recognized when a customer obtains control of promised goods or services in an amount that reflects the consideration the entity expects to receive in exchange for those goods or services. The standard also requires disclosure of the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. Factors affecting implementation include, but are not limited to, identifying all the contracts that exist and whether incidental obligations or marketing incentives included in some of those contracts are performance obligations. Additionally, we evaluated the transfer of control of certain consignment and tooling contracts which may impact the timing of revenue recognition under the new standard.

The standard is effective for us beginning January 1, 2018, with full retrospective or modified retrospective adoption permitted. We will adopt the standard utilizing the modified retrospective transition method. Under this transition method, we will recognize the cumulative effect of initially applying the new standard as an adjustment to the opening balance of retained earnings as of January 1, 2018, and will apply the new standard beginning with the most current period presented to contracts that are not completed at the date of initial application. We expect the adoption adjustment to be less than \$0.1 million, which represents the net profit on certain contracts that were accounted for on a consignment basis prior to the new guidance but do not meet the consignment criteria under the new standard.

We expect to utilize certain practical expedients allowed by the new standard. We intend to utilize the portfolio approach practical expedient to evaluate sales-related discounts on a portfolio basis to contracts with similar characteristics. We expect that the effect on our financial statements of applying the portfolio approach would not differ materially from applying the new standard to individual contracts.

While our ability to adopt the standard using the modified retrospective method depends on system readiness and completing our analysis of information necessary to present required footnote disclosures in the consolidated financial statements, the implementation project remains on schedule. We have completed a diagnostic accounting assessment, including an analysis of a representative sample of contracts, to identify areas that will be most significantly impacted by implementation of the new standard. We have also completed training to educate contract managers of the technical aspects of the new standard. We have documented our assessments related to the standard as well as system and procedural changes. Based on our analysis, we do not expect the new standard to have a significant impact on our financial condition, results of operations or cash flows.

Leases. In February 2016, the FASB issued ASU 2016-02, Leases. ASU 2016-02 creates Topic 842, Leases, in the ASC and supersedes ASC 840, Leases. Entities that hold numerous equipment and real estate leases, in particular those with numerous operating leases, will be most affected by the new guidance. The lease accounting standard is effective for NN beginning January 1, 2019, with modified retrospective adoption required and early adoption permitted. The amendments in ASU 2016-02 are expected to impact balance sheets at many companies by adding lease-related assets and liabilities. This may affect compliance with contractual agreements and loan covenants. We have performed inquiries within segment locations and compiled information on operating and capital leases. We are currently evaluating the impacts of the lease accounting standard on our financial position, results of operations, and related disclosures. Upon adoption, we expect to recognize a right-of-use asset and a lease liability for nearly all of our leases that are currently classified as operating leases and are therefore not recorded on the balance sheet. Note 14 in the Notes to Consolidated Financial Statements presents future minimum lease payments under leases that are currently accounted for as off-balance sheet operating leases. We are in the process of gathering information that will enable us to estimate the amounts of those assets and liabilities.

Results of Operations

Factors That May Influence Results of Operations

The following paragraphs describe factors that have influenced results of operations for 2017 that management believes are important to provide an understanding of the business and results of operations.

Discontinued Operations

On August 17, 2017, we completed the sale of our PBC Business to Tsubaki for a base purchase price of \$375.0 million in cash, subject to certain adjustments. After working capital and other closing adjustments, the final cash purchase price was approximately \$388.5 million. The PBC Business included all our facilities that were engaged in the production of precision steel balls, steel rollers, and metal retainers and automotive specialty products used primarily in the bearing industry. The PBC Business represented all of the PBC reportable segment disclosed in our historical financial statements. The sale of the PBC Business furthers management's long-term strategy to build a diversified industrial business with a comprehensive geographic footprint in attractive high-growth market segments.

We recorded an after-tax gain on sale of \$127.7 million, which is included in the "Income from discontinued operations, net of tax" line on the Consolidated Statements of Operations and Comprehensive Income (Loss) for the year ended December 31, 2017.

In accordance with ASC 205-20, *Presentation of Financial Statements – Discontinued Operations*, the operating results of PBC are classified as discontinued operations. The presentation of discontinued operations includes revenues and expenses of the discontinued operations and gain on the disposition of the business, net of tax, as one line item on the Consolidated Statements of Operations and Comprehensive Income. All Consolidated Statements of Operations and Comprehensive Income presented have been revised to reflect this presentation. Accordingly, results of the PBC Business have been excluded from continuing operations and segment results for all periods presented in the consolidated financial statements and the accompanying notes unless otherwise stated. Refer to Note 2 in the Notes to Consolidated Financial Statements for more information.

Debt Refinancing

On April 3, 2017, we redeemed our 10.25% senior notes due 2020 (the "Senior Notes") for \$281.6 million resulting in a loss on debt extinguishment of \$36.3 million, including \$31.6 million cash paid for the call premium and a \$4.7 million non-cash write-off of unamortized debt issuance costs. The Senior Notes were redeemed and the call premium was paid with the proceeds of a new \$300.0 million Incremental Term Loan that was added by amendment to our existing credit facility. The Incremental Term Loan matures on April 3, 2021, with payments of \$3.0 million due quarterly. The amendment also reduced our Senior Secured Revolver from \$143.0 million to \$100.0 million until such time as a leverage ratio covenant threshold has been met for four consecutive fiscal quarters. Upon satisfaction of the ratio threshold, our Senior Secured Revolver may be restored to \$143.0 million. In connection with the amendment, we paid \$6.5 million in debt issuance costs of which we recorded \$4.0 million as a direct reduction to the carrying amount of the associated debt and \$2.5 million as a loss on modification of the Senior Secured Term Loan. Debt issuance costs related to the amendment were paid with proceeds from the Incremental Term Loan. Also in connection with the amendment, we wrote off \$0.8 million of unamortized debt issuance costs related to the modification of the Senior Secured Revolver.

On November 24, 2017, we further amended our existing credit facility to reduce the interest rate by 50 basis points on the Senior Secured Term Loan and the Incremental Term Loan. The interest rate on the Senior Secured Term Loan decreased from the London Inter Bank Offering Rate ("LIBOR") plus 4.25% to LIBOR plus 3.75%. The interest rate on the Incremental Term loan decreased from LIBOR plus 3.75% to LIBOR plus 3.25%. In connection with the amendment, we paid \$2.1 million in debt issuance costs, which we recorded as a loss on modification of debt. Debt issuance costs related to the amendment were paid with cash on hand. Also in connection with the amendment, we wrote off \$0.3 million of unamortized debt issuance costs related to the modification.

Prior Periods' Financial Statement Revision

Financial statements for the years ended December 31, 2016 and 2015, as well as financial statements for the interim periods in 2017 and 2016, have been revised to correct for prior period errors primarily related to the (i) accounting for income and franchise taxes, (ii) accounting for the gain on the disposition of the PBC Business; (iii) accounting for indemnification assets related to a prior acquisition, (iv) accounting for foreign currency transactions, (v) accounting for the translation of foreign subsidiary assets and joint ventures, and (vi) other immaterial errors, including errors that had previously been adjusted for as out of period corrections in the period identified. The impact of these error corrections and the resulting revision is reflected throughout this Annual Report on 10-K.

Acquisitions

On October 2, 2017, we acquired 100% of the membership interests of Vandalia for approximately \$38.7 million in cash, subject to certain post-closing adjustments. Vandalia is a supplier of precision manufactured medical instruments and orthopedic implants with locations in Ohio and Pennsylvania. Operating results of Vandalia after the acquisition date are reported in our Precision Engineered Products Group. We incurred approximately \$0.3 million in acquisition related costs with respect to Vandalia during 2017.

On October 19, 2015, we completed the PEP Acquisition for \$619.6 million in cash. We financed the PEP Acquisition with new debt. On May 29, 2015, we completed the acquisition of Caprock for approximately \$9.1 million in cash. Operating results of PEP and Caprock after their respective acquisition dates are reported in our Precision Engineered Products Group. We incurred, in the aggregate, approximately \$11.7 million in acquisition related costs in 2015.

Tax Reform

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Act"). The Act reduces the U.S. federal corporate income tax rate from 35% to 21%, requires companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred, and creates new taxes on certain foreign sourced earnings. As a result of the U.S. Tax Cuts and Jobs Act of 2017, we recognized a \$51.8 million net tax benefit in 2017.

At December 31, 2017, we have made a reasonable estimate of the effects on the one-time transition tax and included this in our provisional amount. The ultimate impact could possibly differ materially from this provisional amount due to, among other things, additional analysis, changes in interpretations and assumptions we have made, and additional interpretive regulatory guidance that may be issued. In accordance with Staff Accounting Bulletin No. 118, we may record additional provisional amounts during a measurement period not to extend beyond one year of the enactment date of the Act. The accounting is expected to be complete when our 2017 U.S. corporate income tax return is filed in 2018, and any measurement period adjustments will be recognized as income tax expense or benefit in 2018.

Financial Data as a Percentage of Net Sales

The following table sets forth for the periods indicated selected financial data and the percentage of our net sales represented by each income statement line item presented.

	Year Ended December 31,		
	2017	2016 (1)	2015 (1)
Net sales	100.0%	100.0%	100.0%
Cost of sales (exclusive of depreciation and amortization)	74.1%	73.3%	79.1%
Selling, general and administrative expense	12.0%	11.0%	8.6%
Acquisition related costs excluded from selling, general and			
administrative expense	0.1%	0.0%	2.9%
Depreciation and amortization	8.5%	8.7%	8.1%
Other operating expense (income)	0.1%	0.1%	0.0%
Restructuring and integration expense	0.1%	1.0%	1.3%
Income (loss) from operations	5.3%	5.9%	0.0%
Interest expense	8.4%	10.7%	7.3%
Loss on extinguishment of debt and write-off of unamortized			
debt issuance costs	6.8%	0.4%	4.7%
Derivative payments on interest rate swap	0.0%	0.1%	0.0%
Derivative loss (gain) on change in interest rate swap fair value	0.0%	0.4%	0.0%
Other (income) expense, net	-0.3%	-0.5%	0.1%
Loss from continuing operations before benefit for			·
income taxes and share of net income from joint venture	-9.5%	-5.3%	-12.1%
Benefit for income taxes	12.8%	2.6%	4.9%
Share of net income from joint venture	0.8%	1.0%	1.2%
Income (loss) from continuing operations	4.1%	-1.6%	-6.0%
Income from discontinued operations, net of tax	22.2%	2.8%	4.4%
Net income (loss)	26.3%	1.1%	-1.6%

Includes the reclassification of discontinued operations and the effects of prior periods' revisions as disclosed in Note 2 and Note 21, respectively, of
the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report

Sales Concentration

During 2017, sales to various U.S. and foreign divisions of our ten largest customers accounted for approximately 46% of our consolidated net sales. However, no customers individually accounted for more than 10% of our consolidated net sales for 2017. The loss of all or a substantial portion of sales to these customers would cause us to lose a substantial portion of our revenue and have a corresponding negative impact on our income from operations due to the operational leverage these customers provide. This could lead to sales volumes not being high enough to cover our current cost structure or to provide adequate operating cash flows or cause us to incur additional restructuring and/or impairment costs.

Year Ended December 31, 2017, Compared to the Year Ended December 31, 2016

The year ended December 31, 2017, was significantly impacted by certain costs related to current and past acquisitions as well as refinancing our debt portfolio as well as the impact of the U.S. Tax Cuts and Jobs Act of 2017. The following table summarizes these costs.

Loss on extinguishment of debt and write-off of unamortized debt issuance costs	\$ 42,087
Intangible asset amortization cost related to acquisition activities	23,460
Acquisition related costs	344
Restructuring and integration expense	386
Foreign exchange loss on inter-company charges	258
Estimated tax effect of identified items at an assumed rate of 37%	(24,618)
Impact of Tax Act	(51,822)
Total impact on income from continuing operations	\$ (9,905)

Overall Consolidated Results

	<u> </u>	Year Ended December 31,		
		2017 2016 (1) \$ Change		
Net sales	\$619,793	\$584,954	\$ 34,839	
Acquisitions				\$ 6,682
Volume				25,944
Foreign exchange effects				1,956
Price/mix/inflation/other				<i>257</i>
Cost of sales (exclusive of depreciation and amortization				
shown separately below)	459,080	428,843	30,237	
Acquisitions				\$ 6,204
Volume				17,704
Foreign exchange effects				1,796
Cost reduction projects				(3,150)
Mix/inflation/other				7,683
Selling, general and administrative expense	74,112	64,144	9,968	
Acquisition related costs excluded from selling, general and				
administrative expense	344	_	344	
Depreciation and amortization	52,406	50,721	1,685	
Loss (gain) on disposal of assets	351	809	(458)	
Restructuring and integration expense	386	5,658	(5,272)	
Income from operations	33,114	34,779	(1,665)	
Interest expense	52,085	62,870	(10,785)	
Loss on extinguishment of debt and write-off of unamortized				
debt issuance costs	42,087	2,589	39,498	
Derivative payments on interest rate swap	_	609	(609)	
Derivative loss (gain) on change in interest rate swap fair value	(101)	2,448	(2,549)	
Other (income) expense, net	(2,084)	(2,871)	787	
Loss from continuing operations before benefit for income				
taxes and share of net income from joint venture	(58,873)	(30,866)	(28,007)	
Benefit for income taxes	79,026	15,438	63,588	
Share of net income from joint venture	5,211	5,938	(727)	
Income (loss) from continuing operations	25,364	(9,490)	34,854	
Income from discontinued operations, net of tax	137,688	16,153	121,535	
Net income	\$163,052	\$ 6,663	\$156,389	

⁽¹⁾ Includes the effects of discontinued operations and prior periods' revisions as disclosed in Note 2 and Note 21, respectively, of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report

Net Sales. Net sales increased by \$34.8 million, or 6.0%, in 2017 compared to 2016 primarily due to increased volumes. The higher volumes were primarily due to demand improvements within the life sciences end market, the automotive end market, and the general industrial end market. Additionally, sales from the Vandalia business that we acquired on October 2, 2017, contributed \$6.7 million to 2017 sales. The appreciation of the Chinese renminbi and the euro in relation to the U.S. dollar in 2017 also increased net sales year over year. Overall, net sales increased from 2016 to 2017 by \$24.1 million for the Precision Engineered Products Group and \$10.7 million for the Autocam Precision Components Group.

Cost of Sales. The increase in cost of sales was primarily due to the increase in demand and production volumes as well as changes in product mix and start-up costs for certain new products. Cost of sales for Vandalia contributed \$6.2 million to the 2017 increase, which includes a one-time \$0.9 million charge for stating inventories at fair value in connection with purchase accounting. Increases were partially offset by cost savings from production process improvement projects.

Selling, General and Administrative Expense. The majority of the increase in selling, general and administrative expense during 2017 compared to 2016 was due to infrastructure and staffing costs incurred related to our strategic initiatives, including a global implementation of an enterprise resource planning ("ERP") system.

Acquisition Related Costs Excluded from Selling, General and Administrative. Acquisition related costs are primarily third party legal, accounting, valuation consulting and investment banking advisory fees incurred directly related to the Vandalia acquisition in 2017.

Depreciation and Amortization. The slight increase in depreciation and amortization in 2017 was consistent with additions to property, plant and equipment. The expected increase was partially offset by a decrease of \$2.5 million related to amortization in 2016 of backlog and unfavorable leasehold intangibles acquired with the PEP Acquisition. These intangibles became fully amortized in the first quarter of 2016. The Vandalia business contributed \$0.6 million of depreciation and amortization expense to 2017. This additional depreciation and amortization includes the related step-ups of certain property, plant and equipment to fair value and the addition of intangible assets principally for customer relationships and trade names.

Restructuring and Integration Expense. The decrease in restructuring and integration expense was primarily due to limited spending on site closure costs in 2017 compared to \$4.3 million of cost incurred in 2016 to close a plant in Wheeling, Illinois, in our Autocam Precision Components Group.

Interest Expense. Interest expense decreased by \$10.8 million in 2017 due to the redemption of the Senior Notes on April 3, 2017, with the proceeds of the Incremental Term Loan, which bears a lower interest rate based on LIBOR. Further interest savings resulted from the refinancing of the Senior Secured Term Loan and Senior Secured Revolver in the third quarter of 2016 and further refinancing of the Senior Secured Term Loan and the Incremental Term Loan on November 24, 2017.

	Year Ended De	Year Ended December 31,		
	2017	2016		
Interest on debt	\$ 48,870	\$ 58,898		
Interest rate swaps settlements	_	1,393		
Amortization of debt issuance costs	4,296	4,168		
Capitalized interest (1)	(1,081)	(1,589)		
Total interest expense	\$ 52,085	\$ 62,870		

(1) Capitalized interest primarily relates to equipment construction efforts at various plants.

Loss on Extinguishment of Debt and Write-off of Unamortized Debt Issuance Costs. We wrote off \$39.6 million as a result of the extinguishment of the Senior Notes and modification of our credit facility in April 2017. We wrote off an additional \$2.4 million as a result of refinancing our credit facility to achieve a lower interest rate in November 2017.

Derivative Loss (Gain) on Change in Interest Rate Swap Fair Value. During the third quarter of 2016, we chose to discontinue hedge accounting. As a result, all amounts of accumulated other comprehensive income were reclassified to earnings.

Benefit for Income Taxes. Our effective tax rate from continuing operations was 134.2% in 2017 compared to 50.0% for 2016. Note 11 in the Notes to Consolidated Financial Statements describes the components of income taxes for each period presented.

Income from Continuing Operations. Benefit for income taxes increased by \$63.6 million primarily as a result of the U.S. Tax Cuts and Jobs Act of 2017. Income from operations of \$33.1 million for 2017 was more than offset by the loss on extinguishment of debt and write-off of unamortized debt issuance cost and interest expense. Also, acquisition related costs accounted for a \$0.3 million reduction in income from operations as compared to 2016. The \$10.8 million reduction in interest expense also contributed to income from continuing operations. Significant components of the changes in income from operations and interest expense were presented in the preceding paragraphs.

Income from Discontinued Operations, Net of Tax. The largest component of income from discontinued operations in 2017 was the \$127.7 million gain on sale of our PBC Business, net of tax. Note 2 in the Notes to Consolidated Financial Statements provides details of the results of discontinued operations.

Results by Segment

AUTOCAM PRECISION COMPONENTS GROUP

		Year Ended December 31,		
	2017	2016	\$ Ch	ange
Net sales	\$336,852	\$326,138	\$10,714	
Volume				\$ 9,963
Foreign exchange effects				2,213
Price/mix/inflation/other				(1,462)
Income from operations	\$ 34,405	\$ 29,490(1)	\$ 4,915	

 Includes the effects of prior periods' revisions as disclosed in Note 21 of the Notes to the Consolidated Financial Statements included in Item 8 of this Annual Report.

Net sales increased in 2017 from 2016 due to industrial market demand improvements in the US and China and new automotive program launches in the US, China and Brazil. We are realizing the indirect benefits of our customers taking an increasing portion of market share. Also, as the Brazilian economy rebounds, demand for automotive products is increasing.

The increase in net sales contributed to the increase in income from operations. Cost reduction projects resulted in savings in cost of sales of approximately \$1.6 million in 2017 compared to 2016. Restructuring costs decreased by \$4.0 million, primarily related to the closure of a plant in Wheeling, Illinois. These factors that increased income from operations were slightly offset by start-up costs for new products and a \$2.3 million increase in depreciation and amortization consistent with recent capital expenditure activity.

PRECISION ENGINEERED PRODUCTS GROUP

		Year Ended December 31,		
	2017	2016	\$ Ch	ange
Net sales	\$282,941	\$258,816	\$24,125	
Acquisitions				\$ 6,682
Volume				15,981
Foreign exchange effects				(257)
Price/mix/inflation/other				1,719
Income from operations	\$ 36,711	\$ 33,900(1)	\$ 2,811	

(1) Includes the effects of prior periods' revisions as disclosed in Note 21 of the Notes to the Consolidated Financial Statements included in Item 8 of this Annual Report.

Net sales increased in 2017 from 2016 primarily due to the overall improvement in demand across the life sciences end market and sales to new customers within the aerospace and defense market. In addition to overall life sciences market improvement, we have achieved increases in market share for certain medical devices. We have also benefited from the introduction of new products for the aerospace and defense end market. Sales from the Vandalia business acquired on October 2, 2017, contributed \$6.7 million to 2017 sales.

The increase in net sales contributed to the increase in income from operations. Cost of sales increased at a rate consistent with net sales. The increase from additional sales volumes was offset by a shift in product mix toward higher cost raw materials and new program setup costs for certain products sold into the aerospace and defense end market. Additionally, during the first quarter of 2016, we recognized \$2.5 million of amortization expense related to backlog and unfavorable leasehold intangibles which was fully amortized in 2016 and therefore did not impact 2017. Likewise, \$1.3 million of restructuring cost was incurred in 2016 related to restructuring after the PEP Acquisition.

Year Ended December 31, 2016, Compared to the Year Ended December 31, 2015

The year ended December 31, 2016, was significantly impacted by certain costs related to past acquisitions and higher debt levels. The following table summarizes these costs.

Intangible asset amortization cost related to acquisition activities	\$ 25,998
Restructuring and integration expense	5,658
Write-off of interest rate swap	3,785
Loss on extinguishment of debt and write-off of unamortized debt issuance costs	2,589
Foreign exchange loss on inter-company charges	(1,310)
Estimated tax effect of identified items at an assumed rate of 37%	(13,586)
Total impact on loss from continuing operations	\$ 23,134

Overall Consolidated Results

		Year Ended December, 31		
	2016(1)	2016(1) 2015(1) \$ (
Net sales	\$584,954	\$405,443	\$179,511	
Acquisitions				\$192,182
Sale of a plant				(8,1 <i>7</i> 3)
Volume				6,995
Foreign exchange effects				(3,090)
Price/mix/inflation/other				(8,403)
Cost of sales (exclusive of depreciation and amortization				
shown separately below)	428,843	320,632	108,211	
Acquisitions				\$ 119,157
Sale of a plant				(6,375)
Volume				2,109
Foreign exchange effects				(2,427)
Cost reduction projects				(17,840)
Mix/inflation/other				13,587
Selling, general and administrative expense	64,144	34,873	29,271	
Acquisitions				15,154
Foreign exchange effects				(291)
Strategic initiatives and other				14,408
Acquisition related costs excluded from selling, general and				
administrative expense	_	11,682	(11,682)	
Depreciation and amortization	50,721	32,973	17,748	
Loss (gain) on disposal of assets	809	(24)	833	
Restructuring and integration expense	5,658	5,249	409	
Income from operations	34,779	58	34,721	
Interest expense	62,870	29,582	33,288	
Loss on extinguishment of debt and write-off of unamortized				
debt issuance costs	2,589	19,173	(16,584)	
Derivative payments on interest rate swap	609	_	609	
Derivative loss on change in interest rate swap fair value	2,448	_	2,448	
Other (income) expense, net	(2,871)	521	(3,392)	
Loss from continuing operations before benefit for income				
taxes and share of net income from joint venture	(30,866)	(49,218)	18,352	
Benefit for income taxes	15,438	19,842	(4,404)	
Share of net income from joint venture	5,938	5,001	937	
Loss from continuing operations	(9,490)	(24,375)	14,885	
Income from discontinued operations, net of tax	16,153	17,889	(1,736)	
	\$ 6,663	\$ (6,486)	\$ 13,149	
Net income (loss)	\$ 0,003	\$ (0,480)	3 13,149	

⁽¹⁾ Includes the reclassification of discontinued operations and the effects of prior periods' revisions as disclosed in Note 2 and Note 21, respectively, of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report

Net Sales. Net sales increased during 2016 compared to 2015 primarily due to sales in our PEP business that was acquired in the fourth quarter of 2015. Partially offsetting these increases were both the sale of the Delta Rubber plant in November 2015 and the impact of devaluation of the euro and other currency denominated sales. Additionally, we had lower sales prices and changes in product mix, offset by increased volumes. The reduction in value relates to global industrial weakness partially offset by growth in the markets we serve.

Cost of Sales. The increase in cost of sales was primarily due to the addition of production costs from the acquired PEP business. Partially offsetting these increases was the impact of the devaluation of the euro and other currency denominated costs. Additionally, we experienced savings from cost reduction projects that were partially offset by changes in product mix and volume increases.

Selling, General and Administrative Expense. Approximately \$15.0 million of the increase during 2016 was due to selling, general and administrative costs from the acquired PEP business. Additionally, administrative costs were incurred for infrastructure and staffing costs related to our strategic initiatives.

Acquisition Related Costs Excluded from Selling, General and Administrative Expense. Acquisition related costs are third party legal, accounting, valuation consulting and investment banking advisory fees incurred directly related to the PEP Acquisition and the Caprock acquisition in 2015.

Depreciation and Amortization. The increase in 2016 was primarily due to \$17.0 million of depreciation and amortization from the acquired PEP and Caprock businesses. This additional depreciation and amortization includes the related step-ups of certain property, plant and equipment to fair value and the addition of intangible assets principally for customer relationships and trade names related to the purchase price allocation of the new acquisitions.

Restructuring and Integration Expense. Restructuring and integration activity in 2016 primarily consisted of the closure of a plant in Wheeling, Illinois, in our Autocam Precision Components Group and integration of the PEP business that was acquired in the fourth quarter of 2015. Restructuring and integration activity in 2015 consisted of site closure and PEP integration as well as \$1.8 million for an abandoned accounting and reporting system implementation.

Interest Expense. Interest expense increased in 2016 due to new debt to finance the PEP Acquisition and the Caprock acquisition.

	Year Ended D	ecember 31,
	2016	2015
Interest on debt	\$ 58,898	\$ 29,203
Interest rate swaps settlements	1,393	_
Amortization of debt issuance costs	4,168	1,754
Capitalized interest (1)	(1,589)	(1,375)
Total interest expense	\$ 62,870	\$ 29,582

Capitalized interest primarily relates to equipment construction efforts at various plants.

Loss on Extinguishment of Debt and Write-off of Unamortized Debt Issuance Costs. We wrote off debt issuance costs in 2016 and 2015 due to the debt restructurings that occurred in each year.

Derivative Loss on Change in Interest Rate Swap Fair Value. During the third quarter of 2016, we chose to discontinue hedge accounting. As a result, all amounts of accumulated other comprehensive income were reclassified to earnings.

Benefit for Income Taxes. Our effective tax rate from continuing operations was 50.0% in 2016 compared to 40.3% for 2015. The effective tax rate in 2016 was higher due to the proportionate share of income from foreign entities and the utilization of net operating losses in the U.S.

Loss from Continuing Operations. The PEP and Caprock businesses acquired in 2015 contributed \$35.4 million to income from operations in 2016 and had a loss from operations in 2015 of \$4.5 million after the acquisition date of each business. This increase was offset by increased interest expense related to the debt restructuring in 2016. Significant components of the changes in income from operations and interest expense were presented in the preceding paragraphs.

Results by Segment

AUTOCAM PRECISION COMPONENTS GROUP

		Year Ended December, 31			
	2016	2015	\$ Ch	ange	
Net sales	\$326,138	\$328,260	\$(2,122)		
Volume				\$ 6,995	
Foreign exchange effects				(3,090)	
Price/mix/inflation/other				(6,027)	
Income from operations (1)	\$ 29,490	\$ 30,810	\$(1,320)		

 Includes the effects of prior periods' revisions as disclosed in Note 21 of the Notes to the Consolidated Financial Statements included in Item 8 of this Annual Report.

The decrease in net sales in 2016 was due to the devaluation of the Brazilian real and changes to the product mix, partially offset by the increase in volume. The growth in volume was a result of increased demand for automotive products related to Corporate Average Fuel Economy ("CAFE") efforts.

The decrease in income from operations was due to restructuring charges in 2016 related to our Wheeling, Illinois, plant closure of \$4.3 million. The decrease was partially offset by increased income from higher sales volumes and continuous improvement initiatives.

