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

FORM 10-K

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

For the fiscal year ended **December 31, 2020**

OR

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

For the transition period from _____ to _____

Commission file number **000-23486**



NN, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

6210 Ardrey Kell Road, Suite 600
Charlotte, North Carolina
(Address of principal executive offices)

62-1096725
(I.R.S. Employer Identification Number)

28277
(Zip Code)

(980) 264-4300
(Registrant's telephone number, including area code)

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

Title of each class
Common Stock, par value \$0.01
Preferred Stock Purchase Rights

Trading symbol
NNBR

Name of each exchange on which registered
The Nasdaq Stock Market LLC
The Nasdaq Stock Market LLC

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

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

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

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

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

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

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

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

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

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

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant was approximately \$89 million as of June 30, 2020, 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 \$4.74. 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 12, 2021, there were 42,791,476 shares of the registrant's common stock, par value \$0.01 per share, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement with respect to the 2021 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, 2020.

NN, Inc.
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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; the impacts of the coronavirus pandemic (“COVID-19”) on the Company’s financial condition, business operations, and liquidity; 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; the level of our indebtedness; the restrictions contained in our debt agreements; our ability to obtain financing at favorable rates, if at all, and to refinance existing debt as it matures; 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 U.S dollar amounts presented in tables that follow are in thousands.

Item 1. Business

Introduction

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 primarily for the electrical, automotive, general industrial, aerospace and defense, and medical markets. As used in this Annual Report on Form 10-K (this “Annual Report”), the terms “NN,” the “Company,” “we,” “our,” or “us” refer to NN, Inc., and its subsidiaries. We have 32 facilities in North America, Europe, South America, and China.

On October 6, 2020, we completed the sale of our Life Sciences business (the “Life Sciences business”) to affiliates of American Securities LLC for approximately \$753.3 million. The proceeds from the sale of the Life Sciences business were used to prepay \$700.0 million in the aggregate on the Senior Secured Term Loan and the Incremental Term Loan immediately following the sale. We also paid in full the outstanding balance on the Senior Secured Revolver. The sale of the Life Sciences business furthers management’s strategy to improve liquidity and creates the financial flexibility to pursue key growth areas in the Mobile Solutions and Power Solutions segments.

Our enterprise and management structure is designed to accelerate growth and further balance our portfolio by aligning our strategic assets and businesses. Our businesses are organized into the Mobile Solutions and Power Solutions groups and are based principally on the end markets they serve. Mobile Solutions is focused on growth in the general industrial and automotive end markets. Power Solutions is focused on growth in the electrical and aerospace and defense end markets.

Business Segments and Products

Mobile Solutions

Mobile Solutions is focused on growth in the general industrial and automotive 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.

Power Solutions

Power Solutions is focused on growth in the electrical and aerospace and defense end markets, while also serving the automotive and medical end markets. Within this 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 used in applications ranging from power control to flight control and for military devices. We

manufacture a variety of products including electrical contacts, connectors, contact assemblies, and precision stampings for the electrical end market and high precision products for the aerospace and defense end market utilizing our extensive process technologies for optical grade plastics, thermally conductive plastics, titanium, Inconel, magnesium, and electroplating. Our medical business includes the production of a variety of tools and instruments for the orthopaedics and medical/surgical end markets.

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. 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 volume level requested by our customers. As the need for tight-tolerance precision parts, subassemblies, and devices continues 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 is 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”), Underwriters Laboratories (“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 the 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 and 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 us.

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 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 32 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 2.1 million square feet of manufacturing space. 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.

Synergies

We are well-positioned to take advantage of synergies between our Mobile Solutions and Power Solutions businesses as we expand new technologies in the electric vehicle, hybrid vehicle, and aerospace and defense markets.

Proven and experienced management team

Our management team has significant experience in precision manufacturing and the diversified industrial sector. Warren Veltman was named President and Chief Executive Officer in September 2019 and previously served as Executive Vice President of Mobile Solutions. Mr. Veltman joined us in 2014 as part of the Autocam acquisition, a business at which he had 30 years of experience in financial and operational leadership roles. Thomas DeByle joined NN and was named Senior Vice President and Chief Financial Officer in August 2019. Mr. DeByle has extensive experience in finance leadership roles at global manufacturers and most recently served as Chief Financial Officer, Vice President and Treasurer of Standex International since 2008. John Buchan was named Executive Vice President of Mobile Solutions in September 2019 and Executive Vice President of Mobile Solutions and Power Solutions in November 2019. Mr. Buchan joined us in 2014 as part of the Autocam acquisition, a business at which he had 18 years of experience in operations. We believe that our current management team has the necessary talent and experience to profitably operate and grow the business.

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; aerospace and defense; medical; heating, ventilation, and air conditioning; and 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 2020, our top ten customers accounted for approximately 45% of our net sales. In 2020, 70% of our products were sold to customers in North America, 8% to customers in Europe, 15% to customers in Asia, and the remaining 7% to customers in South America.

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.

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.

Human Capital Management

Our business results depend in part on our ability to successfully manage our human capital resources, including attracting, identifying, and retaining key talent. Factors that may affect our ability to attract and retain qualified employees include employee morale, our reputation, competition from other employers, and availability of qualified individuals. As of December 31, 2020, we employed a total of 3,081 full and part-time employees and 409 temporary workers, which includes approximately 1,460 employees in the U.S. and approximately 2,030 employees in other countries employed by our international subsidiaries. Of our total employment, approximately 14% are management employees and 86% are production employees. Our employees in the France, Brazil, and Brainin de Mexico plants are subject to labor council relationships that vary due to the diverse countries in which we operate. We believe we have a good working relationship with our employees and the unions that represent them.

In response to the COVID-19 pandemic, we implemented significant changes that we determined were in the best interest of our employees and which comply with government orders in all the states and countries where we operate. In an effort to keep our employees safe and to maintain operations during the COVID-19 pandemic, we implemented a number of new health-related measures, including the requirement to wear face-masks at all times while on company property, temperature-taking protocols, increased hygiene, cleaning and sanitizing procedures at all locations, social-distancing protocols, restrictions on visitors to our facilities, and limiting in-person meetings and other gatherings.

We believe diversity and inclusion are at the core of our values and strategic business priorities. Throughout our business, we champion equality, supporting parity for women and under-represented groups as we work to create ethical, safe, and supportive workplaces where our employees thrive. We believe a diverse and inclusive workplace results in business growth and encourages increased innovation, retention of talent, and a more engaged workforce. Respect for human rights is fundamental to our business and its commitment to ethical business conduct.

Competition

Mobile Solutions

In the market in which Mobile Solutions 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 competitors are: Anton Häring KG; A. Berger Holding GmbH & Co. KG; Bovedani Group, Burgmaier Technologies GmbH & Co. KG; CIE Automotive, S.A.; IMS Companies; and MacLean-Fogg Component Solutions. We believe that we generally win new business on the basis of technical competence and our proven track record of successful product development.

Power Solutions

Power Solutions operates in intensely competitive but very fragmented supply chains. We must compete with numerous companies in each industry market segment. Our primary competitors are: Checon Corporation; Deringer-Ney, Inc.; Electrical Contacts, Ltd.; Interplex Industries, Inc.; J&J Machining, LLC; Norstan, Inc.; Owens Industries, Inc.; and Precinmac Precision Machining. We believe that competition within the electrical 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

Mobile Solutions

Mobile Solutions 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.

Power Solutions

Power Solutions 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. Power Solutions bases 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. Most of the raw materials we use are purchased from various suppliers and are typically available from numerous sources, some of which are located in China and Europe. The recent coronavirus outbreak has impacted our suppliers in China and other affected regions. We are monitoring the effect of these impacts on our supply chain in order to maintain regular and timely supply of raw materials to our business segments.

Patents, Trademarks and Licenses

We have several U.S. patents, patent applications and trademarks for various trade names. 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 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, automotive sales tend to slow in July and December, 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.

Government Regulations

Our operations and products are subject to extensive federal, state and local regulatory requirements both domestically and abroad. For example, our business activities are subject to various laws and regulations 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.

As a manufacturer of medical devices, our Taunton, Massachusetts, facility is required to register as such with the FDA.

With respect to medical and products that we may specifically develop 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.

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 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. As of the date hereof, compliance with these laws and regulations has not had a material effect on our capital expenditures, results of operations, and competitive position. For additional information, see "Item 1A - Risk Factors."

Information about our Executive Officers

Our executive officers are:

Name	Age	Position
Warren A. Veltman	59	President and Chief Executive Officer
Thomas D. DeByle	61	Senior Vice President and Chief Financial Officer
John R. Buchan	59	Executive Vice President – Mobile Solutions and Power Solutions
Matthew S. Heiter	60	Senior Vice President and General Counsel
D. Gail Nixon	50	Senior Vice President and Chief Human Resources Officer

Warren A. Veltman was appointed President and Chief Executive Officer in September 2019 having previously served as Executive Vice President of Mobile Solutions since January 2018. Mr. Veltman joined NN as part of the Autocam acquisition in 2014 as the Senior Vice President and General Manager of our former Autocam Precision Components Group. Prior to the acquisition, Mr. Veltman served as Chief Financial Officer of Autocam Corporation from 1990 and Secretary and Treasurer since 1991. Prior to Mr. Veltman’s service at Autocam, Mr. Veltman was an Audit Manager with Deloitte & Touche LLP.

Thomas D. DeByle joined us as Senior Vice President and Chief Financial Officer in September 2019. Since 2019, Mr. DeByle has been on the board of directors of Chase Corporation (NYSE: CCF). He is also their Audit Committee Chair. Prior to joining NN, Mr. DeByle served as Chief Financial Officer, Vice President, and Treasurer of Standex International from March 2008 to August 2019. Prior to joining Standex International, Mr. DeByle held a variety of leadership positions at Ingersoll Rand, a leading diversified industrial firm, culminating in his appointment as Chief Financial Officer for the Compact Vehicle Technology Sector. Prior to joining Ingersoll Rand, Mr. DeByle held a variety of leadership positions at Actuant Corporation, a publicly held diversified industrial company, Milwaukee-based Johnson Controls, and two regional public accounting firms.

John R. Buchan was appointed Executive Vice President of Mobile Solutions in September 2019 and Executive Vice President of Mobile Solutions and Power Solutions in November 2019 having previously served as Vice President of Operations of Mobile Solutions. Mr. Buchan joined NN as part of the Autocam acquisition in 2014, where he served as the Chief Operations Officer. Prior to joining Autocam in 2002, Mr. Buchan held a variety of technical leadership roles at Benteler Automotive, culminating in his appointment as Executive Vice President of the Exhaust Products Group. Mr. Buchan has spent his entire career in operations roles, beginning with General Motors Central Foundry and Rochester Products Divisions.

Matthew S. Heiter joined us as Senior Vice President and General Counsel in July 2015. Prior to joining NN, Mr. Heiter was a shareholder in the law firm of Baker, Donelson, Bearman, Caldwell and Berkowitz, P.C. 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. Ms. Nixon 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 to 2007, she held various accounting and human resources positions with a multi-state healthcare organization, ultimately serving as its corporate human resources director.

Available Information - Securities and Exchange Commission (“SEC”) Filings

We make available free of charge, in the “Investor Relations” section of our website (www.nninc.com), our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), as soon as reasonably practicable after electronically filing such material with, or furnishing it to, the SEC. The SEC maintains a website that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at <http://www.sec.gov>.

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

The COVID-19 pandemic and mitigation efforts to control the spread of the disease have and are expected to continue to materially impact our business, and our financial condition, results of operations and cash flows could be materially adversely affected by factors relating to COVID-19.

The COVID-19 pandemic has created significant volatility in the global economy and led to significant reduced market and economic activity and employment and has disrupted, and may continue to disrupt, the end markets we serve. The spread of COVID-19 has created a disruption in the manufacturing, delivery and overall supply chain of automobile manufacturers and suppliers. Global vehicle production has decreased, and as a result, we have modified our production schedules and have experienced, and may continue to experience, delays in the production and distribution of our products and the loss of sales to our customers. During the pandemic, our production volumes may be volatile, and we will be required to modify our production environment to ensure the health and safety of our workers. Additionally, if the global economic effects caused by the pandemic continue or increase, overall customer demand may continue to decrease, which could have a material and adverse effect on our business, results of operations, and financial condition. COVID-19 vaccines have received emergency use authorization from the United States government, but vaccine distribution has been slower than public officials hoped. Many jurisdictions continue to enforce orders restricting businesses' normal operations, and reinstatement of broader "stay-at-home" directives and mandates remains a possibility. Additionally, the federal emergency supplemental unemployment benefit is scheduled to expire in March 2021. In addition, if a significant portion of our workforce or our customers' workforces are affected by COVID-19 either directly or due to government closures or otherwise, associated work stoppages or facility closures would halt or delay production.

The full extent of the future effects of the pandemic on us, our customers, our supply chain, and our business cannot be assessed at this time, although we expect our 2021 results of operations are likely to be adversely affected. Our business, results of operations and financial condition could continue to be affected even after the pandemic subsides. In addition to the risks specifically described above, the impact of COVID-19 is likely to heighten other risks disclosed below.

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 2020, sales to various U.S. and foreign divisions of our ten largest customers accounted for approximately 45% 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 and unanticipated business disruptions 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. For example, increased demand for semiconductor chips in 2020, due in part to the COVID-19 pandemic and an increased use of laptop computers, 5G phones, gaming systems and other IT equipment that use these chips, has resulted in a severe shortage of chips in early 2021. These same chips are used in automobiles in a variety of parts and information and entertainment systems. As a result, various automotive manufacturers have been forced to delay or stall new vehicle production. If efforts to address the chip shortage by the industry and the U.S government are unsuccessful, there may be further delays in new vehicle production, which could have a material adverse effect on our business, prospects, financial condition, results of operations, or cash flows.

We have a complex network of suppliers, owned and leased manufacturing locations, co-manufacturing locations, distribution networks, and information systems that support our ability to consistently provide our products to our customers. Factors that are hard to predict or beyond our control, such as weather, raw material shortages, natural disasters, fires or explosions, political unrest, terrorism, generalized labor unrest, or health pandemics, such as COVID-19, could damage or disrupt our operations or our customers', suppliers', co-manufacturers' or distributors' operations. These disruptions may require additional resources to restore our supply chain or distribution network. If we cannot respond to disruptions in our operations, whether by finding alternative suppliers or replacing capacity at key manufacturing or distribution locations, or if we are unable to quickly repair damage to our information, production, or supply systems, we may be late in delivering, or be unable to deliver, products to our customers and may also be unable to track orders, inventory, receivables, and payables. If that occurs, our customers' confidence in us and long-term demand for our products could decline. Any of these events could materially and adversely affect our product sales, financial condition, and operating results.

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, 2020, sales to customers located

outside of the U.S. accounted for approximately 37% 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, the prices we pay for raw materials used in our products may be impacted by tariffs. The tariffs initiated by the U.S. government in 2018 under Section 232 of the Trade Expansion Act of 1962 resulted in increased metals prices in the United States. Any future tariffs or quotas imposed on steel and aluminum imports may increase the price of metal, which 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 components, system subassemblies, 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.

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.

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, 2020, we had approximately \$84.9 million of indebtedness outstanding and an additional \$45.4 million of unused borrowing capacity under our debt agreements. Our debt obligations 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 indebtedness level, we may 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 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) or to accelerate the maturity date of the indebtedness incurred thereunder. 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 37% 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 2020, the U.S. dollar strengthened against foreign currencies which unfavorably affected our revenue by \$6.2 million. In contrast, a weakening of the U.S. dollar may beneficially 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 condition, results of operations, and cash flows. Our borrowing agreements limit our ability to complete acquisitions without prior approval of our lenders. We have had difficulty with purchase accounting and other aspects related to the accounting for our acquisitions, which resulted in material weaknesses in our internal control over financial reporting. Although we have remediated these material weaknesses, there can be no assurances we will not face similar issues with respect to any future acquisitions.

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. 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.

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.

General Risk Factors

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

Our ability to attract and retain customers, suppliers, 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 consequences of damage to our reputation include, among other things, increasing the number of litigation claims and the size of damages asserted or subjecting us to enforcement actions, fines, and penalties, all of which would cause us to incur significant defense related costs and expenses.

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

Changes in U.S. tax laws, tax rulings, or interpretations of existing laws could materially affect our business, cash flow, results of operations, and financial condition. In particular, 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 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.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

As of December 31, 2020, we owned or leased 32 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.

Mobile Solutions Group

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

Power Solutions 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, Warehouse	U.S.A.	Owned
Foshan City, China	Plant	China	Leased
Irvine, California	Plant	U.S.A.	Leased
Lubbock, Texas	Plant 1	U.S.A.	Owned
Lubbock, Texas	Plant 2	U.S.A.	Owned
Mexico City, Mexico	Plant	Mexico	Owned
North Attleboro, Massachusetts	Plant	U.S.A.	Owned
Palmer, Massachusetts	Plant	U.S.A.	Leased
Taunton, Massachusetts	Plant	U.S.A.	Leased

Joint Venture

Location	General Character	Country	Owned or Leased
Wuxi, China	Plant	China	Leased

In addition to these manufacturing plants, we lease office space in Charlotte, North Carolina, which serves as our corporate headquarters.

Item 3. Legal Proceedings

As disclosed in Note 15 of the Notes to Consolidated Financial Statements included elsewhere in this Annual Report, we are engaged in certain legal proceedings, and the disclosure set forth in Note 15 relating to certain commitments and contingencies is incorporated herein by reference.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

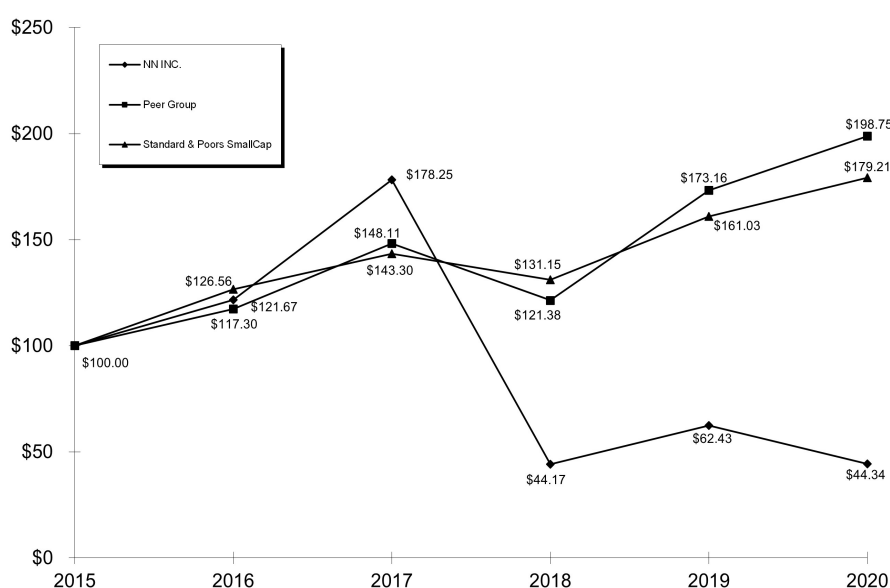
Item 5. Market for the Registrant’s Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities

Our common stock is traded on Nasdaq under the trading symbol “NNBR.” As of March 5, 2021, there were approximately 6,363 beneficial owners of record of our common stock, and the closing per share stock price as reported by Nasdaq was \$6.73. 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, 2015, to December 31, 2020. The customized peer group consists of the following companies, which we believe are in similar lines of business: Altra Industrial Motion Corp., Ametek Inc., CIRCOR International, Inc., Colfax Corporation, Crane, Enerpac Tool Group Corp, 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, 2015, 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 December 31, 2020)



	2015	2016	2017	2018	2019	2020
NN, Inc.	\$ 100.00	\$ 121.67	\$ 178.25	\$ 44.17	\$ 62.43	\$ 44.34
Peer Group	\$ 100.00	\$ 117.30	\$ 148.11	\$ 121.38	\$ 173.16	\$ 198.75
S&P SmallCap 600	\$ 100.00	\$ 126.56	\$ 143.30	\$ 131.15	\$ 161.03	\$ 179.21

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.

See Part III, Item 12 – “Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters” of this Annual Report 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 Part II, Item 7, of this Annual Report and the audited Consolidated Financial Statements, including the Notes thereto, in Part II, Item 8, of this Annual Report. Amounts reflect the reclassification of discontinued operations, as disclosed in Note 2 of the Notes to Consolidated Financial Statements included elsewhere in this report.

	Year Ended December 31,				
	2020	2019	2018	2017	2016
Statement of Operations Data:					
Net sales	\$ 427,534	\$ 489,514	\$ 524,194	\$ 523,024	\$ 506,270
Cost of sales	343,594	392,482	413,394	397,025	379,933
Goodwill impairment	92,942	—	182,542	—	—
Income (loss) from operations	(117,457)	(17,593)	(195,047)	18,995	25,113
Income (loss) from continuing operations	(139,490)	(30,749)	(221,220)	95,949	39,997
Income (loss) from discontinued operations, net of tax	38,898	(15,992)	(41,767)	66,288	(33,334)
Income (loss) from continuing operations per common share, basic	\$ (3.60)	\$ (0.75)	\$ (6.98)	\$ 3.50	\$ 1.48
Income (loss) from continuing operations per common share, diluted	\$ (3.60)	\$ (0.75)	\$ (6.98)	\$ 3.46	\$ 1.48
Cash dividends declared per common share	\$ —	\$ 0.21	\$ 0.28	\$ 0.28	\$ 0.28
	As of December 31,				
	2020	2019	2018	2017	2016
Balance Sheet Data:					
Current assets	\$ 215,218	\$ 302,980	\$ 296,203	\$ 475,986	\$ 282,328
Current liabilities	103,231	139,481	145,030	108,421	140,241
Total assets	624,962	1,541,984	1,500,902	1,473,709	1,358,274
Long-term obligations	85,883	765,161	817,549	792,499	788,953
Convertible preferred stock	105,086	93,012	—	—	—
Stockholders’ equity	254,152	353,277	419,271	485,329	309,391

During 2020, we experienced a decline in sales volume as a result of lower demand during the COVID-19 pandemic. We executed strategic initiatives to improve liquidity, including selling our Life Sciences business and using the proceeds to pay down debt. We recognized goodwill impairment charges of \$92.9 million in our Power Solutions business.

During 2019, we adopted new lease accounting guidance that requires operating leases to be included on the balance sheet. As a result of this new guidance, \$45.5 million of operating lease right-of-use assets are included in total assets as of December 31, 2019. Additionally, we issued convertible preferred stock in December 2019 and used the net cash proceeds of \$95.7 million to pay down debt and to pay debt amendment costs.

During 2018, we recognized goodwill impairment charges of \$182.5 million and issued shares of common stock in a public offering.

During 2017, we completed the sale of our global precision bearing components business (the “PBC Business”) and recorded an after-tax gain on sale of \$127.7 million.

The year ended December 31, 2016, was the first full year following the acquisition of our former Precision Engineered Products Group.

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 the Selected Financial Data included elsewhere in this Annual Report. 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 are based upon the following long-term objectives

- Organic growth within our segments;
- Improved operating margins
- Cost reduction
- Efficient capital deployment
- Reduced overall debt and debt leverage ratio improvement
- Capital management initiatives
- Employee safety and satisfaction

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;
- Defense 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, electric vehicles, and electrification;
- Regulatory environment for United States public companies and manufacturing companies;
- Currency and exchange rate movements and trends;
- Interest rate levels and expectations; and
- Changes in tariff regulations.

Management generally focuses on the following key indicators of operating performance

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

Critical Accounting Policies

Our critical 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.

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. An impairment charge is calculated based on a reporting unit's carrying amount in excess of its fair value (i.e., step 1 of the two-step impairment test). 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. Reporting units for the purpose of goodwill impairment testing are the same as our operating segments (Mobile Solutions and Power Solutions). Based on the results of the quantitative measurement performed, which indicated a fair value less than the carrying amount for Power Solutions, we concluded there was a \$92.9 million impairment of goodwill for the year ended December 31, 2020.

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 consolidated 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 been made for income taxes on unremitted earnings of certain foreign subsidiaries as these earnings are not 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. We eliminate disproportionate tax effects from accumulated other comprehensive income (loss) when the circumstances upon which they are premised cease to exist.

The calculation of tax assets, liabilities, and expenses under U.S. 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. We have recorded a U.S. deferred tax liability for foreign earnings which are not indefinitely reinvested. We treat global intangible low-taxed income ("GILTI") as a periodic charge in the year in which it arises and therefore do not record deferred taxes for basis differences associated with GILTI.

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 Note 1 and Note 11 of the Notes to Consolidated Financial Statements).

Impairment of Long-Lived Assets

Long-lived tangible and intangible assets subject to depreciation or 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, then 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.

Results of Operations

Factors That May Influence Results of Operations

The following paragraphs describe factors that have influenced results of operations for the year ended December 31, 2020, that management believes are important to provide an understanding of the business and results of operations or that may influence operations in the future.

Global COVID-19 Pandemic

The COVID-19 pandemic continues to disrupt the United States and global economy, and we cannot predict when a full economic recovery will occur. Consistent with actions taken by governmental authorities and in response to reduced customer demand, in late March 2020, we idled manufacturing operations in certain regions around the world, other than China, where manufacturing operations began to resume in March 2020. During the year, we experienced supplier and customer disruption, which adversely affected our results of operations and cash flows in 2020. In Europe and North America, sales began declining in the second half of March as the pandemic led to customer plant closures. The situation grew more challenging in the second and third quarters of fiscal 2020, as customer closures affected much of our operations. Although much of the United States and the global economies have reopened, many public health experts warn there may be additional COVID-19 surges in 2021. Further surges in the COVID-19 infection rates could result in the reinstatement of directives and mandates requiring businesses to again curtail or cease normal operations, just as some jurisdictions rolled back reopening plans in the summer of 2020 during one of the initial COVID-19 surges. Thus, the spread of COVID-19 and the responses thereto have created a disruption in the manufacturing, delivery, and overall supply chain of automobile manufacturers and suppliers, as well as disruption within the power industry. Global vehicle production decreased significantly, and some vehicle manufacturers completely shut down manufacturing operations in some countries and regions, including the United States and Europe. The rapid development and fluidity of the situation precludes any prediction as to the ultimate impact COVID-19 will have on our business, financial condition, results of operations, and cash flows, which will depend largely on future developments directly or indirectly relating to the duration and scope of the COVID-19 outbreak.

We have undertaken a number of permanent and temporary actions to manage the evolving situation, including the continuation of previously announced cost savings initiatives.

Initiatives announced in 2019:

- Streamlining facilities and reducing overall selling, general and administrative costs;
- Eliminated the quarterly dividend;
- Reduced capital expenditures;
- Issued \$100 million of Preferred Stock and used net proceeds for debt repayment; and
- Refinanced senior credit facilities to extend maturities and provide additional liquidity.

Additional actions taken in 2020 in response to the economic effects of the pandemic:

- In March 2020, we drew down \$60 million in cash under our Senior Secured Revolver to strengthen our near-term cash position. This debt was repaid immediately following the sale of the Life Sciences business in October 2020.
- Beginning in April 2020, executives reduced their base salaries by 20% to 25%, non-executive employee salaries were reduced by 5% to 15%. In October 2020, these salary reductions were repaid, and salaries were reinstated to their original levels.
- The 401(k) employer match was suspended through December 2020.
- Non-employee board members deferred their cash compensation to later in the year.
- Employee merit increases were not made in 2020, bonus payouts were deferred to later in the year, and the gainsharing plan for 2020 was suspended through December 2020.
- Travel was significantly reduced beginning in the first quarter of 2020.
- In response to government orders and reduced demand, we adjusted production and work week hours, reduced or suspended non-critical discretionary spending, and furloughed personnel, many of whom are eligible to participate in government supported programs.
- Inventory levels and collection of receivables are being closely monitored.
- We entered into rent deferral arrangements with landlords of several of our leased facilities.

