
**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, 2022**

OR

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

For the transition period from _____ to _____

Commission file number **001-39268**



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 No.)

28277

(Zip Code)

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

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

<i>Title of each class</i>	<i>Trading symbol</i>	<i>Name of each exchange on which registered</i>
Common Stock, par value \$0.01	NNBR	The Nasdaq Stock Market LLC

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

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

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

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such 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 the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Non-accelerated filer

Accelerated filer

Smaller reporting company

Emerging growth company

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

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

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

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

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

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant was approximately \$67.5 million as of June 30, 2022, 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 \$2.53. 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 February 28, 2023, there were 43,846,073 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 2023 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, 2022.

NN, Inc.
INDEX

	Page
<u>PART I</u>	<u>5</u>
<u>Item 1. Business</u>	<u>5</u>
<u>Item 1A. Risk Factors</u>	<u>11</u>
<u>Item 1B. Unresolved Staff Comments</u>	<u>19</u>
<u>Item 2. Properties</u>	<u>20</u>
<u>Item 3. Legal Proceedings</u>	<u>21</u>
<u>Item 4. Mine Safety Disclosures</u>	<u>21</u>
<u>Part II</u>	<u>22</u>
<u>Item 5. Market for the Registrant’s Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities</u>	<u>22</u>
<u>Item 6. Reserved</u>	<u>22</u>
<u>Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>23</u>
<u>Item 7A. Quantitative and Qualitative Disclosures About Market Risk</u>	<u>29</u>
<u>Item 8. Financial Statements and Supplementary Data</u>	<u>30</u>
<u>Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	<u>68</u>
<u>Item 9A. Controls and Procedures</u>	<u>66</u>
<u>Item 9B. Other Information</u>	<u>66</u>
<u>Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections</u>	<u>85</u>
<u>Part III</u>	<u>67</u>
<u>Item 10. Directors, Executive Officers, and Corporate Governance</u>	<u>67</u>
<u>Item 11. Executive Compensation</u>	<u>67</u>
<u>Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	<u>67</u>
<u>Item 13. Certain Relationships and Related Transactions, and Director Independence</u>	<u>67</u>
<u>Item 14. Principal Accountant Fees and Services</u>	<u>67</u>
<u>Part IV</u>	<u>68</u>
<u>Item 15. Exhibits and Financial Statement Schedules</u>	<u>68</u>
<u>Item 16. Form 10-K Summary</u>	<u>72</u>
<u>SIGNATURES</u>	<u>73</u>

Note Regarding Forward-Looking Statements

This Annual Report on Form 10-K (this “Annual Report”) contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), which are intended to be covered by the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and include this statement for purposes of complying with these safe harbor provisions. 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. (the “Company”), 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 pandemics, epidemics, disease outbreaks and other public health crises, including the COVID-19 pandemic, on our financial condition, business operations and liquidity; competitive influences; risks that current customers will commence or increase captive production; risks of capacity underutilization; quality issues; material changes in the costs and availability of raw materials; economic, social, political and geopolitical instability, currency fluctuation, and other risks of doing business outside of the United States; inflationary pressures and changes in the cost or availability of materials, supply chain shortages and disruptions, and the availability of labor; our dependence on certain major customers, some of whom are not parties to long-term agreements (and/or are terminable on short notice); the impact of acquisitions and divestitures; our ability to hire or retain key personnel; 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; new laws and governmental regulations; the impact of climate change on our operations; and cyber liability or potential liability for breaches of our or our service providers’ information technology systems or business operations disruptions. The foregoing factors should not be construed as exhaustive and should be read in conjunction with the sections entitled “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included in this Annual Report, and in any of the Company’s subsequent filings made with the Securities and Exchange Commission (the “SEC”). Any forward-looking statement speaks only as of the date of this Annual Report, and the Company undertakes no obligation to publicly update or review any forward-looking statement, whether as a result of new information, future developments or otherwise, except as required by law. New risks and uncertainties may emerge from time to time, and it is not possible for the Company to predict their occurrence or how they will affect the Company. The Company qualifies all forward-looking statements by these cautionary statements.

PART I

Item 1. Business

Introduction

NN, Inc. is a diversified industrial company that combines in-depth materials science expertise with advanced engineering and production capabilities to design and manufacture high-precision metal and plastic components and assemblies for a variety of end markets on a global basis. As used in this Annual Report, the terms “NN,” the “Company,” “we,” “our,” or “us” refer to NN, Inc., and its subsidiaries. As of December 31, 2022, we had 31 facilities in North America, Europe, South America, and Asia.