PRECISION ENGINEERED PRODUCTS GROUP

	Year Ended December, 31			
	2016	2015	\$ Ch	ange
Net sales	\$258,816	\$77,183	\$181,633	
Acquisitions				\$192,182
Sale of a plant				(8,173)
Price/mix/inflation/other				(2,376)
Income from operations(1)	\$ 33,900	\$ (3,806)	\$ 37,706	

(1) Includes the effects of prior periods' revisions as disclosed in Note 21 of the Notes to the Consolidated Financial Statements included in Item 8 of this Annual Report.

The increase in net sales and income from operations was due primarily to the acquisition of PEP and was partially offset by the sale of Delta Rubber in the fourth quarter of 2015.

Changes in Financial Condition from December 31, 2016, to December 31, 2017

From December 31, 2016, to December 31, 2017, total assets increased by \$116.7 million. Cash proceeds of \$387.6 million from the sale of the PBC Business was the primary contributor to the increase in assets. Income tax receivable increased by \$41.5 million due to excess estimated tax payments primarily related to the sale of the PBC Business. The Vandalia acquisition contributed \$40.5 million in assets in 2017. We also experienced increases in accounts receivable at the Autocam Precision Components Group and the Precision Engineered Products Group as sales grew. Days inventory outstanding increased slightly by approximately four days due to normal inventory building activity as we prepare to fulfill customer orders. The increases in cash, income tax receivable, accounts receivable, and inventory were partially offset by the carrying value of current and noncurrent assets of discontinued operations as of December 31, 2016, which were sold in the sale of the PBC Business and are therefore no longer a component of total assets as of December 31, 2017. Accordingly, current assets decreased by \$106.7 million and noncurrent assets decreased by \$103.9 million

compared to December 31, 2016, due to the sale of the PBC Business. Also offsetting the increase in cash was a \$16.6 million decrease in intangible assets due to normal amortization. Foreign exchange translation impacted total assets in comparing changes in account balances from December 31, 2016, to December 31, 2017, by increasing total assets by \$8.6 million, of which \$3.4 million related to current assets.

From December 31, 2016 to December 31, 2017, total liabilities decreased by \$60.0 million. Total liabilities decreased by the carrying value of current and noncurrent liabilities of discontinued operations as of December 31, 2016, which were assumed by the acquirer in the sale of the PBC Business and are therefore no longer a component of total liabilities as of December 31, 2017. Accordingly, current liabilities decreased by \$45.2 million and noncurrent liabilities decreased by \$12.6 million compared to December 31, 2016, due to the sale of the PBC Business. The decrease related to discontinued operations was partially offset by increases in debt and accounts payable. Total debt increased by \$9.6 million as a result of the redemption of our Senior Notes with the proceeds of a new \$300.0 million Incremental Term Loan in April 2017, net of the effect of paying down the Senior Secured Revolver using cash generated from operations and a portion of the cash proceeds from the sale of the PBC Business. We also experienced increases in accounts payable at the Autocam Precision Components Group and the Precision Engineered Products Group as sales grow. Foreign exchange translation impacted total liabilities in comparing changes in account balances from December 31, 2016, to December 31, 2017, by increasing total liabilities by \$2.4 million, of which \$1.7 million related to current liabilities.

Working capital, which consists principally of cash, accounts receivable, inventories and other current assets offset by accounts payable, accrued payroll costs, current maturities of long-term debt and other current liabilities, was \$368.9 million as of December 31, 2017, compared to \$142.1 million as of December 31, 2016. The increase in working capital was due primarily to \$387.6 million of cash proceeds from the sale of the PBC Business and increases in accounts receivable and inventories, as discussed above, slightly offset by an increase in accounts payable, also discussed above. The repayment of approximately \$33.2 million of principal outstanding on our Senior Secured Revolver in August 2017 resulted in a reduction of working capital. The elimination of current assets of discontinued operations of \$106.7 as of December 31, 2016, has the effect of decreasing working capital at December 31, 2017, compared to December 31, 2016, because they were sold in the sale of the PBC Business and are no longer a component of our current assets. The elimination of current liabilities of discontinued operations of \$45.2 as of December 31, 2016, has the effect of increasing working capital at December 31, 2017, compared to December 31, 2016, because they were assumed by the acquirer in the sale of the PBC Business and are no longer a component of our current liabilities.

Cash used by operating activities was \$59.8 million in 2017 compared with cash provided by operating activities of \$69.4 million in 2016. The difference was primarily due to the increase in income tax receivable as a result of excess estimated tax payments primarily related to the sale of the PBC Business and \$31.6 million paid for the call premium on the redemption of the Senior Notes in April 2017. Cash provided by operating activities of \$69.4 million in 2016 increased from cash provided by operating activities of \$33.3 million in 2015. The increase was primarily due to a full year of results of operations from late 2015 acquisitions, offset by higher interest costs incurred on debt used to finance the acquisitions. Cash provided by operating activities for discontinued operations was \$14.4 million, \$17.3 million, and \$9.7 million in 2017, 2016, and 2015, respectively.

Cash provided by investing activities was \$282.5 million in 2017 compared with cash used by investing activities of \$41.2 million in 2016. The difference was primarily due to proceeds from the sale of the PBC Business in August 2017. Cash used by investing activities of \$41.2 million in 2016 decreased from cash used by investing activities of \$65.8 million in 2015. The decrease was due to no acquisitions made in 2016 while capital expenditures remained within planned amounts. Cash used by investing activities for discontinued operations was \$7.1 million, \$11.8 million, and \$15.0 million in 2017, 2016, and 2015, respectively.

Cash used by financing activities was \$14.3 million in 2017 compared with cash used by financing activities of \$24.5 million in 2016. The difference was primarily due to net proceeds of debt to fund the Senior Notes call premium in 2017. Cash used by financing activities of \$24.5 million in 2016 decreased from cash provided by financing activities of \$611.6 million in 2015. The decrease was primarily related to obtaining financing for 2015 acquisitions compared to a year of debt repayments in 2016.

Liquidity and Capital Resources

Aggregate principal amounts outstanding under the Senior Secured Term Loan and Incremental Term Loan as of December 31, 2017, were \$825.3 million (without regard to debt issuance costs). We had no amounts outstanding on the Senior Secured Revolver at that time. As of December 31, 2017, we could borrow up to \$97.6 million under the Senior Secured Revolver, subject to certain limitations. This amount of availability is net of \$2.4 million of outstanding letters of credit at December 31, 2017, which are considered as usage of the Senior Secured Revolver.

Collectively, our Senior Secured Term Loan, Incremental Term Loan, and Senior Secured Revolver is our credit facility. Our credit facility is subject to certain financial covenants based on a consolidated net leverage ratio, as defined in the credit facility agreement. The financial covenants are effective when we have outstanding amounts drawn on our Senior Secured Revolver on the last day of any fiscal quarter. We had no outstanding balance on the Senior Secured Revolver as of December 31, 2017, and were in compliance with all covenants under our credit facility.

The Senior Secured Term Loan requires quarterly principal payments of \$1.4 million through October 19, 2022, with the remaining principal amount due on the maturity date. If one-month LIBOR is less than 0.75%, then we pay 4.50% per annum in interest. If one-month LIBOR exceeds 0.75%, then we pay the variable one-month LIBOR rate plus an applicable margin of 3.75%. Based on the outstanding balance at December 31, 2017, annual interest payments would have been \$28.4 million.

The Incremental Term Loan requires quarterly principal payments of \$3.0 million through April 3, 2021, with the remaining principal amount due on the maturity date. The Incremental Term Loan bears interest at the variable one-month LIBOR rate plus an applicable margin of 3.25%. Based on the outstanding balance at December 31, 2017, annual interest payments would have been \$14 million.

The Senior Secured Revolver bears interest at a rate of one-month LIBOR plus an applicable margin of 3.50%. We had no outstanding balance at December 31, 2017. We pay a quarterly commitment fee at an annual rate of 0.5% on the Senior Secured Revolver for unused capacity.

The Senior Notes were paid in full on April 3, 2017, with proceeds from the Incremental Term Loan. The Senior Notes bore interest at 10.25% payable semi-annually in arrears on May 1 and November 1 of each year. Upon redemption of the Senior Notes, we paid interest of \$10.8 million for the period November 1, 2016 through April 3, 2017.

We believe that funds generated from our consolidated continuing operations and existing cash will provide sufficient cash flow to service the required debt and interest payments under our existing credit facility. The absence of cash flows from discontinued operations is not expected to significantly affect our ability to service our debt.

Our arrangements with customers typically provide that payments are due within 30 to 60 days following the date of shipment. We invoice and receive payment from many of our customers in euros as well as other currencies. Additionally, we are party to various third party and intercompany loans, payables and receivables denominated in currencies other than the U.S. dollar. As a result of these sales, loans, payables and receivables, our foreign exchange transaction and translation risk has increased. Various strategies to manage this risk are available to management, including producing and selling in local currencies and hedging programs. As of December 31, 2017, no currency hedges were in place. In addition, a strengthening of the U.S. dollar and/or euro against foreign currencies could impair our ability to compete with international competitors for foreign as well as domestic sales.

For the next twelve months, we expect capital expenditures to remain relatively consistent, the majority of which relate to new or expanded business or continuous improvement programs. We believe that funds generated from continuing operations and borrowings from the credit facility will be sufficient to finance capital expenditures and working capital needs through this period. The absence of cash flows from discontinued operations is not expected to significantly affect our ability to finance capital expenditures or working capital needs. We base these assertions on current availability for borrowing of up to \$97.6 million, existing cash of \$224.4 million and forecasted positive cash flow from continuing operations for the next twelve months. The table below sets forth our contractual obligations and commercial commitments as of December 31, 2017:

	Payments Due by Period					
Certain Contractual Obligations	Total	Less	than 1 year	1-3 years	3-5 years	After 5 years
Long-term debt including current portion	\$ 828,565	\$	17,283	\$ 35,720	\$775,562	\$ —
Expected interest payments (1)	170,964		42,092	81,582	47,290	_
Operating leases	77,129		8,616	18,246	14,192	36,075
Transition tax on deferred foreign income	6,776		1,183	1,598	3,995	_
Capital leases	4,559		2,790	1,337	432	_
Total contractual cash obligations	\$1,087,993	\$	71,964	\$138,483	\$841,471	\$ 36,075

(1) Substantially all of our debt is based on one-month LIBOR which is a variable rate. Amounts in this table are based on the rate in effect as of December 31, 2017.

We have approximately \$5.7 million in unrecognized tax benefits and related penalties and interest accrued within the liabilities section of our balance sheet. We are unsure when or if at all these amounts might be paid to U.S. and/or foreign taxing authorities. Accordingly, these amounts have been excluded from the table above. (See Note 11 of the Notes to Consolidated Financial Statements).

Functional Currencies

We currently have operations in Brazil, China, France, Mexico, and Poland. The following table presents the functional currency of each of our foreign facilities.

Location	Functional Currency
Brazil	Real
China	Renminbi
France	Euro
Mexico	Peso
Poland	Zloty

Seasonality and Fluctuation in Quarterly Results

General economic conditions impact our business and financial results, and certain of our businesses experience seasonal and other trends related to the industries and end markets that they serve. For example, European sales are often weaker in the summer months as customers slow production, medical device sales are often stronger in the fourth calendar quarter, and sales to original equipment manufacturers are often stronger immediately preceding and following the launch of new products. However, as a whole, we are not materially impacted by seasonality.

Off-Balance Sheet Arrangements

We are not a party to any off-balance sheet arrangements that have, or are reasonably likely to have, a material current or future effect on our financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to changes in financial market conditions in the normal course of business due to use of certain financial instruments as well as transacting business in various foreign currencies. To mitigate the exposure to these market risks, we have established policies, procedures and internal processes governing the management of financial market risks. We are exposed to changes in interest rates primarily as a result of borrowing activities.

At December 31, 2017, we had \$534.3 million of principal outstanding under the variable rate Senior Secured Term Loan, without regard to debt issuance costs. At December 31, 2017, a one-percent increase in the interest rate charged on outstanding variable rate borrowings under the Senior Secured Term Loan would result in interest expense increasing annually by approximately \$5.3 million.

At December 31, 2017, we had \$291.0 million of principal outstanding under the Incremental Term Loan, without regard to debt issuance costs. At December 31, 2017, a one-percent increase in the interest rate charged on outstanding variable rate borrowings under the Incremental Term Loan would result in interest expense increasing annually by approximately \$2.9 million.

At December 31, 2017, we did not have any debt outstanding under the Senior Secured Revolver.

Our policy is to manage interest expense using a mix of fixed and variable rate debt. To manage this mix effectively, we may enter into interest rate swaps to exchange the difference between fixed and variable interest amounts. The nature and amount of borrowings may vary as a result of future business requirements, market conditions and other factors.

Translation of our operating cash flows denominated in foreign currencies is impacted by changes in foreign exchange rates. We participate in various third party and intercompany loans, payables and receivables denominated in currencies other than the U.S. dollar. To help reduce exposure to foreign currency fluctuation, we have incurred debt in euros in the past. From time to time, we may use foreign currency hedges to hedge currency exposures when these exposures meet certain discretionary levels. We did not hold a position in any foreign currency hedging instruments as of December 31, 2017.

Item 8. Financial Statements and Supplementary Data

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of NN, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of NN, Inc. and its subsidiaries as of December 31, 2017 and 2016, and the related consolidated statements of operations and comprehensive income (loss), of changes in stockholders' equity and of cash flows for each of the three years in the period ended December 31, 2017, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control—Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, based on our audits and the report of other auditors with respect to the consolidated financial statements as of and for the year ended December 31, 2016, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2017 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company did not maintain, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control—Integrated Framework* (2013) issued by the COSO because the following material weaknesses in internal control over financial reporting existed as of that date. The Company (i) did not maintain an effective control environment due to a lack of a sufficient complement of personnel with an appropriate level of knowledge, experience and training commensurate with the Company's financial reporting requirements and (ii) did not maintain effective controls over information and communication as it relates to the accounting for income taxes as management did not implement and reinforce an adequate process for communication and information sharing necessary to support the functioning of internal control between the tax group and the corporate accounting group. These material weaknesses contributed to the following additional material weaknesses, as the Company did not design and maintain effective internal control over (iii) the accounting for business combinations, including (a) allocating goodwill to its international businesses and (b) deferred income taxes recorded in connection with business combinations, and (iv) the accounting for income taxes.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis. The material weaknesses referred to above are described in Management's Report on Internal Control Over Financial Reporting appearing under Item 9A. We considered these material weaknesses in determining the nature, timing, and extent of audit tests applied in our audit of the December 31, 2017 consolidated financial statements and our opinion regarding the effectiveness of the Company's internal control over financial reporting does not affect our opinion on those consolidated financial statements.

We did not audit the financial statements of Wuxi Weifu Autocam Precision Machinery Co., Ltd., a 49% equity investment of the Company, as of and for the year ended December 31, 2016, which is reflected in the consolidated financial statements of the Company as an investment in joint venture of \$36,008,000 as of December 31, 2016, and share of net income from joint venture of \$6,427,000 for the year ended December 31, 2016. Those statements were audited by other auditors whose report thereon has been furnished to us, and our opinion expressed herein, insofar as it relates to the amounts included for Wuxi Weifu Autocam Precision Machinery Co., Ltd.as of and for the year ended December 31, 2016, is based solely on the report of the other auditors.

Basis for Opinions

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

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

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

Definition and Limitations of Internal Control over Financial Reporting

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

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

/s/ PricewaterhouseCoopers LLP Atlanta, Georgia April 2, 2018

We have served as the Company's auditor since 2003.

NN, Inc. Consolidated Statements of Operations and Comprehensive Income (Loss) Years Ended December 31, 2017, 2016 and 2015 Amounts in thousands of dollars, except per share data

	2017	2016	2015
Net sales	\$619,793	\$584,954	\$405,443
Cost of sales (exclusive of depreciation and amortization shown separately below)	459,080	428,843	320,632
Selling, general and administrative expense	74,112	64,144	34,873
Acquisition related costs excluded from selling, general and administrative expense	344		11,682
Depreciation and amortization	52,406	50,721	32,973
Other operating expense (income)	351	809	(24)
Restructuring and integration expense	386	5,658	5,249
Income from operations	33,114	34,779	58
Interest expense	52,085	62,870	29,582
Loss on extinguishment of debt and write-off of unamortized debt issuance costs	42,087	2,589	19,173
Derivative payments on interest rate swap	_	609	_
Derivative loss (gain) on change in interest rate swap fair value	(101)	2,448	_
Other (income) expense, net	(2,084)	(2,871)	521
Loss from continuing operations before benefit for income taxes and share of net income from joint venture	(58,873)	(30,866)	(49,218)
Benefit for income taxes	79,026	15,438	19,842
Share of net income from joint venture	5,211	5,938	5,001
Income (loss) from continuing operations	25,364	(9,490)	(24,375)
Income from discontinued operations, net of tax (Note 2)	137,688	16,153	17,889
Net income (loss)	\$163,052	\$ 6,663	\$ (6,486)
Other comprehensive income (loss):			
Change in fair value of interest rate swap	\$ —	\$ 1,910	\$ (1,637)
Reclassification adjustment for discontinued operations	(9,243)	_	_
Foreign currency translation gain (loss)	22,094	(10,623)	(24,903)
Other comprehensive income (loss):	\$ 12,851	\$ (8,713)	\$ (26,540)
Comprehensive income (loss)	\$175,903	\$ (2,050)	\$ (33,026)
Basic net income (loss) per share:			
Income (loss) from continuing operations per share	\$ 0.92	\$ (0.35)	\$ (1.15)
Income from discontinued operations per share	5.02	0.60	0.84
Net income (loss) per share	\$ 5.94	\$ 0.25	\$ (0.31)
Weighted average shares outstanding	27,433	27,016	21,181
Diluted net income (loss) per share:			
Income (loss) from continuing operations per share	\$ 0.91	\$ (0.35)	\$ (1.15)
Income from discontinued operations per share	4.96	0.60	0.84
Net income (loss) per share	\$ 5.87	\$ 0.25	\$ (0.31)
Weighted average shares outstanding	27,755	27,016	21,181
Cash dividends per common share	\$ 0.28	\$ 0.28	\$ 0.28

NN, Inc. Consolidated Balance Sheets December 31, 2017 and 2016

Amounts in thousands of dollars, except share data

	Decemb 2017	ber 31, 2016
Assets	2017	
Current assets:		
Cash and cash equivalents	\$ 224,446	\$ 6,271
Accounts receivable, net	108,446	93,433
Inventories	82,617	67,137
Income tax receivable	43,253	1,741
Current assets of discontinued operations	_	106,717
Other current assets	18,518	7,029
Total current assets	477,280	282,328
Property, plant and equipment, net	259,280	230,093
Goodwill	454,612	443,529
Intangible assets, net	237,702	254,263
Investment in joint venture	39,822	36,008
Non-current assets of discontinued operations	_	103,940
Other non-current assets	6,307	8,113
Total assets	\$1,475,003	\$1,358,274
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 52,990	\$ 44,690
Accrued salaries, wages and benefits	21,145	17,226
Current maturities of long-term debt	17,283	12,751
Current liabilities of discontinued operations	_	45,249
Other current liabilities	17,003	20,325
Total current liabilities	108,421	140,241
Deferred tax liabilities	71,564	96,018
Non-current income tax payable	5,593	_
Long-term debt, net of current portion	790,805	785,713
Non-current liabilities of discontinued operations	_	12,611
Other non-current liabilities	12,516	14,300
Total liabilities	988,899	1,048,883
Commitments and contingencies (Note 14)		
Stockholders' equity:		
Common stock - \$0.01 par value, authorized 45,000 shares, issued and outstanding 27,572 in 2017 and 27,249 in 2016	275	272
Additional paid-in capital	292,494	284,508
Retained earnings	211,080	55,175
Accumulated other comprehensive income (loss)	(17,745)	(30,596)
Non-controlling interest		32
Total stockholders' equity	486,104	309,391
Total liabilities and stockholders' equity	\$1,475,003	\$1,358,274

NN, Inc. Consolidated Statements of Changes in Stockholders' Equity Years Ended December 31, 2017, 2016 and 2015 Amounts in thousands of dollars and shares

	Common	Stock		Accumulated					
	Number of shares	Par value	Additional paid in capital	Retained earnings		other prehensive come (loss)	con	Non- trolling terest	Total
Balance, December 31, 2014	18,983	\$190	\$ 99,095	\$ 69,015	\$	4,657	\$	32	\$172,989
Net loss	_	_	_	(6,486)		_		_	(6,486)
Dividends declared	_	_	_	(6,433)		_		_	(6,433)
Share-based compensation expense	115	1	4,038			_		_	4,039
Shares issued for option exercises	179	2	2,039	_		_		_	2,041
Shares issued in public offering	7,590	76	172,976	_		_			173,052
Restricted shares forgiven for taxes	(18)	_	(231)	_		_		_	(231)
Foreign currency translation loss		_	_	_		(24,903)			(24,903)
Change in fair value of interest rate swap						(1,637)			(1,637)
Balance, December 31, 2015	26,849	\$269	\$277,917	\$ 56,096	\$	(21,883)	\$	32	\$312,431
Net income	_	_	_	6,663		_		_	6,663
Dividends declared	_	_	_	(7,584)		_		_	(7,584)
Share-based compensation expense	142	_	3,935	_		_		_	3,935
Shares issued for option exercises	270	3	2,829			_		_	2,832
Restricted shares forgiven for taxes and forfeited	(12)	_	(173)	_		_		_	(173)
Foreign currency translation loss		_	_	_		(10,623)			(10,623)
Change in fair value of interest rate swap						1,910			1,910
Balance, December 31, 2016	27,249	\$272	\$284,508	\$ 55,175	\$	(30,596)	\$	32	\$309,391
Net income	_	_	_	163,052		_		_	163,052
Dividends declared	_	_	_	(7,887)		_		_	(7,887)
Share-based compensation expense	85	1	5,495	_		_		_	5,496
Shares issued for option exercises	263	2	3,108			_		_	3,110
Sale of PBC Business (Note 2)	_	_	_	_		(9,243)		(32)	(9,275)
Restricted shares forgiven for taxes and forfeited	(25)	_	(617)	_		_			(617)
Foreign currency translation gain (loss)	_	_	_	_		22,094		_	22,094
Adoption of new accounting standard (Note 1)		_		740					740
Balance, December 31, 2017	27,572	\$275	\$292,494	\$211,080	\$	(17,745)	\$		\$486,104

NN, Inc. Consolidated Statements of Cash Flows Years Ended December 31, 2017, 2016 and 2015

Amounts in thousands of dollars

Cash flows from operating activities:		2016	2015
Net income (loss)	\$ 163,052	\$ 6,663	\$ (6,486)
Adjustments to reconcile net income to net cash provided by (used by) operating activities:	Ψ 105,052	ψ 0,005	Ψ (0,400)
Depreciation and amortization of continuing operations	52,406	50,721	32,973
Depreciation and amortization of discontinued operations	7,722	11,852	11,496
Amortization of debt issuance costs	4,296	4,168	1,754
Write-off of debt issuance costs	10,502	2,589	19,173
Total derivative mark-to-market loss (gain), net of cash settlements	(1,483)	2,563	15,175
Allowance for doubtful accounts	699	142	745
Share of net income from joint venture, net of cash dividends received	(1,284)	(2,232)	(3,672)
Loss (gain) on disposals of property, plant and equipment	(54)	288	(687)
Gain on disposal of discontinued operations, net of tax and cost to sell	(133,665)	200	(007)
Compensation expense from issuance of share-based awards	4,730	3,935	4,039
Deferred income taxes	(23,195)	(15,526)	(19,143)
Other	(545)	(13,320)	(15,145)
	(343)	(122)	_
Changes in operating assets and liabilities: Accounts receivable	(11,374)	(18,505)	(2,492)
Inventories	(10,278)	4,377	(1,843)
Other current assets	(1,389)	(522)	(79)
Other non-current assets	(3)	2,381	(559)
Accounts payable	4,118	7,633	(7,963)
Income taxes payable (receivable) Other liabilities	(124,389)	(217)	2,631
	316	9,164	3,441
Net cash provided by (used by) operating activities	(59,818)	69,352	33,328
Cash flows from investing activities:			
Acquisition of property, plant and equipment	(43,722)	(43,820)	(38,553)
Proceeds from measurement period adjustments to previous acquisition	_	1,635	_
Proceeds from disposals of property, plant and equipment	646	839	2,995
Short term investment	(8,000)	_	_
Proceeds from sale of business, net of cash sold	371,436	_	_
Cash paid to acquire businesses, net of cash received	(38,434)	_	(628,281)
Capital contributions to joint venture	_	_	(1,999)
Proceeds from insurance claim	545	122	_
Net cash provided by (used by) investing activities	282,471	(41,224)	(665,838)
Cash flows from financing activities:			
Debt issue costs paid	(8,650)	(3,952)	(35,189)
Dividends paid	(7,695)	(7,584)	(6,433)
Proceeds from long-term debt	322,000	44,000	885,000
Repayment of long-term debt	(314,313)	(55,000)	(401,438)
Proceeds from (repayments of) short-term debt, net	(4,211)	(456)	(84)
Proceeds from shares issued	(4,211)	(4 50)	173,052
Proceeds from exercise of stock options	3,110	2,832	2,041
Shares withheld to satisfy income tax witholding	(617)	(173)	(231)
Principal payments on capital leases	(3,875)	(4,148)	(5,098)
Net cash provided by (used by) financing activities	(14,251)	(24,481)	611,620
Effect of exchange rate changes on cash flows	1,639	(4,329)	(1,340)
Net change in cash and cash equivalents	210,041	(682)	(22,230)
Cash and cash equivalents at beginning of period (1)	14,405	15,087	37,317
Cash and cash equivalents at end of period (1)	\$ 224,446	\$ 14,405	\$ 15,087
Supplemental schedule of non-cash operating, investing and financing activities:		<u> </u>	
Dividends accrued for performance share units	\$ 192	\$ —	\$ —
Property, plant and equipment acquired with capital leases	\$ 1,436	\$ —	\$ —
Restructuring charges in other current and non-current liabilities	\$ 222	\$ 3,238	\$ 2,959
Supplemental disclosures:		,	-,
Cash paid for interest	\$ 52,083	\$ 59,158	\$ 20,146
Cash paid for income taxes	\$ 72,294	\$ 889	\$ 6,377
	\$, 2,2 54	4 000	4 0,077

(1) Cash and cash equivalents includes \$8.1 million, \$3.7 million, and \$9.1 million of cash and cash equivalents that was included in current assets of discontinued operations as of December 31, 2016, 2015, and 2014, respectively.

NN, Inc. Notes to Consolidated Financial Statements December 31, 2017, 2016 and 2015

Amounts in thousands of dollars and shares, except per share data

Note 1. Significant Accounting Policies

Nature of Business

NN, Inc. is a global diversified industrial company that combines advanced engineering and production capabilities with in-depth materials science expertise to design and manufacture high-precision components and assemblies for the medical, aerospace and defense, electrical, automotive and general industrial markets. As used in this Annual Report on Form 10-K, the terms "NN," the "Company," "we," "our," or "us" refer to NN, Inc., and its subsidiaries. We have historically reported results of operations in three reportable segments: the Precision Bearing Components Group ("PBC"), the Precision Engineered Products Group ("PEP"), and the Autocam Precision Components Group ("APC"). On August 17, 2017, we completed the sale of our global precision bearing components business (the "PBC Business"). Note 2 in these Notes to Consolidated Financial Statements provides further information on the sale of the PBC Business. We have 44 facilities in North America, Europe, South America and China. On January 2, 2018, we announced plans to implement a new enterprise and management structure designed to accelerate growth and align businesses. See Note 22 for discussion of the announcement.