- As allowed by the CARES Act, we deferred payments of the employer share of U. S. payroll taxes and will begin making payments in 2021 through 2022.
- In July 2020, we amended our credit agreement with Truist Bank; JPMorgan Chase Bank, N.A.; KeyBank National Association; and Hometrust Bank (as amended, the “Credit Agreement”) to waive compliance with the financial leverage ratio covenant for the second and third quarters of 2020.

Further actions taken or expected in 2021:

- We expect to restructure our debt by refinancing our term loans and revolver.
- We expect to terminate our existing interest rate swap.
- We are taking advantage of other provisions of the CARES Act that could result in reduced income tax obligation and a positive impact on cash.
- We continue to focus on further general cost reduction actions.

While managing decreased demand in many regions across the globe, we are now operating at all of our business locations. We are coordinating with our customers and suppliers to make the necessary preparations. We are focused on the safety of our employees, customers and suppliers when re-starting. We have developed and implemented processes to ensure a safe environment for our employees and any visitors to our facilities, including providing personal protective equipment to our employees, establishing social distancing protocols and temperature checks. These processes include recommendations based on guidelines from the Centers for Disease Control and Prevention and the World Health Organization as well as from our experience with ramp-ups at our plants in China, the United States, Mexico, Poland, France, and Brazil. The health and safety of our employees remains our top priority.

Discontinued Operations

In August 2020, we entered into a Stock Purchase Agreement (the “SPA”) with affiliates of American Securities LLC for the sale of our Life Sciences business for an aggregate purchase price of up to \$825 million, which includes a \$755 million cash base purchase price and a potential earnout payment of up to \$70 million. The cash base purchase price was subject to certain adjustments and was payable at the closing of the transaction, which occurred on October 6, 2020. The earnout payment is subject to the performance of the Life Sciences business during the year ending December 31, 2022, measured by Adjusted EBITDA targets, as defined by the SPA. The Life Sciences business includes facilities that are engaged in the production of a variety of components, assemblies, and instruments, such as surgical knives, bioresorbable implants, surgical staples, cases and trays, orthopaedic implants and tools, laparoscopic devices, and drug delivery devices for the orthopaedics and medical/surgical end markets. The sale of the Life Sciences business furthers management’s strategy to improve liquidity and creates the financial flexibility to pursue key growth areas in the Mobile Solutions and Power Solutions segments.

After working capital and other closing adjustments, the final cash purchase price was approximately \$753.3 million. We received cash proceeds at closing of \$757.2 million and recorded a \$3.9 million payable at December 31, 2020, for the balance. We prepaid \$700.0 million in the aggregate on the Senior Secured Term Loan and the Incremental Term Loan immediately following the sale. We also paid in full the outstanding balance on the Senior Secured Revolver. We recognized a gain on sale of \$214.9 million, net of income taxes. Under the terms of a transition services agreement, we are providing certain support services for up to 180 days from the closing date of the sale.

In accordance with ASC 205-20, *Presentation of Financial Statements - Discontinued Operations*, the operating results of the Life Sciences business are classified as discontinued operations. The presentation of discontinued operations includes revenues and expenses of the discontinued operations and will also include any gain on the disposition of the business, all 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, the results of the Life Sciences 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 Statements of Cash Flows include cash flows of the Life Sciences business in each line item unless otherwise stated.

Our credit facility required us to use proceeds from the sale of the Life Sciences business to prepay a portion of our existing debt. We paid \$700 million in the aggregate on our term loans as described in Note 12. The prepayment was applied to debt in accordance with the prepayment provisions of the Credit Agreement immediately after the transaction closed on October 6, 2020. Average quarterly interest rates were multiplied by the required prepayment amounts to calculate interest expense to be reclassified to discontinued operations for all periods presented. Write-offs of credit facility debt issuance costs were allocated to discontinued operations by multiplying the ratio of the required prepayment amounts as a percentage of total outstanding principal by the total write-off charges in each period. See Note 2 in the Notes to Consolidated Financial Statements for more information on discontinued operations.

Goodwill Impairment

During the first quarter of 2020, our market capitalization declined to a level that was less than the net book value of our stockholders' equity. The decline in market capitalization was a triggering event that caused us to perform a goodwill impairment analysis as of March 31, 2020. The goodwill impairment analysis required significant judgments to calculate the fair value for the Power Solutions reporting unit, including estimation of future cash flows, which is dependent on internal forecasts, estimation of the long-term growth rate for each operating segment, and determination of weighted average cost of capital. Our forecasts used in the goodwill impairment analysis reflected our expectations of declines in sales resulting from COVID-19. Significant assumptions and estimates are involved in the application of the discounted cash flow model to forecast operating cash flows, including market growth and market share, sales volumes and prices, costs to produce, discount rate, and estimated capital needs. Management considers historical experience and all available information at the time the fair values of its reporting units are estimated. Assumptions in estimating future cash flows are subject to a high degree of judgment and complexity. The carrying value of the Power Solutions reporting unit exceeded the estimated fair value as of the March 31, 2020, analysis. As a result of our analysis, we recorded an impairment loss on goodwill of \$92.9 million to the "Goodwill impairment" line on the Consolidated Statements of Operations and Comprehensive Income (Loss). See Note 8 in the Notes to Consolidated Financial Statements for more information on the impairment charge. As of December 31, 2020, there is no remaining goodwill balance.

Financial Data as a Percentage of Net Sales

The following table presents the percentage of our net sales represented by statement of operations line item.

	Year Ended December 31,		
	2020	2019	2018
Net sales	100.0 %	100.0 %	100.0 %
Cost of sales (exclusive of depreciation and amortization shown separately below)	80.4 %	80.2 %	78.9 %
Selling, general, and administrative expense	13.6 %	14.1 %	13.9 %
Depreciation and amortization	10.7 %	9.2 %	8.2 %
Restructuring and integration expense, net	— %	— %	0.1 %
Goodwill impairment	21.7 %	— %	34.8 %
Other operating expense, net	1.1 %	0.2 %	1.3 %
Loss from operations	(27.5)%	(3.6)%	(37.2)%
Interest expense	4.4 %	2.7 %	2.2 %
Loss on extinguishment of debt and write-off of debt issuance costs	— %	0.1 %	— %
Derivative payments on interest rate swap	1.0 %	— %	— %
Loss on interest rate swap	2.7 %	— %	— %
Other expense (income), net	— %	0.2 %	0.4 %
Loss from continuing operations before benefit (provision) for income taxes and share of net income (loss) from joint venture	(35.6)%	(6.6)%	(39.8)%
Benefit (provision) for income taxes	2.1 %	(0.1)%	0.3 %
Share of net income (loss) from joint venture	0.8 %	0.3 %	(2.7)%
Loss from continuing operations	(32.6)%	(6.3)%	(42.2)%
Income (loss) from discontinued operations, net of tax	9.1 %	(3.3)%	(8.0)%
Net loss	(23.5)%	(9.5)%	(50.2)%

Sales Concentration

During 2020, sales to various U.S. and foreign divisions of our ten largest customers accounted for approximately 45% 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 have a corresponding negative impact on our income from operations and operating cash flows or cause us to incur additional restructuring and/or impairment costs. We recognized sales from a single customer of \$49.7 million, or 10% of consolidated net sales, during the year ended December 31, 2019, and \$65.3 million, or 12% of consolidated net sales, during the year ended December 31, 2018. Revenues from this customer are in our Mobile Solutions segment and were less than 10% of consolidated net sales during the year ended December 31, 2020.

Year Ended December 31, 2020, compared to the Year Ended December 31, 2019

	Year Ended December 31,		
	2020	2019	\$ Change
Net sales	\$ 427,534	\$ 489,514	\$ (61,980)
<i>Organic decline</i>			\$ (55,735)
<i>Foreign exchange effects</i>			(6,245)
Cost of sales (exclusive of depreciation and amortization shown separately below)	343,594	392,482	(48,888)
Selling, general, and administrative expense	58,055	68,895	(10,840)
Depreciation and amortization	45,680	44,896	784
Restructuring and integration expense, net	—	(12)	12
Goodwill impairment	92,942	—	92,942
Other operating expense, net	4,720	846	3,874
Loss from operations	(117,457)	(17,593)	(99,864)
Interest expense	18,898	13,030	5,868
Loss on extinguishment of debt and write-off of debt issuance costs	144	540	(396)
Derivative payments on interest rate swap	4,133	—	4,133
Loss on interest rate swap	11,669	—	11,669
Other expense (income), net	(213)	962	(1,175)
Loss from continuing operations before benefit (provision) for income taxes and share of net income from joint venture	(152,088)	(32,125)	(119,963)
Benefit (provision) for income taxes	8,972	(305)	9,277
Share of net income from joint venture	3,626	1,681	1,945
Loss from continuing operations	(139,490)	(30,749)	(108,741)
Income (loss) from discontinued operations, net of tax	38,898	(15,992)	54,890
Net loss	\$ (100,592)	\$ (46,741)	\$ (53,851)

Net Sales. Net sales decreased by \$62.0 million, or 13%, during the twelve months ended December 31, 2020, compared to the twelve months ended December 31, 2019, primarily due to a decrease in organic volume of \$55.7 million as a result of decreased demand due to the COVID-19 pandemic. Unfavorable foreign exchange effects of \$6.2 million also contributed to the decrease.

Cost of Sales. Cost of sales decreased by \$48.9 million, or 12%, during the twelve months ended December 31, 2020, compared to the twelve months ended December 31, 2019, primarily due to variable costs associated with the above-referenced sales volume decline and variable and fixed cost reduction initiatives that were implemented.

Selling, General, and Administrative Expense. Selling, general and administrative expense decreased by \$10.8 million during the twelve months ended December 31, 2020, compared to the twelve months ended December 31, 2019, primarily due to cost reduction initiatives that drove decreases in personnel and travel costs.

Depreciation and Amortization. Depreciation and amortization increased by \$0.8 million during the twelve months ended December 31, 2020, compared to the twelve months ended December 31, 2019, as the full year depreciation impact of prior year capital expenditures exceeded the reduction due to lower capital expenditures in 2020.

Goodwill Impairment. The increase in goodwill impairment during the year ended December 31, 2020, was the result of a \$92.9 million goodwill impairment charge at Power Solutions. See Note 8 in the Notes to Consolidated Financial Statements for more information on the impairment charge.

Other Operating Expense, Net. Other operating expense, net, changed unfavorably by \$3.9 million during the year ended December 31, 2020, compared to the year ended December 31, 2019, primarily due to charges and costs associated with asset impairments and disposals and elimination of a portion of our lease obligation as a result of our decision to vacate a portion of our corporate headquarters building. These charges were partially offset by a \$0.8 million gain on the sale of a building in Fairfield, Ohio, in the year ended December 31, 2020.

Interest Expense. Interest expense increased by \$5.9 million during the year ended December 31, 2020, compared to the year ended December 31, 2019, primarily due to an increase in settlements on the interest rate swap and an increase in the interest rate margin over one-month LIBOR on the Senior Secured Term Loan and the Incremental Term Loan as a result of amendments executed in 2019. These increases were partially offset by a reduction in one-month LIBOR. Interest on our Senior Secured Revolver decreased due to a low outstanding principal balance throughout most of the first quarter of 2020 after using proceeds from the Preferred Stock offering to repay the balance in December 2019. We repaid the entire outstanding balance on the Senior Secured Revolver after the sale of the Life Sciences business.

	Year Ended December 31,	
	2020	2019
Interest on debt	\$ 7,714	\$ 10,971
Interest rate swap settlements	8,906	1,411
Amortization of debt issuance costs	1,702	1,421
Capitalized interest	(204)	(1,458)
Other	780	685
Total interest expense	\$ 18,898	\$ 13,030

Derivative Payments on Interest Rate Swap. Derivative payments on interest rate swap represent cash settlements of the interest rate swap after hedge accounting was discontinued in October 2020. Prior to October 2020, interest rate swap settlements were recognized in interest expense. See Note 21 in the Notes to Consolidated Financial Statements for more discussion about the interest rate swap.

Loss on Interest Rate Swap. Loss on interest rate swap represents mark-to-market adjustments on the interest rate swap after hedge accounting was discontinued in October 2020 as well as amortization of the residual loss in accumulated other comprehensive income as monthly settlements occur. Prior to October 2020, mark-to-market adjustments on the interest rate swap were recognized in accumulated other comprehensive income.

Other Expense (Income), Net. Other expense (income), net, changed favorably by \$1.2 million during the twelve months ended December 31, 2020, compared to the twelve months ended December 31, 2019, primarily due to more favorable foreign exchange effects associated with intercompany borrowings compared to the prior year.

Benefit (Provision) for Income Taxes. Our effective tax rate was 5.9% for the year ended December 31, 2020, compared to (1.0)% for the year ended December 31, 2019. The difference in rates is primarily due to the impact of the impairment of nondeductible goodwill in 2020 and the CARES Act in 2020. Note 11 in the Notes to Consolidated Financial Statements describes the components of income taxes for each period presented.

Share of Net Income from Joint Venture. Our share of net income from the joint venture increased during the year ended December 31, 2020, compared to the year ended December 31, 2019, primarily due to increased sales and improved profits from expanding variable margins as a result of successful process improvement initiatives and improved product mix, and fixed cost reduction actions. These favorable impacts were partially offset by the shutdown of manufacturing operations in China during the first quarter of 2020 due to the COVID-19 pandemic.

Income (Loss) from Discontinued Operations, Net of Tax. The largest component of income (loss) from discontinued operations, net of tax, in 2020 was the \$214.9 million gain on sale of our Life Sciences business. Note 2 in the Notes to Consolidated Financial Statements provides details of the results of discontinued operations.

Results by Segment

MOBILE SOLUTIONS

	Year Ended December 31,		
	2020	2019	\$ Change
Net sales	\$ 256,360	\$ 297,749	\$ (41,389)
Organic decline			\$ (34,849)
Foreign exchange effects			(6,540)
Income from operations	\$ 5,228	\$ 9,553	\$ (4,325)

Net sales decreased by \$41.4 million during the year ended December 31, 2020, compared to the year ended December 31, 2019, primarily due to lower demand within the global automotive markets resulting from the COVID-19 pandemic, contractual price reductions, and unfavorable foreign exchange effects.

Income from operations decreased by \$4.3 million compared to prior year due to lost variable margin on the above-referenced sales volume decline, partially offset by fixed cost reduction actions taken in response to the decline in sales volume. Additionally, the twelve months ended December 31, 2019, were impacted by a \$1.4 million one-time favorable litigation settlement.

POWER SOLUTIONS

	Year Ended December 31,		
	2020	2019	\$ Change
Net sales	\$ 171,269	\$ 192,100	\$ (20,831)
<i>Organic decline</i>			\$ (21,126)
<i>Foreign exchange effects</i>			295
Goodwill impairment	\$ (92,942)	\$ —	\$ (92,942)
Income (loss) from operations	\$ (85,983)	\$ 13,881	\$ (99,864)

Net sales decreased by \$20.8 million during the year ended December 31, 2020, compared to the year ended December 31, 2019, primarily due to lower demand in the electrical products, automotive, and oil and gas end markets resulting from the COVID-19 pandemic, partially offset by increased pass-through pricing on products utilizing precious metals.

Income (loss) from operations decreased by \$99.9 million compared to prior year primarily due to a goodwill impairment loss of \$92.9 million recognized in the first quarter of 2020 and lost variable margin on the above-referenced sales volume decline. These unfavorable impacts were partially offset by fixed cost reduction actions taken in response to the decline in sales volume.

Year Ended December 31, 2019, compared to the Year Ended December 31, 2018

	Year Ended December 31,		
	2019	2018	\$ Change
Net sales	\$ 489,514	\$ 524,194	\$ (34,680)
<i>Acquisitions</i>			\$ 3,959
<i>Organic decline</i>			(31,451)
<i>Foreign exchange effects</i>			(7,188)
Cost of sales (exclusive of depreciation and amortization shown separately below)	392,482	413,394	(20,912)
Selling, general, and administrative expense	68,895	72,764	(3,869)
Depreciation and amortization	44,896	43,026	1,870
Restructuring and integration expense, net	(12)	689	(701)
Goodwill impairment	—	182,542	(182,542)
Other operating expense, net	846	6,826	(5,980)
Loss from operations	(17,593)	(195,047)	177,454
Interest expense	13,030	11,315	1,715
Loss on extinguishment of debt and write-off of debt issuance costs	540	—	540
Other expense, net	962	2,016	(1,054)
Loss from continuing operations before benefit (provision) for income taxes and share of net income (loss) from joint venture	(32,125)	(208,378)	176,253
Benefit (provision) for income taxes	(305)	1,548	(1,853)
Share of net income (loss) from joint venture	1,681	(14,390)	16,071
Loss from continuing operations	(30,749)	(221,220)	190,471
Loss from discontinued operations, net of tax	(15,992)	(41,767)	25,775
Net loss	\$ (46,741)	\$ (262,987)	\$ 216,246

Net Sales. Net sales decreased by \$34.7 million, or 7%, in 2019 compared to 2018, primarily due to a decrease in demand in the automotive end market and unfavorable foreign exchange effects of \$7.2 million.

Cost of Sales. Cost of sales decreased by \$20.9 million, or 5%, in 2019 compared to 2018, primarily due to the relative contribution margin impact of sales in the Mobile Solutions group. The decrease in cost of sales was partially offset by favorable foreign exchange effects of \$5.2 million.

Selling, General, and Administrative Expense. Selling, general and administrative expense decreased by \$3.9 million during the year ended December 31, 2019, compared to the year ended December 31, 2018, primarily due to lower costs for professional services as a result of cost savings initiatives.

Depreciation and Amortization. Depreciation and amortization increased by \$1.9 million during the year ended December 31, 2019, compared to the year ended December 31, 2018, consistent with capital expenditure activity.

Goodwill Impairment. Goodwill impairment decreased by \$182.5 million during the year ended December 31, 2019, compared to the year ended December 31, 2018, as a result of goodwill impairment charges at Mobile Solutions and Power Solutions.

Other Operating Expense, Net. Other operating expense, net, decreased by \$6.0 million during the year ended December 31, 2019, compared to the year ended December 31, 2018, primarily due to a reduction in asset impairment charges.

Interest Expense. Interest expense increase by \$1.7 million during the year ended December 31, 2019, compared to the year ended December 31, 2018, primarily due to higher average interest rates, increased borrowings under the Senior Secured Revolver during 2019, and unfavorable interest rate swap settlements.

	Year Ended December 31,	
	2019	2018
Interest on debt	\$ 10,971	\$ 10,570
Interest rate swap settlements	1,411	—
Amortization of debt issuance costs	1,421	1,274
Capitalized interest	(1,458)	(1,089)
Other	685	560
Total interest expense	\$ 13,030	\$ 11,315

Other Expense, Net. Other expense, net, decreased during the year ended December 31, 2019, compared to the year ended December 31, 2018, primarily due to a decrease in interest income from short-term investments in 2018 and currency effects on intercompany loans.

Benefit (Provision) for Income Taxes. Our effective tax rate from continuing operations was (1.0)% for the year ended December 31, 2019, compared to 0.7% for the year ended December 31, 2018. Note 11 in the Notes to Consolidated Financial Statements describes the components of income taxes for each period presented.

Share of Net Income (Loss) from Joint Venture. Our share of net income (loss) from the joint venture increased by \$16.1 million during the year ended December 31, 2019, compared to the year ended December 31, 2018, primarily due to a partial impairment of the investment in the joint venture of \$16.6 million during the year ended December 31, 2018.

Loss from Discontinued Operations, Net of Tax. Loss from discontinued operations, net of tax, represents the results of operations of our Life Sciences business. Note 2 in the Notes to Consolidated Financial Statements provides details of the results of discontinued operations.

Results by Segment

MOBILE SOLUTIONS

	Year Ended December 31,		
	2019	2018	\$ Change
Net sales	\$ 297,749	\$ 335,037	\$ (37,288)
<i>Organic growth</i>			\$ (30,305)
<i>Foreign exchange effects</i>			(6,983)
Goodwill impairment	\$ —	\$ (73,442)	\$ 73,442
Income (loss) from operations	\$ 9,553	\$ (55,079)	\$ 64,632

Net sales decreased by \$37.3 million during the year ended December 31, 2019, compared to the year ended December 31, 2018, primarily due to lower demand within the North American and European automotive markets, unfavorable foreign exchange effects, reduced demand for components associated with programs nearing the end of the product lifecycle, and delays in new product launches, partially offset by higher demand within the South American automotive market.

Income (loss) from operations increased by \$64.6 million compared to prior year primarily due to the \$73.4 million goodwill impairment in the prior year. Absent the effect of the goodwill impairment, income (loss) from operations decreased by \$8.8 million due to lost variable margin on the above-referenced sales volume decline and costs associated with the launch of new fuel systems business within our European operations. These unfavorable impacts were partially offset by favorable foreign exchange effects and fixed cost reduction initiatives implemented in response to the decline in sales volume.

POWER SOLUTIONS

	Year Ended December 31,		
	2019	2018	\$ Change
Net sales	\$ 192,100	\$ 189,778	\$ 2,322
<i>Acquisitions</i>			\$ 3,959
<i>Organic growth</i>			(1,432)
<i>Foreign exchange effects</i>			(205)
Goodwill impairment	\$ —	\$ 109,100	\$ (109,100)
Income (loss) from operations	\$ 13,881	\$ (95,115)	\$ 108,996

Net sales increased by \$2.3 million during the year ended December 31, 2019, compared to the year ended December 31, 2018, primarily due to \$4.0 million of net sales attributable to the Technical Arts business that was acquired in the third quarter of 2018. The increase in net sales was partially offset by lower demand in the electrical products end market and unfavorable foreign exchange effects.

Income (loss) from operations increased by \$109.0 million compared to prior year primarily due to the \$109.1 million goodwill impairment in the prior year.

Changes in Financial Condition from December 31, 2019, to December 31, 2020

Overview

From December 31, 2019, to December 31, 2020, total assets decreased by \$917.0 million primarily due to the sale of the Life Sciences business and use of cash proceeds to pay down debt. The \$92.9 million impairment of Power Solutions goodwill in the first quarter of 2020 and normal depreciation and amortization of fixed assets and intangible assets also contributed to the decrease.

From December 31, 2019, to December 31, 2020, total liabilities decreased by \$830.0 million primarily due to the prepayment of long-term debt with cash proceeds from the sale of the Life Sciences business.

Working capital of continuing operations, which consists of cash, accounts receivable, inventories, income taxes receivable, and other current assets offset by accounts payable, accrued personnel costs, income taxes payable, current maturities of long-term debt, current portion of lease liabilities, and other current liabilities, was \$112.0 million as of December 31, 2020, compared to \$88.0 million as of December 31, 2019. The increase in working capital was primarily due to cash proceeds from the sale of the Life Sciences business and a reduction in the current maturities of long-term debt due to the prepayment of the Senior Secured Term Loan and the Incremental Term Loan.

Cash Flows

Cash provided by operations was \$15.5 million for the twelve months ended December 31, 2020, compared with cash provided by operations of \$49.2 million for the twelve months ended December 31, 2019. The difference was primarily due to a decrease in sales volumes and higher interest expense, partially offset by improvement in working capital.

Cash provided by investing activities was \$719.3 million for the twelve months ended December 31, 2020, compared with cash used in investing activities of \$39.4 million for the twelve months ended December 31, 2019. The increase was primarily due to cash received from the sale of the Life Sciences business as well as lower capital expenditures in 2020 as part of our cash savings initiatives. Cash received from the liquidation of the short-term investment during 2019 partially offset the decrease in capital expenditures on a year-over-year basis.

Cash used in financing activities was \$714.9 million for the twelve months ended December 31, 2020, compared with cash provided by financing activities of \$5.3 million for the twelve months ended December 31, 2019. The difference was primarily due to the prepayment of debt with proceeds from the sale of the Life Sciences business.

Liquidity and Capital Resources

Overview

On October 21, 2019, we announced expense reduction and cash savings initiatives to help pay down our debt and support greater growth by reinvesting in our businesses. The expense reduction and cash saving initiatives include streamlining facilities and reducing overall selling, general and administrative costs; elimination of quarterly dividend payments; and a reduction in capital expenditures from 2019 spending levels as we return to a more normalized level of capital spending after several years of higher investment. As described in the “Results of Operations, Factors That May Influence Results of Operations” section of Management’s Discussion and Analysis of Financial Condition and Results of Operations, we have taken additional actions in response to the economic effects of the COVID-19 pandemic and in order to enhance our liquidity position during this difficult period.

In November 2019, we initiated a strategic review to evaluate a broad range of operational, financial, and strategic options to reduce leverage and enhance shareholder value, and we retained external advisors to assist in this effort. The strategic options we have evaluated included further cost savings and cash generation initiatives, more efficient capital deployment, changes to our debt and equity structure to improve financial flexibility and liquidity, and the sale of part or all of NN, among others.

As discussed in Note 16 in the Notes to Consolidated Financial Statements, on December 11, 2019, we issued Series B Convertible Preferred Stock (“Preferred Stock” for net proceeds of \$95.7 million and used a portion of the proceeds to repay amounts due at that time on our Senior Secured Revolver. In December 2019, we amended our Credit Agreement which, in turn, extended the due date of our Senior Secured Revolver to July 20, 2022, reduced the total capacity under the Senior Secured Revolver to \$75.0 million, and extended the due date of our Incremental Term Loan to October 19, 2022, matching the date of our longer-dated Senior Secured Term Loan. Additionally, as part of this amendment our debt covenants were amended to establish more restrictive leverage ratios that also become more restrictive over time. Our Consolidated Net Leverage Ratio (the “financial leverage ratio”) covenant is required to be complied with on a quarterly basis at the end of each of our quarterly reporting periods. Our financial leverage ratio covenant is based upon our consolidated net indebtedness at each quarter end and our trailing twelve-month Adjusted EBITDA as defined in our Credit Agreement.

In July 2020, we amended our Credit Agreement to waive compliance with the financial leverage ratio covenant for the second and third quarters of 2020. During this period, we were required to maintain minimum liquidity levels, provide certain financial and other information, and take certain other action as specified in the amendment. Failure to maintain the required minimum liquidity levels or satisfy other requirements set forth in the amendment would allow the revolving credit lenders, the Senior Secured Term loan lenders, and the Incremental Term Loan lenders to cause amounts outstanding under our credit facility to become immediately due and payable and would have a material, adverse impact on our financial position.

In August 2020, we entered into an agreement to sell our Life Sciences business. The sale closed on October 6, 2020, at which time we received cash proceeds of \$757.2 million. We immediately prepaid \$700.0 million in the aggregate on the Senior Secured Term Loan and the Incremental Term Loan. We also paid in full the outstanding balance on the Senior Secured Revolver. Additionally, in August 2020, we amended our Credit Agreement to obtain the lenders’ consent to the sale of the Life Sciences business, subject to certain terms and conditions.

We rely on cash flow generated from operations and available borrowings under our Senior Secured Revolver to fund our working capital and other operating and investing needs. Our ability to borrow under our Senior Secured Revolver is based on our continued compliance with the minimum liquidity requirements and, for periods beginning in the fourth quarter of 2020, the financial leverage ratio covenant, as defined, which became more restrictive upon the occurrence of a qualified sale transaction, which closed on October 6, 2020.

Based on available borrowing capacity of the Senior Secured Revolver, the reduction in debt service costs as a result of the debt prepayment with net proceeds from the sale of the Life Sciences business in October 2020, and cash flows expected to be generated from operations and investing activities, we anticipate that our cash and cash equivalents are sufficient to support our operations and meet our obligations, and that we will be able to maintain compliance with the existing financial leverage ratio covenant for the next twelve months from issuance of these consolidated financial statements. As the term of our Credit Agreement ends in the second half of 2022, we are in the process of evaluating financing alternatives.

Hedging

On February 8, 2019, we entered into a \$700.0 million fixed-rate interest rate swap agreement that changed the LIBOR-based portion of the interest rate on a portion of our variable rate debt to a fixed rate of 2.4575%. The term of the interest rate swap is from the effective date of February 12, 2019, through the termination date of October 19, 2022, with a declining notional amount over the term of the interest rate swap. Refer to Note 21 in the Notes to Consolidated Financial Statements for further discussion about the interest rate swap.

In connection with the prepayment of debt on October 6, 2020, with proceeds from the sale of our Life Sciences business, the outstanding balance of our variable rate debt fell below the \$700.0 million notional amount of the interest rate swap. After the prepayment, a majority of the hedged forecasted transactions (i.e. interest payments) were probable of not occurring, resulting in the recognition in earnings of \$14.8 million of the hedging loss in accumulated other comprehensive income in the fourth quarter of 2020. The remaining \$2.9 million of the hedging loss in accumulated other comprehensive income will be amortized into earnings as settlements occur. Finally, as the interest rate swap no longer qualifies as an effective hedge subsequent to October 6, 2020, changes in fair value of the interest rate swap are recognized in earnings each period. All amounts recognized in earnings related to the interest rate swap are recorded in the “Loss on interest rate swap” line on the Consolidated Statements of Operations and Comprehensive Income (Loss) except that cash settlements were recognized in “Interest expense” prior to October 6, 2020, and in “Derivative payments on interest rate swap” after October 6, 2020. Cash settlements are presented in operating activities on the Consolidated Statements of Cash Flows prior to October 6, 2020, and in investing activities after October 6, 2020.

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 various 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, we are exposed to foreign exchange transaction and translation risk. Various strategies to manage this risk are available to management, including producing and selling in local currencies and hedging programs. As of December 31, 2020, no currency derivatives were in place. In addition, a strengthening of the U.S. dollar against foreign currencies could impair our ability to compete with international competitors for foreign as well as domestic sales.

Credit Facility

Aggregate principal amounts outstanding under our Senior Secured Term Loan, Incremental Term Loan, and Senior Secured Revolver as of December 31, 2020, were \$70.4 million, without regard to unamortized debt issuance costs. As of December 31, 2020, we had unused borrowing capacity of \$45.4 million under the Senior Secured Revolver, subject to certain limitations. This amount of borrowing capacity is net of \$14.6 million of outstanding letters of credit at December 31, 2020, which are considered as usage of the Senior Secured Revolver.

Collectively, our Senior Secured Term Loan, Incremental Term Loan, and Senior Secured Revolver comprise our credit facility. Total capacity under the Senior Secured Revolver was \$60.0 million as of December 31, 2020, and will decrease to \$50.0 million on June 30, 2021. The Senior Secured Revolver matures on July 20, 2022. The credit agreement requires cash in excess of \$35.0 million on the last day of each month to be used to pay down the Senior Secured Revolver.

The Senior Secured Term Loan requires quarterly principal payments of \$0.1 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 6.50% per annum in interest. If one-month LIBOR exceeds 0.75%, then we pay the variable one-month LIBOR plus an applicable margin of 5.75%. Based on the interest rate in effect at December 31, 2020, annual interest payments would be approximately \$3.1 million.

The Incremental Term Loan requires quarterly principal payments of \$0.3 million through October 19, 2022, with the remaining principal amount due on the maturity date. The Incremental Term Loan bears interest at the variable one-month LIBOR plus an applicable margin of 5.75%. Based on the interest rate in effect at December 31, 2020, annual interest payments would be approximately \$1.3 million.

The Senior Secured Revolver bears interest on a variable rate structure with borrowings bearing interest at either one-month LIBOR plus an applicable margin of 4.00% or the prime lending rate plus an applicable margin of 3.00%. We pay a commitment fee of 0.50% for unused capacity under the Senior Secured Revolver. We had no borrowings outstanding under the Senior Secured Revolver at December 31, 2020. Total capacity under the Senior Secured Revolver was \$60.0 million as of December 31, 2020, with \$45.4 million available for future borrowings after reductions for outstanding letters of credit.

Covenants

In July 2020, we amended our Credit Agreement to waive compliance with the financial leverage ratio covenant for the second and third quarters of 2020. During this period, we were required to maintain minimum liquidity levels, provide certain financial and other information, and take certain other action as specified in the amendment. Failure to maintain the required minimum liquidity levels or satisfy other requirements set forth in the amendment would allow the revolving credit lenders, the Senior Secured Term loan lenders, and the Incremental Term Loan lenders to cause amounts outstanding under our credit facility to become immediately due and payable and would have a material, adverse impact on our financial position. Our ability to borrow under our Senior Secured Revolver is based on our continued compliance with the minimum liquidity requirements and, for periods beginning in the fourth quarter of 2020, the financial leverage ratio covenant, as defined, which became more restrictive upon the occurrence of a qualified sale transaction, which closed on October 6, 2020.

We were in compliance as of December 31, 2020, with all requirements under our credit facility.

Contractual Obligations

The following table presents our contractual obligations and commercial commitments as of December 31, 2020:

Certain Contractual Obligations	Payments Due by Period				
	Total	Less than 1 year	1-3 years	3-5 years	After 5 years
Long-term debt including current portion	\$ 84,862	\$ 4,885	\$ 73,296	\$ 3,027	\$ 3,654
Expected interest payments ⁽¹⁾	9,067	4,764	3,916	173	214
Expected derivative payments ⁽²⁾	15,379	11,022	4,357	—	—
Operating leases	88,196	9,348	15,855	14,470	48,523
Finance leases	11,469	4,442	5,472	1,345	210
Total contractual cash obligations	\$ 208,973	\$ 34,461	\$ 102,896	\$ 19,015	\$ 52,601

(1) Expected interest payments on our variable-rate Senior Secured Term Loan and Incremental Term Loan are based on one-month LIBOR as of December 31, 2020.

(2) Expected derivative payments are estimated based on the fair value of the interest rate swap as of December 31, 2020.

We have approximately \$0.8 million in unrecognized tax benefits 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 foreign operations in Brazil, China, France, Mexico, and Poland. The local currency of each foreign facility is also its functional currency.

Seasonality and Fluctuation in Quarterly Results

General economic conditions impact our business and financial results, and certain 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 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.

Interest Rate Risk

Our policy is to manage interest expense using a mixture of fixed and variable rate debt. To manage this mixture of fixed and variable rate debt effectively and mitigate interest rate risk, we may use interest rate swap agreements. The nature and amount of borrowings may vary as a result of future business requirements, market conditions, and other factors.

In February 2019, we entered into a \$700.0 million fixed-rate interest rate swap agreement that changed the LIBOR-based portion of the interest rate on a portion of our variable rate debt to a fixed rate of 2.4575%. The term of the interest rate swap is from the effective date of February 12, 2019, through the termination date of October 19, 2022, with a declining notional amount over the term of the interest rate swap. Refer to Note 21 in the Notes to Consolidated Financial Statements for further discussion about the interest rate swap.

At December 31, 2020, we had \$47.7 million and \$22.7 million of principal outstanding under the Senior Secured Term Loan and Incremental Term Loan, respectively, without regard to capitalized debt issuance costs. A one-percent increase in one-month LIBOR would result in a net increase in interest expense of \$0.4 million on an annualized basis due to the fact that the

Senior Secured Term Loan is subject to a LIBOR floor of 0.75% and one-month LIBOR was below the floor as of December 31, 2020.

At December 31, 2020, we had no principal outstanding under the Senior Secured Revolver.

Foreign Currency Risk

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 derivatives to hedge currency exposures when these exposures meet certain discretionary levels. We did not hold a position in any foreign currency derivatives as of December 31, 2020.

Item 8. Financial Statements and Supplementary Data

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Reports of Independent Registered Public Accounting Firm

Board of Directors and Stockholders
NN, Inc.

Opinion on internal control over financial reporting

We have audited the internal control over financial reporting of NN, Inc. (a Delaware corporation) and subsidiaries (the “Company”) as of December 31, 2020, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the consolidated financial statements of the Company as of and for the year ended December 31, 2020, and our report dated March 15, 2021 expressed an unqualified opinion on those consolidated financial statements.

Basis for opinion

The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and limitations of internal control over financial reporting

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

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

/s/ GRANT THORNTON LLP

Charlotte, North Carolina
March 15, 2021

Board of Directors and Stockholders
NN, Inc.

Opinion on the consolidated financial statements

We have audited the accompanying consolidated balance sheet of NN Inc. (a Delaware corporation) and subsidiaries (the “Company”) as of December 31, 2020, the related consolidated statements of operations and comprehensive income (loss), changes in stockholders’ equity, and cash flows for the year then ended, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020, and the results of its operations and its cash flows for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the Company’s internal control over financial reporting as of December 31, 2020, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”), and our report dated March 15, 2021 expressed an unqualified opinion.

Basis for opinion

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audit 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 audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provides a reasonable basis for our opinion.

Critical audit matters

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

Goodwill Valuation – Power Solutions

As described in Note 8 to the consolidated financial statements, the Company’s market capitalization declined to a level that was less than the net book value of the stockholders’ equity during the first quarter of 2020. The decline in market capitalization was a triggering event that resulted in the Company performing an interim quantitative goodwill impairment analysis as of March 31, 2020. As a result of the interim goodwill impairment analysis, it was determined that the carrying value of the Power Solutions reporting unit exceeded its estimated fair value resulting in an impairment charge of \$92.9 million. We identified goodwill valuation as a critical audit matter because of the significant judgements made by management to estimate the fair value of goodwill.

Estimates of future performance and market conditions used to arrive at the net present value of future cash flows, which is used within the goodwill impairment analysis, are subjective in nature. In particular, the Company’s fair value estimate was sensitive to assumptions including the revenue growth rate and discount rate used by the Company, which are affected by expectations about future market or economic conditions. These assumptions proved more subjective during the March 31, 2020 goodwill impairment analysis as a result of the uncertainty surrounding the immediate and long-term impact of the COVID-19 pandemic.

Our audit procedures related to the goodwill impairment analysis included the following, among others:

- We obtained an understanding, evaluated the design, and tested the operating effectiveness of controls related to the accounting for the March 31, 2020 goodwill impairment, which included the Company’s review over revenue growth rates and discount rate used to determine the fair value estimate of the Power Solutions reporting unit.

- We tested the reasonableness of the revenue growth rates by (1) comparing projected amounts to prior historical periods and trends and (2) obtaining an understanding of drivers underlying projected amounts, including consideration of industry information and economic trends.
- We utilized valuation specialists to assess the Company's methodologies and assess the appropriateness of the discount rate used in the March 31, 2020 goodwill impairment analysis. Our specialists calculated a range of rates using market participant inputs and performed analysis to test sensitivity to changes in the discount rate.

Valuation of Power Solutions Segment for Tax Distribution

As described further in Note 11 to the consolidated financial statements, prior to the sale of the Life Sciences business, the Company completed a tax restructuring in which Precision Engineered Products Holdings, Inc., a wholly owned U.S. domestic subsidiary, distributed to NN, Inc., all of its assets and equity holdings related to the Power Solutions segment. The restructuring process created a deferred gain, required to be realized upon the sale of Life Sciences, equal to the fair market value of the distributed assets over tax basis. We identified the valuation of the Power Solutions segment as a critical audit matter because of the significant judgements made by management to estimate the fair value. The distribution resulted in a step-up in tax basis and a taxable gain, both of which were directly impacted by the valuation.

Estimates of future performance and market conditions used to arrive at the net present value of future cash flows, which is used in the valuation of Power Solutions segment, are subjective in nature. In particular, the Company's fair value estimate was sensitive to assumptions including the revenue growth rate and discount rate used by the Company, which are affected by expectations about future market or economic conditions.

Our audit procedures related to the valuation of the Power Solutions segment included the following, among others:

- We obtained an understanding, evaluated the design, and tested the operating effectiveness of the Company's controls related to the valuation of the Power Solutions segment, including the Company's review over revenue growth rates and discount rate used to determine the fair value estimate.
- We tested the reasonableness of the growth rates by (1) comparing projected amounts to prior historical periods and trends, and (2) obtaining an understanding of drivers underlying projected amounts, including consideration of industry information and economic trends.
- We utilized valuation specialists to assess the Company's methodologies and assess the appropriateness of the discount rate used in the valuation. Our specialists calculated a range of rates using market participant inputs and performed analysis to test sensitivity to changes in the discount rate.

/s/ GRANT THORNTON LLP

We have served as the Company's auditor since 2020.

Charlotte, North Carolina
March 15, 2021

Report of Independent Registered Public Accounting Firm

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

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheet of NN, Inc. and its subsidiaries (the “Company”) as of December 31, 2019, and the related consolidated statements of operations and comprehensive income (loss), of changes in stockholders’ equity and of cash flows for each of the two years in the period ended December 31, 2019, including the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2019 in conformity with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

As discussed in Note 1, the Company changed the manner in which it accounts for leases in 2019.

Basis for Opinion

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

We conducted our audits of these consolidated financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

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

Emphasis of Matter

As disclosed in Note 1 (not presented herein) to the consolidated financial statements appearing under Item 8 of the Company's 2019 Annual Report on Form 10-K, the Company is required to comply with a financial ratio covenant pursuant to its Credit Agreement which becomes more restrictive over time and will require the Company to improve financial performance or take other measures to maintain compliance with its debt agreements.

/s/ PricewaterhouseCoopers LLP

Atlanta, Georgia

March 16, 2020, except for the effect of discontinued operations discussed in Note 2 to the consolidated financial statements, as to which the date is March 15, 2021.

We served as the Company's auditor from 2003 to 2020.

NN, Inc.
Consolidated Statements of Operations and Comprehensive Income (Loss)

(in thousands, except per share data)	Years Ended December 31,		
	2020	2019	2018
Net sales	\$ 427,534	\$ 489,514	\$ 524,194
Cost of sales (exclusive of depreciation and amortization shown separately below)	343,594	392,482	413,394
Selling, general, and administrative expense	58,055	68,895	72,764
Depreciation and amortization	45,680	44,896	43,026
Restructuring and integration expense, net	—	(12)	689
Goodwill impairment	92,942	—	182,542
Other operating expense, net	4,720	846	6,826
Loss from operations	(117,457)	(17,593)	(195,047)
Interest expense	18,898	13,030	11,315
Loss on extinguishment of debt and write-off of debt issuance costs	144	540	—
Derivative payments on interest rate swap	4,133	—	—
Loss on interest rate swap	11,669	—	—
Other expense (income), net	(213)	962	2,016
Loss from continuing operations before benefit (provision) for income taxes and share of net income (loss) from joint venture	(152,088)	(32,125)	(208,378)
Benefit (provision) for income taxes	8,972	(305)	1,548
Share of net income (loss) from joint venture	3,626	1,681	(14,390)
Loss from continuing operations	(139,490)	(30,749)	(221,220)
Income (loss) from discontinued operations, net of tax (Note 2)	38,898	(15,992)	(41,767)
Net loss	\$ (100,592)	\$ (46,741)	\$ (262,987)
Other comprehensive income (loss):			
Reclassification adjustment for discontinued operations	\$ 5,961	\$ —	\$ —
Foreign currency translation loss	(1,683)	(3,845)	(13,609)
Interest rate swap:			
Change in fair value, net of tax	(12,443)	(10,479)	—
Reclassification adjustment for losses included in net loss, net of tax	18,987	1,084	—
Other comprehensive income (loss)	\$ 10,822	\$ (13,240)	\$ (13,609)
Comprehensive loss	\$ (89,770)	\$ (59,981)	\$ (276,596)
Basic net loss per common share:			
Loss from continuing operations per common share	\$ (3.60)	\$ (0.75)	\$ (6.98)
Income (loss) from discontinued operations per common share	0.92	(0.38)	(1.32)
Net loss per common share	\$ (2.68)	\$ (1.13)	\$ (8.30)
Weighted average common shares outstanding	42,199	42,030	31,678
Diluted net loss per common share:			
Loss from continuing operations per common share	\$ (3.60)	\$ (0.75)	\$ (6.98)
Income (loss) from discontinued operations per common share	0.92	(0.38)	(1.32)
Net loss per common share	\$ (2.68)	\$ (1.13)	\$ (8.30)
Weighted average common shares outstanding	42,199	42,030	31,678

See Notes to Consolidated Financial Statements.

NN, Inc.
Consolidated Balance Sheets

(in thousands, except per share data)	December 31,	
	2020	2019
Assets		
Current assets:		
Cash and cash equivalents	\$ 48,138	\$ 17,911
Accounts receivable, net	84,615	83,240
Inventories	62,517	67,078
Income tax receivable	8,800	5,973
Current assets of discontinued operations	—	117,000
Other current assets	11,148	11,778
Total current assets	215,218	302,980
Property, plant and equipment, net	223,690	255,977
Operating lease right-of-use assets	50,264	45,452
Goodwill	—	94,779
Intangible assets, net	103,065	117,413
Investment in joint venture	26,983	21,755
Non-current assets of discontinued operations	—	695,054
Other non-current assets	5,742	8,574
Total assets	\$ 624,962	\$ 1,541,984
Liabilities, Preferred Stock, and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 37,435	\$ 40,973
Accrued salaries, wages and benefits	21,296	15,584
Income tax payable	3,557	684
Current maturities of long-term debt	4,885	19,106
Current portion of operating lease liabilities	4,797	4,288
Current liabilities of discontinued operations	—	41,546
Other current liabilities	31,261	17,300
Total current liabilities	103,231	139,481
Deferred tax liabilities	11,178	24,461
Non-current income tax payable	—	1,272
Long-term debt, net of current portion	79,025	757,250
Operating lease liabilities, net of current portion	55,053	48,575
Non-current liabilities of discontinued operations	—	84,199
Other non-current liabilities	17,237	40,457
Total liabilities	265,724	1,095,695
Commitments and contingencies (Note 15)		
Series B convertible preferred stock - \$0.01 par value per share, 100 shares authorized, 100 shares issued and outstanding at December 31, 2019, and December 31, 2020	105,086	93,012
Stockholders' equity:		
Common stock - \$0.01 par value per share, 90,000 shares authorized, 42,313 and 42,686 shares issued and outstanding at December 31, 2019, and December 31, 2020, respectively	427	423
Additional paid-in capital	493,332	501,615
Warrants	—	1,076
Accumulated deficit	(205,875)	(105,283)
Accumulated other comprehensive loss	(33,732)	(44,554)
Total stockholders' equity	254,152	353,277
Total liabilities, preferred stock, and stockholders' equity	\$ 624,962	\$ 1,541,984

See Notes to Consolidated Financial Statements.

NN, Inc.
Consolidated Statements of Changes in Stockholders' Equity

(in thousands)	Common Stock			Warrants	Retained earnings (Accumulated deficit)	Accumulated other comprehensive income (loss)	Total
	Number of shares	Par value	Additional paid-in capital				
Balance, December 31, 2017	27,572	\$ 275	\$ 292,494	\$ —	\$ 210,265	\$ (17,705)	\$ 485,329
Net loss	—	—	—	—	(262,987)	—	(262,987)
Dividends declared or accrued for common stock	—	—	(2,968)	—	(5,835)	—	(8,803)
Shares issued	14,375	144	217,168	—	—	—	217,312
Shares issued for option exercises	27	—	274	—	—	—	274
Share-based compensation expense	165	2	4,382	—	—	—	4,384
Restricted shares and performance shares forgiven for taxes and forfeited	(35)	—	(805)	—	—	—	(805)
Change in estimate of share-based award vesting	—	—	(1,890)	—	50	—	(1,840)
Foreign currency translation loss	—	—	—	—	—	(13,609)	(13,609)
Adoption of new accounting standard	—	—	—	—	16	—	16
Balance, December 31, 2018	42,104	\$ 421	\$ 508,655	\$ —	\$ (58,491)	\$ (31,314)	\$ 419,271
Net loss	—	—	—	—	(46,741)	—	(46,741)
Dividends declared or accrued for common stock	—	—	(8,933)	—	—	—	(8,933)
Dividends accrued for preferred stock	—	—	(642)	—	—	—	(642)
Shares issued for option exercises	5	—	21	—	—	—	21
Share-based compensation expense	248	2	3,931	—	—	—	3,933
Restricted shares forgiven for taxes	(44)	—	(365)	—	—	—	(365)
Change in estimate of share-based award vesting	—	—	(1,052)	—	—	—	(1,052)
Proceeds from issuance of warrants	—	—	—	1,076	—	—	1,076
Change in fair value of interest rate swap, net of tax of \$3,166	—	—	—	—	—	(10,479)	(10,479)
Reclassification of interest rate swap settlement to net loss, net of tax of \$327	—	—	—	—	—	1,084	1,084
Foreign currency translation loss	—	—	—	—	—	(3,845)	(3,845)
Adoption of new accounting standard	—	—	—	—	(51)	—	(51)
Balance, December 31, 2019	42,313	\$ 423	\$ 501,615	\$ 1,076	\$ (105,283)	\$ (44,554)	\$ 353,277
Net loss	—	—	—	—	(100,592)	—	(100,592)
Dividends accrued for preferred stock	—	—	(12,373)	—	—	—	(12,373)
Share-based compensation expense	417	4	4,965	—	—	—	4,969
Restricted shares forgiven for taxes	(44)	—	(157)	—	—	—	(157)
Change in estimate of share-based award vesting	—	—	(718)	—	—	—	(718)
Reclassification of warrants to liabilities (Note 21)	—	—	—	(1,076)	—	—	(1,076)
Change in fair value of interest rate swap, net of tax of \$3,764	—	—	—	—	—	(12,443)	(12,443)
Reclassification of interest rate swap to net loss, net of tax of \$5,742	—	—	—	—	—	18,987	18,987
Foreign currency translation loss	—	—	—	—	—	(1,683)	(1,683)
Sale of discontinued operations	—	—	—	—	—	5,961	5,961
Balance, December 31, 2020	42,686	\$ 427	\$ 493,332	\$ —	\$ (205,875)	\$ (33,732)	\$ 254,152

See Notes to Consolidated Financial Statements.

NN, Inc.
Consolidated Statements of Cash Flows

(in thousands)	Year Ended December 31,		
	2020	2019	2018
Cash flows from operating activities			
Net loss	\$ (100,592)	\$ (46,741)	\$ (262,987)
Adjustments to reconcile net loss to net cash provided by operating activities:			
Depreciation and amortization of continuing operations	45,680	44,896	43,026
Depreciation and amortization of discontinued operations	35,731	46,950	28,102
Amortization of debt issuance costs	15,692	4,789	4,845
Goodwill impairment of continuing operations	92,942	—	182,542
Goodwill impairment of discontinued operations	146,757	—	—
Other impairments	4,148	643	21,825
Loss on extinguishment of debt and write-off of debt issuance costs	1,532	3,293	19,562
Total derivative loss, net of cash settlements	15,802	—	—
Share of net income (loss) from joint venture, net of cash dividends received	(3,626)	(1,681)	642
Gain on disposal of discontinued operations, net of tax and cost to sell	(233,824)	—	—
Compensation expense from issuance of share-based awards	4,226	2,822	2,416
Deferred income taxes	(21,697)	(3,142)	(22,402)
Other	(4,730)	3,169	1,290
Changes in operating assets and liabilities:			
Accounts receivable	10,831	1,265	(3,543)
Inventories	5,114	1,426	(16,208)
Accounts payable	(8,606)	(7,900)	2,693
Income taxes receivable and payable, net	(633)	(5,292)	39,615
Other	10,802	4,711	(479)
Net cash provided by operating activities	15,549	49,208	40,939
Cash flows from investing activities			
Acquisition of property, plant and equipment	(23,773)	(54,003)	(64,036)
Proceeds from liquidation of short-term investment	—	8,000	—
Proceeds from sale of business, net of cash sold	743,178	—	838
Cash paid to acquire businesses, net of cash received	—	—	(399,009)
Proceeds from sale of property, plant, and equipment	3,317	7,287	1,434
Cash settlements of interest rate swap	(4,133)	—	—
Other	695	(711)	(517)
Net cash provided by (used in) investing activities	719,284	(39,427)	(461,290)
Cash flows from financing activities			
Cash paid for debt issuance costs	(661)	(11,336)	(20,726)
Dividends paid	—	(8,879)	(8,826)
Proceeds from issuance of common stock	—	—	217,312
Proceeds from issuance of preferred stock	—	95,741	—
Proceeds from long-term debt	66,195	54,209	311,841
Repayments of long-term debt	(776,331)	(108,157)	(290,687)
Proceeds from (repayments of) short-term debt, net	(924)	(12,564)	10,305
Other	(3,133)	(3,715)	(4,126)
Net cash provided by (used in) financing activities	(714,854)	5,299	215,093
Effect of exchange rate changes on cash flows	(3,544)	(1,365)	(1,200)
Net change in cash and cash equivalents	16,435	13,715	(206,458)
Cash and cash equivalents at beginning of period (1)	31,703	17,988	224,446
Cash and cash equivalents at end of period (1)	\$ 48,138	\$ 31,703	\$ 17,988
Supplemental schedule of non-cash operating, investing and financing activities:			
Non-cash additions to property, plant and equipment	9,644	23,281	26,605
Restructuring charges in other current and non-current liabilities	—	(12)	2,071
Supplemental disclosures:			
Cash paid for interest	\$ 51,542	\$ 50,514	\$ 56,223
Cash paid (received) for income taxes	2,241	6,428	(32,582)

(1) Cash and cash equivalents include \$13.8 million, \$10.2 million, and \$0.2 million of cash and cash equivalents that were included in current assets of discontinued operations as of December 31, 2019; December 31, 2018; and December 31, 2017, respectively.

See Notes to Consolidated Financial Statements.

NN, Inc.
Notes to Consolidated Financial Statements

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 primarily for the electrical, automotive, general industrial, aerospace and defense, and medical markets. As used in this Annual Report on Form 10-K (this “Annual Report”), the terms “NN,” the “Company,” “we,” “our,” or “us” refer to NN, Inc., and its subsidiaries. We have 32 facilities in North America, Europe, South America, and China.

Basis of Presentation

The accompanying consolidated financial statements are prepared in accordance 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 reclassifications for discontinued operations (see Note 2). Except for per share data or as otherwise indicated, all U.S. dollar amounts presented in the tables in these Notes to Consolidated Financial Statements are in thousands.

Going Concern

In July 2020, we amended our Credit Agreement to waive compliance with our Consolidated Net Leverage Ratio (the “financial leverage ratio”) covenant for the second and third quarters of 2020. During this period, we were required to maintain minimum liquidity levels, provide certain financial and other information, and take certain other action as specified in the amendment. Failure to maintain the required minimum liquidity levels or satisfy other requirements set forth in the amendment would allow the revolving credit lenders, the Senior Secured Term loan lenders, and the Incremental Term Loan lenders to cause amounts outstanding under our credit facility to become immediately due and payable and would have a material, adverse impact on our financial position.

In August 2020, we entered into an agreement to sell our Life Sciences business (see Note 2). The sale closed on October 6, 2020, at which time we received cash proceeds of \$757.2 million. We immediately prepaid \$700.0 million in the aggregate on the Senior Secured Term Loan and the Incremental Term Loan. We also paid in full the outstanding balance on the Senior Secured Revolver. Additionally, in August 2020, we amended our Credit Agreement to obtain the lenders’ consent to the sale of the Life Sciences business, subject to certain terms and conditions.