Basis of Presentation

The accompanying consolidated financial statements are prepared in conformity with accounting principles generally accepted in the United States ("U.S. GAAP"). Certain prior period amounts have been reclassified to conform to the current year's presentation. Historical periods presented reflect discontinued operations (see Note 2). Historical periods also reflect revisions related to prior period misstatements (see Prior Periods' Financial Statement Revision) identified in the current year (see Note 21). In management's opinion, the accompanying consolidated financial statements reflect all adjustments necessary to fairly present our results of operations, financial position, and cash flows for the periods presented. Except for per share data or as otherwise indicated, all dollar amounts presented in the tables in these Notes to Consolidated Financial Statements are in thousands of U.S. dollars.

Principles of Consolidation

Our consolidated financial statements include the accounts of NN, Inc. and its wholly owned subsidiaries. We own a 49% interest in a joint venture which we account for using the equity method (see Note 10). All intercompany transactions and balances have been eliminated in consolidation.

Use of Estimates in the Preparation of Financial Statements

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of certain assets and liabilities, disclosure of contingent assets and liabilities, and the reported amounts of revenues and expenses. Actual results could differ from those estimates.

Prior Periods' Financial Statement Revision

In connection with the preparation of our consolidated financial statements for the year ended December 31, 2017, and the preparation of our interim financial statements, we identified various misstatements in our previously issued 2016 and 2015 annual financial statements and interim periods in 2016 and 2017. These prior period errors relate primarily to the (i) accounting for income and franchise taxes, (ii) accounting for the gain on the disposition of PBC Business, (iii) accounting for indemnification assets related to a prior acquisition, (iv) accounting for foreign currency transactions, (v) accounting for the translation of foreign subsidiary assets and joint venture, and (vi) other immaterial errors, including errors that had previously been adjusted for as out of period corrections in the period identified.

We have assessed the materiality of the misstatements on the 2016 and 2015 financial statements in accordance with SEC Staff Accounting Bulletin ("SAB") Topic 1.M, *Materiality*, codified in ASC Topic 250, *Accounting Changes and Error Corrections*, ("ASC 250") and concluded that the misstatements were not material to any prior annual or interim periods. In accordance with ASC 250 (SAB Topic 1.N, *Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements*), we have corrected for these misstatements, including the previously recorded out of period adjustments, for all periods presented by revising the accompanying consolidated financial statements.

The accompanying notes to the consolidated financial statements reflect the impact of this revision. We have also reflected the impact of the revision in the applicable unaudited quarterly financial results. Refer to Note 20 and 21 for reconciliations between as originally reported and as revised annual and quarterly amounts, respectively.

Accounting Standards Recently Adopted

Stock Compensation. In March 2016, the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update ("ASU") 2016-09, Compensation – Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. The new standard changes how companies account for certain aspects of share-based payments to employees. Entities must recognize the income tax effects of awards in the statement of operations when the awards vest or are settled (i.e., additional paid-in capital pools were eliminated). The guidance changed regarding employers' accounting for an employee's use of shares to satisfy the employer's statutory income tax withholding obligation and for forfeitures. The guidance was effective for public business entities for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years. As of January 1, 2017, we adopted ASU 2016-09. Upon adoption, we reclassified \$0.7 million in historical tax benefits from deferred taxes to retained earnings. We recognize excess tax benefits in income tax expense prospectively beginning in 2017. Excess tax benefits are presented in cash flows from operating activities in the statement of cash flows retrospectively for all periods presented. Beginning in 2017, the calculation of diluted net income (loss) per share now excludes tax benefits that would have generated more dilutive shares. The effects of the adoption were not material to the financial statements.

Inventory. In July 2015, the FASB issued ASU 2015-11, *Inventory (Topic 330): Simplifying the Measurement of Inventory,* that simplifies the subsequent measurement of inventory by using only the lower of cost or net realizable value. We adopted ASU 2015-11 on January 1, 2017. The adoption of ASU 2015-11 did not have a material impact on our consolidated financial statements.

Tax Reform Estimates. On December 22, 2017, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 118 ("SAB 118") to address the application of U.S. GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed in reasonable detail to complete the accounting for certain income tax effects of the Tax Cuts and Jobs Act ("U.S. Tax Cuts and Jobs Act of 2017"). In accordance with SAB 118, we have recorded \$6.8 million of income tax expense in connection with the one-time transition tax related to the inclusion of deferred foreign earnings in U.S. taxable income. We have made a reasonable estimate of the effects of this foreign inclusion in our U.S. taxable income for the year ended December 31, 2017, and remeasurement of our deferred tax balances as of December 31, 2017, based on our interpretation of the computations and intent of Congress as defined in the U.S. Tax Cuts and Jobs Act of 2017. We do not expect any additional material adjustments; however, since the U.S. Tax Cuts and Jobs Act of 2017 was passed late in the fourth quarter of fiscal 2017 and ongoing guidance and accounting interpretation is expected over the next several months, it is reasonably possible that additional adjustments will be required during the one-year measurement period.

Accounting Standards Not Yet Adopted

Revenue Recognition. In May 2014, the FASB issued a new standard that provides a single, comprehensive revenue recognition model for all contracts with customers and supersedes most of the existing revenue recognition requirements. Under the new guidance, revenue is recognized when a customer obtains control of promised goods or services in an amount that reflects the consideration the entity expects to receive in exchange for those goods or services. The standard also requires disclosure of the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. Factors affecting implementation include, but are not limited to, identifying all the contracts that exist and whether incidental obligations or marketing incentives included in some of those contracts are performance obligations. Additionally, we evaluated the transfer of control of certain consignment and tooling contracts which may impact the timing of revenue recognition under the new standard.

The standard is effective for us beginning January 1, 2018, with full retrospective or modified retrospective adoption permitted. We will adopt the standard utilizing the modified retrospective transition method. Under this transition method, we will recognize the cumulative effect of initially applying the new standard as an adjustment to the opening balance of retained earnings as of January 1, 2018, and will apply the new standard beginning with the most current period presented to contracts that are not completed at the date of initial application. We expect the adoption adjustment to be less than \$0.1 million, which represents the net profit on certain contracts that were accounted for on a consignment basis prior to the new guidance but do not meet the consignment criteria under the new standard.

We expect to utilize certain practical expedients allowed by the new standard. We intend to utilize the portfolio approach practical expedient to evaluate sales-related discounts on a portfolio basis to contracts with similar characteristics. We expect that the effect on our financial statements of applying the portfolio approach would not differ materially from applying the new standard to individual contracts.

Leases. In February 2016, the FASB issued ASU 2016-02, Leases. ASU 2016-02 creates Topic 842, Leases, in the ASC and supersedes ASC 840, Leases. Entities that hold numerous equipment and real estate leases, in particular those with numerous operating leases, will be most affected by the new guidance. The lease accounting standard is effective for NN beginning January 1, 2019, with modified retrospective adoption required and early adoption permitted. The amendments in ASU 2016-02 are expected to impact balance sheets at many companies by adding lease-related assets and liabilities. This may affect compliance with contractual agreements and loan covenants. We have performed inquiries within segment locations and compiled information on operating and capital leases. We are currently evaluating the impacts of the lease accounting standard on our financial position, results of operations, and related disclosures. Upon adoption, we expect to recognize a right-of-use asset and a lease liability for nearly all of our leases that are currently classified as operating leases and are therefore not recorded on the balance sheet. We are in the process of gathering information that will enable us to estimate the amounts of those assets and liabilities. Note 14 presents future minimum lease payments under leases that are currently accounted for as off-balance sheet operating leases.

Statement of Cash Flows. In August 2016, the FASB issued ASU 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments (a consensus of the Emerging Issues Task Force). This guidance provides clarification on how certain cash receipts and cash payments are presented and classified on the statement of cash flows, with focus on eight specific areas in which cash flows have, in practice, been presented inconsistently. The guidance is effective for NN beginning January 1, 2018, and is required to be adopted using a retrospective approach if practicable, with early adoption permitted.

The new cash flow guidance states that cash payments for debt prepayment costs should be classified as cash outflows for financing activities. We paid \$31.6 million for debt prepayment costs in 2017 as discussed in Note 12. These debt prepayment costs are classified as cash outflows from operating activities in 2017. Under the new guidance, these costs will be reclassified to cash outflows from financing activities.

The new guidance also requires entities to make an accounting policy election regarding classification of distributions received from equity method investees. Existing guidance does not currently address how an entity should determine which distributions represent returns on versus returns of investment. The lack of specific guidance has resulted in diversity in practice. The two allowable approaches are the "cumulative earnings" approach and the "nature of the distribution" approach, as defined by ASU 2016-15. Upon adoption of the new guidance on January 1, 2018, we will utilize the cumulative earnings approach for classifying distributions received from our joint venture investment (see Note 10). This policy election will have an immaterial impact to our consolidated statements of cash flows.

Goodwill. In January 2017, the FASB issued ASU 2017-04, Intangibles – Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment, that eliminates the requirement to calculate the implied fair value of goodwill (i.e., Step 2 of the current goodwill impairment test) 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 (i.e., measure the charge based on the current Step 1 test). The standard is effective for us beginning with impairment tests performed on or after January 1, 2020, with early adoption permitted. We are currently evaluating the impact this new guidance is expected to have on our financial position or results of operations and related disclosures.

Effects of Tax Reform in Other Comprehensive Income. In February 2018, the FASB issued guidance related to the impacts of the U.S. Tax Cuts and Jobs Act of 2017. Under existing U.S. GAAP, the effects of changes in tax rates and laws on deferred tax balances are recorded as a component of income tax expense in the period in which the law was enacted. When deferred tax balances related to items originally recorded in accumulated other comprehensive income ("AOCI") are adjusted, certain tax effects become stranded in AOCI. The FASB issued ASU 2018-02, Income Statement – Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income, that permits reclassification of certain income tax effects of the Act from AOCI to retained earnings. The guidance also requires certain disclosures about stranded tax effects. ASU 2018-02 is effective for us on January 1, 2019, with early adoption in any period permitted. Entities may adopt the guidance using either at the beginning of the period of adoption or retrospectively to each period in which the effect of the change in the U.S. federal corporate income tax rate in the U.S. Tax Cuts and Jobs Act of 2017 is recognized. We are in the process of evaluating adoption method and the effects of this new guidance on our financial statements.

Definition of a Business. In January 2017, the FASB issued ASU 2017-01, Business Combinations (Topic 805): Clarifying the Definition of a Business, which changes the definition of a business. The new guidance requires an entity to first evaluate whether substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or a group of similar identifiable assets. If that threshold is met, the set of assets and activities is not a business. If the threshold is not met, the entity evaluates whether the set meets the definition of a business. The new definition requires a business to include at least one substantive process and narrows the definition of outputs by more closely aligning it with how outputs are described in the new revenue recognition guidance. The new guidance is effective for us beginning on January 1, 2018. We will apply the new definition of a business prospectively to any transactions occurring in 2018 or later. The new guidance will have no effect on our historical financial statements.

Cash and Cash Equivalents

Cash and cash equivalents include cash and highly liquid investments with original maturities of three months or less.

Fair Value Measurements

Fair value principles prioritize valuation inputs across three broad levels. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities. Level 2 inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument. Level 3 inputs are unobservable inputs based on the assumptions used to measure assets and liabilities at fair value. An asset or liability's classification within the various levels is determined based on the lowest level input that is significant to the fair value measurement.

Accounts Receivable and Allowance for Doubtful Accounts

Trade accounts receivable are recorded at the invoiced amount upon recognition of a sale of goods when ownership and risk of loss is assumed by the customer. We maintain allowances for doubtful accounts for estimated losses resulting from the inability of our customers to make required payments. The allowances are based on the number of days an individual receivable is past the invoice due date and on regular credit evaluations of our customers. In evaluating the credit worthiness of our customers, we consider numerous inputs including but not limited to the customers' financial position, past payment history, relevant industry trends, cash flows, management capability, historical loss experience and economic conditions and prospects. Allowances are established when customer accounts are at risk of being uncollectible. Accounts receivable are written off at the time a customer receivable is deemed uncollectible.

Inventories

Inventories are stated at the lower of cost or net realizable value. Cost is determined using standard costs, which approximates the average cost method. Our policy is to expense abnormal amounts of idle facility expense, freight, handling cost, and waste included in cost of products sold. In addition, we allocate fixed production overheads based on the normal production capacity of our facilities. Inventory valuations were developed using normalized production capacities for each of our manufacturing locations. The costs from excess capacity or under-utilization of fixed production overheads were expensed in the period incurred and are not included as a component of inventory.

Inventories also include tools, molds and dies in progress that we are producing and will ultimately sell to our customers. These inventories are also carried at the lower of cost or net realizable value.

Property, Plant and Equipment

Property, plant and equipment are stated at cost less accumulated depreciation. Assets to be disposed of are stated at the lower of depreciated cost or fair market value less estimated selling costs. Expenditures for maintenance and repairs are charged to expense as incurred. Major renewals and betterments are capitalized. When a property item is retired, its cost and related accumulated depreciation are removed from the property accounts and any gain or loss is recorded in the consolidated Statements of Operations and Comprehensive Income (Loss). We review the carrying values of long-lived assets for impairment whenever events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. Property, plant and equipment also includes tools, molds and dies used in manufacturing.

Depreciation is calculated based on historical cost using the straight-line method over the estimated useful lives of the depreciable assets. Estimated useful lives for buildings generally range from 15 to 40 years. Estimated useful lives for machinery and equipment generally range from 3 to 12 years. We depreciate leasehold improvements and buildings under capital lease over the shorter of the leased asset's useful life or the lease term.

Goodwill and Other Indefinite Lived Intangible Assets

Goodwill is tested for impairment on an annual basis in the fourth quarter and between annual tests if a triggering event occurs. The impairment analysis is performed at the reporting unit level. We have the option to make a qualitative assessment of whether it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount before applying the two-step goodwill impairment test. If we conclude that it is more likely than not that the fair value of a reporting unit exceeds its carrying amount, then we do not need to perform the two-step impairment test. For the years ended, December 31, 2017 and 2016, we chose not to perform the qualitative assessment but performed only the first step in the annual impairment test. The decision to perform a qualitative assessment or proceed to the two-step impairment test is an annual decision made by management. Based on the results of performing the first step of the impairment test, the fair value of the reporting units exceeded the carrying value of the reporting units at December 31, 2017 and 2016.

If the qualitative assessment indicates it is more likely than not that the fair value is less than the carrying value, GAAP prescribes a two-step process for testing for goodwill impairments. The first step is to determine if the carrying value of the reporting unit with goodwill is less than the related fair value of the reporting unit. We consider three main approaches to value (cost, market and income) the fair value of the reporting unit and market based multiples of earning and sales methods obtained from a grouping of comparable publicly trading companies. We believe this methodology of valuation is consistent with how market participants would value reporting units. The discount rate and market based multiples used are specifically developed for the unit tested regarding the level of risk and end markets served. Even though we do use other observable inputs (Level 2 inputs) the calculation of fair value for goodwill would be most consistent with Level 3 inputs.

If the carrying value of the reporting unit including goodwill is less than fair value of the reporting unit, the goodwill is not considered impaired. If the carrying value is greater than fair value then the potential for impairment of goodwill exists. The potential impairment is determined by allocating the fair value of the reporting unit among the assets and liabilities based on a purchase price allocation methodology as if the reporting unit was acquired in a business combination. The fair value of the goodwill is implied from this allocation and compared to the carrying value with an impairment loss recognized if the carrying value is greater than the implied fair value.

We base our fair value estimates, in large part, on management business plans and projected financial information which are subject to a high degree of management judgment and complexity. Actual results may differ from projections, and the differences may be material.

Impairment of Long-Lived Assets

Long-lived tangible and intangible assets subject to amortization are tested for recoverability when changes in circumstances indicate the carrying value of these assets may not be recoverable. A test for recoverability is also performed when management has committed to a plan to dispose of a reporting unit or asset group. Assets to be held and used are tested for recoverability when indications of impairment are evident. Recoverability of a long-lived tangible or intangible asset is evaluated by comparing its carrying value to the future estimated undiscounted cash flows expected to be generated by the asset or asset group. If the asset is not recoverable the asset is considered impaired and adjusted to fair value which is then depreciated or amortized over its remaining useful life. Assets to be disposed of are recorded at the lesser of carrying value or fair value less costs of disposal.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized. Provision has not been made for income taxes on unremitted earnings of foreign subsidiaries as these earnings are deemed to be permanently reinvested. We recognize income tax positions that meet the more likely than not threshold and accrue interest and potential penalties related to unrecognized income tax positions which are recorded as a component of the provision (benefit) for income taxes.

Revenue Recognition

We recognize revenues based on the stated shipping terms with customers when these terms are satisfied and the risks of ownership are transferred to the customers. We have an inventory management program for certain customers whereby revenue is recognized when products are used by customers from consigned stock rather than at the time of shipment. Under both circumstances, revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred, the sellers' price is fixed and determinable, and collectability is reasonably assured.

Share Based Compensation

The cost of stock options, restricted stock and performance share units are recognized as compensation expense over the vesting periods based on the grant date fair value, net of expected forfeitures. We determine grant date fair value using the Black Scholes financial pricing model for our stock options and a Monte Carlo simulation for the performance share units because these awards are not traded in open markets. We account for restricted stock by recognizing compensation expense ratably over the vesting period as specified in the award agreement. Compensation expense to be recognized is based on the closing stock price on the date of grant. Upon the adoption of ASU 2016-09 as of January 1, 2017, we recognize excess tax benefits in income tax expense prospectively beginning in 2017. Excess tax benefits are presented in cash flows from operating activities in the statement of cash flows retrospectively for all periods presented.

Foreign Currency Translation

Assets and liabilities of our foreign subsidiaries are translated at current exchange rates. Revenue, costs and expenses are translated at average rates prevailing during each reporting period. Translation adjustments arising from the translation of foreign subsidiary financial statements are reported as a component of other comprehensive income and accumulated other comprehensive income ("AOCI") within stockholders' equity. Transactions denominated in foreign currencies, including intercompany transactions, are initially recorded at the current exchange rate at the date of the transaction. The balances are adjusted to the current exchange rate as of each balance sheet date and as of the date when the transaction is consummated. Transaction gains or losses, excluding intercompany loan transactions, are expensed as incurred in either cost of products sold or selling, general and administrative expense in the Consolidated Statements of Operations and Comprehensive Income (Loss) and were immaterial to the years ended December 31, 2017, 2016 and 2015. Transaction gains or losses on intercompany loan transactions are recognized as incurred in the "Other (income) expense, net" line in the Consolidated Statements of Operations and Comprehensive Income (Loss).

Net Income Per Common Share

Basic income per share reflects reported earnings divided by the weighted average number of common shares outstanding. Diluted income per share includes the effect of dilutive stock options and the respective tax benefits, unless inclusion would not be dilutive.

Business Combinations

We allocate the total purchase price of tangible and intangible assets acquired and liabilities assumed based on their estimated fair values as of the business combination date, with the excess purchase price recorded as goodwill. The purchase price allocation process requires us to use significant estimates and assumptions, including fair value estimates, as of the business combination date. Although we believe the assumptions and estimates we have made are reasonable and appropriate, they are based in part on historical experience and information obtained from management of the acquired company. Our assumptions and estimates are also partially based on valuation models that incorporate projections of expected future cash flows and operating plans and are inherently uncertain. Valuations are performed by management or third-party valuation specialists under management's supervision. In determining the fair value of assets acquired and liabilities assumed in business combinations, as appropriate, we may use one of the following recognized valuation methods: the income approach (including discounted cash flows from relief from royalty and excess earnings model), the market approach, or the replacement cost approach.

Examples of significant estimates used to value certain intangible assets acquired include but are not limited to:

- sales volume, pricing and future cash flows of the business overall;
- future expected cash flows from customer relationships, and other identifiable intangible assets, including future price levels, rates of increase in revenue and appropriate attrition rate;
- the acquired company's brand and competitive position, royalty rate quantum, as well as assumptions about the period of time the acquired brand will continue to benefit to the combined company's product portfolio; and
- cost of capital, risk-adjusted discount rates and income tax rates.

Different assumptions regarding projected performance and other factors associated with the acquired assets may affect the amount recorded under each type of asset and liability. The valuations of property, plant and equipment, intangible assets, goodwill and deferred income tax liabilities depend heavily on assumptions. Subsequent assessment could result in future impairment charges. We refine these estimates over a measurement period not to exceed one year to reflect new information obtained surrounding facts and circumstances existing at the acquisition date.

Note 2. Discontinued Operations

On August 17, 2017, we completed the sale of our PBC Business to TSUBAKI NAKASHIMA, Co., Ltd. for a base purchase price of \$375.0 million in cash, subject to certain adjustments. After working capital and other closing adjustments, the final cash purchase price was approximately \$388.5 million. We received cash proceeds at closing of \$387.6 million and recorded a \$0.8 million receivable at December 31, 2017, for the balance. The PBC Business included all our facilities that were engaged in the production of precision steel balls, steel rollers, and metal retainers and automotive specialty products used primarily in the bearing industry. The sale of the PBC Business furthers management's long-term strategy to build a diversified industrial business with a comprehensive geographic footprint in attractive high-growth market segments. The PBC Business represented all of the PBC reportable segment disclosed in our historical financial statements. Under the terms of a transition services agreement, we are providing certain support services for twelve months from the closing date of the sale.

We recorded an after-tax gain on sale of \$127.7 million, which is included in the "Income from discontinued operations, net of tax" line on the Consolidated Statements of Operations and Comprehensive Income (Loss) for the year ended December 31, 2017. The gain includes the effects of reclassifying \$9.3 million in cumulative foreign currency translation gain from accumulated comprehensive income and eliminating the non-controlling interest attributable to the PBC Business as of August 17, 2017.

In accordance with ASC 205-20, *Presentation of Financial Statements – Discontinued Operations*, the operating results of PBC are classified as discontinued operations. The presentation of discontinued operations includes revenues and expenses of the discontinued operations and gain on the disposition of the business, net of tax, as one line item on the Consolidated Statements of Operations and Comprehensive Income (Loss). The Consolidated Statements of Operations and Comprehensive Income (Loss) for all periods presented have been revised to reflect this presentation. Accordingly, results of the PBC Business have been excluded from continuing operations and segment results for all periods presented in the consolidated financial statements and the accompanying notes unless otherwise stated. The Consolidated Statement of Cash Flows include cash flows of the PBC Business in each line item unless otherwise stated.

The following table summarizes the major line items included in the results of operations of the discontinued operations.

	Year Ended December 31,			
	2017(1)	2016	2015	
Net sales	\$168,287	\$248,534	\$261,837	
Cost of products sold (exclusive of depreciation and				
amortization shown separately below)	130,555	192,994	205,361	
Selling, general and administrative expense	11,818	16,992	17,468	
Depreciation and amortization	7,722	11,852	11,496	
(Gain) loss on disposal of assets	_	27	_	
Restructuring and integration expense	429	4,366	2,019	
Income from operations	17,763	22,303	25,493	
Interest income (expense)	(181)	(284)	(317)	
Interest and other income (expense)	(84)	503	(654)	
Income from discontinued operations before gain on disposal		·		
and provision for income taxes	17,498	22,522	24,522	
Provision for income taxes on discontinued operations	(7,461)	(6,369)	(6,633)	
Income from discontinued operations before gain on disposal	10,037	16,153	17,889	
Gain on disposal of discontinued operations	213,503	_	_	
Provision for income taxes on gain on disposal	(85,852)	_	_	
Income from discontinued operations, net of tax	\$137,688	\$ 16,153	\$ 17,889	

⁽¹⁾ Includes the results of operations of the PBC Business from January 1 to August 17, 2017.

The following table summarizes the carrying amounts of major classes of assets and liabilities of discontinued operations for each of the periods presented.

	As of D 2017	December 31, 2016
Cash	\$—	\$ 8,134
Accounts receivable, net	_	46,114
Inventories	_	47,714
Other current assets		4,755
Total current assets of discontinued operations		106,717
Property, plant and equipment, net	_	92,373
Goodwill	—	8,909
Intangible assets, net	_	1,718
Other non-current assets		940
Total non-current assets of discontinued operations		103,940
Total assets of discontinued operations	<u>—</u> \$—	\$210,657
Accounts payable	\$—	\$ 31,014
Accrued salaries, wages and benefits	—	9,234
Income taxes payable		2,825
Other current liabilities	<u> </u>	2,176
Total current liabilities of discontinued operations		45,249
Deferred tax liabilities	_	4,173
Accrued post-employment benefits		4,707
Other non-current liabilities		3,731
Total non-current liabilities of discontinued operations		12,611
Total liabilities of discontinued operations	<u>\$—</u>	\$ 57,860

The following table presents the significant noncash items and cash paid for capital expenditures of discontinued operations for each period presented.

	Year	Year Ended December 31,			
	2017	2016	2015		
Depreciation and amortization	\$7,722	\$11,852	\$11,496		
Acquisition of property, plant and equipment	\$7,316	\$11,926	\$15,111		

Note 3. Acquisitions

NN Life Sciences - Vandalia LLC, Formerly Known as DRT Medical, LLC

On October 2, 2017, we acquired 100% of the membership interests of DRT Medical, LLC, which we subsequently renamed NN Life Sciences – Vandalia, LLC ("Vandalia") for approximately \$38.7 million in cash, after preliminary working capital post-closing adjustments of \$0.3 million. Vandalia is a supplier of precision manufactured medical instruments and orthopedic implants with locations in Ohio and Pennsylvania. Operating results of Vandalia after the acquisition date are included in our PEP segment. We accounted for the Vandalia acquisition using the acquisition method of accounting. The preliminary allocation of the purchase price was determined by management with the assistance of third-party valuation specialists and was based on estimates of the fair value of assets acquired and liabilities assumed as of October 2, 2017. The purchase price allocation for the acquisition is preliminary and subject to completion of working capital adjustments. The following table summarizes the components of the preliminary purchase price allocation for the Vandalia Acquisition.

Fair value of assets acquired and liabilities assumed	As of October 2, 2017
Current assets	\$ 10,166
Property, plant and equipment	13,981
Intangible assets subject to amortization	6,900
Other non-current assets	29
Goodwill	9,452
Total assets acquired	40,528
Current liabilities	1,794
Total liabilities assumed	1,794
Net assets acquired	\$ 38,734

A combination of income, market, and cost approaches were used for the valuation where appropriate, depending on the asset or liability being valued. Valuation inputs in these models and analyses gave consideration to market participant assumptions. Acquired intangible assets are primarily customer relationships, and trade names. As of December 31, 2017, intangible assets in connection with Vandalia were \$6.9 million.

In connection with the Vandalia acquisition, we recorded goodwill, which represents the excess of the purchase price over the estimated fair value of tangible and intangible assets acquired, net of liabilities assumed. As of December 31, 2017, goodwill in connection with Vandalia was approximately \$9.5 million. The goodwill is attributed primarily to the assembled workforce. All of the goodwill is expected to be deducted for tax purposes.

Property, plant and equipment acquired primarily included machinery and equipment for use in manufacturing operations. Additionally, manufacturing sites and related facilities including leasehold improvements were acquired. Property, plant and equipment has been valued using both the cost approach and the market approach supported where available by observable market data which includes consideration of obsolescence. Intangible assets have been valued using the relief from royalty and multi-period excess earnings methods, both forms of the income approach supported by market data.

We incurred approximately \$0.3 million in acquisition related costs with respect to Vandalia during the year ended December 31, 2017. Transaction costs were expensed as incurred and are included in the "Acquisition related costs excluded from selling, general and administrative expense" line item in the Consolidated Statements of Operations and Comprehensive Income (Loss). As required by the acquisition method of accounting, acquired inventories were recorded at their estimated fair value. Beginning October 2, 2017, our consolidated results of operations include the results of Vandalia. Since the date of the acquisition, sales revenue of \$6.7 million and loss from continuing operations of \$0.5 million has been included in our consolidated financial statements.

Precision Engineered Products Holdings, Inc.