The full extent of the effect of the COVID-19 pandemic on our customers, our supply chain, and our business cannot be reasonably assessed at this time. We have developed a plan to mitigate the impact of COVID-19, which includes the implementation of a series of specific and identified cost reductions in both our corporate and business groups, in addition to actions already taken, including further reducing our direct and indirect labor costs and benefits. The impact of COVID-19 on our operating results will depend on future developments, which are highly uncertain and cannot be predicted, including governmental and business reactions to the pandemic. We have made appropriate accounting estimates based on the facts and circumstances available as of the reporting date. If there are differences between these estimates and actual results, our consolidated financial statements may be materially affected.

In accordance with Accounting Standards Update (“ASU”) 2014-15, *Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern (Subtopic 205-40)*, we have evaluated whether there are conditions and events, considered in the aggregate, that raise substantial doubt about our ability to continue as a going concern within one year after the date that the Consolidated Financial Statements are issued. We rely on cash flow generated from operations and available borrowings under our Senior Secured Revolver to fund our working capital and other operating and investing needs. Our ability to borrow under our Senior Secured Revolver is based on our continued compliance with the minimum liquidity requirements and, for periods beginning in the fourth quarter of 2020, the financial leverage ratio covenant, as defined, which became more restrictive upon the occurrence of a qualified sale transaction, which closed on October 6, 2020.

Based on available borrowing capacity of the Senior Secured Revolver, the reduction in debt service costs as a result of the debt prepayment with net proceeds from the sale of the Life Sciences business in October 2020, and cash flows expected to be generated from operations and investing activities, we anticipate that our cash and cash equivalents are sufficient to support our operations and meet our obligations, and that we will be able to maintain compliance with the existing financial leverage ratio covenant for the next twelve months from issuance of these consolidated financial statements.

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 Consolidated Financial Statements

The preparation of consolidated financial statements in accordance with U.S. GAAP requires management to use 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 may differ from those estimates.

Accounting Standards Recently Adopted

Financial Instruments - Credit Losses. In June 2016, the Financial Accounting Standards Board (the “FASB”) issued ASU 2016-13, *Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* (“ASU 2016-13”), which modifies the measurement of expected credit losses on certain financial instruments and the timing of when such losses are recorded. In November 2019, the SEC issued Staff Accounting Bulletin (“SAB”) No. 119, codified in Accounting Standards Codification (“ASC”) Topic 326, *Financial Instruments-Credit Losses*, which provides guidance on accounting of credit losses. We adopted ASU 2016-13 on January 1, 2020, using the modified retrospective transition method, which resulted in no material impact on our consolidated financial statements.

Fair Value Disclosures. In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement* (“ASU 2018-13”), that modifies fair value disclosure requirements. The new guidance streamlines disclosures of Level 3 fair value measurements. The modified disclosures were effective for us beginning in the first quarter of 2020. ASU 2018-13 changes disclosures only and does not impact our consolidated financial statements.

Internal-Use Software. In August 2018, the FASB issued ASU 2018-15, *Intangibles - Goodwill and Other - Internal-Use Software: Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract (a consensus of the FASB Emerging Issues Task Force)* (“ASU 2018-15”), that provides guidance on a customer’s accounting for implementation, set-up, and other upfront costs incurred in a cloud computing arrangement that is hosted by the vendor. Under the new guidance, customers apply the same criteria for capitalizing implementation costs as they would for an arrangement that has a software license. We adopted ASU 2018-15 as of January 1, 2020, prospectively. We have had no such costs after the adoption date, and we do not expect the new guidance to have a material impact on our consolidated financial statements.

Reference Rate Reform. In March 2020, the FASB issued ASU 2020-04, *Reference Rate Reform (Topic 848), Facilitation of the Effects of Reference Rate Reform on Financial Reporting*, which provides temporary optional expedients and exceptions for applying U.S. GAAP to contracts, hedging relationships, and other transactions that reference the London Interbank Offered Rate (“LIBOR”) or another reference rate expected to be discontinued because of reference rate reform. Among other things, for all types of hedging relationships, the guidance allows an entity to change the reference rate and other critical terms related to reference rate reform without having to remeasure the value or reassess a previous accounting determination. The amendments in this guidance should be applied on a prospective basis and, for companies with a fiscal year ending December 31, are effective from January 1, 2020, through December 31, 2022. We adopted this guidance effective January 1, 2020. When the transition occurs, we expect to apply this expedient to new transactions that reference LIBOR or another reference rate that is discontinued, through December 31, 2022. The adoption of this ASU is not expected to have a material impact on our consolidated financial statements.

Accounting Standards Not Yet Adopted

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740) - Simplifying the Accounting for Income Taxes*, (“ASU 2019-12”) as part of its initiative to reduce complexity in accounting standards. ASU 2019-12 removes certain exceptions and provides simplification to specific tax items to improve consistent application. This standard is effective for fiscal years beginning after December 15, 2020, and interim periods within those fiscal years. Early adoption is permitted, including adoption in any interim period for which consolidated financial statements have not yet been issued. Adoption methods vary based on the specific items impacted. We are currently evaluating the impact on our consolidated financial statements and related disclosures.

In August 2020, the FASB issued ASU 2020-06, *Accounting for Convertible Instruments and Contracts in an Entity’s Own Equity*, (“ASU 2020-06”) which simplifies the accounting for certain financial instruments with characteristics of liabilities and equity. Specifically, ASU 2020-06 simplifies accounting for convertible instruments by removing major separation models required under current U.S. GAAP. In addition, ASU 2020-06 removes certain settlement conditions that are required for

equity contracts to qualify for the derivative scope exception, which will permit more equity contracts to qualify for the exception. Further, for the diluted earnings-per-share calculation, the new guidance requires entities to use the if-converted method for all convertible instruments and generally requires entities to include the effect of share settlement for instruments that may be settled in cash or shares, among other things. ASU 2020-06 is effective for fiscal years beginning after December 15, 2021, and interim periods within those fiscal years. Early adoption is permitted for fiscal years beginning after December 15, 2020, and interim periods within those fiscal years. Either the full or modified retrospective adoption method is allowed. We are currently evaluating the impact on our consolidated financial statements and related disclosures.

Cash and Cash Equivalents

Cash and cash equivalents include cash and highly liquid investments with original maturities of three months or less. We maintain cash balances in transaction accounts with various financial institutions that are insured by the Federal Deposit Insurance Corporation (“FDIC”). Although we maintain balances that exceed the federally insured limit, we have not experienced any losses related to these balances, and we believe credit risk to be minimal. We had approximately \$17.0 million and \$12.7 million in cash and cash equivalents as of December 31, 2020 and 2019, respectively, held at foreign financial institutions.

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 Credit Losses

Trade accounts receivable are recorded at their net realizable value. We maintain allowances for estimated losses resulting from the inability of our customers to make required payments. The allowances are based on the amount that we ultimately expect to collect from our customers. We evaluate the collectability of accounts receivable based on a combination of factors including number of days receivables are past due, historical collection experience, current market conditions, and forecasted direction of economic and business environment. 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 improvements 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 and land improvements generally range from 10 to 40 years. Estimated useful lives for machinery and equipment generally range from 3 to 12 years. Estimated useful lives for leasehold improvements are based on the life of the lease.

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. An impairment charge is calculated based on a reporting unit's carrying amount in excess of its fair value (i.e., step 1 of the two-step impairment test). 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.

Impairment of Long-Lived Assets

Long-lived tangible and intangible assets subject to depreciation or 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, then 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.

Equity Method Investments

Our equity method investment is subject to a review for impairment if, and when, circumstances indicate that a decline in value below its carrying amount may have occurred. Examples of such circumstances include, but are not limited to, a significant deterioration in the earnings performance or business prospects of the investee; a significant adverse change in the regulatory, economic or technological environment of the investee; a significant adverse change in the general market condition of either the geographic area or the industry in which the investee operates; and recurring negative cash flows from operations. If management considers the decline to be other than temporary, we would write down the investment to its estimated fair market value.

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 consolidated 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 been made for income taxes on unremitted earnings of certain foreign subsidiaries as these earnings are not 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. We treat global intangible low-taxed income ("GILTI") as a periodic charge in the year in which it arises and therefore do not record deferred taxes for basis differences associated with GILTI. We eliminate disproportionate tax effects from accumulated other comprehensive income (loss) when the circumstances upon which they are premised cease to exist.

Revenue Recognition

We recognize revenues when control of the good or service is transferred to the customer either at a point in time or, in limited circumstances, as our services are rendered over time. Revenue is measured as the amount of consideration we expect to receive in exchange for transferring goods or services.

Share Based Compensation

The cost of stock options, restricted stock, and performance share units is 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 stock options and a Monte Carlo simulation for performance share units that include a market condition for vesting because these awards are not traded in open markets. We determine grant date fair value using the closing price of our common stock on the date of grant for restricted stock and performance share units that include performance conditions for vesting.

Common Stock and Preferred Stock Dividends

Dividends are recorded as a reduction to retained earnings. When we have an accumulated deficit, dividends are recorded as a reduction of additional paid-in capital.

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 (loss) and accumulated other comprehensive income (loss) 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 sales 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, 2020, 2019, and 2018. Transaction gains or losses on intercompany loan transactions are recognized as incurred in the "Other expense (income), net" line in the Consolidated Statements of Operations and Comprehensive Income (Loss). For the years ended December 31, 2020, 2019, and 2018, transaction gains or losses on intercompany loan transactions were \$0.8 million, \$0.4 million, and \$3.6 million, respectively.

Net Income (Loss) Per Common Share

We are required to allocate earnings or losses for a reporting period to common stockholders and participating securities using the two-class method to compute earnings per share. The two-class method is an earnings allocation formula that treats participating securities as having rights to earnings that otherwise would have been available to common stockholders. Participating securities may participate in undistributed earnings with common stock whether or not that participation is conditioned upon the occurrence of a specified event. Under the two-class method, our net income (loss) is reduced (or increased) by the amount that has been or will be distributed to our participating security holders. Preferred shares are participating securities that participate in earnings but do not participate in losses.

Basic net income (loss) per common share is computed by dividing net income (loss) allocable to common shares by the weighted average number of common shares outstanding. Diluted net income (loss) per common share includes the effect of warrants, convertible preferred stock, 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, 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 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

In August 2020, we entered into a Stock Purchase Agreement (the “SPA”) with affiliates of American Securities LLC for the sale of our Life Sciences business for an aggregate purchase price of up to \$825 million, which includes a \$755 million cash base purchase price and a potential earnout payment of up to \$70 million. The cash base purchase price was subject to certain adjustments and was payable at the closing of the transaction, which occurred on October 6, 2020. The earnout payment is subject to the performance of the Life Sciences business during the year ending December 31, 2022, measured by Adjusted EBITDA targets, as defined by the SPA. The Life Sciences business includes facilities that are engaged in the production of a variety of components, assemblies, and instruments, such as surgical knives, bioresorbable implants, surgical staples, cases and trays, orthopaedic implants and tools, laparoscopic devices, and drug delivery devices for the orthopaedics and medical/surgical end markets. The sale of the Life Sciences business furthers management’s strategy to improve liquidity and creates the financial flexibility to pursue key growth areas in the Mobile Solutions and Power Solutions segments.

After working capital and other closing adjustments, the final cash purchase price was approximately \$753.3 million. We received cash proceeds at closing of \$757.2 million and recorded a \$3.9 million payable at December 31, 2020, for the balance. We prepaid \$700.0 million in the aggregate on the Senior Secured Term Loan and the Incremental Term Loan immediately following the sale. We also paid in full the outstanding balance on the Senior Secured Revolver. We recognized a gain on sale of \$214.9 million, net of income taxes. Under the terms of a transition services agreement, we are providing certain support services for up to 180 days from the closing date of the sale. In accordance with the terms of the SPA, we agreed to indemnify the buyer for certain tax liabilities on its consolidated federal income tax return related to the Life Sciences business during the portion of the year ended December 31, 2020, prior to the change in ownership on October 6, 2020. We estimate that the tax indemnification will result in a payment of approximately \$1.2 million to the buyer during the year ending December 31, 2021, and we have recorded this estimated obligation in the “Other current liabilities” line item on the Consolidated Balance Sheets at December 31, 2020.

In accordance with ASC 205-20, *Presentation of Financial Statements - Discontinued Operations*, the operating results of the Life Sciences business are classified as discontinued operations. The presentation of discontinued operations includes revenues and expenses of the discontinued operations and will also include any gain on the disposition of the business, all 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, the results of the Life Sciences 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 Statements of Cash Flows include cash flows of the Life Sciences business in each line item unless otherwise stated.

The following table presents the results of operations of the discontinued operations.

	Years Ended December 31,		
	2020	2019	2018
Net sales	\$ 225,255	\$ 357,937	\$ 246,463
Cost of sales (exclusive of depreciation and amortization shown separately below)	160,464	249,157	175,787
Selling, general, and administrative expense	20,779	34,328	20,927
Acquisition related costs excluded from selling, general and administrative expense	—	—	5,763
Depreciation and amortization	35,731	46,950	28,102
Restructuring and integration expense, net	—	—	1,438
Goodwill impairment	146,757	—	—
Other operating expense (income), net	41	20	(737)
Income (loss) from operations	(138,517)	27,482	15,183
Interest expense	48,893	44,125	49,928
Loss on extinguishment of debt and write-off of debt issuance costs	1,388	2,753	19,562
Other expense (income), net	(322)	178	(675)
Loss from discontinued operations before costs of disposal and benefit for income taxes	(188,476)	(19,574)	(53,632)
Benefit for income taxes	12,468	3,582	11,865
Loss from discontinued operations before gain on disposal	(176,008)	(15,992)	(41,767)
Gain on disposal of discontinued operations	212,319	—	—
Benefit for income taxes on gain on disposal	2,587	—	—
Income (loss) from discontinued operations, net of tax	\$ 38,898	\$ (15,992)	\$ (41,767)

During the first quarter of 2020, our market capitalization declined to a level that was less than the net book value of our stockholders’ equity. The decline in market capitalization was a triggering event that caused us to perform a goodwill

impairment analysis as of March 31, 2020. The carrying value of the Life Sciences reporting unit exceeded its estimated fair value as of March 31, 2020. As a result of our analysis, we recorded an impairment loss on goodwill of \$146.8 million for Life Sciences. The judgments, assumptions, and estimates involved in the goodwill impairment analysis for the Life Sciences reporting unit are consistent with those discussed in Note 8.

Our credit facility required us to use proceeds from the sale of the Life Sciences business to prepay a portion of our existing debt. We paid \$700 million in the aggregate on our term loans as described in Note 12. The prepayment was applied to debt in accordance with the prepayment provisions of the Credit Agreement immediately after the transaction closed on October 6, 2020. Average quarterly interest rates were multiplied by the required prepayment amounts to calculate interest expense to be reclassified to discontinued operations for all periods presented. Write-offs of credit facility debt issuance costs were allocated to discontinued operations by multiplying the ratio of the required prepayment amounts as a percentage of total outstanding principal by the total write-off charges in each period. Write-offs of credit facility debt issuance costs that have been allocated to discontinued operations are presented in the “Loss on extinguishment of debt and write-off of debt issuance costs” line the table above. The following table summarizes the amount of interest expense related to the credit facility that has been reclassified to discontinued operations.

	Years Ended December 31,		
	2020	2019	2018
Interest on debt	\$ 35,147	\$ 40,996	\$ 46,406
Amortization of debt issuance costs	13,990	3,368	3,571
Capitalized interest and other	(244)	(239)	(49)
Total interest expense of discontinued operations	\$ 48,893	\$ 44,125	\$ 49,928

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

	December 31, 2020	December 31, 2019
Cash and cash equivalents	\$ —	\$ 13,792
Accounts receivable, net	—	48,318
Inventories	—	51,644
Other current assets	—	3,246
Total current assets of discontinued operations	—	117,000
Property, plant and equipment, net	—	118,536
Operating lease right-of-use assets	—	20,044
Goodwill	—	344,316
Intangible assets, net	—	211,847
Other non-current assets	—	311
Total non-current assets of discontinued operations	—	695,054
Total assets of discontinued operations	\$ —	\$ 812,054
Accounts payable	\$ —	\$ 16,367
Accrued salaries, wages and benefits	—	14,844
Income tax payable	—	344
Current portion of operating lease liabilities	—	2,364
Other current liabilities	—	7,627
Total current liabilities of discontinued operations	—	41,546
Deferred tax liabilities	—	61,338
Operating lease liabilities, net of current portion	—	18,405
Other non-current liabilities	—	4,456
Total non-current liabilities of discontinued operations	—	84,199
Total liabilities of discontinued operations	\$ —	\$ 125,745

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

	Years Ended December 31,		
	2020	2019	2018
Depreciation and amortization	\$ 35,731	\$ 46,950	\$ 28,102
Goodwill impairment	146,757	—	—
Amortization of debt issuance costs	13,990	3,368	3,571
Loss on extinguishment of debt and write-off of debt issuance costs	1,388	2,753	19,562
Acquisition of property, plant and equipment	8,416	21,834	14,759
Right-of-use assets obtained in exchange for new finance lease liabilities	695	5,321	—
Right-of-use assets obtained in exchange for new operating lease liabilities (1)	6,174	51	—

(1) Includes new leases, renewals, and modifications after the adoption of ASC Topic 842, *Leases*, on January 1, 2019.

Note 3. Acquisitions

Paragon Medical, Inc.

On May 7, 2018, we acquired 100% of the stock of PMG Intermediate Holding Corporation, the parent company of Paragon Medical, Inc. (“Paragon Medical”). For accounting purposes, Paragon Medical met the definition of a business and was accounted for as a business combination. Paragon Medical is a medical device manufacturer which focuses on the orthopaedic, case and tray, implant, and instrument markets. We finalized the purchase price allocation and recorded measurement period adjustments to the initial allocation as disclosed in our 2018 Annual Report. Operating results of Paragon Medical were included in our historical consolidated financial statements after the date of acquisition as part of our Life Sciences business. The Life Sciences business was subsequently sold on October 6, 2020, and is included in discontinued operations as discussed in Note 2.

Bridgemedica, LLC

On February 22, 2018, we completed the acquisition of 100% of the assets of Bridgemedica, LLC (“Bridgemedica”). For accounting purposes, Bridgemedica met the definition of a business and was accounted for as a business combination. Bridgemedica is a medical device company that provides concept to supply solutions through design, development engineering, and manufacturing. We finalized our valuation related to the assets acquired and liabilities assumed during 2019 with no material changes to the initial allocation. Operating results of Bridgemedica were included in our historical consolidated financial statements report after the acquisition date as part of our Life Sciences business. The Life Sciences business was subsequently sold on October 6, 2020, and is included in discontinued operations as discussed in Note 2.

Southern California Technical Arts, Inc.

On August 9, 2018, we completed the acquisition of 100% of the capital stock of Southern California Technical Arts, Inc. (“Technical Arts”). For accounting purposes, Technical Arts met the definition of a business and was accounted for as a business combination. Technical Arts is an industrial machining company that manufactures tight tolerance metal components and assemblies. The acquisition of Technical Arts expands our presence in the aerospace and defense end market. Operating results of Technical Arts are reported in our Power Solutions group after the acquisition date. We finalized our valuation related to the assets acquired and liabilities assumed during 2019 with no material changes to the initial allocation.

Note 4. Segment Information

Our business has historically been aggregated into the following three reportable segments.

- *Mobile Solutions.* Mobile Solutions is focused on growth in the general industrial and automotive 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.
- *Power Solutions.* Power Solutions is focused on growth in the electrical and aerospace and defense end markets, while

also serving the automotive and medical end markets. Within this 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 used in applications ranging from power control to flight control and for military devices. We manufacture a variety of products including electrical contacts, connectors, contact assemblies, and precision stampings for the electrical end market and high precision products for the aerospace and defense end market utilizing our extensive process technologies for optical grade plastics, thermally conductive plastics, titanium, Inconel, magnesium, and electroplating. Our medical business includes the production of a variety of tools and instruments for the orthopaedics and medical/surgical end markets.

- *Life Sciences.* Life Sciences was focused on growth in the medical end market, primarily in the orthopaedics and medical/surgical end markets. Within this group we combined advanced engineering and production capabilities to design and manufacture a broad range of high-precision metal and plastic components, assemblies, and finished devices. We manufactured a variety of components, assemblies, and instruments, such as surgical knives, bioresorbable implants, surgical staples, cases and trays, orthopaedic implants and tools, laparoscopic devices, and drug delivery devices for the orthopaedics and medical/surgical end markets.

These divisions have historically been considered our three operating segments as each has engaged in business activities for which it earns revenues and incurs expenses, discrete financial information is available for each, and this is the level at which the chief operating decision maker reviews discrete financial information for purposes of allocating resources and assessing performance. See Note 2 for information regarding the sale of the Life Sciences business on October 6, 2020. The results of the Life Sciences business are classified as discontinued operations for all periods in the consolidated financial statements and accompanying notes unless otherwise stated. Accordingly, results of the Life Sciences business are not included in the tabular presentation below.

The following tables present results of continuing operations by reportable segment.

	<u>Mobile Solutions</u>	<u>Power Solutions</u>	<u>Corporate and Consolidations</u>	<u>Total</u>
<u>Year Ended December 31, 2020</u>				
Net sales	\$ 256,360	\$ 171,269	\$ (95) (a)	\$ 427,534
Depreciation and amortization	28,298	15,730	1,652	45,680
Goodwill impairment	—	92,942	—	92,942
Income (loss) from operations	5,228	(85,983)	(36,702)	\$ (117,457)
Interest expense				(18,898)
Other				(15,733)
Loss from continuing operations before income taxes and share of net income from joint venture				<u>\$ (152,088)</u>
Share of net income from joint venture	\$ 3,626	\$ —	\$ —	\$ 3,626
Expenditures for long-lived assets	12,400	2,754	203	15,357
Total assets	370,985	(b) 197,348	56,629	624,962
	<u>Mobile Solutions</u>	<u>Power Solutions</u>	<u>Corporate and Consolidations</u>	<u>Total</u>
<u>Year Ended December 31, 2019</u>				
Net sales	\$ 297,749	\$ 192,100	\$ (335) (a)	\$ 489,514
Depreciation and amortization	27,146	15,301	2,449	44,896
Income (loss) from operations	9,553	13,881	(41,027)	\$ (17,593)
Interest expense				(13,030)
Other				(1,502)
Loss from continuing operations before income taxes and share of net income from joint venture				<u>\$ (32,125)</u>
Share of net income from joint venture	\$ 1,681	\$ —	\$ —	\$ 1,681
Expenditures for long-lived assets	24,969	4,457	2,743	32,169
Total assets	373,256	(b) 310,545	858,183	(c) 1,541,984

Year Ended December 31, 2018	Mobile Solutions	Power Solutions	Corporate and Consolidations	Total
Net sales	\$ 335,037	\$ 189,778	\$ (621) (a)	\$ 524,194
Depreciation and amortization	26,217	14,753	2,056	43,026
Goodwill impairment	73,442	109,100	—	182,542
Loss from operations	(55,079)	(95,115)	(44,853)	\$ (195,047)
Interest expense				(11,315)
Other				(2,016)
Loss from continuing operations before income taxes and share of net loss from joint venture				\$ (208,378)
Share of net loss from joint venture	\$ (14,390)	\$ —	\$ —	\$ (14,390)
Expenditures for long-lived assets	36,660	6,459	6,158	49,277

(a) Includes eliminations of intersegment transactions which occur during the ordinary course of business.

(b) Total assets in Mobile Solutions includes \$27.0 million and \$21.8 million as of December 31, 2020 and 2019, respectively, related to the investment in our 49% owned joint venture (Note 10).

(c) Total assets in Corporate and Consolidations includes \$812.1 million in assets of discontinued operations.

The following table summarizes long-lived tangible assets by geographical region.

	Property, Plant, and Equipment, Net As of December 31,	
	2020	2019
United States	\$ 130,077	\$ 158,444
Europe	\$ 40,663	\$ 38,082
Asia	33,854	33,058
Mexico	1,230	1,388
South America	17,866	25,005
All foreign locations	\$ 93,613	\$ 97,533
Total	\$ 223,690	\$ 255,977

Note 5. Accounts Receivable

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

	As of December 31,	
	2020	2019
Trade	\$ 86,659	\$ 85,284
Less—allowance for credit losses	2,044	2,044
Accounts receivable, net	\$ 84,615	\$ 83,240

The following table presents changes in allowance for credit losses.

	Year Ended December 31,		
	2020	2019	2018
Balance at beginning of year	\$ 2,044	\$ 2,517	\$ 2,339
Additions	505	231	628
Write-offs	(562)	(692)	(400)
Currency impact	57	(12)	(50)
Balance at end of year	\$ 2,044	\$ 2,044	\$ 2,517

As of December 31, 2020, one customer represented 11% of consolidated accounts receivable from continuing operations. As of December 31, 2019, another customer represented 10% of consolidated accounts receivable from continuing operations. Amounts due from these customers are primarily related to Mobile Solutions.

Note 6. Inventories

Inventories are comprised of the following amounts:

	As of December 31,	
	2020	2019
Raw materials	\$ 22,589	\$ 34,816
Work in process	20,758	17,810
Finished goods	19,170	14,452
Total inventories	\$ 62,517	\$ 67,078

Note 7. Property, Plant and Equipment

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

	As of December 31,	
	2020	2019
Property, plant and equipment		
Land and buildings	\$ 58,296	\$ 57,222
Machinery and equipment	339,268	321,110
Construction in progress	1,270	25,416
Total	398,834	403,748
Less: Accumulated depreciation	175,144	147,771
Property, plant and equipment, net	\$ 223,690	\$ 255,977

We monitor property, plant and equipment for any indicators of potential impairment. We recognized impairment charges of \$4.1 million, \$0.6 million, and \$5.2 million for the years ended December 31, 2020, 2019, and 2018, respectively, related to the early retirement of identified fixed assets. The impairment charges were recorded to the “Other operating expense, net,” line item on the Consolidated Statements of Operations and Comprehensive Income (Loss). The impairment charges were determined by writing the assets down to the estimated salvage value, less disposal costs.

For the years ended December 31, 2020, 2019, and 2018, we recorded depreciation expense of \$31.3 million, \$30.4 million, and \$28.5 million, respectively.

Note 8. Goodwill

All of our net goodwill is recorded in the Power Solutions reportable segment, and no goodwill is recorded in the Mobile Solutions reportable segment. The following table shows changes in the carrying amount of Power Solutions goodwill.

Balance as of December 31, 2018	\$ 94,505
Currency impact and other	274
Balance as of December 31, 2019	94,779
Currency impact and other	(1,837)
Impairments	(92,942)
Balance as of December 31, 2020	\$ —

The following table presents the gross carrying amount of goodwill and accumulated impairment charges as of December 31, 2020, and 2019.

	December 31, 2020			December 31, 2019		
	Gross Carrying Amount	Accumulated Impairment Charges	Net Book Value	Gross Carrying Amount	Accumulated Impairment Charges	Net Book Value
Mobile Solutions	78,254	(78,254)	—	77,458	(77,458)	—
Power Solutions	213,791	(213,791)	—	215,628	(120,849)	94,779
Total goodwill	<u>\$ 292,045</u>	<u>\$ (292,045)</u>	<u>\$ —</u>	<u>\$ 293,086</u>	<u>\$ (198,307)</u>	<u>\$ 94,779</u>

During the first quarter of 2020, our market capitalization declined to a level that was less than the net book value of our stockholders' equity. The decline in market capitalization was a triggering event that caused us to perform a goodwill impairment analysis as of March 31, 2020. The goodwill impairment analysis required significant judgments to calculate the fair value for the Power Solutions reporting unit, including estimation of future cash flows, which is dependent on internal forecasts, estimation of the long-term growth rate for each operating segment, and determination of weighted average cost of capital. Our forecasts used in the goodwill impairment analysis reflected our expectations of declines in sales resulting from COVID-19. Significant assumptions and estimates are involved in the application of the discounted cash flow model to forecast operating cash flows, including market growth and market share, sales volumes and prices, costs to produce, discount rate, and estimated capital needs. Management considers historical experience and all available information at the time the fair values of its reporting units are estimated. Assumptions in estimating future cash flows are subject to a high degree of judgment and complexity. The carrying value of the Power Solutions reporting unit exceeded the estimated fair value as of the March 31, 2020, analysis. As a result of our analysis, we recorded an impairment loss on goodwill of \$92.9 million to the "Goodwill impairment" line on the Consolidated Statements of Operations and Comprehensive Income (Loss). As of December 31, 2020, there is no remaining goodwill balance.

During the fourth quarter of 2018, our market capitalization declined to a level that was less than the net book value of our stockholders' equity. We performed our annual goodwill impairment analysis as of October 1, 2018, and elected to early adopt ASU 2017-4, *Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*. As a result of our analysis, we recorded an impairment loss on goodwill in 2018 of \$73.4 million and \$109.1 million for Mobile Solutions and Power Solutions, respectively, to the "Goodwill impairment" line on the Consolidated Statements of Operations and Comprehensive Income (Loss).

Note 9. Intangible Assets, Net

The following table shows changes in the carrying amount of intangible assets, net, by reportable segment.

	Mobile Solutions	Power Solutions	Total
Balance as of December 31, 2018	\$ 35,892	\$ 95,991	\$ 131,883
Amortization	(3,479)	(10,994)	(14,473)
Other	3	—	3
Balance as of December 31, 2019	32,416	84,997	117,413
Amortization	(3,354)	(10,994)	(14,348)
Balance as of December 31, 2020	<u>\$ 29,062</u>	<u>\$ 74,003</u>	<u>\$ 103,065</u>

The following table shows the cost and accumulated amortization of our intangible assets as of December 31, 2020 and 2019.

	Estimated Useful Life in Years	December 31, 2020			December 31, 2019		
		Gross Carrying Value as of Acquisition Date	Accumulated Amortization	Net Carrying Value	Gross Carrying Value as of Acquisition Date	Accumulated Amortization	Net Carrying Value
Customer relationships	12 - 20	\$ 173,746	\$ (74,250)	\$ 99,496	\$ 173,746	\$ (60,603)	\$ 113,143
Trademark and trade name	8 - 15	7,527	(3,958)	3,569	7,527	(3,257)	4,270
Total identified intangible assets		<u>\$ 181,273</u>	<u>\$ (78,208)</u>	<u>\$ 103,065</u>	<u>\$ 181,273</u>	<u>\$ (63,860)</u>	<u>\$ 117,413</u>

Intangible assets that are fully amortized are removed and no longer represented in the gross carrying value or accumulated amortization.

The following table shows estimated future amortization expense for the next five years and thereafter.

Year Ending December 31,	
2021	\$ 14,347
2022	14,347
2023	14,262
2024	13,919
2025	13,919
Thereafter	32,271
Total	<u>\$ 103,065</u>

Intangible assets are reviewed for impairment when changes in circumstances indicate the carrying value of those assets may not be recoverable. As of December 31, 2020 and 2019, there were no indications of impairment.

Note 10. Investment in Joint Venture

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

The following table shows changes in our investment in the JV.

Balance as of December 31, 2019	\$ 21,755
Share of earnings	3,626
Foreign currency translation gain	1,602
Balance as of December 31, 2020	<u>\$ 26,983</u>

During the fourth quarter of 2018, as a result of changing market conditions, the fair value of the JV was assessed, and we recorded an impairment of \$16.6 million against our investment in the JV. The fair value assessment was significantly affected by changes in our assessment of future growth rates. During the first quarter of 2020, the goodwill impairment testing trigger caused us to test the JV for impairment as well. Based on our analysis, no impairment charge was deemed necessary. It is reasonably possible that material deviation of future performance from the estimates used in the March 31, 2020, impairment test could result in additional impairment to our investment in the JV in subsequent periods.

Note 11. Income Taxes

The following table summarizes the loss from continuing operations before benefit (provision) for income taxes and share of net income (loss) from joint venture.

	Year Ended December 31,		
	2020	2019	2018
United States	\$ (146,963)	\$ (31,760)	\$ (200,164)
Foreign	(5,125)	(365)	(8,214)
Loss from continuing operations before benefit (provision) for income taxes and share of net income (loss) from joint venture	<u>\$ (152,088)</u>	<u>\$ (32,125)</u>	<u>\$ (208,378)</u>

The following table summarizes total income tax expense (benefit) recognized in each year.

	Year Ended December 31,		
	2020	2019	2018
Current taxes:			
U.S. Federal	\$ (299)	\$ (5,948)	\$ 5,684
State	4,599	1,656	58
Foreign	2,250	2,247	2,271
Total current tax expense (benefit)	6,550	(2,045)	8,013
Deferred taxes:			
U.S. Federal	\$ (10,368)	\$ (1,430)	\$ (6,028)
State	(5,368)	3,850	(214)
U.S. federal and foreign valuation allowance	2,066	(592)	2,263
Foreign	(1,852)	522	(5,582)
Total deferred tax expense (benefit)	(15,522)	2,350	(9,561)
Total income tax expense (benefit)	\$ (8,972)	\$ 305	\$ (1,548)

The following table presents a reconciliation of income taxes based on the U.S. federal statutory income tax rate.

	Year Ended December 31,		
	2020	2019	2018
U.S federal statutory income tax rate	21.0 %	21.0 %	21.0 %
Change in valuation allowance, exclusive of state	(1.3)%	1.8 %	(1.1)%
State taxes, net of federal taxes, exclusive of tax reform	0.2 %	(13.6)%	0.1 %
Non-U.S. earnings taxed at different rates	1.4 %	3.0 %	0.3 %
GILTI	(0.1)%	— %	— %
Goodwill impairment	(12.7)%	— %	(17.7)%
Nondeductible asset loss	— %	(2.2)%	(0.2)%
Research and development tax credit	0.4 %	2.2 %	0.3 %
Change in uncertain tax positions	2.2 %	4.3 %	0.5 %
Impact of tax reform:			
Toll charge, net of foreign tax credit	— %	— %	0.7 %
Remeasurement of deferred taxes pursuant to tax reform	— %	— %	(1.2)%
Impact of 2019 Treasury regulations	— %	(18.4)%	— %
CARES Act	2.7 %	— %	— %
Divestiture of business segment, exclusive of tax reform	— %	— %	(1.1)%
Return to provision	(0.5)%	(0.2)%	(1.0)%
Taxes on unremitted foreign earnings	(3.9)%	(2.2)%	— %
Restructuring gain	(2.6)%	— %	— %
Other adjustments, net	(0.9)%	3.3 %	0.1 %
Effective tax rate	5.9 %	(1.0)%	0.7 %

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (the “CARES Act”) was enacted. Among other provisions, the CARES Act allows for the carryback of certain tax losses and favorably impacts the deductibility of interest expense and depreciation. The CARES Act had a material impact on our consolidated financial statements, primarily due to enacted federal rate difference in the carryback periods, and has been accounted for in the benefit for income taxes for the twelve months ended December 31, 2020.

On October 6, 2020, we sold our Life Sciences business via a sale of our equity interest in Precision Engineered Products Holdings, Inc., a wholly owned U.S. domestic subsidiary. Prior to the sale, we completed tax restructuring in which Precision Engineered Products Holdings, Inc., distributed to NN, Inc., all of its asset and equity holdings related to the Power Solutions segment. The restructuring process created a deferred gain, required to be realized upon the third party equity sale, equal to the fair market value of the distributed assets over tax basis. The associated U.S. federal, state and foreign tax impacts are reflected in the tables within this footnote. The tax impacts of the sale of the Life Sciences business are included in income from discontinued operations and excluded from the tables presented within this footnote. For comparative purposes, the prior period information contained in the tables in this footnote have been adjusted to exclude the Life Sciences business, unless otherwise noted.

Our effective tax rate for continuing operations was 5.9% for 2020. The 2020 effective tax rate for continuing operations differs from the U.S. federal statutory tax rate of 21% primarily due to (1) the impact of the impairment of nondeductible goodwill which is treated as a permanent difference and (2) the company's accrual of taxes on unremitted earnings of foreign subsidiaries which may be repatriated.

Our effective tax rate for continuing operations was (1.0)% for 2019. The 2019 effective tax rate for continuing operations differs from the U.S. federal statutory tax rate of 21% principally due to a discrete tax charge of \$6.0 million related to final tax regulations published by the Department of the Treasury and Internal Revenue Service on February 4, 2019. The tax rate was also impacted by valuation of its state tax attributes.

Our effective tax rate for continuing operations was 0.7% for 2018. The 2018 effective tax rate for continuing operations differs from the U.S. federal statutory income tax rate of 21% primarily due to the impact of goodwill impairment which was nondeductible for tax purposes.

The following table summarizes the principal components of the deferred tax assets and liabilities.

	As of December 31,	
	2020	2019
Deferred income tax liabilities:		
Tax in excess of book depreciation	\$ 27,459	\$ 28,329
Intangible assets	23,695	26,474
Operating leases	11,149	12,697
Taxes on unremitted foreign earnings	6,601	—
Other deferred tax liabilities	533	2,178
Total deferred income tax liabilities	69,437	69,678
Deferred income tax assets:		
Interest expense limitation	3,811	14,073
Goodwill	25,653	386
Inventories	3,224	2,447
Interest rate swap	3,611	2,838
Pension/Personnel accruals	2,909	1,669
Operating leases	13,209	14,438
Net operating loss carryforwards	18,659	15,486
R&D credit carryforwards	—	2,463
Non-U.S. credit carryforwards	3,574	3,419
Accruals and reserves	2,399	2,335
Other deferred tax assets	2,891	1,157
Deferred income tax assets before valuation allowance	79,940	60,711
Valuation allowance on deferred tax assets	(21,681)	(15,494)
Total deferred income tax assets	58,259	45,217
Net deferred income tax liabilities	\$ 11,178	\$ 24,461

As of December 31, 2020, we had no U.S. federal net operating loss ("NOL") carryover, \$3.8 million of consolidated state NOL carryovers, and \$234.8 million of separate state NOL carryovers. The state NOLs begin to expire in 2030. Management believes that certain of the state NOL carryovers will more likely than not expire prior to utilization. As such, a valuation allowance of \$12.6 million (net of federal benefit) has been established to reduce the state attribute balance to the amount

expected to be utilized before expiration. We also have \$6.1 million, tax-effected, of foreign NOL carryovers at December 31, 2020. The foreign NOLs have an indefinite life; however, management believes that benefit for certain of the foreign NOLs may not be realized. Therefore, we have established a valuation allowance of \$3.1 million to reduce the carrying value of the asset related to foreign NOLs to the amount that has been determined to be more likely than not realized.

We have \$0.2 million of state credit carryforwards and \$0.7 million of other consolidated state deferred tax assets for which we believe recognition is not appropriate. In addition, we have \$3.4 million of tax credits in other foreign jurisdictions as of December 31, 2020. The tax credits in these jurisdictions begin to expire in 2026. Valuation allowances have been recorded for these state and foreign items accordingly.

We have a U.S. federal and state deferred tax asset related to currency losses on intercompany loans. Management believes it is more likely than not that the benefit for the asset will not be realized based on timing of expected repayment of the intercompany loans. We have established a valuation allowance of \$1.7 million to eliminate the carrying value of this asset.

Management believes all remaining tax assets will more likely than not be realized. However, the amount of the deferred tax considered realizable could be reduced based on changing conditions.

During 2020, the state valuation allowance increased by approximately \$3.1 million, primarily due to a valuation allowance recorded to offset the current year generation of separate state loss carryforwards that management does not believe are realizable given anticipated changes in state nexus. The federal valuation allowance increased by approximately \$1.0 million, to offset current year changes in unrealized exchange losses on intercompany loans. The foreign valuation allowance increased by \$2.2 million in 2020 primarily to offset current year loss generation in jurisdictions where realization of the asset is not more likely than not.

As a result of the deemed mandatory repatriation provisions in the Tax Act and our recognition in income of GILTI as part of the changes from the Tax Act, we do not have material basis differences related to cumulative unremitted earnings for U.S. income tax purposes. However, we continue to evaluate quarterly the impact that repatriation of foreign earnings would have on withholding and other taxes. As of December 31, 2020, we have recorded a liability of \$6.6 million for the anticipated withholding taxes that would be due upon repatriation of the unremitted earnings of those subsidiaries for which management does not intend to permanently reinvest all earnings.

We are subject to U.S. federal income tax as well as tax in several foreign jurisdictions. We are also subject to tax by various state authorities. The tax years subject to examination vary by jurisdiction. We are no longer subject to U.S. federal examination for periods before 2017. During 2020 we concluded, with no material findings, an audit by French tax authorities for the 2016 tax year. We regularly assess the outcomes of both ongoing and future examinations for the current or prior years to ensure our provision for income taxes is sufficient. We recognize liabilities based on estimates of whether additional taxes will be due, and we believe our reserves are adequate in relation to any potential assessments. The outcome of any one examination, some of which may conclude during the next twelve months, is not expected to have a material impact on our financial position or results of operations.

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 and Comprehensive Income (Loss). Accrued interest and penalties of \$0.6 million, \$1.5 million, and \$1.3 million are included in other non-current liabilities as of December 31, 2020, 2019, and 2018, respectively.

The following table presents a reconciliation of the beginning and ending amounts of unrecognized tax benefits, excluding interest and penalties.

	Year Ended December 31,		
	2020	2019	2018
Balance at beginning of year	\$ 2,589	\$ 4,609	\$ 5,655
Additions for tax positions of prior years	121	—	304
Settlements for tax positions of prior years	—	(275)	—
Reductions for tax positions of prior years	(2,463)	(1,745)	(1,350)
Balance at end of year	<u>\$ 247</u>	<u>\$ 2,589</u>	<u>\$ 4,609</u>

The reduction to unrecognized tax benefits in 2020 is related to (1) expiring statutes of limitations in certain U.S. state and foreign jurisdictions and (2) the remeasurement of previously unrecognized tax benefits. As of December 31, 2020, the unrecognized tax benefits would, if recognized, impact our effective tax rate by \$0.8 million, inclusive of the impact of interest and penalties. Management believes that it is reasonably possible that the amount of unrecognized income tax benefits, including interest and penalties, may not decrease during the next twelve months as no statutes are expected to lapse within the period.

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 \$0.2 million for 2020. The tax holidays had no impact on our 2019 and 2018 foreign taxes.

Note 12. Debt

Collectively, our credit facility is comprised of a term loan with a face amount of \$545.0 million, maturing on October 19, 2022 (the “Senior Secured Term Loan”); a term loan with a face amount of \$300.0 million, maturing on October 19, 2022 (the “Incremental Term Loan”); and a revolving line of credit with a face amount of \$60.0 million, maturing on July 20, 2022 (the “Senior Secured Revolver”). The credit facility is collateralized by all of our assets.

The following table presents outstanding debt balances as of December 31, 2020 and 2019.

	As of December 31,	
	2020	2019
Senior Secured Term Loan	\$ 47,728	\$ 526,313
Incremental Term Loan	22,716	257,111
International lines of credit and other loans	14,418	9,579
Total principal	84,862	793,003
Less-current maturities of long-term debt	4,885	19,106
Principal, net of current portion	79,977	773,897
Less-unamortized debt issuance costs (1)	952	16,647
Long-term debt, net of current portion	\$ 79,025	\$ 757,250

(1) In addition to this amount, costs of \$1.8 million and \$3.0 million related to the Senior Secured Revolver are recorded in other non-current assets as of December 31, 2020, and December 31, 2019, respectively.

We capitalized interest costs of \$0.2 million, \$1.5 million, and \$1.1 million in the years ended December 31, 2020, 2019, and 2018, respectively, related to construction in progress.

In August 2020, we entered into an agreement to sell our Life Sciences business (see Note 2). The sale closed on October 6, 2020, at which time we received cash proceeds of \$757.2 million. We immediately prepaid \$700.0 million in the aggregate on the Senior Secured Term Loan and the Incremental Term Loan. We also paid in full the outstanding balance on the Senior Secured Revolver. The prepayment was applied to debt in accordance with the prepayment provisions of the credit agreement immediately after the transaction closed on October 6, 2020. See Note 2 for a description of the methodology for allocating debt-related costs in historical periods to discontinued operations.

Senior Secured Term Loan

Outstanding borrowings under the Senior Secured Term Loan bear interest at one-month LIBOR (subject to a 0.75% floor) plus an applicable margin of 5.75%. At December 31, 2020, the Senior Secured Term Loan bore interest at 6.50%.

Incremental Term Loan

Outstanding borrowings under the Incremental Term Loan bear interest at one-month LIBOR plus an applicable margin of 5.75%. At December 31, 2020, the Incremental Term Loan bore interest at 5.90%.

Senior Secured Revolver

Outstanding borrowings under the Senior Secured Revolver bear interest on a variable rate structure at either 1) one-month LIBOR plus an applicable margin of 4.00% or 2) the prime lending rate plus an applicable margin of 3.00%. We pay a commitment fee of 0.50% for unused capacity under the Senior Secured Revolver. We had no outstanding borrowings under the Senior Secured Revolver at December 31, 2020 or 2019. Total capacity under the Senior Secured Revolver was \$60.0 million as of December 31, 2020, with \$45.4 million available for future borrowings after reductions for outstanding letters of credit of \$14.6 million. Our credit facility is subject to certain financial covenants based on a consolidated net leverage ratio, becoming more restrictive over time. We were in compliance with all covenants under our credit facility at December 31, 2020.

Debt Amendments

In July 2020, we amended our Credit Agreement to waive compliance with the financial leverage ratio covenant for the second and third quarters of 2020. During this period, we were required to maintain minimum liquidity levels, provide certain financial and other information, and take certain other action as specified in the amendment. Failure to maintain the required minimum liquidity levels or satisfy other requirements set forth in the amendment would allow the revolving credit lenders, the Senior Secured Term loan lenders, and the Incremental Term Loan lenders to cause amounts outstanding under our credit facility to become immediately due and payable and could have a material, adverse impact on our financial position.

In August 2020, we amended our Credit Agreement to obtain the lenders’ consent to the sale of the Life Sciences business, subject to certain terms and conditions. The amendment required a minimum of \$675.0 million in cash proceeds from the sale. All cash proceeds, less certain allowable costs, were required by the amendment to be used to prepay the Senior Secured Term Loan and the Incremental Term Loan. The amendment also required a minimum \$15.0 million payment on the Senior Secured Revolver and reduced total capacity from \$75.0 million to \$60.0 million immediately after the sale of the Life Sciences business. The capacity will decrease to \$50.0 million on June 30, 2021. The amendment requires cash in excess of \$35.0 million on the last day of each month to be used to pay down the Senior Secured Revolver. Liquidity thresholds were amended so that the threshold decreases commensurate with any principal payment on the Senior Secured Revolver.

We were in compliance with all covenants under our credit facility at December 31, 2020.

We capitalized a total of \$0.4 million in new debt issuance costs related to the July 2020 and August 2020 amendments. Costs related to the Senior Secured Term Loan and the Incremental Term Loan are recorded as a direct reduction to the carrying amount of the associated long-term debt. Costs related to the Senior Secured Revolver are recorded in other non-current assets. Additionally, \$1.5 million of unamortized debt issuance costs were written off in the twelve months ended December 31, 2020, in connection with the July 2020 and August 2020 amendments. See Note 2 for a description of the methodology for allocating amortization and write-offs of debt issuance costs in historical periods to discontinued operations.

International Lines of Credit and Other Loans

International lines of credit and other loans consist of loans with financial institutions in France, Brazil, China, and the United States with a weighted average interest rate of 2.77% as of December 31, 2020. These sources are used to fund working capital and equipment purchases for our manufacturing plants and have a weighted average remaining term of 6.7 years. As of December 31, 2020, the international lines of credit and other loans had \$14.4 million outstanding of which \$4.5 million is classified as “Current maturities of long-term debt” on the Consolidated Balance Sheets.

Interest Rate Swap

In February 2019, we entered into a \$700.0 million amortizing notional amount fixed-rate interest rate swap agreement to manage the interest rate risk associated with our long-term variable-rate debt until 2022. The fixed-rate interest rate swap agreement calls for us to receive interest monthly at a variable rate equal to one-month LIBOR and to pay interest monthly at a fixed rate of 2.4575%.

In connection with the prepayment of debt on October 6, 2020, with proceeds from the sale of our Life Sciences business, the outstanding balance of our variable rate debt fell below the \$700.0 million notional amount of the interest rate swap contract. Refer to Note 21 for further discussion of the interest rate swap agreement.

Future Maturities

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
2021	\$ 4,885
2022	71,664
2023	1,632
2024	1,474
2025	1,553
Thereafter	3,654
Total outstanding principal	<u>\$ 84,862</u>

Note 13. Leases

We adopted ASC 842 on January 1, 2019, and elected the modified retrospective approach in which the new standard is applied to all leases existing at the date of adoption through a cumulative-effect adjustment of less than \$0.1 million to accumulated deficit. Consequently, financial information is not updated, and the disclosures required under the new standard are not provided for periods prior to January 1, 2019. As part of the adoption, we elected the package of practical expedients, the short-term lease exemption, and the practical expedient to not separate lease and non-lease components. Accordingly, we accounted for our existing operating leases as operating leases under the new standard, without reassessing (a) whether the contracts contain a lease under ASC 842, (b) whether classification of the operating leases would be different in accordance with ASC 842, or (c) whether any unamortized initial direct costs would have met the definition of initial direct costs in ASC 842 at lease commencement.

We determine whether an arrangement is a lease at inception. Right-of-use (“ROU”) lease assets represent our right to use an underlying asset for the lease term, and lease liabilities represent our obligation to make lease payments arising from the lease. ROU lease assets and liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term. When the implicit rate is not readily determinable, we use the estimated incremental borrowing rate based on the information available at the lease commencement date in determining the present value of lease payments. The lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option. Amortization of ROU lease assets is recognized in expense on a straight-line basis over the lease term.

Short-term leases are leases having a term of twelve months or less. We recognize short-term leases on a straight-line basis and do not record a related lease asset or liability for such leases. Finance lease ROU assets consist primarily of equipment used in the manufacturing process with terms greater than two years to seven years. Operating lease ROU assets consist of the following:

- Equipment used in the manufacturing process as well as office equipment with terms two years to five years; and
- Manufacturing plants and office facilities with terms two years to twenty years.

The following table presents components of lease expense:

		Years Ended December 31,	
		2020	2019
Financial Statement Line Item			
Finance lease cost:			
Amortization of right-of-use assets	Depreciation and amortization	\$ 1,272	\$ 1,229
Interest expense	Interest expense	192	226
Operating lease cost	Cost of sales and selling, general, and administrative expense	8,396	9,108
Short-term lease cost (1)	Cost of sales and selling, general, and administrative expense	591	479
Variable lease cost (2)	Cost of sales and selling, general, and administrative expense	1	1
Total lease cost		<u>\$ 10,452</u>	<u>\$ 11,043</u>

(1) Excludes expenses related to leases with a lease term of one month or less.

(2) Represents changes to index-based lease payments.

The following table presents lease-related assets and liabilities recorded on the balance sheet.

Financial Statement Line Item		As of December 31,	
		2020	2019
Assets:			
Operating lease assets	Operating lease right-of-use assets	\$ 50,264	\$ 45,452
Finance lease assets	Property, plant and equipment, net	14,644	13,267
Total lease assets		\$ 64,908	\$ 58,719
Liabilities:			
Current liabilities:			
Operating lease liabilities	Current portion of operating lease liabilities	\$ 4,797	\$ 4,288
Finance lease liabilities	Other current liabilities	4,252	2,701
Non-current liabilities:			
Operating lease liabilities	Operating lease liabilities, net of current portion	55,053	48,575
Finance lease liabilities	Other non-current liabilities	6,858	7,911
Total lease liabilities		\$ 70,960	\$ 63,475

The following table contains supplemental cash flow information related to leases of continuing operations.

	Years Ended December 31,	
	2020	2019
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash flows used in finance leases	\$ 192	\$ 226
Operating cash flows used in operating leases	13,498	14,090
Financing cash flows used in finance leases	2,018	3,156
Right-of-use assets obtained in exchange for new finance lease liabilities	\$ 728	\$ 5,250
Right-of-use assets obtained in exchange for new operating lease liabilities (1)	\$ 8,682	\$ 8,457

(1) Includes new leases, renewals, and modifications.

As of December 31, 2020, the weighted average remaining lease term and weighted-average discount rate for finance and operating leases of continuing operations were as follows:

	Years Ended December 31,	
	2020	2019
Weighted-average remaining lease term - finance leases	3.2 years	4.0 years
Weighted-average remaining lease term - operating leases	11.7 years	11.0 years
Weighted-average discount rate - finance leases	2.2 %	2.2 %
Weighted-average discount rate - operating leases	7.0 %	5.7 %

The maturities of lease liabilities greater than twelve months as of December 31, 2020, is as follows:

	Operating Leases	Finance Leases
2021	\$ 9,348	\$ 4,442
2022	8,485	3,107
2023	7,370	2,365
2024	7,276	1,122
2025	7,194	223
Thereafter	48,523	210
Total future minimum lease payments	88,196	11,469
Less: imputed interest	28,346	359
Total lease liabilities	\$ 59,850	\$ 11,110

As of December 31, 2019, we had an operating lease commitment that had not yet commenced. In March 2020, the operating lease for the manufacturing facility commenced and requires us to pay a total of approximately \$27.5 million base rent payments over the lease term of 15 years. We began making rent payments in the third quarter of 2020.

In March 2020, we amended the lease of our corporate headquarters building to exit over half of the previously leased space and reduce annual base rent payments by approximately \$1.3 million over the remaining lease term which ends in 2030. The amendment was accounted for as a lease modification, and the remeasurement of the lease resulted in an \$8.1 million decrease in the operating lease right-of-use (“ROU”) asset, a \$10.5 million decrease in the noncurrent portion of the operating lease liability, and a \$0.6 million decrease in the current portion of the operating lease liability. The \$3.0 million difference between the change in the operating lease ROU asset and the operating lease liabilities was recognized in “Other operating expense, net,” on the Consolidated Statements of Operations and Comprehensive Income (Loss). In connection with the discontinued use of the previously leased space, we also recognized a \$4.4 million termination charge and a \$2.9 million impairment charge on the associated leasehold improvements, all of which were also recognized in “Other operating expense, net.”

During the second quarter of 2020 and as part of our overall plan to improve liquidity during the COVID-19 pandemic, we negotiated with certain lessors to defer rent payments on leased buildings. In total, \$0.5 million of operating lease payments for continuing operations were deferred over a period ranging from April 2020 to December 2020 and are being repaid over a period ranging from June 2020 through December 2022. The deferral of rent payments did not result in a substantial change in total lease payments over the individual lease terms. We have elected to apply lease accounting relief announced by the FASB in April 2020 and have treated these lease concessions as if they existed in the original contracts rather than applying lease modification accounting. The net impact on cash flows from operating activities on the Consolidated Statements of Cash Flows for the twelve months ended December 31, 2020, was \$0.7 million in cash savings which includes \$0.4 million related to continuing operations.

During the year ended December 31, 2018, we recognized rent expense of \$8.7 million in continuing operations.

Note 14. Restructuring and Integration

The following table presents restructuring and integration charges for the years ended December 31, 2019 and 2018. There were no restructuring and integration charges for the year ended December 31, 2020.