We completed the acquisition (the "PEP Acquisition") of Precision Engineered Products Holdings, Inc. ("PEP") on October 19, 2015. During 2016, we finalized all issues related to customary working capital adjustments, fixed assets and income taxes. The changes primarily arose from differences noted during acquisition integration and finalizing return to provision adjustments. As a result, we adjusted the preliminary allocation of the purchase price initially recorded at the PEP Acquisition date to reflect these measurement period adjustments.

The following table summarizes the final purchase price allocation for the PEP Acquisition.

	As of December 31, 2015	Subsequent Adjustments to fair value	Final as of September 30, 2016
Consideration:			
Cash paid	\$ 621,196	\$ —	\$ 621,196
Cash adjustment		(1,635)	(1,635)
Total consideration	\$ 621,196	\$ (1,635)	\$ 619,561
Fair value of assets acquired and liabilities assumed on October 19, 2015:			
Current assets	\$ 69,331	\$ 452	\$ 69,783
Property, plant and equipment	56,163	(962)	55,201
Intangible assets subject to amortization	240,490	_	240,490
Other non-current assets	1,500	_	1,500
Goodwill (1)	372,709	(1,805)	370,904
Total assets acquired	740,193	(2,315)	737,878
Current liabilities (2)	21,354	_	21,354
Non-current deferred tax liabilities (3)	95,435	(680)	94,755
Other non-current liabilities (4)	2,208	_	2,208
Total liabilities assumed	118,997	(680)	118,317
Net assets acquired	\$ 621,196	\$ (1,635)	\$ 619,561

- (1) Goodwill includes \$8.3 million of prior period revisions (Note 1 and Note 21).
- (2) Current liabilities include \$0.2 million of prior period revisions (Note 1 and Note 21).
- (3) Non-current deferred tax liabilities include \$7.9 million of prior period revisions (Note 1 and Note 21).
- (4) Other non-current liabilities include \$0.2 million of prior period revisions (Note 1 and Note 21).

Note 4. Segment Information

We determined our reportable segments under the provisions of U.S. GAAP related to disclosures about segments of an enterprise. Our reportable segments are based on differences in product lines.

Our business has historically been aggregated into three reportable segments: PBC, APC, and PEP. See Note 2 for information regarding the sale of the PBC Business on August 17, 2017. The results of the PBC Business are classified as discontinued operations for all periods in the consolidated financial statements and accompanying notes unless otherwise stated. Accordingly, results of the PBC Business are not included in the tabular presentation below.

Within our APC segment, we manufacture highly engineered, difficult-to-manufacture precision metal components and subassemblies for the automotive and general industrial end markets. Currently, we manufacture components for use in fuel delivery, electromechanical motor, steering and braking systems for the automotive industry and highly engineered shafts, mechanical components, complex precision assembled and tested parts and fluid system components for the heating, ventilation, and air conditioning and fluid power industries.

Within our PEP segment, we combine materials science expertise with advanced engineering and production capabilities to design and manufacture a broad range of high-precision metal and plastic components, assemblies, and finished devices for the medical and life sciences, electrical, automotive, general industrial and aerospace and defense end markets.

Note 22 includes discussion of our announcement subsequent to December 31, 2017, to implement a new enterprise and management structure by organizing our business into three segments beginning in 2018.

The following table presents results of continuing operations for each reportable segment. There were no significant inter-segment transactions during the periods presented.

Year Ended December 31, 2017	Autocam Precision Components Group	Precision Engineered Products Group	Corporate and Consolidations	Total
Net sales	\$ 336,852	\$282,941	\$ —	\$619,793
Depreciation and amortization	\$ 24,491	\$ 26,745	\$ 1,170	\$ 52,406
Income from operations	\$ 34,405	\$ 36,711	\$ (38,002)	\$ 33,114
Interest expense			, ,	(52,085)
Other				(39,902)
Loss from continuing operations before benefit for income taxes and share of net income from joint venture				\$ (58,873)
Share of net income from joint venture	\$ 5,211			\$ 5,211
Expenditures for long-lived assets	\$ 24,056	\$ 5,443	\$ 6,907	\$ 36,406
	4,	, ,,,,,	, ,,,,,,	+,
Year Ended December 31, 2016				
Net sales	\$ 326,138	\$258,816	\$ —	\$584,954
Depreciation and amortization	\$ 22,189	\$ 28,105	\$ 427	\$ 50,721
Income from operations	\$ 29,490	\$ 33,900	\$ (28,611)	\$ 34,779
Interest expense				(62,870)
Other				(2,775)
Loss from continuing operations before benefit for income taxes and share of net income from				
joint venture				\$ (30,866)
Share of net income from joint venture	\$ 5,938			\$ 5,938
Expenditures for long-lived assets	\$ 23,077	\$ 5,352	\$ 3,465	\$ 31,894
•				
Year Ended December 31, 2015				
Net sales	\$ 328,260	\$ 77,183	\$ —	\$405,443
Depreciation and amortization	\$ 21,472	\$ 11,282	\$ 219	\$ 32,973
Income from operations	\$ 30,810	\$ (3,806)	\$ (26,946)	\$ 58
Interest expense				(29,582)
Other				(19,694)
Loss from continuing operations before benefit for income taxes and share of net income from				
joint venture				\$ (49,218)
Share of net income from joint venture	\$ 5,001			\$ 5,001
Expenditures for long-lived assets	\$ 21,341	\$ 728	\$ 1,373	\$ 23,442
		Assets as of Dece		
	2017	2016	2015	

	Total Assets as of December 31,			
	2017	2016	2015	
Autocam Precision Components Group (1)	\$ 428,321	\$ 412,692	\$ 416,504	
Precision Engineered Products Group	738,766	720,362	747,804	
Corporate and Consolidations	307,916	225,220	224,029	
Total	\$1,475,003	\$1,358,274	\$1,388,337	

Total assets of our APC segment include \$39.8 million, \$36.0 million, and \$36.3 million as of December 31, 2017, 2016, and 2015, respectively, related to the investment in our 49% owned joint venture (Note 10).

Acquisition related costs for the Vandalia acquisition in 2017 and the PEP and Caprock acquisitions in 2015 are reported under Corporate and Consolidations. These costs impacted income from operations at Corporate by \$0.3 million and \$10.9 million for the years ended December 31, 2017 and 2015, respectively. We incurred no acquisition related costs in 2016. Beginning October 2, 2017, our PEP segment includes the results of the Vandalia acquisition. During 2017 since the date of the Vandalia acquisition, net sales revenue of \$6.7 million and loss from operations of \$0.5 million (including \$0.9 million for a one-time increase in cost of goods sold for inventory step-up) has been included in our PEP segment. Beginning October 20, 2015, our PEP segment includes the results of the PEP Acquisition. Since the date of the PEP Acquisition, 2015 sales revenue of \$40.7 million and net loss from operations of \$5.1 million (including the \$4.3 million for the one-time increase in cost of goods sold for inventory step-up, and \$5.2 million for the amortization of backlog intangible) has been included in our PEP segment.

The following table summarizes sales to external customers and long-lived tangible assets by geographical region.

	Net Sales Year Ended December 31,			Property, Plant, and Equipment, I As of December 31,			uipment, Net r 31,
	2017	2016	2015		2017		2016
United States	\$437,838	\$407,917	\$275,152	\$	173,269	\$	155,784
Europe	\$ 40,334	\$ 36,481	\$ 32,736	\$	25,288	\$	21,069
Asia	62,657	64,177	46,092		26,078		19,936
Canada	2,176	1,921	861		_		_
Mexico	40,937	45,863	27,023		7,544		5,821
S. America	35,845	28,595	23,558		27,101		27,483
Other	6	_	21		_		_
All foreign countries	\$181,955	\$177,037	\$130,291	\$	86,011	\$	74,309
Total	\$619,793	\$584,954	\$405,443	\$	259,280	\$	230,093

Note 5. Accounts Receivable and Sales Concentrations

Accounts receivable, net, are comprised of the following amounts:

	As of December 31,		
	2017	2016	
Trade	\$110,165	\$94,502	
Less - allowance for doubtful accounts	1,719	1,069	
Accounts receivable, net	\$108,446	\$93,433	

The following table presents activity in the allowance for doubtful accounts.

	Balance at Beginning of Year	Additions	Write- offs	Currency Impacts	Balance at End of Year
Year Ended December 31, 2017	\$ 1,069	\$ 648	\$(101)	\$ 103	\$ 1,719
Year Ended December 31, 2016	\$ 1,055	\$ 153	\$ (59)	\$ (80)	\$ 1,069
Year Ended December 31, 2015	\$ 362	\$ 729	\$ (8)	\$ (28)	\$ 1,055

No customers accounted for more than 10% of our net sales in 2017. For the years ended December 31, 2016 and 2015, sales to Robert Bosch Automotive Systems ("Bosch") amounted to \$59.2 million, and \$73.0 million, respectively, or 10%, and 18% of consolidated net sales, respectively. All revenues related to Bosch are in the APC segment. No customers represented more than 10% of accounts receivable as of December 31, 2017 or 2016.

Note 6. Inventories

Inventories are comprised of the following amounts:

	As of Dec	cember 31,
		2016
Raw materials	\$37,337	\$36,080
Work in process	27,669	22,645
Finished goods	17,611	8,412
Inventories	\$82,617	\$67,137

Note 7. Property, Plant and Equipment

Property, plant and equipment are comprised of the following amounts:

	As of Dec	ember 31,
	2017	2016
Land and buildings	\$ 54,833	\$ 51,992
Machinery and equipment	302,470	251,295
Construction in progress	14,346	10,786
	371,649	314,073
Less—accumulated depreciation	112,369	83,980
Property, plant and equipment, net	\$259,280	\$230,093

During the year ended December 31, 2017, we acquired \$14.0 million in property, plant and equipment with the Vandalia acquisition. During the year ended December 31, 2015, we acquired \$58.1 million in property, plant and equipment with the two acquisitions completed during 2015.

For the years ended December 31, 2017, 2016, and 2015, depreciation expense was \$28.9 million, \$24.7 million, and \$20.1 million, respectively.

Note 8. Goodwill

We completed our annual goodwill impairment review during the fourth quarters of 2017, 2016 and 2015. For the years ended December 31, 2017, 2016 and 2015, we concluded that there were no indicators of impairment at the reporting units with goodwill.

The following table shows changes in the carrying amount of goodwill, for the years ended December 31, 2017, 2016 and 2015.

	Autocam Precision Components Group	Precision Engineered Products Group	Total
Balance as of December 31, 2015	\$ 73,864	\$374,535	\$448,399
Currency impacts	(601)	(2,464)	(3,065)
Adjustments to goodwill	_	(1,805)	(1,805)
Balance as of December 31, 2016	\$ 73,263	\$370,266	\$443,529
Currency impacts	884	747	1,631
Goodwill acquired in acquisition		9,452	9,452
Balance as of December 31, 2017	\$ 74,147	\$380,465	\$454,612

As of December 31, 2017, 2016 and 2015, the balance of goodwill reported in the table above included accumulated impairment charges of \$4.3 million and \$11.7 million in our APC and PEP segments, respectively, all of which were recorded during the year ended December 31, 2008.

The goodwill acquired in 2017 is related to the Vandalia acquisition as described in Note 3 and is derived from the value of the businesses acquired. This fair value was based on management business plans and future performance estimates which are subject to a high degree of management judgment and complexity. Actual results may differ from these projections and the differences may be material, leading to a potential impairment of this goodwill if this reporting unit's future results are not as forecasted.

Note 9. Intangible Assets, Net

Intangible assets are tested for impairment when changes in circumstances indicate the carrying value of those assets may not be recoverable. As of December 31, 2017 and 2016, there were no indications of impairment.

As disclosed in Note 3, we added \$6.9 million of intangible assets in 2017 related to customer relationships acquired in the Vandalia acquisition with an estimated useful life of 15 years. The following table presents the carrying amount of intangible assets by segment and by major asset class.

	Ī	Autocam Precision Imponents Group	Precision Engineered Products Group	Total
Balance as of December 31, 2015	\$	46,417	\$233,800	\$280,217
Amortization		(3,533)	(22,465)	(25,998)
Currency impacts		44	_	44
Balance as of December 31, 2016	\$	42,928	\$ 211,335	\$254,263
Additions		_	6,900	6,900
Amortization		(3,481)	(19,979)	(23,460)
Currency impacts		(1)		(1)
Balance as of December 31, 2017	\$	39,446	\$198,256	\$237,702

			December 31, 2017			December 31, 2016	<u> </u>
		Gross		Net	Gross		Net
	Estimated Useful Life in Years	Carrying <u>Value</u>	Accumulated Amortization	Carrying <u>Value</u>	Carrying Value	Accumulated Amortization	Carrying Value
Customer relationships	12 - 15	\$282,030	\$ (52,408)	\$229,622	\$275,130	\$ (30,137)	\$244,993
Other	1 - 15	19,200	(11,120)	8,080	19,217	(9,947)	9,270
Total identified intangible assets		\$301,230	\$ (63,528)	\$237,702	\$294,347	\$ (40,084)	\$254,263

The following table summarizes estimated amortization expense for the next five years:

Year Ending December 31,	
2018	\$ 23,878
2019	23,810
2020	23,670
2021	23,678
2022	23,678

Note 10. Investment in Joint Venture

We own a 49% investment in a joint venture located in Wuxi, China, called Wuxi Weifu Autocam Precision Machinery Company, Ltd. (the "JV"). The JV is jointly controlled and managed, and we account for it under the equity method.

The following table summarizes activity related to our investment in the JV.

Balance as of December 31, 2016	\$36,008
Our share of cumulative earnings	5,582
Dividends declared and paid by joint venture	(4,156)
Accretion of basis difference from purchase accounting	(371)
Foreign currency translation gain	2,759
Balance as of December 31, 2017	\$39,822

The following tables present summarized financial information of the unconsolidated JV.

	As of Dec 2017	ember 31, 2016
Current assets	\$47,600	\$31,295
Non-current assets	24,763	22,522
Total assets	\$72,363	\$53,817
Current liabilities	\$26,165	\$13,549
Total liabilities	\$26,165	\$13,549

	Year	Year Ended December 31,			
		2016	2015		
Net sales	\$74,805	\$65,756	\$55,962		
Cost of sales	\$57,514	\$44,530	\$37,283		
Income from operations	\$13,659	\$16,268	\$13,972		
Net income	\$11,442	\$13,702	\$11,525		

We had sales to the JV of \$0.2 million, \$0.1 million, and \$0.2 million in each of the years ended December 31, 2017, 2016, and 2015. Amounts due to us from the JV were \$0.1 million, \$0.1 million, and \$0.2 million as of December 31, 2017, 2016, and 2015, respectively.

Note 11. Income Taxes

On December 22, 2017, the U. S. government enacted comprehensive tax legislation. The U.S. Tax Cuts and Jobs Act of 2017 reduces the U.S. federal corporate income tax rate from 35% to 21%, requires companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred, and creates new taxes on certain foreign sourced earnings. As a result of the U.S. Tax Cuts and Jobs Act of 2017, we recognized a \$51.8 million net tax benefit in 2017.

At December 31, 2017, we have made a reasonable estimate of the effects of the one-time transition tax and included this in our provisional amount. The ultimate impact could differ materially from this provisional amount due to, among other things, additional analysis, changes in interpretations and assumptions we have made, and additional interpretive regulatory guidance which may be issued. In accordance with SAB 118, we may record additional provisional amounts during a measurement period not to extend beyond one year of the enactment date of the U.S. Tax Cuts and Jobs Act of 2017. The accounting is expected to be complete when our 2017 U.S. corporate income tax return is filed in 2018, and any measurement period adjustments will be recognized as income tax expense or benefit in 2018.

Loss from continuing operations before benefit for income taxes was as follows:

	Year ended December 31,			
	2017	2016	2015	
Income / (Loss) from continuing operations before expense / (benefit) for income taxes				
and share of net income from joint venture				
United States	(71,603)	(39,160)	(50,831)	
Foreign	12,730	8,294	1,613	
Total	(58,873)	(30,866)	(49,218)	

Total income tax benefit was as follows:

	Year	Year ended December 31,		
	2017	2016	2015	
Tax Expense:				
Current:				
U.S. Federal	(47,916)	(2,595)	(2,228)	
State	(12,226)	679	189	
Foreign	4,310	2,004	1,340	
Total current expense	(55,832)	88	(699)	
Deferred:				
U.S. Federal	(25,017)	(9,679)	(16,007)	
State	3,009	(6,406)	(1,913)	
Deferred tax valuation allowance	710	1,882	_	
Foreign	(1,896)	(1,323)	(1,223)	
Total deferred expense (benefit)	(23,194)	(15,526)	(19,143)	
Total expense (benefit)	(79,026)	(15,438)	(19,842)	

A reconciliation of income taxes based on the U.S. federal statutory rate is summarized as follows:

	Year ended December 31,		31,
	2017	2016	2015
Rate Rec: Percentages			
Income taxes at the federal statutory rate	35.0%	34.0%	34.0%
Change in valuation allowance	-1.2%	-6.1%	0.0%
Foreign tax credits, exclusive of tax reform	-13.8%	8.2%	2.7%
State taxes, net of federal taxes, exclusive of tax reform	9.1%	5.7%	3.6%
Non-U.S. earnings taxed at different rates	1.7%	4.8%	3.2%
Non-deductible mergers and acquisitions costs	0.0%	0.0%	-2.6%
R&D Tax credit	0.3%	0.9%	1.3%
Change in uncertain tax positions	-0.4%	3.2%	0.0%
Impact of Tax Reform			
Toll Charge, net of foreign tax credit	-11.5%	0.0%	0.0%
Remeasurement of deferred taxes pursuant to tax reform	65.6%	0.0%	0.0%
Tax Reform impact on divestiture of business segment	33.9%	0.0%	0.0%
Section 199/Domestic Production Deduction	0.8%	0.0%	0.0%
Divestiture of Business Segment, exclusive of tax reform	13.6%	0.0%	0.0%
Prior period revisions	0.5%	4.2%	1.8%
Foreign JV Net Income	0.0%	-4.1%	-2.3%
Other adjustments, net	0.7%	-0.8%	-1.3%
	134.2%	50.0%	40.3%

The 2017 effective tax rate of 134.2% was heavily influenced by the remeasurement of our ending domestic deferred balances, an estimate of the one-time transition tax (net of foreign tax credits) on earnings of our foreign subsidiaries in accordance with the U.S. Tax Cuts and Jobs Act of 2017, and the impact of the U.S. Tax Cuts and Jobs Act of 2017 on the divestiture of the PBC Business.

The principal components of the deferred tax assets and liabilities are as follows:

Deferred income tax liabilities:		
Tax in excess of book depreciation 34,14	3 40,389	39,447
Goodwill	8 23	_
Intangible assets 50,68	86,492	91,947
Other deferred tax liabilities 38	9 720	(0)
Total deferred income tax liabilities 85,27	127,624	131,394
Deferred income tax assets:		
Goodwill 2,06	7 1,165	1,697
Inventories 2,24	8 740	4,370
Pension/Personnel accruals 1,59	6 1,395	2,669
Net operating loss carry forwards 6,95	10,297	6,289
Foreign tax credits —	5,759	3,242
Guarantee claim deduction —	414	1,141
Credit carry forwards 3,42	4,581	4,958
Accruals and reserves 2,01	5 1,151	0
Other deferred tax assets 3,01	.9 10,193	2,084
Deferred income tax assets before Valuation Allowance 21,32	35,695	26,451
Valuation allowance on deferred tax assets (7,60	(4,090)	(2,376)
Total deferred income tax assets 13,71	4 31,605	24,075
Net deferred income tax liabilities (1) 71,56	96,019	107,319

 In accordance with the U.S. Tax Cuts and Jobs Act of 2017, our ending domestic deferred balances have been remeasured to 21% for the year ended December 31, 2017.

As realization of certain deferred tax assets is not assured, management believes it is more likely than not that those net deferred tax assets will be realized. However, the amount of the deferred tax assets considered realizable could be reduced based on changing conditions.

The following table summarizes our total valuation allowances:

	 llance at ning of Year	Additions	Rece	overies	Reprice	 ılance at d of Year
Year ended December 31, 2017	\$ 4,090	\$ 3,518	\$		\$ —	\$ 7,608
Year ended December 31, 2016	\$ 2,376	\$ 1,882	\$	(168)	\$ —	\$ 4,090
Year ended December 31, 2015	\$ _	\$ 2,376	\$	_	\$ —	\$ 2,376

During 2017, the valuation allowance increased by approximately \$3.5 million. This consisted of a \$2.3 million increase due to the uncertainty of realizing certain state net operating loss (NOL) carryforwards, and a \$1.2 million increase for foreign NOL's.

During 2016, the valuation allowance increased by approximately \$1.7 million, consisting of a \$1.9 million increase due to the uncertainty of realizing certain state NOL carryforwards and a decrease of \$0.2 million. The decrease reflects the Company's expectation that it is more likely than not that it will generate future taxable income to utilize this amount of net deferred tax assets.

During 2015, the valuation allowance increased by approximately \$2.4 million, consisting solely of an increase due to the uncertainty of realizing certain local tax credits of a foreign subsidiary.

There has been no change in our long term international expansion plans as of December 31, 2017, and our intent and ability is to indefinitely reinvest our foreign earnings. We base this assertion on two factors. The first factor is our intention to invest in foreign countries that are strategically important to our PEP and APC businesses. Due to the acquisitions completed in 2015 and 2014, we have operations in Mexico, Brazil, Poland, France and China which will require more foreign investment. Second, we have sufficient access to funds in the U.S. through projected free cash flows and the availability of our U.S. credit facilities to fund currently anticipated domestic operational and investment needs.

With respect to accumulated earnings of foreign subsidiaries, no additional US federal income taxes have been provided as all accumulated earnings of foreign subsidiaries are deemed to have been remitted as part of the one-time transition tax. The Company continues to evaluate its indefinite reinvestment assertion in light of the U.S. Tax Cuts and Jobs Act of 2017, as the Company could still be subject to foreign withholding taxes, US state taxes, and foreign currency adjustments if this assertion is not maintained. The accounting is expected to be completed within the one-year measurement period as allowed by SAB 118.

A reconciliation of the beginning and ending amounts of unrecognized tax benefits, excluding interest and penalties, is as follows:

	Year 1	Year Ended December 31,			
	2017	2016	2015		
Beginning balance	\$4,741	\$ 5,724	\$3,834		
Additions for tax positions of prior years	1,404	179	2,516		
Reductions for tax positions of prior years	(490)	(1,162)	(626)		
Ending balance	\$5,655	\$ 4,741	\$5,724		

As of December 31, 2017, the \$5.7 million of unrecognized tax benefits would, if recognized, impact our effective tax rate by \$5.2 million. The 2017 addition is related to a foreign NOL.

Interest and penalties related to federal, state, and foreign income tax matters are recorded as a component of the provision for income taxes in our Consolidated Statements of Operations. During 2017, we released \$0.2 million of previously accrued U.S. interest. During 2016, we released less than \$0.1 million of previously accrued foreign interest and accrued \$0.2 million in U.S. interest. During 2015, we accrued less than \$0.1 million in foreign interest and \$0.3 million in U.S. interest.

Management believes that it is reasonably possible that the amount of unrecognized income benefits and interest may decrease during the next 12 months by approximately \$1.0 million, related to the expiration of the statutes of limitations.

As of December 31, 2017, the Company has \$81.4 million of state NOL carryovers. The state NOL's begin to expire in 2030. We also have \$26.6 million of foreign NOL carryovers at December 31, 2017. The foreign NOL's have an indefinite life. The Company has \$18.0 million of tax credits in foreign jurisdictions at December 31, 2017. The tax credits in foreign jurisdictions begin to expire in 2026. The state NOL's and foreign credits have a full valuation allowance. These amounts are included in the valuation allowance table on the previous page.

We or our subsidiaries file income tax returns in the U.S. federal jurisdiction, and in various states and foreign jurisdictions. During the third quarter of 2017, the Internal Revenue Service commenced an examination of the federal tax return for the pre-acquisition period of January 1, 2015, through October 19, 2015, for Precision Engineered Products.

The Company is no longer subject to federal examinations by tax authorities for years before 2010. The Company is also subject to examination by various state and international tax authorities. The tax years subject to examination vary by jurisdiction. The Company regularly assesses the outcomes of both ongoing and future examinations for the current or prior years to ensure the Company's provision for income taxes is sufficient. The Company recognizes liabilities based on estimates of whether additional taxes will be due and believes its reserves are adequate in relation to any potential assessments. The outcome of any one examination, some of which may conclude during the next 12 months, is not expected to have a material impact on the Company's financial position or results of operations.

We operate under tax holidays in other countries, which are effective through December 31, 2026, and may be extended if certain additional requirements are satisfied. The tax holidays are conditional upon our meeting certain employment and investment thresholds. The impact of these tax holidays decreased foreign taxes by \$0.8 million, \$0.7 million, and \$0.2 million for 2017, 2016, and 2015, respectively. The benefit of the tax holidays on net income per share (diluted) was \$0.03, \$0.03, and \$0.01 for 2017, 2016, and 2015, respectively.

Note 12. Debt

The following table presents debt balances as of December 31, 2017 and 2016.

	As of December 31 2017 20	
\$545.0 million Senior Secured Term Loan B ("Senior Secured Term Loan") bearing		
interest at the greater of 0.75% or one-month LIBOR (1.56% at December 31, 2017),		
plus an applicable margin of 3.75% at December 31, 2017, expiring October 19, 2022	\$534,250	\$543,563
\$300.0 million Incremental Term Loan ("Incremental Term Loan") bearing interest at		
one-month LIBOR (1.56% at December 31, 2017), plus an applicable margin of 3.25%		
at December 31, 2017, expiring April 3, 2021	291,000	
\$143.0 million Senior Secured Revolver ("Senior Secured Revolver") bearing interest at		
one-month LIBOR (1.56% at December 31, 2017) plus an applicable margin of 3.5% at		
December 31, 2017, expiring October 19, 2020	_	27,977
\$250.0 million Senior Notes ("Senior Notes") bearing interest at 10.25%	_	250,000
French Safeguard Obligations	290	358
Brazilian lines of credit and equipment notes	257	573
Chinese line of credit	2,768	2,619
Total	828,565	825,090
Less current maturities of long-term debt	17,283	12,751
Principal, net of current portion	811,282	812,339
Less unamortized debt issuance costs	20,477	26,626
Long-term debt, net of current portion	\$790,805	\$785,713

We capitalized interest costs amounting to \$1.1 million, \$1.6 million, and \$1.4 million in the years ended December 31, 2017, 2016, and 2015, related to construction in progress.

On April 3, 2017, we redeemed the Senior Notes for \$281.6 million resulting in a loss on debt extinguishment of \$36.3 million, including \$31.6 million cash paid for the call premium and a \$4.7 million non-cash write-off of unamortized debt issuance costs. The Senior Notes were redeemed and the call premium was paid with the proceeds of a new \$300.0 million Incremental Term Loan that was added by amendment to the existing credit facility. The Incremental Term Loan matures on April 3, 2021, with payments of \$3.0 million due quarterly. The amendment also reduced the principal available under the Senior Secured Revolver from \$143.0 million to \$100.0 million until such time as a leverage ratio covenant threshold has been met for four consecutive fiscal quarters. Upon satisfaction of the ratio threshold, the Senior Secured Revolver may be restored to \$143.0 million. In connection with the amendment, we paid \$6.5 million in debt issuance costs of which we recorded \$4.0 million as a direct reduction to the carrying amount of the associated debt and \$2.5 million as a loss on modification of the Senior Secured Term Loan. Debt issuance costs related to the amendment were paid with proceeds from the Incremental Term Loan. Also in connection with the amendment, we wrote off \$0.8 million of unamortized debt issuance costs related to the modification of the Senior Secured Revolver.