	Mobile Solutions	Corporate and Consolidations	Total
Year Ended December 31, 2019			
Site closure and other associated costs	\$ (12)	\$ —	\$ (12)
Total	\$ (12)	\$ —	\$ (12)
Year Ended December 31, 2018			
Severance and other employee costs	\$ —	\$ 626	\$ 626
Site closure and other associated costs	63	—	63
Total	\$ 63	\$ 626	\$ 689

The following tables present restructuring and integration reserve activity for the years ended December 31, 2019 and 2018. There was no restructuring and integration reserve activity for the year ended December 31, 2020.

	Reserve Balance as of December 31, 2018	Charges	Non-cash Adjustments	Cash Reductions	Reserve Balance as of December 31, 2019
Severance and other employee costs	\$ 129	\$ —	\$ —	\$ (129)	\$ —
Site closure and other associated costs	24	(12)	—	(12)	—
Total	\$ 153	\$ (12)	\$ —	\$ (141)	\$ —

	Reserve Balance as of December 31, 2017	Charges	Non-cash Adjustments	Cash Reductions	Reserve Balance as of December 31, 2018
Severance and other employee costs	\$ —	\$ 626	\$ —	\$ (497)	\$ 129
Site closure and other associated costs	1,099	63	(56)	(1,082)	24
Total	\$ 1,099	\$ 689	\$ (56)	\$ (1,579)	\$ 153

In 2018, we recognized severance and other employee costs of \$0.6 million at corporate headquarters related to the restructuring of our former Precision Engineered Products Group, effective January 2, 2018.

Note 15. Commitments and Contingencies

Brazil ICMS Tax Matter

Prior to the acquisition of Autocam Corporation in 2014 (“Autocam”), Autocam’s Brazilian subsidiary (“Autocam Brazil”) received notification from the Brazilian tax authority regarding ICMS (state value added tax or “VAT”) tax credits claimed on intermediary materials (e.g., tooling and perishable items) used in the manufacturing process. The Brazilian tax authority notification disallowed state ICMS tax 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. The matter encompasses several lawsuits filed with the Brazilian courts requesting declaratory actions that no tax is due or seeking a stay of execution on the collection of the tax. In 2018, we obtained a favorable decision in one of the declaratory actions for which the period for appeal has expired. We have filed actions in each court requesting dismissal of the matter based on the earlier court action. In May 2020, we received an unfavorable decision in one of the lawsuits, and as a result have recorded a liability to the Brazilian tax authorities and a receivable from the former shareholders of Autocam for the same amount. Although we anticipate a favorable resolution to the remaining matters, we can provide no assurances that we will be successful in achieving dismissal of all pending cases. The U.S. dollar amount that would be owed in the event of an unfavorable decision is subject to interest, penalties, and currency impacts and therefore is dependent on the timing of the decision. For the remaining open lawsuits, we currently believe the cumulative potential liability in the event of unfavorable decisions on all matters will be less than \$5.0 million, inclusive of interest and penalties.

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. Accordingly, we don’t expect to incur a loss related to this matter even in the event of an unfavorable decision and, therefore, have not accrued an amount for the remaining matters as of December 31, 2020.

Securities Offering Matter

On November 1, 2019, Erie County Employees’ Retirement System, on behalf of a purported class of plaintiffs, filed a complaint in the Supreme Court of the State of New York, County of New York, against the Company, certain of the Company’s current and former officers and directors, and each of the underwriters involved in the Company’s public offering and sale of 14.4 million shares of its common stock pursuant to a preliminary prospectus supplement, dated September 10, 2018, a final prospectus supplement, dated September 13, 2018, and a base prospectus, dated April 19, 2017, relating to the Company’s effective shelf registration statement on Form S-3 (File No. 333-216737) (the “Offering”), which complaint was amended on January 24, 2020. The complaint alleges violations of Sections 11, 12(a)(2), and 15 of the Securities Act of 1933 in connection with the Offering. The plaintiffs seek to represent a class of stockholders who purchased shares of the

Company's common stock in the Offering. The complaint seeks unspecified monetary damages and other relief. The Company believes the complaint and allegations to be without merit and intends to vigorously defend itself against these actions. The Company is unable at this time to determine whether the outcome of the litigation would have a material impact on the Company's financial position, results of operations, or cash flows.

All Other Legal Matters

On October 26, 2020, Corre Opportunities Qualified Master Fund, LP, and Corre Horizon Fund, LP, filed a complaint in the Chancery Court of the State of Delaware against the Company. The complaint alleges that the Company's sale of its Life Sciences business without obtaining the prior consent of the plaintiffs was a breach of the terms of the Series B Preferred Stock. The complaint seeks unspecified monetary damages and other relief. The Company believes the complaint and allegations to be without merit and intends to vigorously defend itself against these actions. The Company is unable at this time to determine whether the outcome of the litigation would have a material impact on the Company's financial position, results of operations, or cash flows.

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 16. Preferred Stock and Stockholders' Equity

Series B Convertible Preferred Stock

On December 11, 2019, we issued to affiliates of existing common stockholders in a private placement 0.1 million shares of contingently redeemable Series B convertible preferred stock ("Preferred Stock"), par value of \$0.01 per share and at a price of \$1,000 per share, together with detachable warrants (the "Warrants") to purchase up to 1.5 million shares of our common stock at an exercise price of \$12.00 per share. The Preferred Stock has a liquidation preference of \$1,000 per share; is redeemable at our option in cash (or, under certain circumstances, in stock), subject to the applicable redemption premium; is convertible into a variable number of common shares on certain terms and conditions on or after March 31, 2023; and is subject to certain other rights and obligations. In connection with the issuance of Preferred Stock, we entered into a registration rights agreement with the purchasers to provide certain customary demand registration rights exercisable beginning on March 31, 2021, with respect to their shares of common stock, including those underlying the Preferred Stock and Warrants, shares of Preferred Stock, and the Warrants.

Net cash proceeds of \$95.7 million from the issuance of the Preferred Stock were used for debt repayment, fees associated with the amendment and extension of our credit facility, and for general corporate purposes. Preferred Stock shares earn cumulative dividends at a rate of 10.625% per year, payable quarterly in arrears if declared, and accrue whether or not earned or declared. If a Preferred Stock dividend is declared by the Board of Directors, then it will be paid in cash. Additionally, holders of Preferred Stock participate in any dividends paid on shares of our common stock on an as-converted basis at a fixed conversion rate. Our common stockholders approved a proposal at our 2020 annual stockholder meeting to issue common stock in excess of thresholds established by certain Nasdaq stock market rules upon the exercise of Warrants or the conversion or redemption of Preferred Stock.

Preferred Stock is classified as mezzanine equity, between liabilities and stockholders' equity, because certain features of the Preferred Stock could require redemption of some or all Preferred Stock upon events that are considered not solely within our control, including a leverage ratio threshold and the passage of time. For initial recognition in 2019, the Preferred Stock was recognized at a discounted value, net of issuance costs and allocation to warrants and bifurcated embedded derivatives. The aggregate discount is amortized as a deemed dividend through December 31, 2023, which is the date the holders have a non-contingent conversion option into a variable number of common shares equal to the liquidation preference plus accrued and unpaid dividends. Deemed dividends adjust retained earnings (or in the absence of retained earnings, additional paid-in capital).

In accordance with ASC 815-15, *Derivatives and Hedging - Embedded Derivatives*, ("ASC 815-15") certain features of the Preferred Stock were bifurcated and accounted for as derivatives separate from the Preferred Stock. Note 21 discusses the accounting for these features.

As of December 31, 2020, the carrying value of the Preferred Stock shares was \$105.1 million which included \$13.0 million of accumulated unpaid and deemed dividends. The following table presents the change in the Preferred Stock carrying value during the year ended December 31, 2020.

	Years Ended December 31,	
	2020	2019
Beginning balance	\$ 93,012	\$ —
Gross proceeds from issuance of shares	—	100,000
Relative fair value of Warrants issued	—	(1,076)
Recognition of bifurcated embedded derivative	—	(2,295)
Allocation of issuance costs to Preferred Stock	—	(4,259)
Accrual of in-kind dividends	11,121	590
Amortization and other	953	52
Ending balance	\$ 105,086	\$ 93,012

Common Stock

In September 2018, we issued 14.4 million shares of our common stock in a public offering under our shelf registration statement at a price of \$16.00 per share. Net proceeds of \$217.3 million were used to repay debt.

Preferred Share Purchase Rights

On April 15, 2020, our Board of Directors authorized and declared a dividend of one preferred share purchase right for each outstanding share of common stock to shareholders of record on April 27, 2020. The rights will become exercisable if a person or group becomes the beneficial owner of 15% or more of our outstanding common stock (including in the form of synthetic ownership through derivative positions). In the event that the rights become exercisable due to the triggering ownership threshold being crossed, each right will entitle its holder to purchase one thousandth of a share of Series C Junior Participating Preferred Stock for \$31.50 per share. Rights held by the triggering person or entity will become void and will not be exercisable. The Board of Directors may, rather than permitting the exercise of the rights, exchange each right (other than rights held by the triggering person or entity) for one share of common stock per right, subject to adjustment. The Board of Directors will, prior to the rights becoming exercisable, in general be entitled to redeem the rights for \$0.001 per right. The rights expire on March 31, 2021.

Note 17. Revenue from Contracts with Customers

Revenue is recognized when control of the good or service is transferred to the customer either at a point in time or, in limited circumstances, as our services are rendered over time. Revenue is measured as the amount of consideration we expect to receive in exchange for transferring goods or services.

	Year Ended December 31, 2020			
	Mobile Solutions	Power Solutions	Intersegment Sales Eliminations	Total
United States and Puerto Rico	\$ 129,147	\$ 139,499	\$ (95)	\$ 268,551
China	46,442	5,563	—	52,005
Brazil	27,055	689	—	27,744
Mexico	16,465	13,400	—	29,865
Germany	5,846	378	—	6,224
Poland	4,913	14	—	4,927
Other	26,492	11,726	—	38,218
Total net sales	\$ 256,360	\$ 171,269	\$ (95)	\$ 427,534

	Year Ended December 31, 2019			
	Mobile Solutions	Power Solutions	Intersegment Sales Eliminations	Total
United States and Puerto Rico	\$ 162,445	\$ 156,945	\$ (335)	\$ 319,055
China	38,793	6,722	—	45,515
Brazil	36,058	300	—	36,358
Mexico	18,815	13,489	—	32,304
Germany	6,372	65	—	6,437
Poland	6,363	15	—	6,378
Other	28,903	14,564	—	43,467
Total net sales	\$ 297,749	\$ 192,100	\$ (335)	\$ 489,514

	Year Ended December 31, 2018			
	Mobile Solutions	Power Solutions	Intersegment Sales Eliminations	Total
United States and Puerto Rico	\$ 187,178	\$ 157,357	\$ (621)	\$ 343,914
China	43,610	5,537	—	49,147
Brazil	35,314	215	—	35,529
Mexico	27,053	12,254	—	39,307
Germany	5,652	26	—	5,678
Poland	7,010	13	—	7,023
Other	29,220	14,376	—	43,596
Total net sales	\$ 335,037	\$ 189,778	\$ (621)	\$ 524,194

Product Sales

We generally transfer control and recognize a sale when we ship the product from our manufacturing facility to our customer, at a point in time, as this is when our customer obtains the ability to direct use of, and obtain substantially all of the remaining benefits from, the goods. We have elected to recognize the cost for freight and shipping when control over products has transferred to the customer as a component of cost of sales.

We use an observable price to determine the stand-alone selling price for separate performance obligations or a cost-plus-margin approach when an observable price is not available. The expected duration of our contracts is one year or less, and we have elected to apply the practical expedient that allows entities to disregard the effects of financing when the contract length is less than one year. The amount of consideration we receive and the revenue we recognize varies with volume rebates and incentives we offer to our customers. We estimate the amount of variable consideration that should be included in the transaction price utilizing the expected value method or the most likely amount method depending on the nature of the variable consideration. Variable consideration is included in the transaction price if, in our judgment, it is probable that a significant future reversal of cumulative revenue under the contract will not occur.

We utilize the portfolio approach practical expedient to evaluate sales-related discounts on a portfolio basis to contracts with similar characteristics. The effect on our consolidated financial statements of applying the portfolio approach would not differ materially from evaluation of individual contracts.

We give our customers the right to return only defective products in exchange for functioning products or rework of the product. These transactions are evaluated and accounted for under ASC Topic 460, *Guarantees*, and we estimate the impact to the transaction price based on an analysis of historical experience.

Other Sources of Revenue

We provide pre-production activities related to engineering efforts to develop molds, dies, and machines that are owned by our customers. We may receive advance payments from customers which are deferred until satisfying our performance obligations by compliance with customer-specified milestones, recognizing revenue at a point in time. These contracts generally have an original expected duration of less than one year.

Transaction Price Allocated to Future Performance Obligations

We are required to disclose the aggregate amount of transaction price that is allocated to performance obligations that have not yet been satisfied as of December 31, 2020, unless our contracts meet one of the practical expedients. Our contracts met the practical expedient for a performance obligation that is part of a contract that has an original expected duration of one year or less.

Costs to Obtain and Fulfill a Contract

We recognize commissions paid to internal sales personnel that are incremental to obtaining customer contracts as an expense when incurred since the amortization period is less than one year. Costs to obtain a contract are expensed as selling, general and administrative expense.

Sales, VAT, and other taxes we collect concurrent with revenue-producing activities are excluded from revenue. Incidental items that are immaterial in the context of the contract are recognized as expense.

Sales Concentration

We recognized sales from a single customer of \$49.7 million, or 10% of consolidated net sales, during the year ended December 31, 2019, and \$65.3 million, or 12% of consolidated net sales, during the year ended December 31, 2018. Revenues from this customer are in our Mobile Solutions segment and were less than 10% of consolidated net sales during the year ended December 31, 2020.

Note 18. Share-Based Compensation

We recognize compensation expense of all employee and non-employee director share-based compensation awards in the consolidated 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, 2020, we have 2.7 million maximum shares available that can be issued as options, stock appreciation rights, and other share-based awards. Shares of our common stock delivered upon exercise or vesting may consist of newly issued shares of our common stock or shares acquired in the open market.

Share-based compensation expense is recognized in the “Selling, general, and administrative expense” line in the Consolidated Statements of Operations and Comprehensive Income (Loss) except for \$0.8 million, \$0.4 million, and \$0.2 million attributable to discontinued operations for the twelve months ended December 31, 2020, 2019, and 2018, respectively. The following table lists the components of share-based compensation expense by type of award.

	Year Ended December 31,		
	2020	2019	2018
Stock options	\$ 741	\$ 881	\$ 678
Restricted stock	3,473	1,897	1,630
Performance share units	755	1,155	2,076
Change in estimate of share-based award vesting ⁽¹⁾	(743)	(1,111)	(1,968)
Share-based compensation expense	<u>\$ 4,226</u>	<u>\$ 2,822</u>	<u>\$ 2,416</u>

(1) Amounts reflect the decrease in share-based compensation expense based on the change in estimate of the probability of vesting of share-based awards.

Unrecognized compensation cost related to unvested awards was \$3.6 million as of December 31, 2020. We expect that cost to be recognized over a weighted-average period of 2.2 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 generally ten years with a vesting period of generally three years.

During the years ended 2020, 2019, and 2018, we granted options to purchase 158,700, 210,400, and 57,800 shares, respectively, to certain key employees. The weighted average grant-date fair value of the options granted during 2020, 2019, and 2018 was \$4.76, \$2.77, and \$10.60 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.

	2020	2019	2018
Expected term	6 years	6 years	6 years
Average risk-free interest rate	1.42 %	2.47 %	2.66 %
Expected dividend yield	— %	3.53 %	1.15 %
Expected volatility	52.80 %	49.53 %	47.69 %
Expected forfeiture rate	— %	4.00 %	4.00 %

The expected term is derived from using the simplified method of determining stock option terms as described under the SAB Topic 14, *Share-based payment*. The simplified method was used because sufficient historical stock option exercise experience was not available, primarily due to the transformation of the management structure over the past several years.

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 dividend yield for 2020 grants reflects no expected annual dividends over the expected term because we discontinued dividends in 2019.

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

The expected forfeiture rate is determined from examining the historical pre-vesting forfeiture patterns of past option issuances to key employees. While the expected forfeiture rate is not an input of the Black Scholes financial pricing 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 presents stock option activity for the year ended December 31, 2020.

	Number of Options (in thousands)	Weighted- Average Exercise Price (per share)	Weighted- Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Outstanding at January 1, 2020	775	\$ 13.24		
Granted	159	9.44		
Forfeited or expired	(63)	15.09		
Outstanding at December 31, 2020	871	\$ 12.41	4.0 years	\$ — (1)
Exercisable at December 31, 2020	682	\$ 13.17	2.7 years	\$ — (1)

(1) The aggregate intrinsic value is the sum of intrinsic values for each exercisable individual option grant. The intrinsic value is the amount by which the closing market price of our stock at December 31, 2020, was greater than the exercise price of any individual option grant.

No options were exercised during the year ended December 31, 2020. Cash proceeds from the exercise of options in the years ended December 31, 2019 and 2018, totaled less than \$0.1 million and \$0.3 million, respectively. The tax benefit recognized from stock option exercises was less than \$0.1 million and \$0.1 million in the years ended December 31, 2019 and 2018, respectively. For the years ended December 31, 2019 and 2018, 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, 2019 and 2018, was \$7.0 thousand and \$0.5 million, respectively.

Restricted Stock

During the years ended December 31, 2020, 2019, and 2018, we granted 460,255, 339,498, and 86,516 shares of restricted stock to non-executive directors, officers, and certain other key employees. The shares of restricted stock granted during the years ended December 31, 2020, 2019, and 2018, vest pro-rata generally over three years for officers and certain other key employees and over one year for non-executive directors and certain key employees. 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 fair value of

restricted stock granted in the years ended December 31, 2020, 2019, and 2018, was \$9.35, \$7.74, and \$24.55 per share, respectively. The total grant-date fair value of restricted stock that vested in the years ended December 31, 2020, 2019, and 2018, was \$1.9 million, \$2.9 million, and \$1.8 million, respectively.

The following table presents the status of unvested restricted stock awards as of December 31, 2020, and changes during the year then ended.

	Nonvested Restricted Shares (in thousands)	Weighted Average Grant-Date Fair Value (per share)
Unvested at January 1, 2020	222	\$ 9.33
Granted	460	9.35
Vested	(254)	7.31
Forfeited	(43)	9.17
Unvested at December 31, 2020	<u>385</u>	<u>\$ 9.42</u>

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. PSUs granted in 2020 were made pursuant to the NN, Inc. 2019 Omnibus Incentive Plan and a Performance Share Unit Agreement (the “2019 Omnibus Agreement”). PSUs granted in 2019 and 2018 were made pursuant to the NN, Inc. 2016 Omnibus Incentive Plan and a Performance Share Unit Agreement (the “2016 Omnibus 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 2019 Omnibus Agreement and the 2016 Omnibus Agreement. The ROIC Awards will vest, if at all, upon our achieving a specified average return on invested capital during the performance periods. Each performance period generally begins on January 1 of the year of grant and ends 36 months later on December 31.

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 award recipient’s continued employment. The actual number of shares of common stock to 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 tables present the goals with respect to TSR Awards and ROIC Awards granted in 2020, 2019, and 2018.

TSR Awards:	Threshold Performance (50% of Shares)	Target Performance (100% of Shares)	Maximum Performance (150% of Shares)
2020 grants	35 th Percentile	50 th Percentile	75 th Percentile
2019 grants	35 th Percentile	50 th Percentile	75 th Percentile
2018 grants	35 th Percentile	50 th Percentile	75 th Percentile

ROIC Awards:	Threshold Performance (35% of Shares)	Target Performance (100% of Shares)	Maximum Performance (150% of Shares)
2020 grants (1)	4.9 %	5.1 %	5.6 %
2019 grants	4.7 %	5.8 %	7.0 %
2018 grants	15.5 %	18.0 %	19.5 %

- (1) The performance levels for 2020 grants were modified by the compensation committee of the board of directors in the first quarter of 2021 to adjust for the sale of the Life Sciences business and the ongoing effects of the COVID-19 pandemic. Threshold Performance was changed to 6.7% to earn 50% of Shares, Target Performance was changed to 7.9% to earn 100% of Shares, and Maximum Performance was changed to 8.7% to earn 150% of Shares.

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 PSUs granted and the grant-date fair value of each award in the periods presented.

Award Year	TSR Awards		ROIC Awards	
	Shares (in thousands)	Grant-Date Fair Value (per share)	Shares (in thousands)	Grant-Date Fair Value (per share)
2020	139	\$ 10.88	157	\$ 9.44
2019	136	\$ 9.28	174	\$ 7.93
2018	55	\$ 24.65	55	\$ 24.55

We recognize expense for ROIC Awards based on the probable outcome of the associated performance condition. We generally recognize an 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.

The following table presents the status of unvested PSUs as of December 31, 2020, and changes during the year then ended.

	Nonvested TSR Awards		Nonvested ROIC Awards	
	Number of Shares (in thousands)	Weighted Average Grant-Date Fair Value	Number of Shares (in thousands)	Weighted Average Grant-Date Fair Value
Nonvested at January 1, 2020	65	\$ 13.27	79	\$ 11.50
Granted	139	10.88	157	9.44
Forfeited	(56)	11.89	(66)	10.32
Expired	(10)	24.65	(10)	24.55
Nonvested at December 31, 2020	138	\$ 10.58	160	\$ 9.13

None of the PSUs that were granted in 2016, 2017, and 2018 vested in 2018, 2019, and 2020, respectively, because the actual performance achieved was below the “Threshold Performance” level as defined by the grant agreements.

Change in Vesting Estimates

During the year ended December 31, 2020, we recognized a decrease in share-based compensation expense in continuing operations of \$0.3 million in the “Selling, general, and administrative expense” line of the Consolidated Statements of Operations and Comprehensive Income (Loss) to reverse cumulative expense for option, restricted stock, and PSU awards that

were forfeited upon termination of employment and for ROIC Awards that were granted in 2019 and are not expected to achieve Threshold Performance. In 2020 we also recognized a decrease in share-based compensation expense of \$0.5 million in the “Income (loss) from discontinued operations, net of tax” line in the Consolidated Statements of Operations and Comprehensive Income (Loss) to reverse cumulative expense for option, restricted stock, and PSU awards that were forfeited upon termination of employees related to the Life Sciences business.

During the year ended December 31, 2019, we recognized a decrease in share-based compensation expense in continuing operations of \$1.1 million in the “Selling, general, and administrative expense” line in the Consolidated Statements of Operations and Comprehensive Income (Loss) to reverse cumulative expense for option, restricted stock, and PSU awards that were forfeited upon termination of employment.

During the year ended December 31, 2018, we determined that the probability of performance achievement for ROIC Awards that were granted in 2016, 2017, and 2018 diminished to below the “Threshold Performance” level as defined by the grant agreements, and we recognized a decrease in share-based compensation expense in continuing operations of \$1.8 million in “Selling, general, and administrative expense” and \$0.2 million in “Income (loss) from discontinued operations, net of tax” on the Consolidated Statements of Operations and Comprehensive Income (Loss).

Related accrued dividend equivalents of less than \$0.1 million, \$0.1 million, and \$0.1 million were also reversed in 2020, 2019, and 2018, respectively, for awards that are not expected to vest.

Note 19. Accumulated Other Comprehensive Income

The components of accumulated other comprehensive income (“AOCI”) are as follows:

	Foreign Currency Translation	Interest rate swap	Income taxes (1)	Total
Balance at December 31, 2017	\$ (17,705)	\$ —	\$ —	\$ (17,705)
Current-period other comprehensive income (loss) activity	(13,609)	—	—	(13,609)
Balance at December 31, 2018	\$ (31,314)	\$ —	\$ —	\$ (31,314)
Other comprehensive income (loss) before reclassifications	(3,845)	(13,645)	3,166	(14,324)
Amounts reclassified from AOCI to interest expense (2)	—	1,411	(327)	1,084
Net current-period other comprehensive income (loss)	(3,845)	(12,234)	2,839	(13,240)
Balance at December 31, 2019	\$ (35,159)	\$ (12,234)	\$ 2,839	\$ (44,554)
Other comprehensive income (loss) before reclassifications	(1,683)	(16,207)	3,764	(14,126)
Amounts reclassified from AOCI to interest expense (2)	—	8,906	(2,068)	6,838
Amounts reclassified from AOCI to loss on interest rate swap (3)	—	15,823	(3,674)	12,149
Sale of discontinued operations	5,961	—	—	5,961
Net current-period other comprehensive income (loss)	4,278	8,522	(1,978)	10,822
Balance at December 31, 2020	\$ (30,881)	\$ (3,712)	\$ 861	\$ (33,732)

(1) Income tax effect of changes in interest rate swap.

(2) Represents settlements on the interest rate swap while the hedge was effective.

(3) Represents reclassification of derivative loss and settlements after discontinuation of hedge accounting. See Note 21 for further discussion of the interest rate swap.

Note 20. Net Income (Loss) Per Common Share

In accordance with ASC 260, *Earnings Per Share*, a company that has participating securities (for example, our Preferred Stock) is required to utilize the two-class method for calculating earnings per share (“EPS”) unless the treasury stock method results in lower EPS. The two-class method is an allocation of earnings between the holders of common stock and a company’s participating securities. Basic EPS is calculated by dividing income or loss attributable to common stockholders by the weighted average number of shares of common stock outstanding. To calculate diluted EPS, basic EPS is further adjusted to include the effect of potentially dilutive stock options, Warrants, and Preferred Stock.

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

	Years Ended December 31,		
	2020	2019	2018
Numerator:			
Loss from continuing operations	\$ (139,490)	\$ (30,749)	\$ (221,220)
Less: Preferred Stock cumulative dividends and deemed dividends	(12,373)	(642)	—
Numerator for basic and diluted loss from continuing operations per common share (1)	(151,863)	(31,391)	(221,220)
Income (loss) from discontinued operations, net of tax (Note 2)	38,898	(15,992)	(41,767)
Numerator for basic and diluted undistributed net loss per common share (1)	<u>\$ (112,965)</u>	<u>\$ (47,383)</u>	<u>\$ (262,987)</u>
Denominator:			
Weighted average common shares outstanding, basic and diluted	42,199	42,030	31,678
Per common share net loss:			
Basic loss from continuing operations per common share	\$ (3.60)	\$ (0.75)	\$ (6.98)
Basic income (loss) from discontinued operations per common share	0.92	(0.38)	(1.32)
Basic net loss per common share	<u>\$ (2.68)</u>	<u>\$ (1.13)</u>	<u>\$ (8.30)</u>
Diluted loss from continuing operations per common share	\$ (3.60)	\$ (0.75)	\$ (6.98)
Diluted income (loss) from discontinued operations per common share	0.92	(0.38)	(1.32)
Diluted net loss per common share	<u>\$ (2.68)</u>	<u>\$ (1.13)</u>	<u>\$ (8.30)</u>
Cash dividends declared per common share	<u>\$ —</u>	<u>\$ 0.21</u>	<u>\$ 0.28</u>

(1) Preferred Stock does not participate in losses.

The following table presents potentially dilutive securities that were excluded from the calculation of diluted net income (loss) per common share because they had an anti-dilutive effect.

	Year Ended December 31,		
	2020	2019	2018
Options	871	577	428
Warrants	1,500	1,500	—
Preferred Stock, as-converted	19,021	12,976	—
	<u>21,392</u>	<u>15,053</u>	<u>428</u>

We have elected to allocate undistributed income to participating securities based on year-to-date results. As there was no undistributed income for the years ended December 31, 2020, and 2019, no such allocation was necessary. In addition, given the undistributed loss from continuing operations in the years ended December 31, 2020, 2019, and 2018, all options and warrants are considered anti-dilutive and were excluded from the calculation of diluted net income (loss) per share. Stock options excluded from the calculations of diluted net income (loss) per share had a per share exercise price ranging from \$7.93 to \$25.16 for the year ended December 31, 2020, \$8.54 to \$25.16 for year ended December 31, 2019, and \$4.42 to \$25.16 for the year ended December 31, 2018. Warrants excluded from the calculation of diluted net income (loss) per share for the years ended December 31, 2020 and 2019, had a per share exercise price of \$12.00. Preferred Stock excluded from the calculation of diluted net income (loss) per share for the years ended December 31, 2020 and 2019, was calculated on an as-converted basis. Holders of Preferred Stock will have the right to convert up to 25% of their Preferred Stock into common shares per quarter after December 31, 2023, at a conversion price that equals a 30-day volume weighted average price per common share. Under certain conditions, holders of Preferred Stock may elect to convert their Preferred Stock into common shares at an earlier date after March 31, 2023, at a conversion price that equals 90% of the volume weighted average market price per common share. The potentially dilutive Preferred Stock in the preceding table presents the more dilutive result of these conversion prices as if the Preferred Stock were converted on December 31, 2020.

Note 21. 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.

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 financial instruments that are subject to fair value disclosure consist of cash and cash equivalents, accounts receivable, accounts payable, derivatives, and long-term debt. As of December 31, 2020, 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.

Derivative Financial Instruments

As described in Note 16, in connection with the issuance of Preferred Stock in December 2019 and in accordance with ASC 815-15, certain features of the Preferred Stock were bifurcated and accounted for separate from the Preferred Stock. The following features are recorded as derivatives.

- *Leverage ratio put feature.* The Preferred Stock includes a redemption option based on a leverage ratio threshold that provides the preferred holder the option to convert the Preferred Stock to a variable number of shares of common stock at a discount to the then fair value of our common stock. The conversion feature is considered a redemption right at a premium which is not clearly and closely related to the debt host.
- *Contingent dividends.* The feature that allowed for the dividend rate to increase to 11.625% in 2020 if shareholder approval was not obtained is not considered clearly and closely related to the debt host. Our common stockholders approved a proposal at our 2020 annual stockholder meeting to issue common stock in excess of thresholds established by certain Nasdaq stock market rules upon the exercise of Warrants or the conversion or redemption of Preferred Stock. Because shareholder approval was obtained during 2020, the contingent dividends feature no longer exists as of December 31, 2020.
- *Dividends withholding.* The Preferred Stock bears a feature that could require us to make an effective distribution to purchasers which is indexed to the tax rate of the purchasers. This distribution would be partially offset by an adjustment to the redemption price and/or conversion rate. The dividends withholding feature is not clearly and closely related to the debt host.
- *Warrants.* The Warrants issued with the Preferred Stock are exercisable, in full or in part, at any time prior to the seventh anniversary of their issuance at an exercise price of \$12.00 per share, subject to customary anti-dilution adjustments in the event of future below market issuances, stock splits, stock dividends, combinations or similar events.

The following tables show the liabilities measured at fair value for the Preferred Stock derivatives above as of December 31, 2020, and December 31, 2019.

Description	Fair Value Measurements as of December 31, 2020		
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Derivative liability - other current liabilities	\$ —	\$ —	\$ 2,453
Derivative liability - other non-current liabilities	—	—	664
Description	\$ —	\$ —	\$ 3,117

Description	Fair Value Measurements as of December 31, 2019		
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Derivative liability - other current liabilities	\$ —	\$ —	\$ 60
Derivative liability - other non-current liabilities	—	—	2,235
Total	\$ —	\$ —	\$ 2,295

The following table presents the change in the Preferred Stock derivatives during the twelve months ended December 31, 2020 and 2019.

	Years Ended December 31,	
	2020	2019
Beginning balance	\$ 2,295	\$ —
Issuances	—	2,295
Change in fair value (1)	(493)	—
Other (2)	1,315	—
Ending balance	\$ 3,117	\$ 2,295

(1) Changes in the fair value are recognized in the “Other expense (income), net” line in the Consolidated Statements of Operations and Comprehensive Income (Loss). All of the change in fair value relates to the derivative liability held at December 31, 2020.

(2) In 2020, we determined that certain anti-dilution provisions of the Warrants require liability accounting; therefore, we reclassified the \$1.1 million value of the Warrants recorded in Stockholders’ Equity as of December 31, 2019, to a liability during the twelve months ended December 31, 2020.

The fair value of the leverage ratio put feature, the dividends withholding feature, and the contingent dividends feature utilizes unobservable inputs based on the best information available to determine the probability of the preferred stock remaining outstanding for future periods. These inputs include probability assessments of how long the Preferred Stock will remain outstanding, whether the leverage ratio threshold will be exceeded, and, as of December 31, 2019, whether approval would be obtained from common stockholders for issuance of common stock upon exercise of the Warrants and conversion or redemption of the Preferred Stock. Inputs also include the percentage of Preferred Stock held by non-U.S. resident holders and the applicable tax withholding rates for those holders. The probability of the Preferred Stock remaining in future periods ranged from 3% to 2% as of December 31, 2020, and from 97% to 2% as of December 31, 2019. The leverage ratio put feature also utilizes unobservable inputs to determine the probability of the leverage ratio put being exercisable as of March 31, 2023, which ranged from 10% to 1% as of December 31, 2020, and from 20% to 1% at December 31, 2019. These probabilities are determined based on management’s assessment of facts and circumstances at each reporting date. An increase in these probabilities would result in an increase in the derivative liability fair value. Given the Preferred Stock value changes by period as a result of dividends and redemption premiums, weighted average values for these assumptions are not meaningful.

The fair value of the Warrants feature is determined using a valuation model, which utilizes unobservable inputs to determine the probability that the Warrants will remain outstanding for future periods. The probabilities ranged from 80% to 5% and resulted in a weighted average term of 2.4 years as of December 31, 2020. An increase in these probabilities would result in an increase in the derivative liability fair value. As of December 31, 2019, the Warrants were classified in equity and valued using a term of 1.3 years.

Interest Rate Swap

We manage our exposure to fluctuations in interest rates using a mix of fixed and variable rate debt. On February 8, 2019, we entered into a \$700.0 million fixed-rate interest rate swap agreement that changed the LIBOR-based portion of the interest rate on a portion of our variable rate debt to a fixed rate of 2.4575% (the “interest rate swap”). The term of the interest rate swap is from the effective date of February 12, 2019, through the termination date of October 19, 2022 (the “interest rate swap term”). The interest rate swap effectively mitigated our exposures to the risks and variability of changes in LIBOR.

The notional amount of the interest rate swap decreases over time as presented in the following table:

	Notional Amount
February 12, 2019 - December 30, 2020	\$ 700,000,000
December 31, 2020 - December 30, 2021	466,667,000
December 31, 2021 - October 19, 2022	233,333,000

The objective of the interest rate swap was to eliminate the variability of cash flows in interest payments on the first \$700.0 million of variable rate debt attributable to changes in benchmark one-month LIBOR interest rates. The hedged risk was the interest rate risk exposure to changes in interest payments, attributable to changes in benchmark one-month LIBOR interest rates over the interest rate swap term. If one-month LIBOR were greater than the minimum percentage under the Senior Secured Term Loan, then the changes in cash flows of the interest rate swap were expected to exactly offset changes in cash flows of the variable rate debt. The interest rate swap was designated as a cash flow hedge at inception.

In connection with the prepayment of debt on October 6, 2020, with proceeds from the sale of our Life Sciences business, the outstanding balance of our variable rate debt fell below the \$700.0 million notional amount of the interest rate swap. After the prepayment, a majority of the hedged forecasted transactions (i.e. interest payments) were probable of not occurring, resulting in the recognition in earnings of \$14.8 million of the hedging loss in accumulated other comprehensive income in the fourth quarter of 2020. The remaining \$2.9 million of the hedging loss in accumulated other comprehensive income will be amortized into earnings as settlements occur. Finally, as the interest rate swap no longer qualifies as an effective hedge subsequent to October 6, 2020, changes in fair value of the interest rate swap are recognized in earnings each period. All amounts recognized in earnings related to the interest rate swap are recorded in the "Loss on interest rate swap" line on the Consolidated Statements of Operations and Comprehensive Income (Loss) except that cash settlements were recognized in "Interest expense" prior to October 6, 2020, and in "Derivative payments on interest rate swap" after October 6, 2020. Cash settlements are presented in operating activities on the Consolidated Statements of Cash Flows prior to October 6, 2020, and in investing activities after October 6, 2020. The following table presents the effect of the interest rate swap on the Consolidated Statements of Operations and Comprehensive Income (Loss).

	Years Ended December 31,	
	2020	2019
Interest expense	\$ 8,906	\$ 1,411
Derivative payments on interest rate swap	4,133	—
Loss on interest rate swap	11,669	—

As of December 31, 2020 and 2019, we reported a \$2.9 million loss and a \$9.4 million loss, respectively, net of tax, in accumulated other comprehensive income related to the interest rate swap.

The following tables present the liabilities measured at fair value on a recurring basis for the interest rate swap as of December 31, 2020, and December 31, 2019.

Description	Fair Value Measurements as of December 31, 2020		
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Derivative liability - other current liabilities	\$ —	\$ 11,022	\$ —
Derivative liability - other non-current liabilities	—	4,357	—
Total	\$ —	\$ 15,379	\$ —

Description	Fair Value Measurements as of December 31, 2019		
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Derivative liability - other current liabilities	\$ —	\$ 5,943	\$ —
Derivative liability - other non-current liabilities	—	6,290	—
Total	\$ —	\$ 12,233	\$ —

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. Counterparty to this derivative contract is a highly rated financial institution which we believe carries only a minimal risk of nonperformance.

Fixed Rate Debt

The fair value of our outstanding fixed-rate debt included in the “International lines of credit and other loans” line item within Note 12 to these Notes to Consolidated Financial Statements was \$14.4 million and \$9.6 million as of December 31, 2020 and 2019, respectively. These fair values represent Level 2 under the three-tier hierarchy described above. The carrying value of this fixed-rate debt was \$14.4 million and \$9.6 million as of December 31, 2020 and 2019, respectively.

Note 22. Quarterly Results of Operations (Unaudited)

The following tables present the quarterly results of operations for the years ended December 31, 2020 and 2019.

2020	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Net sales	\$ 116,213	\$ 78,532	\$ 113,761	\$ 119,028
Cost of sales (exclusive of depreciation and amortization)	94,478	65,058	90,076	93,982
Income (loss) from continuing operations	(108,077)	(17,566)	1,640	(15,487)
Income (loss) from discontinued operations, net of tax	(140,114)	(4,182)	20,330	162,864
Net income (loss)	(248,191)	(21,748)	21,970	147,377
Comprehensive income (loss)	(272,690)	(19,371)	31,851	170,440
Basic loss from continuing operations per common share	\$ (2.64)	\$ (0.49)	\$ (0.04)	\$ (0.44)
Basic net income (loss) per common share	\$ (5.96)	\$ (0.59)	\$ 0.45	\$ 3.41
Diluted loss from continuing operations per common share	\$ (2.64)	\$ (0.49)	\$ (0.04)	\$ (0.44)
Diluted net income (loss) per common share	\$ (5.96)	\$ (0.59)	\$ 0.45	\$ 3.41
2019	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Net sales	\$ 127,528	\$ 130,851	\$ 120,459	\$ 110,676
Cost of sales (exclusive of depreciation and amortization)	101,369	102,643	96,654	91,816
Loss from continuing operations	(11,517)	(4,453)	(4,836)	(9,943)
Loss from discontinued operations, net of tax	(8,001)	(2,830)	(1,019)	(4,142)
Net loss	(19,518)	(7,283)	(5,855)	(14,085)
Comprehensive loss	(22,053)	(15,742)	(17,976)	(4,210)
Basic loss from continuing operations per common share	\$ (0.27)	\$ (0.11)	\$ (0.12)	\$ (0.25)
Basic net loss per common share	\$ (0.47)	\$ (0.17)	\$ (0.14)	\$ (0.35)
Diluted loss from continuing operations per common share	\$ (0.27)	\$ (0.11)	\$ (0.12)	\$ (0.25)
Diluted net loss per common share	\$ (0.47)	\$ (0.17)	\$ (0.14)	\$ (0.35)

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

Dismissal of Previous Independent Registered Public Accounting Firm

On May 29, 2020, the Audit Committee of our Board of Directors dismissed PricewaterhouseCoopers LLP (“PwC”) as our independent registered public accounting firm.

The reports of PwC on our consolidated financial statements as of and for the years ended December 31, 2019 and 2018, did not contain an adverse opinion or a disclaimer of opinion and were not qualified or modified as to uncertainty, audit scope, or accounting principles.

During the years ended December 31, 2019 and 2018, and during the interim period through May 29, 2020, there were (i) no disagreements within the meaning of Item 304(a)(1)(iv) of Regulation S-K between the Company and PwC on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, any of which, if not resolved to PwC's satisfaction, would have caused PwC to make reference thereto in their reports, and (ii) no "reportable events" within the meaning of Item 304(a)(1)(v) of Regulation S-K, except as noted below.

For the year ended December 31, 2019, the material weaknesses in the Company's internal control over financial reporting previously reported in Item 9A of our Annual Report on Form 10-K for the year ended December 31, 2019, filed on March 16, 2020, related to (a) an ineffective 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 and (b) ineffective design and maintenance of monitoring controls over our Paragon Medical business. These material weaknesses contributed to additional material weakness in that we (1) did not design and maintain effective internal controls over the accounting for transactions in the revenue and receivables business process within our Paragon Medical business to determine whether the transactions occurred and were complete and accurate, and (2) did not design and maintain effective controls over certain information technology general controls within our Paragon Medical business for information systems that are relevant to the preparation of our financial statements. Additionally, for the fiscal year ended December 31, 2019, we did not maintain effective control activities at one of our smaller foreign subsidiaries in which certain employees intentionally did not operate the controls related to inventory quantities as designed that resulted in the creation of unsupported physical inventory counts and inventory quantity adjustments.

For the year ended December 31, 2018, the material weakness in the Company's internal control over financial reporting previously reported in Item 9A of our Annual Report on Form 10-K for the year ended December 31, 2018, filed on March 18, 2019, related to an ineffective 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.

Appointment of New Independent Registered Public Accounting Firm

On May 29, 2020, the Audit Committee approved the engagement of Grant Thornton LLP ("Grant Thornton") as our independent registered public accounting firm for the year ending December 31, 2020, effective immediately. During the Company's two most recent years ended December 31, 2019 and 2018, and during the interim period through May 29, 2020, neither the Company nor anyone acting on its behalf consulted with Grant Thornton regarding any of the matters described in Items 304(a)(2)(i) and (ii) of Regulation S-K.

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 Rules 13a-15(e) and 15d-15(e) of the Exchange Act). Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of December 31, 2020, 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, 2020, based on the criteria described in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on this assessment, management has determined that the Company's internal control over financial reporting was effective as of December 31, 2020.

Grant Thornton LLP, the independent registered public accounting firm that has audited our consolidated financial statements, has audited the effectiveness of the Company's internal control over financial reporting as of December 31, 2020, as stated in their report included in Item 8 of this Annual Report.

Remediation of Previously Identified Material Weaknesses

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.

In our 2019 Annual Report, management identified the following control deficiencies that constituted material weaknesses in our internal control over financial reporting as of December 31, 2019:

- 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. This material weakness resulted in immaterial misstatements to income tax receivable; 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; other non-current liabilities; additional paid in capital; accumulated deficit; accumulated other comprehensive income (loss); 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 interim and annual periods in the years ended December 31, 2019, 2018 and 2017, and prior periods.
- We did not design and maintain effective monitoring controls over our Paragon Medical business. Specifically, we did not maintain personnel and systems that were sufficient to ensure the adequate monitoring of control activities for certain processes. This material weakness did not result in a material misstatement to the financial statements.

These material weaknesses contributed to the material weaknesses described below, which were also disclosed in our 2019 Annual Report:

- We did not design and maintain effective internal controls over the accounting for transactions in the revenue and receivables business process within our Paragon Medical business to determine whether the transactions occurred and were complete and accurate. This material weakness did not result in a material misstatement to the interim or annual consolidated financial statements.
- We did not design and maintain effective controls over certain information technology ("IT") general controls within our Paragon Medical business for information systems that are relevant to the preparation of our financial statements. Specifically, we did not design and maintain: (i) program change management controls to ensure that IT program and data changes affecting financial IT applications and underlying accounting records are identified, tested, authorized, and implemented appropriately; (ii) user access controls to ensure appropriate segregation of duties and that adequately restrict user and privileged access to certain financial applications, programs, and data to appropriate Company personnel; and (iii) computer operations controls to ensure that critical batch jobs are monitored and data backups are authorized and monitored.

These IT deficiencies did not result in a material misstatement to the financial statements; however, the deficiencies, when aggregated, could impact the effectiveness of IT-dependent controls (such as automated controls that address the risk of material misstatement to one or more assertions, along with the IT controls and underlying data that support the effectiveness of system-generated data and reports) that could result in misstatements potentially impacting all financial statement accounts and disclosures that would not be prevented or detected. Accordingly, management has determined these deficiencies in the aggregate constitute a material weakness.

As disclosed in our 2019 Annual Report, we did not maintain effective control activities at one of our smaller foreign subsidiaries within our Mobile Solutions Brazil business. Specifically, certain employees at one of our smaller foreign subsidiaries intentionally did not operate the controls related to inventory quantities as designed that resulted in the creation of unsupported physical inventory counts and inventory quantity adjustments. This material weakness resulted in a revision to inventories, cost of sales, and accumulated other comprehensive income/loss within previously issued financial statements for the interim and annual periods in the years ended December 31, 2019, 2018, and 2017.

During the year ended December 31, 2020, management successfully completed a comprehensive plan for remediation of the material weaknesses. This plan included the following actions:

- We have hired qualified professionals for critical roles within our finance department. We also enhanced and implemented new processes, controls, and systems to strengthen our internal control over financial reporting, such as

standardized policies and procedures, implementation of a consolidation system, and enhanced reviews using reporting metrics.

- We have reinforced existing inventory count and reporting procedures in our Mobile Solutions Brazil business and have provided training to finance team members on these procedures.

As of December 31, 2020, the remediation measures described above had been implemented, and we had sufficient time to test the operating effectiveness and remediate the material weaknesses noted above.

All of the material weaknesses arising from deficiencies in the Paragon Medical business, which was part of our Life Sciences business, were removed upon the sale of our Life Sciences business on October 6, 2020, as disclosed in Note 2 of the Notes to Consolidated Financial Statements.

Changes in Internal Control Over Financial Reporting

Except for changes we made in connection with the implementation of the remediation plan described above, there have been no changes in our internal control over financial reporting (as defined in the Exchange Act Rules 13a-15(f) and 15d-15(f)) that occurred during the quarter ended December 31, 2020, 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 our definitive proxy statement to be filed with the Securities and Exchange Commission within 120 days after December 31, 2020 (“our definitive proxy statement”), and 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”), 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. 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 and the Director Nominees — 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)

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants, and rights (a)	Weighted-average exercise price of outstanding options, warrants, and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	871	\$ 12.41	2,729
Equity compensation plans not approved by security holders	—	—	—
Total	871	\$ 12.41	2,729

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

The information required by this Item 13 of Form 10-K regarding review, approval, or ratification of transactions with related persons is contained in the 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.

The information required by this Item 13 of Form 10-K regarding director independence is contained in the section entitled “Information about the Directors and the Director Nominees” 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

The information required by this Item 14 of Form 10-K concerning our accounting fees and services is contained in the section entitled “Fees Paid to Registered Independent 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. Exhibit and Financial Statement Schedules

(a) Documents Filed as Part of this Report

1. Financial Statements

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

	Page
Reports of Independent Registered Public Accounting Firms	36
Consolidated Statements of Operations and Comprehensive Income (Loss)	40
Consolidated Balance Sheets	41
Consolidated Statements of Changes in Stockholders' Equity	42
Consolidated Statements of Cash Flows	43
Notes to Consolidated Financial Statements	44

2. Financial Statement Schedules

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

3. Exhibits

The required information is reflected in the 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

Exhibit Number	Exhibit Description	Incorporation by Reference			
		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	Purchase Agreement, dated as of July 10, 2017, by and between NN, Inc. and TSUBAKI NAKASHIMA Co., Ltd.	8-K	000-23486	2.1	July 10, 2017
2.4	Stock Purchase Agreement, dated as of April 2, 2018, by and among NN, Inc., Precision Engineered Products LLC, Paragon Equity LLC, and PMG Intermediate Holding Corporation	8-K	000-23486	2.1	April 3, 2018
2.5	Stock Purchase Agreement, dated as of August 22, 2020, by and between NN, Inc., Precision Engineered Products Holdings, Inc. and ASP Navigate Acquisition Corp.	8-K	001-39268	2.1	August 24, 2020
3.1	Restated Certificate of Incorporation of NN, Inc.	S-3	333-89950	3.1	June 6, 2002
3.2	Certificate of Amendment to Restated Certificate of Incorporation of NN, Inc. (Declassification).	8-K	000-23486	3.1	May 20, 2019
3.3	Certificate of Amendment to Restated Certificate of Incorporation of NN, Inc. (Share Increase)	8-K	000-23486	3.2	May 20, 2019
3.4	Certificate of Designation of Series A Junior Participating Preferred Stock of NN, Inc., as filed with the Secretary of the State of Delaware	8-K	000-23486	3.1	December 18, 2008
3.5	Certificate of Designation of Series B Convertible Preferred Stock of NN, Inc.	8-K	000-23486	3.1	December 11, 2019
3.6	Certificate of Designations of Series C Junior Participating Preferred Stock of NN, Inc.	8-K	000-23486	3.1	April 16, 2020
3.7	Amended and Restated By-Laws of NN, Inc.	8-K	000-23486	3.1	November 20, 2015
3.8	Amendment to Amended and Restated Bylaws of NN, Inc.	8-K	000-23486	3.3	May 20, 2019
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	Stockholders' Agreement, effective as of August 29, 2014, by and between NN, Inc. and John C. Kennedy	8-K	000-23486	4.1	September 2, 2014
4.3	Form of Common Stock Purchase Warrant	8-K	000-23486	4.1	December 11, 2019
4.4	Rights Agreement, dated as of April 15, 2020, between NN, Inc. and Computershare Inc., as Rights Agent.	8-K	000-23486	4.1	April 16, 2020
4.5#	Description of Securities				
10.1*	NN, Inc. 2005 Stock Incentive Plan	S-8	333-130395	4.1	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

Exhibit Number	Exhibit Description	Incorporation by Reference			
		Form	SEC File No.	Exhibit	Filing Date
10.5	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
10.6	Indemnity Agreement, effective as of August 29, 2014, by and among NN, Inc. and each of the shareholders of Autocam Corporation identified therein	8-K	000-23486	10.4	September 2, 2014
10.7*	Executive Employment Agreement, dated September 9, 2014, between NN, Inc. and Warren A. Veltman	10-K	000-23486	10.27	March 16, 2015
10.8	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
10.9	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
10.10	NN, Inc. 2016 Omnibus Incentive Plan	DEF14A	000-23486	Appendix A	November 10, 2016
10.11	Form of Incentive Stock Option Agreement under the 2016 Omnibus Incentive Plan	10-K	000-23486	10.18	March 16, 2017
10.12	Form of Nonqualified Stock Option Agreement under the 2016 Omnibus Incentive Plan	10-K	000-23486	10.19	March 16, 2017
10.13	Form of Restricted Share Award Agreement under the 2016 Omnibus Incentive Plan	10-K	000-23486	10.20	March 16, 2017
10.14	Form of Performance Share Unit Award Agreement under the 2016 Omnibus Incentive Plan	10-K	000-23486	10.21	March 16, 2017
10.15*	Separation Agreement, dated as of April 1, 2017, by and between NN, Inc. and Matthew S. Heiter.	10-Q	000-23486	10.2	May 4, 2017
10.16	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
10.17	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
10.18	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
10.19	Commitment Letter, dated as of April 2, 2018, by and among NN, Inc., SunTrust Bank and SunTrust Robinson Humphrey, Inc.	8-K	000-23486	10.1	April 3, 2018

Exhibit Number	Exhibit Description	Incorporation by Reference			
		Form	SEC File No.	Exhibit	Filing Date
10.20	Amendment No. 4 to Amended and Restated Credit Agreement, dated May 7, 2018, by and among NN, Inc., the affiliated Guarantors party thereto, SunTrust Bank, SunTrust Robinson Humphrey, Inc. and the Lenders party thereto	8-K	000-23486	10.1	May 7, 2018
10.21	Amendment No. 5 to Amended and Restated Credit Agreement, dated December 26, 2018, 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	December 26, 2018
10.22	Cooperation Agreement dated February 25, 2019, by and among NN, Inc., Legion Partners Asset Management, LLC, and certain persons listed therein	8-K	000-23486	10.1	February 26, 2019
10.23	Amendment No. 6 to Amended and Restated Credit Agreement, dated March 15, 2019, 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	March 18, 2019
10.24*	NN, Inc. 2019 Omnibus Incentive Plan.	DEF14A	000-23486	Appendix C	April 8, 2019
10.25*	Separation Agreement, dated as of April 1, 2017, by and between NN, Inc. and D. Gail Nixon.	10-Q	000-23486	10.1	May 10, 2019
10.26*	Separation Agreement, dated as of April 1, 2017, by and between NN, Inc. and J Robbie Atkinson.	10-Q	000-23486	10.2	May 10, 2019
10.27	Amendment No. 7 to Amended and Restated Credit Agreement, dated June 11, 2019, 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	June 12, 2019
10.28*	Separation Agreement and Release, dated as of July 13, 2019, by and between NN, Inc. and Thomas C. Burwell, Jr.	8-K	000-23486	10.1	July 15, 2019
10.29*	Form of Incentive Stock Option Agreement under the 2019 Omnibus Incentive Plan.	10-Q	000-23486	10.4	August 9, 2019
10.30*	Form of Nonqualified Stock Option Agreement under the 2019 Omnibus Incentive Plan.	10-Q	000-23486	10.5	August 9, 2019
10.31*	Form of Restricted Share Award Agreement under the 2019 Omnibus Incentive Plan.	10-Q	000-23486	10.6	August 9, 2019
10.32*	Form of Performance Share Unit Award Agreement under the 2019 Omnibus Incentive Plan.	10-Q	000-23486	10.7	August 9, 2019
10.33*	Letter of Understanding and Relocation Agreement, effective as of August 23, 2019, by and between NN, Inc. and Thomas DeByle.	8-K	000-23486	10.1	August 27, 2019
10.34*	Form of Separation Agreement.	8-K	000-23486	10.2	August 27, 2019
10.35*	Separation Agreement and General Release, dated as of September 15, 2019, by and between Richard D. Holder and NN, Inc.	8-K	000-23486	10.1	September 16, 2019
10.36*	Amendment No. 1 to Executive Employment Agreement, dated as of September 20, 2019, by and between NN, Inc. and Warren A. Veltman	8-K	000-23486	10.1	September 24, 2019
10.37*	Separation Agreement and General Release, dated as of November 24, 2019, by and between J. Robert Atkinson and NN, Inc.	8-K	000-23486	10.1	November 25, 2019
10.38	Securities Purchase Agreement, dated December 5, 2019, by and among NN, Inc. and the Investors.	8-K	000-23486	10.1	December 11, 2019

Exhibit Number	Exhibit Description	Incorporation by Reference			
		Form	SEC File No.	Exhibit	Filing Date
10.39	Registration Rights Agreement, dated as of December 11, 2019, by and among NN, Inc. and the Investors.	8-K	000-23486	10.2	December 11, 2019
10.40	Amendment No. 8 to Amended and Restated Credit Agreement, dated December 19, 2019, 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	December 19, 2019
10.41*	Amendment No. 2 to Executive Employment Agreement, dated as of February 17, 2020, by and between NN, Inc. and Warren A. Veltman	8-K	000-23486	10.1	February 20, 2020
10.42*	Executive Employment Agreement dated October 3, 2014, between the Company and John R. Buchan	10-Q	001-39268	10.1	May 11, 2020
10.43*	Executive Employment Agreement dated September 9, 2014, between the Company and Christopher Qualters	10-Q	001-39268	10.2	May 11, 2020
10.44	Amendment No. 1 to Second Amended and Restated Credit Agreement, dated as of July 29, 2020, by and among NN, Inc., certain NN, Inc. subsidiaries named therein, Truist Bank, JPMorgan Chase Bank, N.A., KeyBank National Association and HomeTrust Bank	8-K	001-39268	10.1	July 31, 2020
10.45	Amendment No. 2 to Second Amended and Restated Credit Agreement, dated as of August 22, 2020, by and among NN, Inc., certain NN, Inc. subsidiaries named therein, Truist Bank, JPMorgan Chase Bank, N.A., KeyBank National Association and HomeTrust Bank	8-K	001-39268	10.1	August 24, 2020
10.46*	Form of Retention Bonus Agreement	8-K	001-39268	10.1	October 19, 2020
21.1#	List of Subsidiaries of NN, Inc.				
23.1#	Consent of Grant Thornton LLP, Independent Registered Public Accounting Firm				
23.2#	Consent of PricewaterhouseCoopers 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				

101.INS#	XBRL Instance Document
101.SCH#	XBRL Taxonomy Extension Service
101.CAL#	Taxonomy Calculation Linkbase
101.LAB#	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

This certification is being furnished solely to accompany this Annual Report on Form 10-K pursuant to 18 U.S.C. Section 1350 and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934 and is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filings.