On November 24, 2017, we further amended our existing credit facility to reduce the interest rate by 50 basis points on the Senior Secured Term Loan and the Incremental Term Loan. The interest rate on the Senior Secured Term Loan decreased from LIBOR plus 4.25% to LIBOR plus 3.75%. The interest rate on the Incremental Term loan decreased from LIBOR plus 3.75% to LIBOR plus 3.25%. In connection with the amendment, we paid \$2.1 million in debt issuance costs which we recorded as a loss on modification of debt. Debt issuance costs related to the amendment were paid with cash on hand. Also in connection with the amendment, we wrote off \$0.3 million of unamortized debt issuance costs related to the modification.

We used cash generated from operations and a portion of the cash proceeds from the sale of the PBC Business to pay down the Senior Secured Revolver on August 17, 2017, which had a balance of \$33.2 million outstanding at that time. We continue to utilize the Senior Secured Revolver for daily working capital needs.

Our credit facility established the Senior Secured Term Loan, the Incremental Term Loan, and the Senior Secured Revolver. All other debt is subordinated in favor of obligations outstanding under the credit facility. The credit facility is collateralized by all of our assets. We pay a quarterly commitment fee at an annual rate of 0.5% on the Senior Secured Revolver for unused capacity. As of December 31, 2017, we were in compliance with all covenants under our credit facility.

We have foreign credit facilities with financial institutions in France, Brazil, and China. These facilities are used to fund working capital and equipment purchases for our manufacturing plants in those countries. Our French operation has liabilities with certain creditors subject to Safeguard protection. The liabilities are being paid annually over a 10-year period until 2019 and carry a zero percent interest rate. Amounts due as of December 31, 2017, to those creditors opting to be paid over a 10-year period totaled \$0.3 million, of which \$0.1 million is classified as current maturities of long-term debt and \$0.2 million is included in the "Long-term debt, net of current portion" line on the Consolidated Balance Sheet. The Brazilian equipment notes represent borrowings from certain Brazilian banks to fund equipment purchases for our Brazilian plants. These credit facilities have annual interest rates ranging from 2.5% to 6.0%. The Chinese line of credit is a working capital line of credit with a Chinese bank bearing an annual interest rate of 4.6%.

The following table lists aggregate maturities of long-term debt for the next five years and thereafter.

Year Ending December 31,	Aggregate Maturities Principal Amounts
2018	\$ 17,283
2019	17,968
2020	17,752
2021	260,750
2022	514,812
Thereafter	_
Total outstanding principal	\$828,565
	\$828,565

Note 13. Restructuring and Integration

The following tables summarize restructuring and integration charges for the years ended December 31, 2017, 2016, and 2015.

	Year Ended December 31, 2017			
	APC	PEP	Corporate and Consolidations	Total
Severance and other costs	\$ 17	\$ —	\$ —	\$ 17
Site closure and other associated costs	369	_	_	369
Total	\$ 386	\$ —	\$ —	\$ 386
	Year Ended December 31, 2016			
	APC	PEP	Corporate and Consolidations	Total
Severance and other costs	\$ 851	\$ 836	\$ —	\$1,687
Site closure and other associated costs	3,488	483		3,971
Total	\$4,339	\$1,319	\$ —	\$5,658
	Year Ended December 31, 2015			
	Corporate and APC PEP Consolidations		Total	
Severance and other costs	\$ 672	\$ 850	\$ —	\$1,522
Site closure and other associated costs	1,962		1,765	3,727
Total	\$2,634	\$ 850	\$ 1,765	\$5,249

The following tables summarize restructuring and integration reserve activity for the years ended December 31, 2017, 2016, and 2015.

	Bala	eserve ince as of ber 31, 2016	Charges	on-cash ustments	Cash ductions	Bal	Reserve ance as of lber 31, 2017
Severance and other costs	\$	1,000	\$ 17	\$ (164)	\$ (853)	\$	_
Site closure and other associated costs		1,625	369		(895)		1,099
Total	\$	2,625	\$ 386	\$ (164)	\$ (1,748)	\$	1,099
	Bala	eserve ince as of ber 31, 2015	Charges	on-cash ustments	Cash ductions	Bal	Reserve ance as of aber 31, 2016
Severance and other costs	\$	887	\$1,687	\$ (278)	\$ (1,296)	\$	1,000
Site closure and other associated costs		1,845	3,971	(2,142)	(2,049)		1,625
Total	\$	2,732	\$5,658	\$ (2,420)	\$ (3,345)	\$	2,625
	Bala	eserve ince as of ber 31, 2014	Charges	on-cash ustments	Cash ductions	Bal	Reserve ance as of aber 31, 2015
Severance and other costs	\$	_	\$1,522	\$ (408)	\$ (227)	\$	887
Site closure and other associated costs			3,727	(1,882)			1,845
Total	\$	_	\$5,249	\$ (2,290)	\$ (227)	\$	2,732

In 2017, we recognized restructuring and integration expense of \$0.4 million in our APC segment related primarily to the closure of a plant in Wheeling, Illinois, which was a part of our integration plan after the acquisition of Autocam Corporation in 2014.

In 2016, we recognized restructuring and integration expense of \$4.3 million in our APC segment primarily related to the closure of the Wheeling plant. These charges consisted of \$0.8 million of severance costs, fixed asset impairment of \$0.3 million, and site closure costs of \$3.2 million. We also recognized \$1.3 million related to initiatives within our PEP segment related to integration costs, rebranding, site moving costs for two plants, and associated employee costs.

In 2015, we recognized \$2.6 million of restructuring and integration expense in our APC segment related to the closure of the Wheeling plant. This charge consisted of severance costs of \$0.7 million, one-time inventory reduction of \$1.0 million, and a fixed asset impairment charge of \$0.9 million relating to the closure of the facility. Within our PEP segment, restructuring initiatives to adjust inventory resulted in a charge of \$0.9 million, which consisted of adjusting inventory for obsolescence. An additional \$1.8 million was incurred at corporate for an accounting and reporting system that was ultimately never deployed and abandoned during 2015.

We are continually identifying restructuring and impairment costs at our segments. Future filings will include updates to these activities along with a reconciliation of beginning and ending liabilities. As of December 31, 2017, the entire reserve balance relates to the Wheeling plant closure. Within the next twelve months we expect to pay \$1.0 million of the reserve balance, with the remaining reserve of \$0.1 million expected to be paid in January 2019. We do not expect to incur any additional costs related to the closure of the Wheeling plant.

Note 14. Commitments and Contingencies

Rental Payments

We have operating lease commitments for machinery, office equipment, vehicles, manufacturing and office space which expire on varying dates. Rent expense for 2017, 2016 and 2015 was \$7.6 million, \$7.2 million, and \$4.7 million, respectively. The following table summarizes future minimum lease payments as of December 31, 2017, under operating leases that have initial or remaining non-cancelable lease terms in excess of one year.

Year Ending December 31,	Minimum Rental Commitments	
2018	\$	8,616
2019		9,576
2020		8,670
2021		7,255
2022		6,937
Thereafter		36,075
Total minimum payments	\$	77,129

Brazil ICMS Tax Matter

Prior to the Autocam acquisition, Autocam's Brazilian subsidiary received notification from the Brazilian tax authorities regarding ICMS (state value added tax or VAT) tax credits claimed on intermediary materials (tooling and perishable items) used in the manufacturing process. The Brazilian tax authority notification disallowed state ICMS credits claimed on intermediary materials based on the argument that these items are not intrinsically related to the manufacturing processes. Autocam Brazil filed an administrative defense with the Brazilian tax authority arguing, among other matters, that it should qualify for an ICMS tax credit, contending that the intermediary materials are directly related to the manufacturing process.

We believe that we have substantial legal and factual defenses, and we plan to defend our interests in this matter vigorously. While we believe a loss is not probable, we estimate the range of possible losses related to this assessment is from \$0 to \$6.0 million. No amount was accrued at December 31, 2017 or 2016, for this matter.

We are entitled to indemnification from the former shareholders of Autocam, subject to the limitations and procedures set forth in the agreement and plan of merger relating to the Autocam acquisition. Management believes the indemnification would include amounts owed for the tax, interest and penalties related to this matter.

All Other Legal Matters

All other legal proceedings are of an ordinary and routine nature and are incidental to our operations. Management believes that such proceedings should not, individually or in the aggregate, have a material adverse effect on our business, financial condition, results of operations or cash flows. In making that determination, we analyze the facts and circumstances of each case at least quarterly in consultation with our attorneys and determine a range of reasonably possible outcomes.

Note 15. Equity Offering

On July 1, 2015, we closed an underwritten registered public offering of common stock offered pursuant to a shelf registration statement on Form S-3 that was previously filed with, and declared effective by, the Securities Exchange Commission. The total number of shares of common stock sold was 7,590,000 at a public offering price of \$24.00 per share. All of the shares in the offering were sold by us. Our net proceeds from the offering, after deducting underwriting discounts and commissions and offering expenses, were approximately \$173.1 million. Of these proceeds, \$148.7 million was used for repayment of principal and interest on our existing debt.

Note 16. Share-Based Compensation

We recognize compensation expense of all employee and non-employee director share-based compensation awards in the financial statements based upon the grant date fair value of the awards over the requisite service or vesting period, less any expense incurred for estimated forfeitures. As of December 31, 2017, we have approximately 1.9 million maximum shares that can be issued as options, stock appreciation rights, and other share-based awards. Common shares delivered upon exercise or vesting may consist of newly issued common shares or shares acquired in the open market.

Share-based compensation cost is recognized in the "Selling, general and administrative expense" line in the Consolidated Statements of Operations and Comprehensive Income (Loss) except for \$1.0 million, \$0.5 million, and \$0.7 million attributable to discontinued operations for the years ended December 31, 2017, 2016 and 2015, respectively. The following table lists the components of share-based compensation cost by type of award.

	Year	Year Ended December 31,		
		2016	2015	
Stock options	\$1,078	\$ 687	\$ 984	
Restricted stock	1,968	2,061	2,623	
Performance share units	2,450	1,187	432	
Share-based compensation	\$5,496	\$3,935	\$4,039	

The total tax benefit for share-based compensation cost was \$1.6 million, \$0.6 million, and \$0.6 million for the years ended December 31, 2017, 2016, and 2015, respectively. Unrecognized compensation cost related to unvested awards was \$4.6 million as of December 31, 2017. We expect that cost to be recognized over a weighted-average period of 2.0 years.

Stock Options

Option awards are typically granted to key employees on an annual basis. A single option grant is typically awarded to eligible employees each year by the Compensation Committee of the Board of Directors. The Compensation Committee occasionally awards additional individual grants to eligible employees. All employees are awarded options at an exercise price equal to the closing price of our stock on the date of grant. The term life of options is ten years with a vesting period of generally three years.

During 2017, 2016 and 2015, we granted options to purchase 125,700, 167,000, and 54,100 shares, respectively, to certain key employees. The weighted average grant date fair value of the options granted during 2017, 2016 and 2015 was \$11.84, \$5.02, and \$12.61 per share, respectively. The fair value of our options cannot be determined by market value because they are not traded in an open market. Accordingly, we utilized the Black Scholes financial pricing model to estimate the fair value. The following table shows the weighted average assumptions relevant to determining the fair value of stock options granted in each year.

	2017	2016	2015
Expected term	6 years	6 years	6 years
Risk free interest rate	2.03%	1.43%	1.43%
Dividend yield	1.16%	2.48%	1.11%
Expected volatility	56.56%	59.23%	59.22%
Expected forfeiture rate	3.00%	3.00%	3.00%

The expected term is derived from using the simplified method of determining stock option terms as described under the Securities and Exchange Commission's Staff Accounting Bulletin Topic 14, *Share-based payment*. The simplified method was used because sufficient historical stock option exercise experience was not available.

The average risk-free interest rate is derived from United States Department of Treasury published interest rates of daily yield curves for the same time period as the expected term.

The expected dividend yield is derived by a mathematical formula which uses the expected annual dividends over the expected term divided by the fair market value of our common stock at the grant date.

The expected volatility rate is derived from our actual common stock historical volatility over the same time period as the expected term. The volatility rate is derived by mathematical formula utilizing daily closing price data.

The forfeiture rate is determined from examining the historical pre-vesting forfeiture patterns of past option issuances to key employees. While the forfeiture rate is not an input of the Black Scholes model for determining the fair value of the options, it is an important determinant of stock option compensation expense to be recorded.

The following table summarizes option activity for the year ended December 31, 2017.

Options	Shares (in thousands)	Weighted- Average Exercise Price (per share)	Weighted- Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Outstanding at January 1, 2017	897	\$ 12.22		
Granted	126	24.20		
Exercised	(263)	11.84		\$ 3,784
Forfeited or expired	(14)	14.34		
Outstanding at December 31, 2017	746	\$ 14.33	6.2	\$ 9,900(1)
Exercisable at December 31, 2017	573	\$ 12.75	5.5	\$ 8,506(1)

 The intrinsic value is the amount by which the closing market price of our stock as of December 31, 2017, was greater than the exercise price of any individual option grant.

Cash proceeds from the exercise of options in the years ended December 31, 2017, 2016, and 2015 totaled approximately \$3.1 million, \$2.6 million, and \$2.0 million, respectively. The tax benefit recognized from stock option exercises was \$0.2 million, less than \$0.1 million, and \$0.1 million in the years ended December 31, 2017, 2016, and 2015, respectively. For the years ended December 31, 2017, 2016 and 2015, proceeds from stock options are presented exclusive of tax benefits in cash flows from financing activities in the Consolidated Statements of Cash Flows. The total intrinsic value of options exercised during the years ended December 31, 2017, 2016 and 2015 was \$3.8 million, \$2.9 million, and \$2.6 million, respectively.

Restricted Stock

During 2017, 2016, and 2015 we granted 85,393, 152,510, and 114,475 restricted stock awards to non-executive directors, officers and certain other key employees. Restricted stock awards generally vest pro-rata over three years for officers and certain other key employees and over one year for non-executive directors. We determined the fair value of the shares awarded by using the closing price of our common stock as of the date of grant. The weighted average grant date value of restricted stock granted in 2017 was \$24.29 per share. The following table summarizes the status of unvested restricted stock awards as of December 31, 2017, and changes during the year then ended.

	Nonvested Restricted Shares (in thousands)		eighted age Grant- ate Fair Value
Nonvested at January 1, 2017	202	\$	15.01
Granted	85	\$	24.29
Vested	(135)	\$	15.63
Forfeited	_	\$	_
Nonvested at December 31, 2017	152	\$	19.21

Total grant-date fair value of restricted stock that vested in the years ended December 31, 2017, 2016, and 2015, was \$2.1 million, \$2.6 million, and \$1.2 million, respectively.

Performance Share Units

Performance Share Units ("PSUs") are a form of long-term incentive compensation awarded to executive officers and certain other key employees designed to directly align the interests of employees to the interests of our stockholders, and to create long-term stockholder value. PSU awards granted in 2017 were made pursuant to the NN, Inc. 2016 Omnibus Incentive Plan and a Performance Share Unit Agreement. PSU awards granted in 2015 and 2016 were made pursuant to the NN, Inc. 2011 Stock Incentive Plan and a Performance Share Unit Agreement. Some PSUs are based on total shareholder return ("TSR Awards"), and other PSUs are based on return on invested capital ("ROIC Awards").

The TSR Awards vest, if at all, upon our achieving a specified relative total shareholder return, which will be measured against the total shareholder return of the S&P SmallCap 600 Index during specified performance periods as defined in the award agreements. Each performance period generally begins on January 1 of the year of grant and ends 36 months later on December 31. The ROIC Awards will vest, if at all, upon our achieving a specified average return on invested capital during the performance periods. We recognize compensation expense over the performance period in which the performance and market conditions are measured. If the PSUs do not vest at the end of the performance periods, then the PSUs will expire automatically. Upon vesting, the PSUs will be settled by the issuance of shares of our common stock, subject to the executive officer's continued employment. The actual number of shares of common stock will be issued to each award recipient at the

end of the performance periods will be interpolated between a threshold and maximum payout amount based on actual performance results. No dividends will be paid on outstanding PSUs during the performance period; however, dividend equivalents will be paid based on the number of shares of common stock that are ultimately earned at the end of the Performance Periods.

With respect to the TSR Awards, a participant will earn 50% of the target number of PSUs for "Threshold Performance," 100% of the target number of PSUs for "Target Performance," and 150% of the target number of PSUs for "Maximum Performance." With respect to the ROIC Awards, a participant will earn 35% of the target number of PSUs for "Threshold Performance," 100% of the target number of PSUs for "Target Performance," and 150% of the target number of PSUs for "Maximum Performance. For performance levels falling between the values shown below, the percentages will be determined by interpolation. The following table presents the goals with respect to TSR and ROIC for each award.

TSR:

	Threshold Performance (50% of Shares)	Target Performance (100% of Shares)	Maximum Performance (150% of Shares)
2017 grants	35th Percentile	50th Percentile	75th Percentile
2016 grants	35th Percentile	50th Percentile	75th Percentile
2015 grants	35th Percentile	50th Percentile	75th Percentile

ROIC:

	Threshold Performance (35% of Shares)	Target Performance (100% of Shares)	Maximum Performance (150% of Shares)
2017 grants	15%	17.5%	20%
2016 grants	15.5%	18%	20.5%
2015 grants	11%	12.5%	14%

We estimate the grant date fair value of TSR Awards using the Monte Carlo simulation model, as the total shareholder return metric is considered a market condition under ASC Topic 718, *Compensation – stock compensation*. The grant date fair value of ROIC Awards is based on the closing price of a share of our common stock on the date of grant. The following table presents the number of awards granted and the grant date fair value of each award in the periods presented.

	TSR	Awards	RO	OIC Awards			
	Shares	Grant Date	Shares (in	Grant Date			
Award Year	(in thousands)	<u>Fair Value</u>	<u>thousands)</u>	Fair Value			
2017	46	\$ 29.84	53	\$ 24.20			
2016	101	\$ 9.38	101	\$ 11.31			
2015	36	\$ 28.61	36	\$ 25.16			

We generally recognize expense for ROIC Awards based on the Target Performance threshold of 100% because, at the date of grant, the Target Performance is the probable level of performance achievement. In 2017, we determined that it was probable that the ROIC Awards granted in 2015 would vest at the Maximum Performance level of 150% rather than 100%. Accordingly, we recorded a cumulative catch-up adjustment of \$0.4 million to selling, general, and administrative expense and additional paid-in capital in the fourth quarter of 2017 to retroactively apply the new estimate. All PSUs that vested on December 31, 2017, will be settled in shares on April 30, 2018. The total grant-date fair value of TSR Awards that vested in 2017 was \$0.9 million. The total grant-date fair value of ROIC awards that vested in 2017 was \$1.2 million.

The following table summarizes the status of unvested PSU awards as of December 31, 2017, and changes during the year then ended.

	Nonvested TS	SR Awards	Nonvested RO	IC Awards
		Weighted Average		Weighted Average
	Shares (in thousands)	Grant-Date Fair Value	Shares (in thousands)	Grant-Date Fair Value
Nonvested at January 1, 2017	124	\$ 14.33	124	\$ 14.87
Change in Vesting Estimate (1)	_	\$ —	16	\$ 25.16
Granted	46	\$ 29.84	53	\$ 24.20
Vested	(32)	\$ 28.61	(48)	\$ 25.16
Forfeited	(8)	\$ 19.19	(9)	\$ 18.03
Nonvested at December 31, 2017	130	\$ 16.60	136	\$ 16.27

1) Represents additional shares expected to be issued in settlement of ROIC Awards that were granted in 2015.

Acceleration of Vesting

Prior to the sale of the PBC Business, our board of directors approved the acceleration of vesting of share-based awards to 19 members of PBC management in recognition of their service to the Company. The vesting date was accelerated to August 17, 2017, and the term was changed to two years for 58,094 option awards. The vesting date for 25,564 restricted stock awards was accelerated to August 17, 2017. We accounted for the acceleration of vesting as a modification of share-based awards. Accordingly, we recognized in discontinued operations approximately \$0.8 million of incremental share-based compensation expense.

Note 17. Accumulated Other Comprehensive Income

The majority of our AOCI relates to foreign currency translation of our foreign subsidiary balances. During the year ended December 31, 2017, we had other comprehensive income of \$22.1 million due to foreign currency translations. In connection with the sale of the PBC Business, we reclassified \$9.2 million out of AOCI to discontinued operations on the Consolidated Statement of Operations in 2017. During the year ended December 31, 2016, we had other comprehensive loss of \$10.6 million due to foreign currency translations and a net \$1.9 million gain due to change in fair value of the interest rate swap and discontinuation of hedge accounting. Amounts related to the interest rate swap were reclassified out of AOCI during 2016 upon discontinuation of hedge accounting. During the year ended December 31, 2015, we had other comprehensive loss of \$24.9 million due to foreign currency translations and a \$1.6 million other comprehensive loss due to change in fair value of the interest rate swap.

Note 18. Net Income (Loss) Per Share

The following summarizes the computation of basic and diluted net income (loss) per share.

	Year Ended December 31,							
	2017	2016	2015					
Income (loss) from continuing operations	\$ 25,364	\$ (9,490)	\$(24,375)					
Income from discontinued operations, net of tax	137,688	16,153	17,889					
Net income (loss)	\$163,052	\$ 6,663	\$ (6,486)					
Weighted average shares outstanding	27,433	27,016	21,181					
Effect of dilutive stock options	322							
Diluted shares outstanding	27,755	27,016	21,181					
Basic income (loss) from continuing operations per share	\$ 0.92	\$ (0.35)	\$ (1.15)					
Basic income from discontinued operations per share	5.02	0.60	0.84					
Basic net income (loss) per share	\$ 5.94	\$ 0.25	\$ (0.31)					
Diluted income (loss) from continuing operations per share	\$ 0.91	\$ (0.35)	\$ (1.15)					
Diluted income from discontinued operations per share	4.96	0.60	0.84					
Diluted net income (loss) per share	\$ 5.87	\$ 0.25	\$ (0.31)					

The calculations of diluted income (loss) from continuing operations per share for the years ended December 31, 2017, 2016, and 2015, exclude 0.4 million, 0.8 million, and 1.0 million stock options which had the effect of being anti-dilutive. Given the net loss from continuing operations in 2016 and 2015, all options are considered anti-dilutive in those years. Stock options excluded from the calculations of diluted income (loss) from continuing operations per share for the years ended December 31, 2017, 2016, and 2015, had a per share exercise price ranging from \$4.42 to \$25.16 in each respective year.

Note 19. Fair Value Measurements

Fair value is an exit price representing the expected amount that an entity would receive to sell an asset or pay to transfer a liability in an orderly transaction with market participants at the measurement date. We followed consistent methods and assumptions to estimate fair values as more fully described in Note 1.

Our financial instruments that are subject to fair value disclosure consist of cash and cash equivalents, accounts receivable, accounts payable, derivatives, short-term investments and long-term debt. As of December 31, 2017, the carrying values of these financial instruments approximated fair value. The fair value of floating-rate debt approximates the carrying amount because the interest rates paid are based on short-term maturities. As of December 31, 2017, we had no fixed-rate debt outstanding.

Nonrecurring Fair Value Measurements

We completed the Vandalia acquisition on October 2, 2017. In connection with our accounting for this acquisition, it was necessary for us to estimate the values of the assets acquired and liabilities assumed, which involved the use of various assumptions discussed in Note 3. The following table summarizes the fair value estimates for financial and nonfinancial assets and liabilities measured at fair value on a nonrecurring basis by category as of the acquisition date:

			Fair Value Measurements During 2017, Using											
Description	Mea	air Value asurements Acquisition Date	Quoted Prices in Active Markets for Identical Assets (Level 1)		Active Markets for Identical		Active Markets for Identical		Active Markets for Identical		Observ	icant Other vable Inputs evel 2)	Und	gnificant observable its (Level 3)
Vandalia current assets	\$	10,166	\$		\$		\$	10,166						
Vandalia property, plant and equipment		13,981		_		_		13,981						
Vandalia intangible assets subject to amortization		6,900		_		_		6,900						
Vandalia other non-current assets		29				_		29						
Vandalia goodwill		9,452		_		_		9,452						
Vandalia non-current liabilities		(1,794)				—		(1,794)						
	\$	38,734	\$	_	\$	_	\$	38,734						

Recurring Fair Value Measurements

Fair value principles prioritize valuation inputs across three broad levels. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities. Level 2 inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument. Level 3 inputs are unobservable inputs based on the assumptions used to measure assets and liabilities at fair value. An asset or liability's classification within the various levels is determined based on the lowest level input that is significant to the fair value measurement.

Our policy is to manage interest expense using a mix of fixed and variable rate debt. To manage this mix effectively, we may enter into interest rate swaps in which we agree to exchange the difference between fixed and variable interest amounts calculated by reference to an agreed upon notional principal amount. At December 31, 2016, we had a \$150 million interest rate swap that fixed the interest rate on a portion of our variable rate debt at 6.466%. The objective of the interest rate swap was to eliminate the variability of cash flows in interest payments on the first \$150 million of variable interest debt. At the inception of the interest rate swap, the variable rate benchmark was three-month LIBOR for both the variable rate debt and the interest rate swap. The changes in cash flows of the interest rate swap were expected to exactly offset the changes in cash flows of the variable rate debt. The hedged risk was the interest rate risk exposure to changes in the interest payments, attributable to changes in the benchmark three-month LIBOR interest rates (subject to a 1.0% LIBOR index floor) through December 31, 2018. During 2016, the LIBOR floor index on our Senior Secured Term Loan was lowered to 0.75%, and our intent regarding future interest rate resets changed. Three-month LIBOR was above the floor, and it was more economical to use one-month LIBOR. Therefore, our intensions called into question the probability of the amounts deferred in AOCI as the forested transactions would not be probable. As a result, we chose to discontinue hedge accounting in 2016, reclassified all amounts in AOCI to earnings, and began to account for the interest rate swap on a mark-to-market basis. The change in reporting had no impact on our reported cash flows. In October 2017, we terminated the interest rate swap with a cash payment of \$1.3 million. As of December 31, 2017, we had no interest rate swaps outstanding.

The following table summarizes assets and liabilities measured at fair value on a recurring basis for the interest rate swap derivative financial instrument as of December 31, 2016.

		Fair Value Measurements as of December 31, 201							
Description	December 31, 2016	Quoted Prices in Active Markets for Identical Assets (Level 1)	Active Markets Significant Other for Identical Observable Inputs						
Derivative asset—current	\$ 69	\$ —	\$ 69	\$ —					
Derivative asset—noncurrent	6	_	6	_					
Derivative liability—current	(1,903)	_	(1,903)	_					
Derivative liability—noncurrent	(1,028)	_	(1,028)	_					
	\$ (2,856)	\$ —	\$ (2,856)	\$ —					

The inputs for determining fair value of the interest rate swap are classified as Level 2 inputs. Level 2 fair value is based on estimates using standard pricing models. These standard pricing models use inputs which are derived from or corroborated by observable market data such as interest rate yield curves, index forward curves, discount curves, and volatility surfaces. Counterparties to these derivative contracts are highly rated financial institutions which management believes carry only a minimal risk of nonperformance.

We have elected to present the derivative contracts on a gross basis in the Consolidated Balance Sheets included within other current assets, other non-current assets, other current liabilities and other non-current liabilities.

As of December 31, 2017, we had no gains or losses in AOCI related to the interest rate swap. In connection with lowering the LIBOR index floor from 1.0% to 0.75% within the \$150 million interest rate swap, we received a \$0.3 million payment in 2016 that reduced the net liability position on the \$150 million interest rate swap. The payment was reported in the "Derivative payments on interest rate swap" line in the Consolidated Statement of Operations and Comprehensive Income (Loss) for the year ended December 31, 2016. Additionally, during the portion of 2016 when the interest rate swap was accounted for in accordance with hedge accounting, the periodic settlements and related reclassification of other comprehensive income were recognized as \$1.4 million of net hedging losses on the interest rate swap in the "Interest expense" line on the Consolidated Statements of Operations and Comprehensive Income (Loss). The "Derivative loss (gain) on change in interest rate swap fair value" line on the Consolidated Statements of Operations and Comprehensive Income (Loss) includes interest rate swap settlements of \$1.4 million in both 2017 and 2016.

Derivatives' Hedging Relationships

As of December 31, 2017 and 2016, we did not own derivative instruments that were classified as fair value hedges or trading securities. In addition, as of December 31, 2017 and 2016, we did not own derivative instruments containing credit risk contingencies.

Note 20. Quarterly Results of Operations (Unaudited)

The effect of the revision discussed within Note 1 to the 2017 and 2016 previously issued unaudited quarterly financial results is as follows (in thousands, except per share data). The 2017 quarterly revisions will be affected in connection with the future 2018 unaudited interim condensed consolidated financial statement filings on Form 10-Q. The effect of recasting the prior periods for the PBC discontinued operations as described in Note 2 is also reflected below.

The following summarizes the unaudited quarterly results of operations for the fourth quarter ended December 31, 2017.

Fourth Quarter 2017		
Net sales	\$15	56,135
Cost of sales (exclusive of depreciation and amortization)	1.1	18,814
Income (loss) from continuing operations		53,325
Income from discontinued operations, net of tax	1	(2,507)
Net income (loss)	5	50,818
Comprehensive income (loss)	5	51,885
Basic income (loss) from continuing operations per share	\$	1.93
Basic net income (loss) per share	\$	1.84
Diluted income (loss) from continuing operations per share	\$	1.91
Diluted net income (loss) per share	\$	1.82

The effect of recasting the prior periods for the PBC discontinued operations as described in Note 2 is also reflected below.

	As Originally Reported	Ad			Discontinued Operations		Revised
Third Quarter 2017							
Net sales	\$148,156	\$	_			\$1	48,156
Cost of sales (exclusive of depreciation and amortization)	110,836		436			1	11,272
Income (loss) from continuing operations	(2,930)		(550)				(3,480)
Income from discontinued operations, net of tax	135,825		(6,384)				29,441
Net income (loss)	132,895		(6,934)			1	25,961
Comprehensive income (loss)	129,735		(6,606)			1	23,129
Basic income (loss) from continuing operations per share	\$ (0.11)	\$	(0.02)			\$	(0.13)
Basic net income (loss) per share	\$ 4.82	\$	(0.25)			\$	4.57
Diluted income (loss) from continuing operations per share	\$ (0.11)	\$	(0.02)			\$	(0.13)
Diluted net income (loss) per share	\$ 4.82	\$	(0.25)			\$	4.57
Second Quarter 2017							
Net sales	\$225,875	\$	_	\$	(67,928)	\$1	57,947
Cost of sales (exclusive of depreciation and amortization)	166,040		_		(51,526)	1	14,514
Income (loss) from continuing operations	(21,529)		391		(5,236)	(26,374)
Income from discontinued operations, net of tax	_		_		5,236		5,236
Net income (loss)	(21,529)		391			(21,138)
Comprehensive income (loss)	(12,289)		662			(11,627)
Basic income (loss) from continuing operations per share	\$ (0.78)	\$	0.01	\$	(0.19)	\$	(0.96)
Basic net income (loss) per share	\$ (0.78)	\$	0.01			\$	(0.77)
Diluted income (loss) from continuing operations per share	\$ (0.78)	\$	0.01	\$	(0.19)	\$	(0.96)
Diluted net income (loss) per share	\$ (0.78)	\$	0.01			\$	(0.77)
First Quarter 2017							
Net sales	\$226,314	\$	_	\$	(68,759)	\$1	57,555
Cost of sales (exclusive of depreciation and amortization)	166,954		485		(52,959)	1	14,480
Income (loss) from continuing operations	7,407		4		(5,518)		1,893
Income from discontinued operations, net of tax	_		_		5,518		5,518
Net income (loss)	7,407		4				7,411
Comprehensive income (loss)	12,113		403				12,516
Basic income (loss) from continuing operations per share	\$ 0.27	\$	0.00	\$	(0.20)	\$	0.07
Basic net income (loss) per share	\$ 0.27	\$	0.00			\$	0.27
Diluted income (loss) from continuing operations per share	\$ 0.27	\$	0.00	\$	(0.20)	\$	0.07
Diluted net income (loss) per share	\$ 0.27	\$	0.00			\$	0.27

		As iginally ported Adjustment			Discontinued Operations			Revised		
Fourth Quarter 2016										
Net sales		02,029	\$	_	\$	(60,385)	\$141,644			
Cost of sales (exclusive of depreciation and amortization)	1	51,936		466		(47,597)	1	04,805		
Income (loss) from continuing operations		3,063		(1,512)		(3,737)		(2,186)		
Income from discontinued operations, net of tax		_		_		3,737		3,737		
Net income (loss)		3,063		(1,512)				1,551		
Comprehensive income (loss)	(10,212)		(90)			(10,302)		
Basic income (loss) from continuing operations per share	\$	0.11	\$	(0.06)	\$	(0.14)	\$	(80.0)		
Basic net income (loss) per share	\$	0.11	\$	(0.06)			\$	0.06		
Diluted income (loss) from continuing operations per share	\$	0.11	\$	(0.06)	\$	(0.14)	\$	(80.0)		
Diluted net income (loss) per share	\$	0.11	\$	(0.06)			\$	0.06		
Third Quarter 2016										
Net sales	\$2	04,961	\$	_	\$	(58,247)	\$1	46,714		
Cost of sales (exclusive of depreciation and amortization)	1	52,538		91		(45,353)	1	07,276		
Income (loss) from continuing operations		4,147		419		(3,622)		944		
Income from discontinued operations, net of tax		_		_		3,622		3,622		
Net income (loss)		4,147		419				4,566		
Comprehensive income (loss)		8,740		(2,938)				5,802		
Basic income (loss) from continuing operations per share	\$	0.15	\$	0.02	\$	(0.13)	\$	0.03		
Basic net income (loss) per share	\$	0.15	\$	0.02		, ,	\$	0.17		
Diluted income (loss) from continuing operations per share	\$	0.15	\$	0.02	\$	(0.13)	\$	0.03		
Diluted net income (loss) per share	\$	0.15	\$	0.02			\$	0.17		
Second Quarter 2016										
Net sales	\$2	14,272	\$	_	\$	(65,157)	\$1	49,115		
Cost of sales (exclusive of depreciation and amortization)	1	56,794		114		(49,580)	1	07,328		
Income (loss) from continuing operations				2,031		(172)		(4,326)		(2,467)
Income from discontinued operations, net of tax		_				4,326		4,326		
Net income (loss)		2,031		(172)		ŕ		1,859		
Comprehensive income (loss)		(973)		(1,879)				(2,852)		
Basic income (loss) from continuing operations per share	\$	0.08	\$	(0.01)	\$	(0.16)	\$	(0.09)		
Basic net income (loss) per share	\$	0.08	\$	(0.01)		,	\$	0.07		
Diluted income (loss) from continuing operations per share	\$	0.07	\$	(0.01)	\$	(0.16)	\$	(0.09)		
Diluted net income (loss) per share	\$	0.07	\$	(0.01)		(3.3)	\$	0.07		
First Quarter 2016	-		•	(3132)			-			
Net sales	\$2	12,226	\$	_	\$	(64,745)	\$1	47,481		
Cost of sales (exclusive of depreciation and amortization)		59,754	•	144	_	(50,464)		09,434		
Income (loss) from continuing operations		(1,299)		(14)		(4,468)		(5,781)		
Income from discontinued operations, net of tax				— (1·)		4,468		4,468		
Net income (loss)		(1,299)		(14)		.,		(1,313)		
Comprehensive income (loss)		4,418		884				5,302		
Basic income (loss) from continuing operations per share	\$	(0.05)	\$	(0.00)	\$	(0.17)	\$	(0.22)		
Basic net income (loss) per share	\$	(0.05)	\$	(0.00)	Ψ	(3,17)	\$	(0.22)		
Diluted income (loss) from continuing operations per share	\$	(0.05)	\$	(0.00)	\$	(0.17)	\$	(0.22)		
Diluted net income (loss) per share	\$	(0.05)	\$	(0.00)	Ψ	(0.17)	\$	(0.22)		
Diacea net income (1000) per siture	Ψ	(0.05)	Ψ	(0.00)			Ψ	(0.05)		

The fourth quarter of 2017 was impacted by acquisition related costs of \$0.2 million pre-tax, and \$0.1 million after-tax related to the Vandalia acquisition. The fourth quarter of 2017 includes \$0.5 million of net loss attributable to the operations of the Vandalia business after the acquisition date of October 2, 2017. We recognized an estimated after-tax gain on sale of the PBC Business of \$129.4 million in the third quarter of 2017. Working capital adjustments and revisions of \$1.5 million after taxes reduced the gain and were recorded in discontinued operations in the fourth quarter of 2017, resulting in a final gain of \$127.7 million.

The second quarter of 2017 includes \$39.6 million loss on extinguishment of debt and write-offs of unamortized debt issuance costs incurred in connection with the April 3, 2017, redemption of Senior Notes and amendment of our credit facility as disclosed in Note 12. The fourth quarter of 2017 includes an additional \$2.4 million of loss on extinguishment of debt and write-offs of unamortized debt issuance costs incurred in connection with the November 24, 2017, amendment of the credit facility to reduce interest rates as disclosed in Note 12.

Note 21. Prior Periods' Financial Statement Revision

The following tables present the effect of the correction of the misstatements and the revision on the Consolidated Statements of Operations and Comprehensive Income (Loss), as further described in Note 1. Also, as further described in Note 2, due to the disposition of PBC and the related discontinued operations treatment, the tables below present separately the impact of the correction of the misstatements as well as the effect of recasting the prior periods for the PBC discontinued operations.

	Year Ended December 31, 2016						
	As Originally Reported Adjustment			Discontinued Operations	Λ.	s Revised	
Cost of sales (exclusive of depreciation and amortization)		521,022	\$	815	\$ (192,994)		428,843
Selling, general and administrative expense		80,266		870	(16,992)		64,144
Depreciation and amortization		62,488		85	(11,852)		50,721
Other operating expense (income)		288		548	(27)		809
Income from operations		59,400		(2,318)	(22,303)		34,779
Loss on extinguishment of debt and write-off of unamortized debt issuance costs		3,089		(500)	_		2,589
Other (income) expense, net		(2,591)		(783)	503		(2,871)
Income (loss) from continuing operations before							
provision (benefit) for income taxes and share							
of net income from joint venture		(7,309)		(1,035)	(22,522)		(30,866)
Provision (benefit) for income taxes		(9,313)		244	(6,369)		(15,438)
Income (loss) from continuing operations		7,942		(1,279)	(16,153)		(9,490)
Net income (loss)	\$	7,942	\$	(1,279)		\$	6,663
Other comprehensive income (loss):							
Change in fair value of interest rate swap		3,015		(1,105)			1,910
Foreign currency translation loss		(8,984)		(1,639)			(10,623)
Other comprehensive loss		(5,969)		(2,744)			(8,713)
Comprehensive income (loss)	\$	1,973	\$	(4,023)		\$	(2,050)
Basic net income (loss) per share	\$	0.29	\$	(0.05)		\$	0.25
Diluted net income (loss) per share	\$	0.29	\$	(0.05)		\$	0.25

	Year Ended December 31, 2015							
	As Originally Reported Adju			Discontinued Adjustment Operations			Revised	
Selling, general and administrative expense	\$	51,745	\$	596	\$ (17,468)	_	34,873	
Depreciation and amortization		44,482		(13)	(11,496)		32,973	
Other operating expense (income)		(687)		663	_		(24)	
Income (loss) from operations		26,797		(1,246)	(25,493)		58	
Loss on extinguishment of debt and write-off of unamortized debt issuance costs		18,673		500	_		19,173	
Income (loss) from continuing operations before								
provision (benefit) for income taxes and share								
of net income from joint venture		(22,950)		(1,746)	(24,522)	(49,218)	
Provision (benefit) for income taxes		(10,518)		(2,691)	(6,633)	(19,842)	
Income (loss) from continuing operations		(7,431)		945	(17,889)	(24,375)	
Net income (loss)	\$	(7,431)	\$	945		\$	(6,486)	
Other comprehensive income (loss):								
Change in fair value of interest rate swap		(2,584)		947			(1,637)	
Foreign currency translation loss		(21,936)		(2,967)		(24,903)	
Other comprehensive loss		(24,520)		(2,020)		(26,540)	
Comprehensive income (loss)	\$	(31,951)	\$	(1,075)		\$ (33,026)	
Basic net income (loss) per share	\$	(0.35)	\$	0.04		\$	(0.31)	
Diluted net income (loss) per share	\$	(0.35)	\$	0.04		\$	(0.31)	

The following table presents the effect of the correction of the misstatements on the Consolidated Balance Sheet as well as the effect of recasting the prior periods for the PBC discontinued operations.

	As of December 31, 2016					
	As Originally Reported	Discontinued Adjustment Operations		As Revised		
Income tax receivable	\$ —	\$ 1,041	\$ 700	\$ 1,741		
Other current assets	11,752	32	(4,755)	7,029		
Total current assets	280,555	1,073	700	282,328		
Property, plant and equipment, net	322,953	(487)	(92,373)	230,093		
Goodwill	450,311	2,127	(8,909)	443,529		
Investment in joint venture	40,694	(4,686)	_	36,008		
Other non-current assets	9,892	(839)	(940)	8,113		
Total assets	1,360,386	(2,812)	700	1,358,274		
Accounts payable	75,719	(15)	(31,014)	44,690		
Accrued salaries, wages and benefits	24,996	1,464	(9,234)	17,226		
Income tax payable	2,125	_	(2,125)	_		
Other current liabilities	23,025	(524)	(2,176)	20,325		
Total current liabilities	138,616	925	700	140,241		
Deferred tax liabilities	99,591	600	(4,173)	96,018		
Other non-current liabilities	21,267	1,471	(8,438)	14,300		
Total liabilities	1,045,187	2,996	700	1,048,883		
Retained earnings	55,509	(334)		55,175		
Accumulated other comprehensive loss	(25,122)	(5,474)		(30,596)		
Total stockholders' equity	315,199	(5,808)		309,391		
Total liabilities and stockholders' equity	1,360,386	(2,812)	700	1,358,274		

The following tables present the effect of the correction of the misstatements on our Consolidated Statements of Changes in Stockholders' Equity.

	As of and for the Year Ended December 31, 2016				
	As Previously Reported	Adjustment	As Revised		
Net income (loss)	\$ 7,942	\$ (1,279)	\$ 6,663		
Retained earnings	55,509	(334)	55,175		
Change in fair value of interest rate swap	3,015	(1,105)	1,910		
Share-based compensation expense	4,270	(335)	3,935		
Foreign currency translation loss	(8,984)	(1,639)	(10,623)		
Accumulated other comprehensive loss	(25,122)	(5,474)	(30,596)		
Total stockholders' equity	315,199	(5,808)	309,391		

	As of and for the Year Ended December 31, 2015				
	As Previously Reported	Adjustment	As Revised		
Net income (loss)	\$ (7,431)	\$ 945	\$ (6,486)		
Retained earnings	55,151	945	56,096		
Change in fair value of interest rate swap	(2,584)	947	(1,637)		
Share-based compensation expense	3,704	335	4,039		
Foreign currency translation loss	(21,936)	(2,967)	(24,903)		
Accumulated other comprehensive loss	(19,153)	(2,730)	(21,883)		
Additional paid-in capital	277,582	335	277,917		
Total stockholders' equity	313,881	(1,450)	312,431		

The following tables present the effect of the correction of the misstatements on our Consolidated Statements of Cash Flows.

		Year Ended De	cember 31, 2016		
	As Originally Reported	Adjustment	Reclasses (1)	As Revised	
Net income (loss)	\$ 7,942	\$ (1,279)		\$ 6,663	
Adjustments to reconcile net income to net cash provided by (used by) operating activities:					
Depreciation and amortization	62,488	85		62,573	
Write-off of debt issuance costs	3,089	(500)		2,589	
Compensation expense from issuance of share-based awards	4,270	(335)		3,935	
Deferred income taxes	(10,430)	(5,096)		(15,526	
Other	_	(122)		(122	
Changes in operating assets and liabilities:					
Other current assets	(269)	(253)		(522	
Other non-current assets	1,833	548		2,381	
Income taxes payable (receivable)	_	(501)	284	(217	
Other liabilities	1,946	6,828	390	9,164	
Net cash provided by (used by) operating activities	69,303	(625)	674	69,352	
Cash flows from investing activities			· <u> </u>		
Proceeds from insurance claim	_	122		122	
Net cash provided by (used by) investing activities	(41,346)	122		(41,224	
Cash flows from financing activities					
Proceeds from long-term debt (2)		44,000		44,000	
Repayment of long-term debt (2)	(30,000)	(25,000)		(55,000	
Proceeds from (repayment of) short-term debt, net	18,544	(19,000)		(456	
Proceeds from shares issued	2,832	(2,832)		_	
Proceeds from issuance of stock and exercise of stock options	_	2,832		2,832	
Shares withheld to satisfy income tax withholding	_	,	(173)	(173	
Net cash provided by (used by) financing activities	(24,308)		(173)	(24,481	
Effect of exchange rate changes on cash flows	(4,331)		2	(4,329	
		(= 0.5)		•	
Net change in cash and cash equivalents	(682)	(503)	503	(682	
Cash and cash equivalents at beginning of period	15,087			15,087	
Cash and cash equivalents at end of period	14,405	(503)	503	14,405	
		Year Ended De	cember 31, 2015		
	As Originally			As	
	Reported	Adjustment	Reclasses (1)	Revised	
Net income (loss)	\$ (7,431)	\$ 945		\$ (6,486	
Adjustments to reconcile net income to net cash provided by (used by) operating activities:		(4.0)			
Depreciation and amortization	44,482	(13)		44,469	
Write-off of debt issuance costs	18,673	500		19,173	
Compensation expense from issuance of share-based awards	3,704	335		4,039	
Deferred income taxes	(16,878)	(2,265)		(19,143	
Changes in operating assets and liabilities:					
Accounts receivable	(1,343)		(1,149)	(2,492	
		0.0-			
Other current assets	(944)	865			
		865 942		(79 (559	

In come towns are the (marriagh)		(F.40)	2 171	2 (21
Income taxes payable (receivable)	_	(540)	3,171	2,631
Other liabilities	4,999	(307)	(1,251)	3,441
Accounts payable	(6,748)	(1,215)		(7,963)
Net cash provided by (used by) operating activities	33,310	(753)	771	33,328
Net cash provided by (used by) investing activities	(665,838)			(665,838)
Cash flows from financing activities				
Shares withheld to satisfy income tax withholding			(231)	(231)
Net cash provided by (used by) financing activities	611,851		(231)	611,620
Effect of exchange rate changes on cash flows	(1,553)	215	(2)	(1,340)
Net change in cash and cash equivalents	(22,230)	(538)	538	(22,230)
Cash and cash equivalents at beginning of period	37,317			37,317
Cash and cash equivalents at end of period	15,087	(538)	538	15,087

- (1) Includes the reclassification of prior period amounts to reflect current period presentation for the adoption of ASU 2016-09 (see Note 1), as well as for the addition of the income taxes payable (receivable) line item.
- (2) The 2016 presentation of proceeds from and repayments of long-term debt were shown net. The adjustments made are to present these amounts gross for each activity (proceeds from and repayments of) during 2016.

Note 22. Subsequent Events

New Business Structure

On January 2, 2018, we announced plans to implement a new enterprise and management structure designed to accelerate growth and further balance our portfolio by aligning our strategic assets and businesses. Under the new structure, our businesses will be organized into three segments based principally on the end markets they serve. Our segments will be known as Mobile Solutions, Power Solutions, and Life Sciences. Mobile Solutions will be focused on growth in the industrial and automotive end markets. Power Solutions will be focused on growth in the electrical and aerospace and defense end markets. Life Sciences will be focused on growth in the medical end market. As a result of the changes in our organizational structure, we expect to reallocate goodwill in relation to our operating segments. We are in the process of determining the impact of the new structure on our financial statements. Beginning in the first quarter of 2018, our segment disclosures will reflect our new organizational structure.

Bridgemedica Acquisition

On February 22, 2018, we completed the acquisition of 100% of the assets of Bridgemedica, LLC ("Bridgemedica") for \$15.0 million cash. Bridgemedica is a medical device company that provides concept to supply solutions through design, development engineering and manufacturing. Operating results of Bridgemedica will be reported prospectively in our Life Sciences segment. The effects of this acquisition are not reflected in the consolidated financial statements presented in this Annual Report because the acquisition occurred subsequent to December 31, 2017. We are in the process of analyzing the opening balance sheet and purchase price allocation.

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

None.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

Under the supervision and with the participation of management, including our Chief Executive Officer and Chief Financial Officer, we evaluated the effectiveness of disclosure controls and procedures (as defined in Rule 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")). Based upon that evaluation, as a result of the material weaknesses in internal control over financial reporting described below, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were not effective as of December 31, 2017, to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure.

Management's Report on Internal Control Over Financial Reporting

The management of NN, Inc. is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management, under the supervision and with the participation of the Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2017, based on the criteria described in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO").

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

Management has identified the following control deficiencies that constitute material weaknesses in our internal control over financial reporting as of December 31, 2017:

- We did not maintain an effective control environment due to a lack of a sufficient complement of personnel with an appropriate level of knowledge, experience and training commensurate with our financial reporting requirements.
- We did not maintain effective controls over information and communication as it relates to the accounting for income taxes. Specifically, we did not implement and reinforce an adequate process for communication and information sharing necessary to support the functioning of internal control between our tax group and our corporate accounting group.

These material weaknesses contributed to the material weaknesses described below:

- We did not design and maintain effective internal controls over the accounting for business combinations, which specifically included not
 designing and maintaining effective controls over the (a) accuracy, valuation and presentation and disclosure for allocating goodwill to our
 international businesses and (b) completeness, accuracy and valuation of deferred income taxes recorded in connection with business
 combinations;
- We did not design and maintain effective internal controls over the accounting for income taxes, which specifically included not designing and
 maintaining controls over the completeness, accuracy, valuation and presentation and disclosure of deferred income tax accounts, income tax
 provision and related disclosures.

These material weaknesses resulted in immaterial errors to other current assets; property, plant and equipment, net; goodwill; investment in joint venture; other non-current assets; accounts payable; accrued salaries, wages and benefits; other current liabilities; deferred tax liabilities; accumulated other comprehensive income; selling, general and administrative expense; depreciation and amortization; other operating expense/income; write-off of unamortized debt issuance costs; provision/benefit for income taxes; comprehensive income/loss; and cash flows in our consolidated financial statements for the years ended December 31, 2017, 2016 and 2015. These immaterial errors resulted in a revision to previously issued financial statements as discussed in

Note 1, Note 20 and Note 21 in the Notes to Consolidated Financial Statements presented in Item 8 of this Annual Report. Management has determined that the revision was an additional effect of the material weaknesses described above. Additionally, these control deficiencies could result in a misstatement of substantially all account balances or disclosures that would result in a material misstatement to the annual or interim consolidated financial statements that would not be prevented or detected.

Based on its evaluation, and as a result of the material weaknesses discussed above, management concluded we did not maintain effective internal control over financial reporting as of December 31, 2017.

The effectiveness of our internal control over financial reporting as of December 31, 2017, has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears under Item 8.

Remediation Plan for Material Weaknesses

Building on our efforts during 2016, with the oversight of the Audit Committee of our board of directors, we continued throughout 2017 to dedicate resources and efforts to improve our control environment and to take steps to remediate the material weaknesses identified above. While certain remediation plans have been implemented, we continue to actively plan for and implement additional remediation plans.

Remediation Action Taken During the Quarter Ended December 31, 2017

The following remediation efforts were completed in the current quarter.

We designed and implemented new income tax controls as well as enhanced the design of the existing income tax controls related to the preparation and review of the income tax provision, deferred income taxes and the related disclosures.

Remediation Actions Taken During Previous Quarters

The following remediation efforts were completed in previous quarters.

- · Enhanced our tax department by hiring two additional tax personnel and implementing automated tax software.
- Conducted a gap analysis to identify where new tax controls were needed and to enhance existing tax controls to specifically address
 completeness, accuracy, valuation and presentation and disclosure of deferred income tax accounts, income tax provision and related disclosures.
- Beginning in the third quarter of 2017, utilized automated tax software to perform tax calculations.
- Instituted additional training programs for our finance and accounting personnel.
- Augmented the personnel within our finance and accounting organization by adding two experienced personnel to address SEC technical
 accounting and reporting.
- Strengthened our business combination and income tax control process with improved accounting policies, documentation standards, technical oversight and training, as well as the recent hires noted above.
- Designed and implemented new business combination controls and enhanced the design of existing business combination controls to specifically
 address 1) accuracy, valuation and presentation and disclosure for allocating goodwill to newly acquired international businesses and 2)
 completeness, accuracy and valuation of deferred income taxes recorded in connection with business combinations.

Ongoing Remediation Efforts

We are continuing to enhance our overall financial control environment through the following:

Performing a gap analysis, not just for income taxes and business combinations, but for all business processes supporting internal control over
financial reporting to identify areas where new controls are needed and where existing controls need to be enhanced. This analysis will include,
but not be limited to, the evaluation of policies and procedures as well as information technology applications used in connection with the
execution of internal control over financial reporting.

- Evaluating the existing finance team to ensure the size and skill set of the team is adequate given the strategic changes that occurred in 2017 and the strategic objectives we have established for 2018 and beyond.
- Designing and implementing controls and processes to improve the communication and information sharing between our tax group and our corporate accounting group.

Status of Remediation Efforts

We believe the measures described above will remediate the material weaknesses we have identified and strengthen our internal control over financial reporting. We are committed to continuing to improve our internal control processes and will continue to review, optimize and enhance our financial reporting controls and procedures. As we continue to evaluate and work to improve our internal control over financial reporting, we may take additional measures to address control deficiencies, or we may modify, or in appropriate circumstances not complete, certain of the remediation measures described above. These material weaknesses will not be considered remediated until the applicable remedial controls operate for a sufficient period of time and management has concluded, through testing, that these controls are operating effectively.

Changes in Internal Control Over Financial Reporting

As described above in the "Remediation Plan for Material Weaknesses" section, there were changes during the fiscal quarter ended December 31, 2017, in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

Part III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this Item 10 of Form 10-K concerning our directors is contained in the sections entitled "Information about the Directors" and "Beneficial Ownership of Common Stock" of our definitive proxy statement to be filed with the Securities and Exchange Commission within 120 days after December 31, 2017, in accordance with General Instruction G to Form 10-K, is hereby incorporated herein by reference.

Our Code of Conduct/Ethics Statement, as amended (the "Code"), was most recently approved by our Board on August 11, 2016. The Code is applicable to all officers, directors and employees. The Code is posted on our website at www.nninc.com. Information contained on our website is not part of this Annual Report on Form 10-K. We will satisfy any disclosure requirements under Item 5.05 of Form 8-K regarding an amendment to, or waiver from, any provision of the Code with respect to our principal executive officer, principal financial officer, principal accounting officer and persons performing similar functions by disclosing the nature of such amendment or waiver on our website or in a Current Report on Form 8-K.

Item 11. Executive Compensation

The information required by Item 11 of Form 10-K is contained in the sections entitled "Information about the Directors — Compensation of Directors" and "Executive Compensation" of our definitive proxy statement and, in accordance with General Instruction G to Form 10-K, is hereby incorporated herein by reference.

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

The information required by Item 12 of Form 10-K is contained in the section entitled "Beneficial Ownership of Common Stock" of our definitive proxy statement and, in accordance with General Instruction G to Form 10-K, is hereby incorporated herein by reference.

Information required by Item 201(d) of Regulation S-K concerning our equity compensation plans is set forth in the table below.

Table of Equity Compensation Plan Information (in thousands, except per share data)

	(in thousands, except per share data)					
Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	exerc outstan	nted-average cise price of ding options, nts and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))		
Equity compensation plans approved by security holders	746	¢	14.33	1 027		
notuers	/40	Э	14.55	1,937		
Equity compensation plans not approved by security holders	<u></u> _		<u> </u>	<u> </u>		
Total	746	\$	14.33	1,937		

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

Information regarding review, approval or ratification of transactions with related persons is contained in a section entitled "Certain Relationships and Related Transactions" of our definitive proxy statement and, in accordance with General Instruction G to Form 10-K, is hereby incorporated herein by reference.