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/ WARREN A. VELTMAN
Warren A. Veltman
President, Chief Executive Officer, and Director

Dated: March 15, 2021

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

<u>Name and Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ WARREN A. VELTMAN</u> Warren A. Veltman	President, Chief Executive Officer, and Director (Principal Executive Officer)	March 15, 2021
<u>/s/ THOMAS D. DEBYLE</u> Thomas D. DeByle	Senior Vice President- Chief Financial Officer (Principal Financial Officer)	March 15, 2021
<u>/s/ MICHAEL C. FELCHER</u> Michael C. Felcher	Vice President- Chief Accounting Officer (Principal Accounting Officer)	March 15, 2021
<u>/s/ JERI J. HARMAN</u> Jeri J. Harman	Non-Executive Chairman, Director	March 15, 2021
<u>/s/ RAYNARD D. BENVENUTI</u> Raynard D. Benvenuti	Director	March 15, 2021
<u>/s/ ROBERT E. BRUNNER</u> Robert E. Brunner	Director	March 15, 2021
<u>/s/ CHRISTINA E. CARROLL</u> Christina E. Carroll	Director	March 15, 2021
<u>/s/ STEVEN T. WARSHAW</u> Steven T. Warshaw	Director	March 15, 2021
<u>/s/ TOM H. WILSON, JR.</u> Tom H. Wilson, Jr.	Director	March 15, 2021

**DESCRIPTION OF THE REGISTRANT'S SECURITIES
REGISTERED PURSUANT TO SECTION 12 OF THE
SECURITIES EXCHANGE ACT OF 1934**

NN, Inc. ("NN," the "Company," "we," "us," and "our") has two classes of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"): (i) our common stock, par value \$0.01 per share ("Common Stock"), and (ii) our preferred stock purchase rights (the "Rights").

Authorized Shares of Capital Stock

NN's authorized capital stock consists of 95,000,000 shares, consisting of 90,000,000 shares of Common Stock, and 5,000,000 shares of preferred stock, par value \$.01 per share ("Preferred Stock").

DESCRIPTION OF COMMON STOCK

The following description of Common Stock is a summary and is qualified in its entirety by reference to the actual terms and provisions contained in our Restated Certificate of Incorporation, as amended from time to time (the "Certificate of Incorporation"), and our Amended and Restated Bylaws, as amended from time to time (the "Bylaws"), each of which is filed as an exhibit to our Annual Report on Form 10-K of which this Exhibit 4.5 is a part and incorporated by reference herein. We encourage you to read our Certificate of Incorporation, our Bylaws, and the applicable provisions of the Delaware General Corporation Law ("DGCL"), for additional information.

Dividends

Subject to preferential rights of any other class or series of preferred stock, holders of Common Stock may receive dividends pro rata out of assets that we can legally use to pay dividends, when, as and if they are declared by our board of directors (our "Board").

Voting Rights

Holders of Common Stock will have the exclusive power to vote on all matters presented to our stockholders, including the election of directors, except as otherwise provided by Delaware law or as provided with respect to any other class or series of stock. Holders of Common Stock are entitled to one vote per share. There is no cumulative voting in the election of our directors, which means that, subject to any rights to elect directors that are granted to the holders of any class or series of preferred stock, a majority of the votes cast at a meeting of stockholders at which a quorum is present is required to elect a director in any uncontested election and a plurality of the votes cast at a meeting of stockholders at which a quorum is present is required to elect a director in any contested election.

Liquidation Rights

In the event we are liquidated, dissolved or our affairs are wound up, after we pay or make adequate provision for all of our known debts and liabilities, each holder of Common Stock will receive dividends pro rata out of assets that we can legally use to pay distributions, subject to any rights that are granted to the holders of any class or series of preferred stock.

Fully Paid and Nonassessable

The outstanding shares of our Common Stock are fully paid and nonassessable.

Absence of Other Rights

Holders of Common Stock have no preference, appraisal or exchange rights, except for any appraisal rights provided by Delaware law. Furthermore, holders of common stock have no conversion, sinking fund or redemption rights, or preemptive rights to subscribe for any of our securities.

Listing

Our Common Stock is listed on the Nasdaq Stock Market LLC under the symbol “NNBR.”

Transfer Agent and Registrar

The transfer agent and registrar for our Common Stock is Computershare Trust Company, N.A.

DESCRIPTION OF PREFERRED STOCK

Our Certificate of Incorporation authorizes our board of directors, without stockholder approval, to designate and issue up to 5,000,000 shares of preferred stock, par value \$.01 per share, in one or more series and to fix the rights, preferences, privileges and restrictions granted to or imposed upon each such series of preferred stock, including voting rights, dividend rights, conversion rights, terms of redemption, liquidation preference, sinking fund terms, subscription rights and the number of shares constituting any series or the designation of a series. Our board of directors can issue, without stockholder approval, preferred stock with voting and conversion rights that could adversely affect the voting power of the holders of common stock and reduce the likelihood that such holders will receive dividend payments or payments upon liquidation. Such issuance could have the effect of decreasing the market price of the common stock. The issuance of preferred stock or even the ability to issue preferred stock could also have the effect of delaying, deterring or preventing a change of control or other corporate action.

Series A Preferred Stock

We have authority to issue 200,000 shares of Series A Preferred Stock, par value \$.01 per share, all of which shares are designated as “Series A Junior Participating Preferred Stock.” The powers, preferences, rights, qualifications, limitations and restrictions of shares of our preferred stock and our Series A Preferred Stock have been fixed in amendments to our Certificate of Incorporation. No shares of Series A Preferred Stock are issued and outstanding.

Series B Preferred Stock

The following description of our Series B Convertible Preferred Stock, par value \$0.01 per share (the “Series B Preferred Stock”), is a summary and is qualified in its entirety by reference to the actual terms and provisions contained in our Certificate of Incorporation (including the Certificate of Designation for the Series B Preferred Stock) and our Bylaws, each of which is filed as an exhibit to our Annual Report on Form 10-K of which this Exhibit 4.5 is a part and incorporated by reference herein. We encourage you to read our Certificate of Incorporation, our Bylaws, and the DGCL, for additional information.

On December 11, 2019 (the “Issuance Date”), pursuant to that certain Securities Purchase Agreement, dated December 5, 2019, by and among the Company and the purchasers named therein and party thereto (the “Purchase Agreement”), we issued 100,000 shares of Series B Preferred Stock, all of which are currently outstanding.

Dividends

Holders of Series B Preferred Stock are entitled to receive, when, as and if declared by the board of directors, and we shall pay, out of funds lawfully available therefor, cumulative dividends payable quarterly in arrears at the rate per share of 10.625% per annum; provided that if we does not obtain Stockholder Approval (as defined in the Purchase Agreement) prior to the earlier of (i) June 30, 2020 and (ii) at our 2020 annual meeting of stockholders, the rate shall increase to 11.625% per annum until such Stockholder Approval has been obtained. Series B Preferred Stock will fully participate on an as-converted basis in any dividends paid on the Common Stock, using a conversion rate based on a fixed conversion price equal to \$7.91.

Voting Rights

Holders of the Series B Preferred Stock shall not have any voting rights, other than with respect to: (i) amendments to our organizational documents that generally have an adverse effect on the Series B Preferred Stock as well as creation or issuance of senior or parity securities; (ii) issuance of additional Series B Preferred Stock after the Issuance Date; (iii) incurrence by us and our subsidiaries of indebtedness other than (x) any indebtedness that would be permitted to be incurred under our current credit agreement, and (y) (A) indebtedness incurred in connection with refinancing our existing indebtedness outstanding, subject to certain limitations, and (B) indebtedness the net proceeds of which are contemporaneously used to redeem all outstanding shares of Series B Preferred Stock; and (iv) the sale of assets outside the ordinary course of business of NN, unless (A) such assets are sold for fair market value, (B) 85% of the consideration received in connection with the asset sale is in the form of cash or cash equivalents and (C) we use the net cash proceeds from such asset sale to permanently repay

its indebtedness, and any net cash proceeds remaining thereafter in excess of \$25 million are used to redeem shares of Series B Preferred Stock and/or pay Series B dividends.

Liquidation Preference

The Series B Preferred Stock has a liquidation preference of \$1,000 per share of Series B Preferred Stock. In the event of a liquidation, holders of Series B Preferred Stock will receive the greater of (i) the liquidation preference, plus any Series B dividend accrued and unpaid at the time of such liquidation, and (ii) the amount such holder of Series B Preferred Stock would have received upon conversion of its shares of Series B Preferred Stock into shares of Common Stock using a conversion rate based on a fixed conversion price equal to \$7.91.

Conversion and Exchange Rights

The conversion rate for the Series B Preferred Stock equals (i) the liquidation preference, plus any accrued and unpaid Series B dividends, less any dividend withholding taxes that we are entitled to set off, divided by (ii) the then-applicable conversion price described below, which conversion price shall be no less than \$1.00. In addition, under no circumstances will the aggregate number of Common Stock issued upon conversion of Series B Preferred Stock exceed 40,000,000 unless our Certificate of Incorporation is amended to increase the authorized number of shares of Common Stock.

If our consolidated net leverage ratio is equal to or greater than 3.50 to 1.00 as of March 31, 2023 or any quarter ending thereafter, holders of Series B Preferred Stock will have the right to convert at a conversion price that equals 90% of the 30-day volume-weighted average price, during a 60-day conversion window.

Holders of the Series B Preferred Stock will also have the right to convert up to 25% of their shares of Series B Preferred Stock into Common Stock in the quarter following the completion of our fiscal year ending December 31, 2023, and each quarter ending thereafter at a conversion price that equals a 30-day volume-weighted average price, during a 60-day conversion window.

Redemption

We may redeem the shares of Series B Preferred Stock for an amount equal to the applicable redemption price set forth below expressed as a percentage of its Liquidation Preference, plus any accrued and unpaid Series B dividends, minus any dividend withholding taxes that we are entitled to set off pursuant to the terms of the Purchase Agreement.

<u>Year</u>	<u>Percentage of Liquidation Preference</u>
On or before March 31, 2021	105%
After March 31, 2021 and on or before December 31, 2021	110%
After December 31, 2021 and on or before December 31, 2022	120%
After December 31, 2022	130%

The March 31, 2021 date shall be deemed May 15, 2021 if we have entered into a definitive agreement with respect to a transaction that constitutes a Change of Control (as defined in the Purchase Agreement) on or prior to March 31, 2021. The redemption price and any accrued and unpaid dividends shall be paid in cash unless our outstanding shares of Common Stock have a market capitalization in excess of \$750 million on the date of the redemption notice, in which case the redemption price may be paid in cash or a combination of cash and shares of Common Stock; provided that the number of shares of Common Stock to be delivered will be determined based on 95% of the 30-trading day volume-weighted average price.

Limitation on Redemption and Conversion

Unless and until the Stockholder Approval is obtained, the holders shall not have the right to acquire shares of Common Stock pursuant to a redemption or conversion of the Series B Preferred Stock in a manner that would violate Nasdaq Listing Rule 5635. Conversion and redemption of Series B Preferred Stock are also subject to certain other beneficial ownership limitations applicable to any holder.

Limitation on Dividends and Redemptions of Junior Securities

Without the prior written consent of the holders of a majority of the outstanding shares of Series B Preferred Stock, we will not, nor permit any subsidiary to, redeem or purchase or otherwise acquire directly or indirectly any junior securities, nor shall we directly or indirectly pay or declare any dividend upon any junior securities (including any spin-off or other dividend or distribution of properties, securities or any other assets), subject to certain exceptions.

Additional Consent Rights

Until affiliates of Corre Partners Management, L.L.C. and Legion Partners Asset Management, LLC (collectively, the "Specified Holders") cease to hold specified amounts of Series B Preferred Stock, we shall not, without the prior consent of each Specified Holder, consummate or effect Change of Control transactions, other than (a) a transaction not approved by our board of directors prior to the consummation thereof or (b) a Qualifying Transaction (as defined in the Purchase Agreement).

Series C Preferred Stock

Our Board has authority to issue 200,000 shares of our Preferred Stock designated as Series C Junior Participating Preferred Stock, par value \$.01 per share (the "Series C Preferred Stock"). The powers, preferences, rights, qualifications, limitations and restrictions of shares of our preferred stock and our Series C Preferred Stock have been fixed in amendments to our Certificate of Incorporation (including the Certificate of Designation for the Series C Preferred Stock). No shares of Series C Preferred Stock are issued and outstanding.

Rights Agreement

On April 15, 2020, we entered into the Rights Agreement (the "Rights Agreement"), by and between us and Computershare Inc., as rights agent (the "Rights Agreement").

Rights Dividend

Pursuant to the Rights Agreement, our Board declared a dividend of one preferred share purchase right (a "Right") for each outstanding share of our Common Stock to stockholders of record as of the close of business on April 27, 2020 (the "Record Date"). In addition, one Right will automatically attach to each share of Common Stock that becomes outstanding between the Record Date and the earliest of (i) the Distribution Date (defined below), (ii) the redemption of the Rights or (iii) the expiration of the Rights. Each Right entitles the registered holder thereof to purchase one one-thousandth of a share of our Series C Preferred Stock, at a purchase price of \$31.50 per one-thousandth of a share of Series C Preferred Stock (the "Purchase Price"), subject to adjustment as provided in the Rights Agreement and summarized below. Until a Right is exercised, the holder thereof, as such, will have no rights as a stockholder of NN, including, without limitation, the right to vote or to receive dividends.

Distribution Date

Initially, the Rights will be evidenced by the certificates representing shares of Common Stock then outstanding (or, in the case of shares of Common Stock held in uncertificated form, by the transaction statement or other record of ownership of such shares of Common Stock), and no separate Right Certificates (defined below) will be distributed. Upon the occurrence of the Distribution Date, the Rights will separate from the shares of Common Stock and, as soon as practicable thereafter, separate certificates evidencing the Rights ("Right Certificates") will be mailed to holders of record of the shares of Common Stock as of the close of business on the Distribution Date, and such separate Right Certificates alone will evidence the Rights. The "Distribution Date" is the earlier of (i) the close of business on the 10th day after the first date of public announcement that any person has become an Acquiring Person (as defined in the Rights Agreement) (such date, the "Shares Acquisition Date") (or, if the 10th day after the Shares Acquisition Date occurs before the Record Date, the close of business on the Record Date) and (ii) the close of business on the 10th day (or such later date as the Board shall determine, prior to such time as any person becomes an Acquiring Person) after the date that a tender or exchange offer by any person is first published, sent or given, if, upon consummation thereof, such person would become an Acquiring Person.

Until the earliest of the Distribution Date, the date that the Rights are redeemed by the Board and the date on which the Rights expire, (i) in the case of certificated shares, the Rights associated with the shares of Common Stock represented by any certificate will be evidenced by such certificate and the surrender for transfer of any such certificate shall also constitute the transfer of the Rights associated with the shares of Common Stock represented thereby, and (ii) in the case of the shares of Common Stock held in uncertificated form, the Rights associated with the shares of Common Stock shall be evidenced by the balances indicated in the book-entry account system of the transfer agent for such shares and the transfer of any shares of

Common Stock in the book-entry account system of the transfer agent for such shares shall also constitute the transfer of the Rights associated with such shares. Therefore, until the Distribution Date, the Rights may be transferred with and only with the underlying shares of Common Stock. After that date, the Rights may be transferred only on the registry book of the Rights Agent. Any Rights held by an Acquiring Person will become null and void and may not be exercised.

Exercisability

Flip In. In the event that any person or group becomes an Acquiring Person, all holders of Rights (not including the Rights of the Acquiring Person, which will have become null and void) may, for the Purchase Price, purchase shares of Common Stock (or, in certain circumstances, a combination of shares of Common Stock and shares of Series C Preferred Stock) with a then-current market value of twice the Purchase Price, based on the market value of the Common Shares.

Flip Over. In the event that, at any time after a person or group has become an Acquiring Person, (i) the we or our subsidiaries are party to a merger with another company in which the shares of Common Stock are converted into other securities, cash or property, or (ii) we sell or otherwise transfer 50% or more of our assets or earning power of to another company, all holders of Rights (not including the Rights of the Acquiring Person, which will have become null and void) may, for the Purchase Price, purchase shares of common stock of such other company with a then-current market value of twice the Purchase Price, based on the market price of such common stock prior to such merger or sale.

Expiration

The Rights will expire at the close of business on March 31, 2021, unless earlier redeemed or exchanged by us as described below.

Exchange

After a person or group becomes an Acquiring Person, but before an Acquiring Person owns 50% or more of the outstanding shares of Common Stock, the Board may extinguish the Rights by exchanging one share of Common Stock (or, in certain circumstances, shares of Series C Preferred Stock or a combination of shares of Common Stock and shares of Series C Preferred Stock) for each Right (not including the Rights of the Acquiring Person, which will have become null and void).

Anti-Dilution Provisions

The Board may adjust the Purchase Price, the number of shares of Series C Preferred Stock issuable and the number of outstanding Rights to prevent dilution that may occur from a stock dividend, a stock split, or a reclassification of the shares of Series C Preferred Stock or shares of Common Stock. No adjustments to the Purchase Price of less than 1% will be made.

Series C Preferred Stock Provisions

Shares of Series C Preferred Stock purchasable upon exercise of the Rights will not be redeemable. Each thousandth of a Preferred Share will entitle holders, in preference to the holders of shares of Common Stock, to receive, when and if declared, quarterly dividends in an amount per share equal to the greater of (i) \$0.01 and (ii) subject to adjustment, the aggregate dividend amount declared per share of Common Stock. In the event of liquidation, the holders of the shares of Series C Preferred Stock will be entitled to a preferential liquidation payment equal to the greater of (x) \$1,000 per share of Series C Preferred Stock (plus an amount equal to accrued and unpaid dividends and distributions thereon) and (y) an aggregate amount per share of Series C Preferred Stock subject to certain adjustments equal to 1,000 times the aggregate amount to be distributed per share to the holders of the shares of Common Stock. Finally, in the event of any merger, consolidation or other transaction in which shares of Common Stock are exchanged, each thousandth of a shares of Series C Preferred Stock will be entitled to receive (subject to certain adjustments) the amount received per share of Common Stock. These rights are protected by customary anti-dilution provisions.

No fractional shares of Series C Preferred Stock will be issued other than fractions which are integral multiples of one one-thousandth of a share of Series C Preferred Stock (which may, at our election, be evidenced by depositary receipts), but, in lieu thereof, an adjustment in cash will be made based on the closing price of the shares of Series C Preferred Stock on the last trading day prior to the date of exercise.

Redemption

The Board may, at its option, at any time prior to such time as any person or group becomes an Acquiring Person, redeem all but not less than all the then outstanding Rights at a redemption price of \$0.001 per Right, subject to adjustment (the

“Redemption Price”). Immediately upon the action of the Board ordering redemption of the Rights, the Rights will terminate and the only right of the holders of Rights will be to receive the Redemption Price.

Amendments

We may from time to time supplement or amend the Rights Agreement without the approval of any holders of Right Certificates in order to, among other things, make any provisions with respect to the Rights, the Rights Agreement or otherwise, which we may deem necessary or desirable; provided, however, that from and after such time as any person or group becomes an Acquiring Person, the Rights Agreement may not be amended in any manner which would adversely affect the interests of the holders of Rights.

CERTAIN MATTERS OF CORPORATE GOVERNANCE

Delaware Anti-Takeover Statute

We are subject to the provisions of Section 203 of the DGCL regulating corporate takeovers. In general, Section 203, subject to certain exceptions, prohibits a publicly held Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years following the date that such person or entity became an interested stockholder, unless:

- prior to such date, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding specified shares; or
- at or subsequent to such date of the transaction that resulted in a person or entity becoming an interested stockholder, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

The application of Section 203 may limit the ability of stockholders to approve a transaction that they may deem to be in their best interests. In addition, Section 203 makes it more difficult for an interested stockholder to effect various business combinations with a corporation for a three-year period, although the stockholders may, by adopting an amendment to our Certificate of Incorporation or Bylaws, elect not to be governed by this section, effective 12 months after adoption.

In general, Section 203 defines “business combination” as:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, lease, exchange, mortgage, pledge, transfer or other disposition of 10% or more of the assets of the corporation to or with the interested stockholder;
- subject to certain exceptions, any transaction which results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an “interested stockholder” as any person that is:

- the owner of 15% or more of the outstanding voting stock of the corporation;
- an affiliate or associate of the corporation and was the owner of 15% or more of the outstanding voting stock of the corporation at any time within three years immediately prior to the relevant date; or
- an affiliate or associate of the above.

Our Certificate of Incorporation and Bylaws do not exclude us from the restrictions imposed under Section 203. We anticipate that the provisions of Section 203 may encourage companies 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 resulted in the stockholder becoming an interested stockholder.

Other Corporate Governance Matters

Until the election of directors at the 2021 annual meeting of stockholders, the directors, other than those who may be elected by the holders of any series of Preferred Stock under specified circumstances, shall be divided, with respect to the time for which they severally hold office, into three classes, as nearly equal in number as is reasonably possible. Each director elected at or prior to the 2018 annual meeting shall be elected for a term expiring on the date of the third annual meeting following the annual meeting at which the director was elected. Each director elected at the 2019 annual meeting shall be elected for a one-year term expiring at the 2020 annual meeting of stockholders. Each director elected at the 2020 annual meeting shall be elected for a one-year term expiring at the 2021 annual meeting of stockholders. At the 2021 annual meeting and each annual meeting thereafter, all directors shall be elected for a one-year term expiring at the next annual meeting. Directors elected to succeed those directors whose terms then expire shall be elected for a term of office to expire at the succeeding annual meeting after their election, with each director to hold office until his or her successor shall have been duly elected and qualified.

Subject to the preferential rights of any other class or series of preferred stock, any director, or the entire board of directors, may be removed from office at any time, with or without cause, by the affirmative vote of the holders of a majority of the voting power of all the then outstanding shares of voting stock of the company, voting together as a single class. Our Bylaws require that stockholders provide the Secretary of our company with notice of the nomination of a person for election as a director with respect to an election to be held at an annual meeting of stockholders, not less than 90 nor more than 120 days prior to the anniversary date of the immediately preceding annual meeting of stockholders or special meeting in lieu of an annual meeting, provided, however, that if the date of the annual meeting is more than 30 days before or more than 60 days after such anniversary date, notice by the stockholder to be timely must be given, not earlier than the 120th day prior to such annual meeting and not later than the 90th day prior to such annual meeting or, if later, the 10th day following the day on which public disclosure of the date of such annual meeting was first made. To be timely, a stockholder's notice for nominations to be made at a special meeting must be made not earlier than the 120th day prior to such special meeting and not later than the 90th day prior to such special meeting or, if later, the 10th day following the day on which public disclosure of the date of such special meeting was first made. Our Bylaws provide that special meetings of stockholders of our company may be called only by: (i) the Chairman of the board of directors, (ii) by a majority of the board of directors, or (iii) the Chief Executive Officer of our Company. Our Certificate of Incorporation, as well as applicable provisions of the DGCL, provide that no action required or permitted to be taken at any annual or special meeting of our stockholders may be taken without a meeting, unless the consent of two-thirds of the voting power of the then outstanding shares of stock of the company entitled to vote on the matter is obtained. These provisions may diminish the likelihood that a potential acquirer would make an offer for our common stock or that there would otherwise be a change in control of our company.

Subsidiaries of Registrant

<u>Subsidiaries of NN, Inc.</u>	<u>Jurisdiction of Incorporation or Organization</u>
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
Autocam-Pax, Inc.	Michigan
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
General Metal Finishing LLC	Delaware
Holmed, LLC	Delaware
HowesTemco, LLC	Delaware
Industrial Molding Corporation	Tennessee
Kugelfertigung Eltmann GmbH	Germany
NN Euroball Ireland Ltd.	Ireland
NN Power Solutions, LLC	Delaware
NN Power Solutions Holdings, LLC	Delaware
NN Precision Plastics, Inc.	Delaware
PMC Acquisition Company, Inc.	Delaware
PMC USA Acquisition Company, Inc.	Delaware
PNC Acquisition Company Inc.	Delaware
Polymetallurgical LLC	Delaware
Precision Metal Components Mexico SRL	Mexico
Premco, Inc.	Massachusetts
Profiles Incorporated	Massachusetts
Southern California Technical Arts, Inc.	California
Triumph LLC	Arizona
Wauconda Tool & Engineering LLC	Delaware
Whirlaway Corporation	Ohio

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our reports dated March 15, 2021, with respect to the consolidated financial statements and internal control over financial reporting included in the Annual Report of NN, Inc. on Form 10-K for the year ended December 31, 2020. We consent to the incorporation by reference of said reports in the Registration Statements of NN, Inc. on Form S-8 (File Nos. 333-174519, 333-130395, 333-216739, and 333-232258) and Form S-3 (File No. 333-216737).

/s/ GRANT THORNTON LLP
Charlotte, North Carolina
March 15, 2021

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-174519, 333-130395, 333-216739, and 333-232258) and Form S-3 (No. 333-216737) of NN, Inc. of our report dated March 16, 2020, except for the effect of discontinued operations discussed in Note 2 to the consolidated financial statements, as to which the date is March 15, 2021, relating to the consolidated financial statements, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Atlanta, Georgia

March 15, 2021

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, Warren A. Veltman, 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.

March 15, 2021

/s/ Warren A. Veltman

Warren A. Veltman

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 D. DeByle, 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.

March 15, 2021

/s/ Thomas D. DeByle

Thomas D. DeByle
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, 2020, 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.

March 15, 2021

/s/ Warren A. Veltman

Warren A. Veltman
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, 2020, 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.

March 15, 2021

/s/ Thomas D. DeByle

Thomas D. DeByle

Senior Vice President – Chief Financial Officer
(Principal Financial Officer)