Information regarding director independence is contained in a section entitled "Information about the Directors" of our definitive proxy statement and, in accordance with General Instruction G to Form 10-K, is hereby incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

Information required by this item of Form 10-K concerning our accounting fees and services is contained in the section entitled "Fees Paid to Independent Registered Public Accounting Firm" of our definitive proxy statement and, in accordance with General Instruction G to Form 10-K, is hereby incorporated herein by reference.

Part IV

Item 15. Exhibits, Financial Statement Schedules

(a) Documents Filed as Part of this Report

1. Financial Statements

The financial statements of NN, Inc. filed as part of this Annual Report on Form 10-K begin on the following pages hereof:

Report of Independent Registered Public Accounting Firm	42
Consolidated Statements of Operations and Comprehensive Income (Loss)	44
Consolidated Balance Sheets	45
Consolidated Statements of Changes in Stockholders' Equity	46
Consolidated Statements of Cash Flows	47
Notes to Consolidated Financial Statements	48

Page

2. Financial Statement Schedules

The required information is reflected in the Notes to Consolidated Financial Statements within Item 8.

- 3. See Index to Exhibits (attached hereto)
- (b) Exhibits: See Index to Exhibits (attached hereto).

NN, Inc. will provide without charge to any person, upon the written request of such person, a copy of any of the Exhibits to this Form 10-K.

(c) Not Applicable

Item 16. Form 10-K Summary

None.

INDEX TO EXHIBITS

E 193		Incorporation by Reference			ce
Exhibit Number	Exhibit Description	Form	SEC File No.	Exhibit	Filing Date
2.1	Agreement and Plan of Merger, dated as of July 18, 2014, by and among NN, Inc., PMC Global Acquisition Corporation, Autocam Corporation, Newport Global Advisors, L.P., and John C. Kennedy	8-K	000-23486	2.1	July 22, 2014
2.2	Stock Purchase Agreement, dated as of August 17, 2015, by and among NN, Inc., Precision Engineered Products Holdings, Inc. and PEP Industries, LLC	8-K	000-23486	2.1	August 18, 2015
2.3	<u>Purchase Agreement, dated as of July 10, 2017, by and between NN, Inc. and TSUBAKI NAKASHIMA Co., Ltd.</u>	8-K	000-23486	2.1	July 10, 2017
3.1	Restated Certificate of Incorporation of NN, Inc.	S-3	333-89950	3.1	June 6, 2002
3.2	<u>Certificate of Designation of Series A Junior Participating Preferred Stock of NN, Inc., as filed with the Secretary of the State of Delaware</u>	8-K	000-23486	3.1	December 18, 2008
3.3	Amended and Restated By-Laws of NN, Inc.	8-K	000-23486	3.1	November 20, 2015
4.1	The specimen stock certificate representing NN, Inc.'s Common Stock, par value \$0.01 per share	S-3	333-89950	4.1	June 6, 2002
4.2	<u>Stockholders' Agreement, effective as of August 29, 2014, by and between NN, Inc. and John C. Kennedy</u>	8-K	000-23486	4.1	September 2, 2014
4.3	<u>Indenture, dated as of October 19, 2015, by and among NN, Inc., the subsidiary guarantors party thereto, and U.S. Bank National Association, as trustee</u>	8-K	000-23486	4.1	October 20, 2015
4.4	Form of the NN, Inc. 10.25% Senior Notes due 2020	8-K	000-23486	4.2	October 20, 2015
4.5	Supplemental Indenture, dated as of October 19, 2015, by and among NN, Inc., certain direct and indirect subsidiaries of NN, Inc., as additional subsidiary guarantors, and U.S. Bank National Association, as trustee	8-K	000-23486	4.3	October 20, 2015
10.1*	NN, Inc. 2005 Stock Incentive Plan	S-8	333-130395	4.3	December 16, 2005
10.2*	NN, Inc. 2011 Amended and Restated Stock Incentive Plan	DEF14A	000-23486	Appendix A	April 1, 2016
10.3*	Form of Indemnification Agreement	S-3/A	333-89950	10.6	July 15, 2002
10.4*	Elective Deferred Compensation Plan, dated February 26, 1999	10-K	000-23486	10.16	March 31, 1999
10.5*	Amended and Restated Executive Employment Agreement, dated September 13, 2012, by and between NN, Inc. and James H. Dorton	8-K	000-23486	10.2	September 18, 2012

10.6*	Amended and Restated Executive Employment Agreement, dated September 13, 2012, by and between NN, Inc. and Thomas C. Burwell	8-K	000-23486	10.3	September 18, 2012
10.7*	Amended and Restated Executive Employment Agreement, dated September 13, 2012, by and between the Whirlaway and James R. Widders	8-K	000-23486	10.6	September 18, 2012
10.8*	Executive Employment Agreement, dated May 8, 2013, between NN, Inc. and Richard D. Holder	8-K	000-23486	10.1	May 10, 2013
10.9	Escrow Agreement, effective as of August 29, 2014, by and among NN, Inc., Newport Global Advisors, L.P., John C. Kennedy and Computershare Trust Company, N.A.	8-K	000-23486	10.3	September 2, 2014
10.10	<u>Indemnity Agreement, effective as of August 29, 2014, by and among NN, Inc.</u> and each of the shareholders of Autocam Corporation identified therein	8-K	000-23486	10.4	September 2, 2014
10.11*	Executive Employment Agreement, dated September 9, 2014, between NN, Inc. and Warren A. Veltman	10-K	000-23486	10.27	March 16, 2015
10.12*	Executive Employment Agreement, dated October 6, 2014, between NN, Inc. and L. Jeffrey Manzagol	10-K	000-23486	10.28	March 16, 2015
10.13*	<u>Separation Agreement and Release, dated as of April 4, 2016, by and between James H. Dorton and NN, Inc.</u>	8-K	000-23486	10.1	April 4, 2016
10.14	Amended and Restated Registration Rights Agreement, dated as of June 10, 2016, by and among NN, Inc., the guarantors party thereto, SunTrust Robinson Humphrey, Inc., on behalf of itself and as representative of the initial purchasers, Spring Capital II Subsidiary, L.P., Summit Partners Credit Fund II, L.P., Summit Partners Credit Fund B-2, L.P., Summit Partners Credit Fund A-2, L.P., Summit Investors Credit II, LLC, Summit Investors Credit II (UK), L.P. and Summit Partners Credit Offshore Intermediate Fund II, L.P.	8-K	000-23486	10.1	June 10, 2016
10.15	Amendment and Restatement Agreement, dated as of September 30, 2016, by and among NN, Inc., certain NN, Inc. subsidiaries named therein, SunTrust Bank, KeyBank National Association and Regions Bank	8-K	000-23486	10.1	October 3, 2016
10.16	Incremental Amendment to Amended and Restated Credit Agreement, dated as of October 31, 2016, among NN, Inc., the Guarantors, HomeTrust Bank, as 2016 Revolving Credit Increase Lender, KeyBank National Association, as an L/C Issuer, Regions Bank, as Swing Line Lender and an L/C Issuer, and SunTrust Bank, as Administrative Agent and an L/C Issuer	8-K	000-23486	10.1	November 4, 2016
10.17	NN, Inc. 2016 Omnibus Incentive Plan	DEF14A	000-23486	Appendix A	November 10, 2016
10.18	Form of Incentive Stock Option Agreement under the 2016 Omnibus Incentive Plan	10-K	000-23486	10.18	March 16, 2017
10.19	Form of Nonqualified Stock Option Agreement under the 2016 Omnibus Incentive Plan	10-K	000-23486	10.19	March 16, 2017
10.20	Form of Restricted Share Award Agreement under the 2016 Omnibus Incentive Plan	10-K	000-23486	10.20	March 16, 2017

10.21	Form of Performance Share Unit Award Agreement under the 2016 Omnibus Incentive Plan	10-K	000-23486	10.21	March 16, 2017
10.22*	Executive Employment Agreement, dated as of October 19, 2015, by and between NN, Inc. and John A. Manzi.	10-Q	000-23486	10.1	May 4, 2017
10.23*	<u>Separation Agreement, dated as of April 1, 2017, by and between NN, Inc. and Matthew S. Heiter.</u>	10-Q	000-23486	10.2	May 4, 2017
10.24	Amendment No. 1 to Amended and Restated Credit Agreement, dated as of April 3, 2017, by and among NN, Inc., certain NN, Inc. subsidiaries named therein, SunTrust Bank, JPMorgan Chase Bank, N.A., KeyBank National Association and Regions Bank	8-K	000-23486	10.1	April 4, 2017
10.25	Amendment No. 2 to Amended and Restated Credit Agreement, dated as of August 15, 2017, by and among NN, Inc., certain NN, Inc. subsidiaries named therein, and SunTrust Bank, Regions Bank, JPMorgan Chase Bank, N.A., HomeTrust Bank and Key Bank National Association, collectively, the Revolving Credit Lenders, and SunTrust Bank, as the Administrative Agent.	8-K	000-23486	10.1	August 18, 2017
10.26	Amendment No. 3 to Amended and Restated Credit Agreement, dated as of November 24, 2017, by and among NN, Inc., certain NN, Inc. subsidiaries named therein, SunTrust Bank, as administrative agent, and certain lenders named therein.	8-K	000-23486	10.1	November 24, 2017
10.27*	<u>Separation Agreement and Release, dated as of January 2, 2018, by and between John A. Manzi and NN, Inc.</u>	8-K	000-23486	10.1	January 5, 2018
10.28	Satisfaction and Discharge of Indenture, dated April 3, 2017, between NN, Inc. and U.S. Bank National Association, as trustee	8-K	000-23486	10.2	April 4, 2017
12.1#	Calculation of Ratios of Earnings to Fixed Charges				
21.1#	List of Subsidiaries of NN, Inc.				
23.1#	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm				
23.2#	Consent of Deloitte Touche Tohmatsu Certified Public Accountants LLP, Independent Registered Public Accounting Firm				
31.1#	Certification of Chief Executive Officer pursuant to Section 302 of Sarbanes-Oxley Act				
31.2#	Certification of Chief Financial Officer pursuant to Section 302 of Sarbanes-Oxley Act				
32.1##	Certification of Chief Executive Officer pursuant to Section 906 of Sarbanes-Oxley Act				
32.2##	Certification of Chief Financial Officer pursuant to Section 906 of Sarbanes-Oxley Act				
99.1#	Financial Statements of Wuxi Weifu Autocam Precision Machinery Co., Ltd.				

101.INS#	XBRL Instance Document
101.SCH#	XBRL Taxonomy Extension Service
101.CAL#	Taxonomy Calculation Linkbase
101LAB#	XBRL Taxonomy Label Linkbase
101.PRE#	XBRL Presentation Linkbase Document
101.DEF#	XBRL Definition Linkbase Document

Management contract or compensatory plan or arrangement. Filed herewith

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.

NN, Inc.

By: /s/ RICHARD D. HOLDER

Richard D. Holder

Chief Executive Officer, President and Director

Dated: April 2, 2018

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

Name and Signature	Title	Date
/s/ RICHARD D. HOLDER Richard D. Holder	Chief Executive Officer, President and Director	April 2, 2018
/s/ THOMAS C. BURWELL, JR. Thomas C. Burwell, Jr.	Senior Vice President- Chief Financial Officer	April 2, 2018
/s/ ROBERT E. BRUNNER Robert E. Brunner	Non-Executive Chairman, Director	April 2, 2018
/s/ WILLIAM DRIES William Dries	Director	April 2, 2018
/s/ DAVID K. FLOYD David K. Floyd	Director	April 2, 2018
/s/ DAVID L. PUGH David L. Pugh	Director	April 2, 2018
/s/ CAREY A. SMITH Carey A. Smith	Director	April 2, 2018
/s/ STEVEN T. WARSHAW Steven T. Warshaw	Director	April 2, 2018

NN, Inc. Computation of Ratio of Earnings to Fixed Charges For Fiscal Years Ended December 31, 2013 through 2017 (in thousands except ratio amounts)

	For Fiscal Years Ended December 31,				
	2017	2016(1)	2015(1)	2014	2013
Earnings:					
Loss from continuing operations before provision for income taxes and minority interest	(58,873)	(30,866)	(49,218)	(17,397)	(1,009)
Fixed charges	55,843	67,602	33,205	13,325	3,148
Amortization of capitalized interest	260	239	_	_	_
Distributed income of equity investees	4,156	3,706	2,868	2,538	_
Pre-tax losses (gains) of equity investees	5,582	6,427	5,440	1,646	_
Less: Interest capitalized	(1,081)	(1,589)	(1,375)	(946)	_
Total Adjusted Earnings	5,887	45,519	(9,080)	(834)	2,139
Fixed Charges:					
Interest expense	47,970	58,986	28,145	10,051	1,827
Capitalized interest	1,081	1,589	1,375	946	_
Amortization of debt issuance costs	4,296	4,168	1,754	844	547
Interest estimate within rental expense	2,496	2,859	1,931	1,484	774
Total Fixed Charges	55,843	67,602	33,205	13,325	3,148
Ratio of Earnings to Fixed Charges	0.1x	0.7x	-0.3x	-0.1x	0.7x

⁽¹⁾ Includes the effects of prior periods' revisions as disclosed in Note 21 of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report.

Delaware

Ohio

Subsidiaries of Registrant

Subsidiaries of NN, Inc. Jurisdiction of Incorporation or Organization Advanced Precision Products, Inc. Delaware Autocam (China) Automotive Components Co., Ltd. China **Autocam Corporation** Michigan Autocam do Brasil Usinagem, Ltda. Brazil Autocam Equipment Holdings, LLC Delaware Autocam Equipment, LLC Delaware Autocam Europe, B.V. Netherlands Autocam France, SARL France Autocam International, Ltd Michigan Autocam Poland Sp. z o.o. Poland Autocam South Carolina, Inc. Michigan Michigan Autocam-Pax, Inc. Boston Endo-Surgical Technologies LLC Delaware Bouverat Industries, S.A.S. France Brainin (Foshan) Precision Engineered Products Co. Ltd. China Brainin de Mexico, S.A. de C.V. Mexico Brainin-Advance Industries LLC Delaware Caprock Enclosures, LLC Texas Caprock Manufacturing, Inc. Texas Connecticut Plastics LLC Delaware General Metal Finishing LLC Delaware Holmed, LLC Delaware HowesTemco, LLC Delaware **Industrial Molding Corporation** Tennessee Lacey Manufacturing Company, LLC Delaware Matrix I LLC Delaware NN Life Sciences Design & Development, LLC Delwaware NN Life Sciences – Vandalia, LLC Ohio NN Precisions Plastics, Inc. Delaware PMC Acquisition Company, Inc. Delaware PMC USA Acquisition Company, Inc. Delaware PNC Acquisition Company Inc. Delaware Polymetallurgical LLC Delaware Precision Engineered Products Holdings, Inc. Delaware Precision Engineered Products LLC Delaware Precision Metal Components Mexico SRL Mexico Premco, Inc. Massachusetts Profiles Incorporated Massachusetts Trigon International LLC Delaware Triumph LLC Arizona

Wauconda Tool & Engineering LLC

Whirlaway Corporation

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (Nos. 333-174519, 333-130395, 333-69588, 333-50934, and 333-216739) and in the Registration Statement on Form S-3 (No. 333-216737) of NN, Inc. of our report dated April 2, 2018 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP Atlanta, GA April 2, 2018

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-174519, No. 333-130395, No. 333-69588, No. 333-50934 and No. 333-216739) and in the Registration Statement on Form S-3 (No. 333-216737) of our report dated March 16, 2017, relating to the financial statements of Wuxi Weifu Autocam Precision Machinery Company, Ltd. as of and for the year ended December 31, 2016, appearing in the Annual Report on Form 10-K of NN, Inc. for the year ended December 31, 2017.

/s/ Deloitte Touche Tohmatsu Certified Public Accountants LLP Shanghai, People's Republic of China April 2, 2018

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, Richard D. Holder, certify that:

- 1) I have reviewed this annual report on Form 10-K of NN, 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;
- 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 the 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: April 2, 2018

/s/ RICHARD D. HOLDER

Richard D. Holder President, Chief Executive Officer and Director (Principal Executive Officer)

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, Thomas C. Burwell, Jr., certify that:

- 1) I have reviewed this annual report on Form 10-K of NN, 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 the 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: April 2, 2018

/s/ THOMAS C. BURWELL, JR.

Thomas C. Burwell, Jr.
Senior Vice President – Chief Financial Officer
(Principal Financial Officer)

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of NN, Inc. (the "Company") on Form 10-K for the annual period ended December 31, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, in the capacity and date indicated below, hereby certifies pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge: (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 as of the dates and for the periods indicated.

Date: April 2, 2018 /s/ RICHARD D. HOLDER

Richard D. Holder President, Chief Executive Officer and Director (Principal Executive Officer)

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of NN, Inc. (the "Company") on Form 10-K for the annual period ended December 31, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, in the capacity and date indicated below, hereby certifies pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge: (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 as of the dates and for the periods indicated.

Date: April 2, 2018 /s/ THOMAS C. BURWELL, JR.

Thomas C. Burwell, Jr. Senior Vice President – Chief Financial Officer (Principal Financial Officer)

WUXI WEIFU AUTOCAM PRECISION MACHINERY CO., LTD.

Financial Statements as of December 31, 2017 (unaudited) and 2016 and for the years ended December 31, 2017 (unaudited), 2016 and 2015 (unaudited)

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors of Wuxi Weifu Autocam Precision Machinery Co., Ltd.

We have audited the accompanying balance sheet of Wuxi Weifu Autocam Precision Machinery Co., Ltd. (the "Company") as of December 31, 2016, and the related statements of operations, comprehensive income, changes in equity, and cash flows for the year ended December 31, 2016. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. According, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the financial position of Wuxi Weifu Autocam Precision Machinery Co., Ltd. as of December 31, 2016 and the results of its operations and its cash flows for the year ended December 31, 2016, in conformity with accounting principles generally accepted in the United States of America.

The accompanying balance sheet of the Company as of December 31, 2015, and the related statements of income, comprehensive income, stockholders' equity, and cash flows for the year ended December 31, 2015 and for the four-month period ended December 31, 2014 were not audited, reviewed or compiled by us in accordance with the standards of the Public Company Accounting Oversight Board (United States) and, accordingly, we do not express an opinion on them.

/s/ Deloitte Touche Tohmatsu Certified Public Accountants LLP Shanghai, People's Republic of China

March 15, 2017

WUXI WEIFU AUTOCAM PRECISION MACHINERY CO., LTD. STATEMENTS OF COMPREHENSIVE INCOME

(All amounts in RMB unless otherwise stated)

	For the	For the years ended December 31,		
	2017	2016	2015	
	(Unaudited)		(Unaudited)	
Revenues				
Sales to third parties	8,018,531.26	8,712,281.91	4,630,219.43	
Sales to related parties (Notes 10)	497,078,185.84	427,627,264.21	346,669,708.76	
Total revenues	505,096,717.10	436,339,546.12	351,299,928.19	
Costs and expenses				
Cost of sales	(388,344,903.96)	(295,485,723.58)	(234,042,339.14)	
Selling, general and administrative expenses	(8,583,261.37)	(7,324,044.28)	(7,501,687.80)	
Research and development costs (Notes 2)	(15,937,928.51)	(25,578,659.82)	(22,049,817.67)	
Total costs and expenses	(412,866,093.84)	(328,388,427.68)	(263,593,844.61)	
Operating income	92,230,623.26	107,951,118.44	87,706,083.58	
Interest expense	(2,192,401.05)	(512,829.58)	(299,380.79)	
Other income and expense, net	250,630.81	(421,921.08)	(1,881,497.41)	
Income before income taxes	90,288,853.02	107,016,367.78	85,525,205.38	
Income tax expense (Note 8)	(13,032,901.58)	(16,090,812.87)	(13,176,045.95)	
Net income	77,255,951.44	90,925,554.91	72,349,159.43	
Other comprehensive income				
Comprehensive income	77,255,951.44	90,925,554.91	72,349,159.43	

WUXI WEIFU AUTOCAM PRECISION MACHINERY CO., LTD. BALANCE SHEETS

(All amounts in RMB unless otherwise stated)

	December 31, 2017 (Unaudited)	<u>December 31, 2016</u>
ASSETS	,	
Cash and cash equivalents	38,868,952.66	28,352,964.04
Trade receivables, net of allowance for doubtful accounts of nil as of December 31, 2017 and 2016	4,615,411.23	314,141.44
Amounts due from related parties (Note 10)	122,395,160.34	115,219,953.56
Inventories (Note 3)	76,012,965.65	62,304,790.61
Other current assets (Note 4)	67,600,985.92	11,132,866.29
Total current assets	309,493,475.80	217,324,715.94
Property, plant, and equipment, net (Note 5)	160,951,584.61	156,198,077.50
Intangible assets, net (Note 6)	56,105.94	202,950.31
Total non-current assets	161,007,690.55	156,401,027.81
Total assets	470,501,166.35	373,725,743.75
LIABILITIES		
Short-term borrowings (Note 7)	90,000,000.00	20,000,000.00
Trade payables	48,370,198.04	43,504,873.01
Amounts due to related parties (Note 10)	4,885,213.83	4,575,558.94
Payroll payable	17,171,693.24	16,301,156.43
Income taxes payable	1,656,731.22	3,874,194.35
Other current liabilities	8,037,045.34	5,832,627.78
Total current liabilities	170,120,881.67	94,088,410.51
Total liabilities	170,120,881.67	94,088,410.51
EQUITY		
Statutory capital (Note 2)	107,278,476.97	107,278,476.97
Retained earnings	193,101,807.71	172,358,856.27
Total equity	300,380,284.68	279,637,333.24
Total liabilities and equity	470,501,166.35	373,725,743.75

WUXI WEIFU AUTOCAM PRECISION MACHINERY CO., LTD. STATEMENTS OF CASH FLOWS

(All amounts in RMB unless otherwise stated)

	For the years ended December 31,		
	2017	2016	2015
	(Unaudited)		(Unaudited)
Cash flows from operating activities			
Net cash provided by operating activities (Note 9)	77,327,849.49	92,703,479.13	79,523,302.92
Cash flows from investing activities			
Purchase of property, plant and equipment	(92,711,731.80)	(25,352,788.80)	(48,502,288.67)
Purchase of intangible assets	_	(293,688.74)	_
Proceeds from sale of property, plant and equipment	12,444,075.93	54,400.00	
Net cash used in investing activities	(80,267,655.87)	(25,592,077.54)	(48,502,288.67)
Cash flows from financing activities			
Capital contribution from investors	_	_	25,348,054.82
Proceeds from short-term bank borrowings	90,000,000.00	24,091,357.10	20,000,000.00
Dividends paid	(56,513,000.00)	(50,620,000.00)	(41,479,000.00)
Repayment of short-term bank borrowings	(20,000,000.00)	(24,091,357.10)	(33,000,000.00)
Net cash from financing activities	13,487,000.00	(50,620,000.00)	(29,130,945.18)
Effect of exchange rate changes on cash and cash equivalents	(31,205.00)	27,680.31	
Net increase in cash and cash equivalents	10,515,988.62	16,519,081.90	1,890,069.07
Cash and cash equivalents, beginning of year	28,352,964.04	11,833,882.14	9,943,813.07
Cash and cash equivalents, end of year	38,868,952.66	28,352,964.04	11,833,882.14

WUXI WEIFU AUTOCAM PRECISION MACHINERY CO., LTD. STATEMENTS OF EQUITY

(All amounts in RMB unless otherwise stated)

	Statutory capital	Retained earnings	Total equity
Balance at December 31, 2014 (Unaudited)	81,930,422.15	101,183,141.93	183,113,564.08
Net income (Unaudited)	_	72,349,159.43	72,349,159.43
Capital contribution (Unaudited)	25,348,054.82	_	25,348,054.82
Dividends paid to shareholders (Unaudited)		(41,479,000.00)	(41,479,000.00)
Balance at December 31, 2015 (Unaudited)	107,278,476.97	132,053,301.36	239,331,778.33
Balance at December 31, 2015 (Unaudited)	107,278,476.97	132,053,301.36	239,331,778.33
Net income	_	90,925,554.91	90,925,554.91
Dividends paid to shareholders		(50,620,000.00)	(50,620,000.00)
Balance at December 31, 2016	107,278,476.97	172,358,856.27	279,637,333.24
Balance at December 31, 2016	107,278,476.97	172,358,856.27	279,637,333.24
Net income (Unaudited)	_	77,255,951.44	77,255,951.44
Dividends paid to shareholders (Unaudited)		(56,513,000.00)	(56,513,000.00)
Balance at December 31, 2017 (Unaudited)	107,278,476.97	193,101,807.71	300,380,284.68

WUXI WEIFU AUTOCAM PRECISION MACHINERY CO., LTD. NOTES TO THE FINANCIAL STATEMENTS

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WUXI WEIFU AUTOCAM PRECISION MACHINERY CO., LTD.

December 31, 2017 (unaudited), 2016 and 2015 (unaudited) Notes to The Financial Statements

1. ORGANIZATION AND PRINCIPAL ACTIVITIES

Wuxi Weifu Autocam Precision Machinery Co., Ltd. (the "Company") was established in Wuxi, Jiangsu Province, the People's Republic of China (the "PRC") by Wuxi Weifu Hi-Technology Co., Ltd. and Autocam Corporation as a joint venture on August 23, 2005 with an operating period of 20 years. The Company principally engages in researching, developing and producing precision automotive parts and components and engine control system; selling self-manufactured products and providing after-sales services.

Pursuant to Rule 3-09, only the financial statements as of and for the year ended December 31, 2016 have been audited by Deloitte Touche Tohmatsu Certified Public Accountants LLP and the financial statements as of December 31, 2017 and 2015, and for the years ended December 31, 2017 and 2015 are unaudited. In the opinion of management, these unaudited financial statements include all adjustments, consisting of only normal recurring adjustments, necessary for a fair presentation of the financial position, results of operations, and changes in cash flows and equity for those periods.

These financial statements are presented in Chinese Renminbi ("RMB"), unless otherwise stated.

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND PRACTICES

(a) Basis of presentation

The financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("US GAAP").

(b) Use of estimates

The financial statements are prepared in conformity with US GAAP, which require the use of estimates, judgments, and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses in the periods presented. Management has made significant estimates in a variety of areas, including but not limited to allowance for doubtful accounts, inventories valuation, useful lives and residual values of long-lived assets and impairment for long-lived assets. The Company believes that the accounting estimates employed are appropriate and the resulting balances are reasonable; however, due to the inherent uncertainties in making estimates, actual results could differ from the original estimates, requiring adjustments to these balances in future periods.

(c) Foreign currency translation

The Company's functional and reporting currency is the Renminbi ("RMB"). An entity's functional currency is the currency of the primary economic environment in which it operates, normally that is the currency of the environment in which it primarily generates and expends cash. Management's judgment is essential to determine the functional currency by assessing various indicators, such as cash flows, sales price and market, expenses, financing and intercompany transactions and arrangements.

Transactions denominated in currencies other than RMB are translated into RMB at the exchange rates quoted by the People's Bank of China prevailing at the dates of the transactions. Gains and losses resulting from foreign currency transactions are included in the Statements of Operations and Comprehensive Loss. Monetary assets and liabilities denominated in foreign currencies are translated into RMB using the applicable exchange rates quoted by the People's Bank of China at the balance sheet date. Nonmonetary assets and liabilities are remeasured into the applicable functional currencies at historical exchange rates. All such exchange gains and losses are included in the Statements of Comprehensive Income.

(d) Cash and cash equivalents

Cash and cash equivalents consist of cash on hand and in banks.

December 31, 2017 (unaudited), 2016 and 2015 (unaudited) Notes to The Financial Statements

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND PRACTICES - continued

(e) Allowance of accounts receivable

The Company regularly review the creditworthiness of our customers, and generally does not require collateral or other security from the customers.

The carrying value of accounts receivable is reduced by an allowance that reflects our best estimate of the amounts that will not be collected. We make estimations of the collectability of accounts receivable. Many factors are considered in estimating the allowance, including but not limited to reviewing delinquent accounts receivable, performing aging analyses and customer credit analyses, and analyzing historical bad debt records and current economic trends. Additional allowance for specific doubtful accounts might be made if our customers are unable to make payments due to their deteriorating financial conditions. The Company has no significant credit risk associated with accounts receivable.

(f) Inventories

Inventories are stated at lower of cost or net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Raw materials and work-in-process are reviewed to determine if inventory quantities are in excess of forecasted usage, or if they have become obsolete. Write-downs are recorded in cost of revenues in the Statements of Comprehensive Income. No inventory write-down was made in the years ended December 31, 2017, 2016 and 2015.

(g) Fair value measurements

A three-level valuation hierarchy, based upon observable and unobservable inputs, is used for fair value measurements. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect market assumptions based on the best evidence available. These three types of inputs create the following fair value hierarchy:

- Level 1 Quoted prices for identical instruments in active markets;
- Level 2 Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not
 active; and model-derived valuations whose significant inputs are observable; and
- Level 3 Instruments whose significant inputs are unobservable.

Financial instruments are transferred in and/or out of Level 1, 2 or 3 at the beginning of the accounting period in which there is a change in the valuation inputs.

The Company's fair value of its financial instruments, principally cash and cash equivalents, accounts receivable, amount due from/to related parties, other current assets, short-term borrowings, accounts and notes payable, payroll payable and other current liabilities, approximate their recorded values due to the short-term nature of the instruments or interest rates, which are comparable with current rates.

December 31, 2017 (unaudited), 2016 and 2015 (unaudited) Notes to The Financial Statements

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND PRACTICES - continued

(h) Property, plant and equipment, net

Property, plant and equipment are recorded at cost less accumulated depreciation. Major improvements that extend the useful life of property are capitalized. Expenditures for repairs and maintenance are charged to expense as incurred.

The Company's depreciation method is summarized in the following table:

Category	Depreciation method	Salvage value rate	Estimated useful lives
Machinery and equipment	Straight-line	10%	10 years
Motor vehicles	Straight-line	10%	10 years
Office equipment	Straight-line	10%	5 years
Leasehold improvements	Straight-line	10%	5 years

The Company reassesses the reasonableness of the estimates of useful lives and residual values of long-lived assets when events or changes in circumstances indicate that the useful lives and residual values of a major asset or a major category of assets may not be reasonable. Factors that the Company considers in deciding when to perform an analysis of useful lives and residual values of long-lived assets include, but are not limited to, significant variance of a business or product line in relation to expectations, significant deviation from industry or economic trends, and significant changes or planned changes in the use of the assets. The analysis will be performed at the asset or asset category with the reference to the assets' conditions, current technologies, market, and future plan of usage and the useful lives of major competitors.

(i) Intangible assets

Intangible assets include computer software and are amortized on a straight-line basis over the expected beneficial periods, ranging from two to five years. The estimated lives of intangible assets are reassessed if circumstances occur that indicate the lives have changed.

(j) Impairment of long-lived assets

Long-lived assets and intangible assets subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. When events and circumstances warrant, the Company evaluates the carrying value of long-lived assets to be held and used in the business. If the carrying value of a long-lived asset group is considered impaired, a loss is recognized based on the amount by which the carrying value exceeds the fair value for assets to be held and used. Fair value is determined primarily using the anticipated cash flows discounted at a rate commensurate with the risk involved. Long-lived assets to be disposed of other than by sale are considered held for use until disposition. No impairment charges recognized for the years ended December 31, 2017, 2016 and 2015 respectively.

(k) Revenue recognition

The Company recognizes revenues when the following four revenue recognition criteria are met, which is when goods are delivered to and accepted by customers: (i) persuasive evidence of an arrangement exists, (ii) delivery has occurred or services have been rendered, (iii) the selling price is fixed or determinable, and (iv) collectability is reasonably assured.

Sales consist primarily of revenue generated from the sale of precision automotive parts and components and engine control system. Sales are recorded when title and risks and rewards of ownership have passed to our customers.

(l) Cost of revenues

Cost of products consists of the purchase price of raw materials, electricity and other utilities, consumables, direct labor, overhead costs, depreciation of property, plant and equipment and inbound shipping charges, as well as inventory write-downs.

December 31, 2017 (unaudited), 2016 and 2015 (unaudited) Notes to The Financial Statements

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND PRACTICES - continued

(m) Research and development costs

Research and development costs are expensed when incurred. Expenditures for research activities relating to product development and improvement are charged to expense as incurred. Such expenditures amounted to RMB15,937,928.51, RMB25,578,659.82 and RMB22,049,817.67 for the years ended December 31, 2017, 2016 and 2015 respectively.

(n) Income taxes

The Company uses the asset and liability method in accounting for income taxes. Deferred tax assets and liabilities are recorded for temporary differences between the tax basis of assets and liabilities and their reported amounts in the financial statements, using the statutory tax rates in effect for the year in which the differences are expected to reverse. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the results of operations in the period that includes the enactment date under the law. A valuation allowance is recorded to reduce the carrying amounts of deferred tax assets unless it is more likely than not that such asset will be realized.

The Company recognizes a tax benefit associated with an uncertain tax position when, in management's judgment, it is more likely than not that the position will be sustained upon examination by a taxing authority. The Company has elected to classify interest and penalties related to an uncertain tax position, if any and when required, as general and administrative expenses. During 2017, 2016 and 2015, the Company did not record any interest and penalties associated with uncertain tax positions as there were no uncertain tax positions.

(o) Restricted reserves

Pursuant to laws applicable to entities incorporated in the PRC, the Company must make appropriations from after-tax profit to a surplus reserve fund, enterprise expansion fund and staff welfare fund. The amount allocated to each of these funds is at the discretion of the Company's board of directors, who has determined that an annual appropriation of 10% of after-tax profit, after offsetting accumulated losses from prior years, is to be made to surplus reserve fund and 5% to enterprise expansion fund and staff welfare fund, respectively. Moreover, the Company's board of directors also has determined that the Company can cease appropriation when the surplus reserve fund and enterprise expansion fund together accumulated reach 50% of the statutory capital.

The reserve fund can only be used for specific purpose of offsetting future losses, enterprise expansion and not distributable as cash dividends. Since the accumulated amount of surplus reserve fund and enterprise expansion fund reaches 50% of the statutory capital, there is no further appropriation made for surplus reserve fund and enterprise expansion fund and the total amount was RMB60,920,156.93 as of December 31, 2017, same as that of 2016. In addition, due to the restrictions on the distribution of statutory capital from the Company, statutory capital of RMB107,278,476.97 as of December 31, 2017 is considered restricted. As a result of these PRC laws and regulations, as of December 31, 2017, statutory capital, reserve fund and enterprise expansion fund, with total amount of RMB168,198,633.90, are not available for distribution in the form of dividends, loans or advances.

December 31, 2017 (unaudited), 2016 and 2015 (unaudited) Notes to The Financial Statements

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND PRACTICES - continued

(p) Concentration of credit risk

Financial instruments that potentially expose the Company to concentrations of credit risk consist primarily of cash and cash equivalents and accounts receivable.

The Company places cash and cash equivalents with financial institutions with high credit ratings and quality.

The Company conducts credit evaluations of customers and generally does not require collateral or other security from the customers.

(q) Recent accounting pronouncement

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2014-09. This update is intended to improve the financial reporting requirements for revenue from contracts with customers by providing a principle based approach. The core principle of the standard is that revenue should be recognized when the transfer of promised goods or services is made in an amount that the entity expects to be entitled to in exchange for the transfer of goods and services. The update also requires disclosures enabling users of financial statements to understand the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. The FASB has recently issued several amendments to the standard, including clarification on principal versus agent considerations, accounting for licenses of intellectual property and identifying performance obligations. The amendments in this ASU are effective for annual reporting periods beginning after December 15, 2018 (early adoption permitted after December 15, 2018) for non-public companies. The Company is in the process of evaluating the impact of adoption of this guidance on its financial statements.

In November 2015, FASB issued Accounting Standards Update 2015-17 Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes. The amendments in this Update require that deferred tax liabilities and assets be classified as noncurrent in a classified statement of financial position. The amendments in this Update apply to all entities that present a classified statement of financial position. For non-public business entities, the amendments in this Update are effective for financial statements issued for annual periods beginning after December 15, 2017 (early adoption permitted). The amendments in this Update may be applied either prospectively to all deferred tax liabilities and assets or retrospectively to all periods presented. Management is in the process of evaluating the impact, if any, of the standard on its financial statements.

In January 2016, the FASB issued a new pronouncement ASU 2016-01 which is intended to improve the recognition and measurement of financial instruments. Under this updated standard, entities must measure equity investments at fair value and recognize changes in fair value in net income. For equity investments without readily determinable fair values, entities have the option to either measure these investments at fair value or at cost adjust for changes in observable prices less impairment. The updated guidance does not apply to equity method investments or investments in consolidated subsidiaries. The new guidance is effective for non-public companies for fiscal years beginning after December 15, 2018 (early adoption permitted). The Company does not expect the adoption of this guidance will have a material effect on the Company's financial statements.

December 31, 2017 (unaudited), 2016 and 2015 (unaudited) Notes to The Financial Statements

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND PRACTICES - continued

(q) Recent accounting pronouncement - continued

In January 2016, the FASB issued a new pronouncement ASU 2016-13 which is intended to improve the accounting for credit losses on financial assets within its scope. For assets held at amortized cost basis, Topic 326 eliminates the probable initial recognition threshold in current GAAP and, instead, requires an entity to reflect its current estimate of all expected credit losses. The allowance for credit losses is a valuation account that is deducted from the amortized cost basis of the financial assets to present the net amount expected to be collected. For available for sale debt securities, credit losses should be measured in a manner similar to current GAAP, however Topic 326 will require that credit losses be presented as an allowance rather than as a write-down. ASU 2016-13 affects entities holding financial assets and net investment in leases that are not accounted for at fair value through net income. The amendments affect loans, debt securities, trade receivables, net investments in leases, off balance sheet credit exposures, reinsurance receivables, and any other financial assets not excluded from the scope that have the contractual right to receive cash. The new guidance is effective for non-public companies for fiscal years beginning after December 15, 2018(early adoption permitted). The Company does not expect the adoption of this guidance will have a material effect on the Company's financial statements.

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842). The guidance supersedes existing guidance on accounting for leases with the main difference being that operating leases are to be recorded in the statement of financial position as right-of-use assets and lease liabilities, initially measured at the present value of the lease payments. For operating leases with a term of 12 months or less, a lessee is permitted to make an accounting policy election not to recognize lease assets and liabilities. For non-public business entities, the guidance is effective for fiscal years beginning after December 15, 2019 (early adoption permitted). In transition, entities are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. The Company is in the process of evaluating the impact that this pronouncements on its financial statements.

In August, 2016, the FASB issued a new pronouncement ASU 2016-15, which makes eight targeted changes to how cash receipts and cash payments are presented and classified in the statement of cash flows. For non-public companies, the guidance in the ASU is effective for fiscal years beginning after December 15, 2018 (early adoption permitted). Entities must apply the guidance retrospectively to all periods presented but may apply it prospectively from the earliest date practicable if retrospective application would be impracticable. The Company is in the process of evaluating the impact of adoption of this pronouncements on its financial statements.

In November 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash ("ASU 2016-18"), which enhances and clarifies the guidance on the classification and presentation of restricted cash in the statement of cash flows. The new guidance is effective for non-public companies for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. The new guidance permits early adoption. Management is in the process of evaluating the impact of the standard on its financial statements.

December 31, 2017 (unaudited), 2016 and 2015 (unaudited) Notes to The Financial Statements

3. INVENTORIES

The following table summarizes the components of inventories.

	December 31, 2017 (Unaudited)	December 31, 2016
Raw materials	49,721,651.13	39,993,854.09
Work in progress	12,273,357.09	8,850,215.67
Finished goods	14,017,957.43	13,460,720.85
Total inventories	76,012,965.65	62,304,790.61

4. OTHER CURRENT ASSETS

The following table summarizes the components of other current assets.

	December 31, 2017	December 31, 2016
	(Unaudited)	
Advances to suppliers	67,157,510.90	11,078,991.08
Other receivables	15,379.77	53,875.21
Deferred tax assets	428,095.25	
Total other current assets	67,600,985.92	11,132,866.29

5. PROPERTY, PLANT AND EQUIPMENT, NET

The following table summarizes the components of property, plant and equipment.

	December 31, 2017 (Unaudited)	December 31, 2016
Machinery and equipment	224,692,012.98	235,271,249.14
Motor Vehicles	1,480,616.61	1,419,975.58
Office equipment	19,955,969.99	16,144,100.57
Leasehold improvements	5,715,229.71	4,701,243.15
Total	251,843,829.29	257,536,568.44
Accumulated depreciation	(123,597,494.21)	(107,752,818.42)
Subtotal	128,246,335.08	149,783,750.02
Construction in progress	32,705,249.53	6,414,327.48
Total property, plant and equipment, net	160,951,584.61	156,198,077.50

For the years ended December 31, 2017, 2016 and 2015, depreciation expense was RMB22,846,049.79, RMB20,764,534.52 and RMB17,399,805.23 of which about 99.65%, 99.64% and 99.51% were charged to cost of sales and 0.35%, 0.36% and 0.49% to selling, general and administrative expenses for the years ended December 31, 2017, 2016, and 2015, respectively. No impairments on property, plant and equipment, net were recorded in the fiscal years ended December 31, 2017, 2016 and 2015.

December 31, 2017 (unaudited), 2016 and 2015 (unaudited) Notes to The Financial Statements

6. INTANGIBLE ASSETS, NET

Intangible assets include computer software, summarized as follows.

	December 31, 2017 (Unaudited)	December 31, 2016
Computer software	766,949.99	766,949.99
Accumulated amortization	(710,844.05)	(563,999.68)
Computer software, net	56,105.94	202,950.31

For the years ended December 31, 2017, 2016 and 2015, amortization expense was RMB146,844.37, RMB109,549.00 and RMB55,067.59 which was charged to general and administrative expenses for the years ended December 31, 2017 and 2016, and 2015, respectively.

Estimated amortization expense for each of next five years is as follows:

	2018	2019	2020	2021	2022
Estimated amortization expense	56,105.943	=	_	_	_

No impairment needs to be provided for intangible assets at the year end.

7. SHORT-TERM BORROWINGS

	December 31, 2017	December 31, 2016
	(Unaudited)	
Unsecured	90,000,000.00	20,000,000.00

The credit loan was borrowed from Jiang Su Bank Wuxi Branch and there is no guarantee on the loan balance.

The weighted average interest rates on the short-term bank borrowings were 4.26% and 4.35% for the years ended December 31, 2017 and 2016, respectively.

December 31, 2017 (unaudited), 2016 and 2015 (unaudited)

Notes to The Financial Statements

8. INCOME TAX

The income tax rate is 15% since the entity was regarded as high-tech company.

Income tax expense is summarized as follows:

	For the years ended December 31,		
	2017 2016		2015
	(Unaudited)		(Unaudited)
Current income tax expense	13,460,996.83	16,090,812.87	13,176,045.95
Deferred income tax expense	(428,095.25)		
Total income tax expense	13,032,901.58	16,090,812.87	13,176,045.95

A reconciliation of the provisions for income taxes with amounts determined by applying the statutory income tax rate to income before income tax is as follows.

	For the years ended December 31,			
	2017	2016	2015	
	(Unaudited)		(Unaudited)	
Statutory income tax rate	15%	15%	15%	
Computed tax at the statutory tax rate	13,543,327.95	16,052,455.17	12,828,780.81	
Effect of expenses that are not deductible in determining taxable				
profit	398,862.30	109,444.18	14,360.39	
Additional deduction of research and development expenses	(383,809.80)	_	_	
Effect of expenses adjusted for prior year	(525,478.87)	(71,086.48)	332,904.75	
Income tax expense	13,032,901.58	16,090,812.87	13,176,045.95	
Effective income tax rate	14%	15%	15%	

December 31, 2017 (unaudited), 2016 and 2015 (unaudited)

Notes to The Financial Statements

9. NOTES TO CASH FLOWS

The reconciliation of net income to net cash provided by operating activities for the years ended December 31 was as follows (in RMB thousands):

	For the years ended December 31,			
	2017	2016	2015	
	(Unaudited)		(Unaudited)	
Net income	77,255,951.44	90,925,554.91	72,349,159.43	
Adjustments to reconcile net income to net cash provided by				
operating activities:				
Depreciation	22,846,049.79	20,764,534.52	17,399,805.23	
Disposal of property, plant and equipment	22,166.06	34,368.23	_	
Amortization of intangible assets	146,844.37	109,549.00	55,067.59	
Finance expense	31,205.00	_	_	
Changes in operating assets and liabilities:				
Increase in amounts due from related parties	(7,175,206.78)	(32,269,803.81)	(11,658,129.57)	
(Increase) decrease in other current assets	(796,554.13)	567,686.30	12,310,284.10	
Increase in accounts receivable	(4,301,269.79)	(184,374.62)	(106,439.24)	
(Increase) decrease in inventories	(13,708,175.04)	(8,767,790.75)	364,833.25	
Increase (decrease) in amounts due to related parties	309,654.89	4,430,903.48	(8,318,418.93)	
Increase (decrease) in accounts payables	4,865,325.03	14,366,956.50	(7,165,358.08)	
Increase (decrease) in income taxes payable	(2,217,463.13)	1,052,257.51	1,561,416.14	
Increase (decrease) in other current liability	(821,215.03)	2,113,512.82	2,175,314.08	
Increase (decrease) in payroll payable	870,536.81	(439,874.96)	555,768.92	
Net cash provided by operating activities	77,327,849.49	92,703,479.13	79,523,302.92	

Supplemental disclosure of cash flow information:

	For th	For the years ended December 31,		
	2017	2017 2016		
	(Unaudited)		(Unaudited)	
Income taxes paid	15,386,015.29	15,038,555.36	11,293,380.70	
Interest paid	2,368,294.74	1,052,093.82	1,141,230.01	

Supplemental schedule of non-cash investing activities:

	For the years	For the years ended December 31,		
	2017	2017 2016 20		
	(Unaudited)		(Unaudited)	
Payable for purchase of property, plant and equipment	3,025,632.59		1,678,052.31	

(i) The amount included the effects of prior periods' revision of RMB 118,776,560.00.

December 31, 2017 (unaudited), 2016 and 2015 (unaudited) Notes to The Financial Statements

10. RELATED PARTY TRANSACTIONS AND BALANCES

(1) The relationship between the Company and related party are as follows:

Company Relationship with the Company Wuxi Weifu Hi-Technology Co., Ltd. Investor **Autocam Corporation** Investor Weifu Mashan Pump Glib Co., Ltd. Subsidiary of Wuxi Weifu Hi-Technology Co., Ltd. United Automotive Electronic Systems Co., Ltd. Subsidiary of the investor of Wuxi Weifu Hi-Technology Subsidiary of Wuxi Weifu Hi-Technology Co., Ltd. Wuxi Weifu International Trade Co., Ltd. Wuxi Weifu Schmidt Power System Spare Parts Co., Ltd. Subsidiary of Wuxi Weifu Hi-Technology Co., Ltd. Autocam (China) Automotive Components Co., Ltd. Subsidiary of Autocam Corporation Wuxi Weifu Automotive Diesel Systems Co., Ltd. Subsidiary of Wuxi Weifu Hi-Technology Co., Ltd. Weifu Environmental Protection Cayalyst Co., Ltd. Subsidiary of Wuxi Weifu Hi-Technology Co., Ltd.

(2) Significant transactions between the Company and related parties in the year:

(a) Sales and purchases

Sales and purchases between the Company and its related parties were as follows:

	For t	For the years ended December 31,		
	2017	2016	2015	
	(Unaudited)		(Unaudited)	
Sales:				
United Automotive Electronic Systems Co., Ltd.	421,862,669.90	372,986,849.62	309,728,240.95	
Wuxi Weifu Hi-Technology Co., Ltd.	28,129,302.07	15,716,216.48	8,991,736.79	
Wuxi Weifu Schmidt Power System Spare Parts Co., Ltd.	19,068,699.27	6,067,625.35	831,430.44	
Wuxi Weifu International Trade Co., Ltd.	16,071,603.32	21,620,109.27	21,330,008.20	
Wuxi Weifu Automotive Diesel Systems Co., Ltd	11,614,510.90	11,230,758.00	5,666,492.88	
Weifu Mashan Pump Glib Co., Ltd.	331,400.38	5,705.49	121,799.50	
Total	497,078,185.84	427,627,264.21	346,669,708.76	
Weifu Mashan Pump Glib Co., Ltd.	331,400.38	5,705.49	121,799.50	

For the years ended December 31,		
2017 2016 201		2015
(Unaudited)		(Unaudited)
39,868,723.30	41,288,742.59	37,121,469.96
4,073,483.83	1,885,394.40	1,603,886.13
1,787,550.11	964,532.27	1,097,700.46
<u> </u>	4,782,300.69	2,880,077.16
45,729,757.24	48,920,969.95	42,703,133.71
	2017 (Unaudited) 39,868,723.30 4,073,483.83 1,787,550.11	2017 (Unaudited) 2016 39,868,723.30 41,288,742.59 4,073,483.83 1,885,394.40 1,787,550.11 964,532.27 — 4,782,300.69

December 31, 2017 (unaudited), 2016 and 2015 (unaudited)

Notes to The Financial Statements

0. RELATED PARTY TRANSACTIONS AND BALANCES – continued

- (2) Significant transactions between the Company and related parties in the year-continued:
- (b) Others

Details of sale of machinery to the related party were as follows:

	For the years	For the years ended December 31,		
	2017	2016	2015	
	(Unaudited)		(Unaudited)	
Wuxi Weifu Hi-Technology Co., Ltd.	12,483,952.29			

Details of purchase of machinery and software from the related party were as follows:

	For the	For the years ended December 31,		
	2017	2016	2015	
	(Unaudited)		(Unaudited)	
Autocam Corporation	39,066.48	183,360.37	31,551.97	

Details of general expenses paid on behalf of related parties were as follows:

	For the years ended December 31,		
	2017	2016	2015
	(Unaudited)		(Unaudited)
Autocam (China) Automotive Components Co., Ltd.	4,629,705.78	8,490,391.51	5,267,356.39
Wuxi Weifu Schmidt Power System Spare Parts Co., Ltd.	2,998,263.07	2,564,239.25	1,732,007.45
United Automotive Electronic Systems Co., Ltd.	_	606,256.00	278,880.00
Weifu Environmental Protection Cayalyst Co., Ltd.			38,000.00
Total	7,627,968.85	11,660,886.76	7,316,243.84

Details of general expenses charged by related parties were as follows:

	For th	For the years ended December 31,		
	2017	2016	2015	
	(Unaudited)		(Unaudited)	
Wuxi Weifu Hi-Technology Co., Ltd.	6,357,752.52	2,140,034.40	2,027,337.08	
Autocam Corporation	1,212,408.00	900,325.37	1,831,956.69	
Autocam (China) Automotive Components Co., Ltd.		97,747.99	135,104.00	
Total	7,570,160.52	3,138,107.76	3,994,397.77	

December 31, 2017 (unaudited), 2016 and 2015 (unaudited)

Notes to The Financial Statements

10. RELATED PARTY TRANSACTIONS AND BALANCES - continued

- (2) Significant transactions between the Company and related parties in the year-continued:
- (c) Balances due from/to related parties

Accounts	Name of the related parties	December 31, 2017 (Unaudited)	December 31, 2016
Amount due fro	m related parties	<u>-</u>	
-Accounts	receivables		
	United Automotive Electronic Systems Co., Ltd.	50,458,811.71	54,259,344.08
	Wuxi Weifu Schmidt Power System Spare Parts Co., Ltd.	21,250,032.21	8,253,924.12
	Wuxi Weifu Hi-Technology Co., Ltd.	3,601,362.29	2,537,687.15
	Wuxi Weifu International Trade Co., Ltd.	2,875,539.92	3,572,227.14
	Autocam (China) Automotive Components Co., Ltd.	<u> </u>	14,362.92
	Wuxi Weifu Automotive Diesel Systems Co., Ltd.		3,086,444.08
	Total	78,185,746.13	71,723,989.49
-Other rece	eivables		
	Wuxi Weifu Schmidt Power System Spare Parts Co., Ltd.	2,998,263.07	2,486,196.48
	Autocam (China) Automotive Components Co., Ltd	298,443.30	220,627.51
	Wuxi Weifu Hi-Technology Co., Ltd.		35,061.40
	Total	3,296,706.37	2,741,885.39
-Note recei	ivables		
	United Automotive Electronic Systems Co., Ltd.	37,037,457.36	40,733,401.63
	Wuxi Weifu Schmidt Power System Spare Parts Co., Ltd.	3,875,250.48	
	Total	40,912,707.84	40,733,401.63
-Advances	to suppliers		
	Autocam Corporation	<u> </u>	20,677.05
Total		122,395,160.34	115,219,953.56

December 31, 2017 (unaudited), 2016 and 2015 (unaudited) Notes to The Financial Statements

10. RELATED PARTY TRANSACTIONS AND BALANCES - continued

- (2) Significant transactions between the Company and related parties in the year continued:
- (c) Balances due from/to related parties continued

Accounts	Name of the related parties	December 31, 2017 (Unaudited)	December 31, 2016
Amount due to re	lated parties		
-Accounts pa	yable		
	Wuxi Weifu International Trade Co., Ltd	1,675,370.87	2,093,481.59
	Autocam Corporation	142,370.42	3,793.72
	Wuxi Weifu Hi-Technology Co., Ltd.	28,700.00	_
	Wuxi Weifu Schmidt Power System Spare Parts Co., Ltd.	_	2,130,795.19
	Autocam (China) Automotive Components Co., Ltd.	<u> </u>	7,870.17
	Total	1,846,441.29	4,235,940.67
-Other payables			
	Wuxi Weifu Hi-Technology Co., Ltd.	2,853,968.47	_
	Autocam Corporation	-	7,064.39
	Total	2,853,968.47	7,064.39
-Payroll payable (i)		
	Autocam Corporation	184,804.07	332,553.88
Total		4,885,213.83	4,575,558.94

⁽i) Salaries of general manager were paid by Autocam Corporation in advance, which would be paid back to Autocam Corporation by the Company.

December 31, 2017 (unaudited), 2016 and 2015 (unaudited) Notes to The Financial Statements

11. COMMITMENTS AND CONTINGENCIES

a) Operating lease commitments

The company has entered into leasing arrangements relating to office premises that are classified as operating leases. Future minimum lease payments for non-cancellable operating leases as of December 31, 2017 are as follows:

Year ending December 31, 2017	
2018	4,142,479.50
2019	_
And after years	
Total minimum lease payments	4,142,479.50

Rental expense amounted to RMB6,932,030.29, RMB3,590,854.51 and RMB 2,795,898.28 for the years ended December 31, 2017, 2016 and 2015. Rental expense is charged to the Statement of Comprehensive Income when incurred.

b) Capital commitments

The capital commitment for 2017 was RMB 41,845.991.86 (2016: nil). As of December 31, 2016, the Company has entered into purchase commitments for the acquisition of long-lived assets, which have not been recognized in the financial statements. However, the Company was still negotiating with the supplier on the final acquisition scale which would be concluded in 2017.

c) Contingencies

The Company is not currently a party to any pending material litigation or other legal proceeding or claims.

12. SUBSEQUENT EVENTS

In connection with the presentation of these financial statements, an evaluation of subsequent events was performed through April 2, 2018.

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