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.

Business Segments and Products

Mobile Solutions

Mobile Solutions is focused on growth in the automotive and general industrial end markets. We have developed an expertise in manufacturing highly complex, tight tolerance, system critical components. Our technical capabilities can be utilized in numerous applications including for use in battery electric, hybrid electric, and internal combustion engine vehicles. The group currently manufactures components on a high-volume basis for use in power steering, braking, transmissions, and gasoline fuel system applications, along with components utilized in heating, ventilation and air conditioning and diesel injection and diesel emissions treatment applications. This expertise has been gained through investment in technical capabilities, processes and systems, and allows us to provide skilled program management and product launch capabilities.

Power Solutions

Power Solutions is focused on growth in the electrical, general industrial, 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 transportation electrification. 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 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 Underwriters Laboratories (“UL”).

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 certain instances, we will file for regulatory production approval and include the customer’s proprietary processes, further reducing 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 helps stabilize overall product demand.

Strategic global footprint

Our 31 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. We believe that the Asian and South American facilities have significant growth potential as local customer bases expand and the markets for high-precision products grow in those regions.

Synergies

We continue to realize synergy effects between Mobile Solutions and Power Solutions by pairing our experienced engineering resources and wide-ranging portfolio of process technologies from each business to serve our customers’ ever evolving needs. Recent solutions developed in the electrical, electric vehicle, and general industrial markets leveraged the deep experience and expertise from each business to respond to tight, stringent requirements - all of which in a custom and innovative manner to meet each customer’s unique demand requirements. In addition, we continue to experience customer demand that utilizes multiple facilities from both businesses on a global basis due to our track record of quality and strong performance.

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 2022, our top ten customers accounted for approximately 48% of our net sales. In 2022, 70% of our products were sold to customers in North America, 13% to customers in Asia, 10% to customers in South America, and 7% to customers in Europe.

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

Core Principles

Our success depends 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 in the communities in which we operate.

Headcount

As of December 31, 2022, we employed a total of 3,363 full and part-time employees and 298 temporary workers, which includes 1,335 employees in the U.S. and 2,326 employees in other countries employed by our international subsidiaries. Of our total employment, approximately 12% are management/staff employees and 88% are production employees. Our employees in the France, Brazil, and Mexico City 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.

Diversity, Equity, and Inclusion (“DE&I”)

Diversity, equity, 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 our commitment to ethical business conduct, as is embodied by our Human Rights Policy, which sets forth our expectations related to workplace discrimination; diversity, equity and inclusion; workplace conditions; and freedom of association.

Compensation, Benefits, and Employee Health and Safety

Our compensation programs are based on a strong alignment between pay and performance, and are designed to reward both financial and operational successes and support actions that drive stockholder value creation at all organizational levels. We use a combination of programs (which vary by geography and level) to attract and retain our employees, including annual performance bonuses, quarterly gainsharing bonuses, and equity awards.

We also provide our employees and their families access to a range of benefits, including health insurance benefits, employer-paid life and disability insurance, health savings and flexible spending accounts, 401(k) match, vacation and paid time off, wellness offerings, education assistance, and an employee assistance program.

The health and safety of our employees and anyone who conducts business on our behalf is very important to us. Our commitment to safety starts at the top levels of our organization. We believe a safe and secure workplace is fundamental to our success. We are also committed to engaging our employees to continually improve health and safety by acting upon opportunities to reduce risk and improve our safety and health performance. In addition we offer training programs on a regular basis. We maintain comprehensive safety programs focused on identifying hazards and eliminating risks that can lead to workplace injuries.

In addition to the strong safety focus that we maintain within our operations, our emphasis during the COVID-19 pandemic has been on protecting the health and safety of our employees and the communities in which we operate. Our team monitors country, state, and local guidance, and uses these to implement best practice guidelines for employees and visitors. Throughout the COVID-19 pandemic, we increased communications, including the addition of virtual “town hall” style meetings at the

group and organizational level. This has helped employees across our global footprint stay connected, whether working from home or at one of our manufacturing sites.

Talent Development

We invest resources in professional development to improve employee motivation, performance and engagement. Our annual talent management program helps identify needs at multiple levels, enabling us to provide employees with the resources they need to help achieve their career goals, build skills and lead their organizations. Further, annual goal-setting and development opportunities for employees and leaders helps our people align their professional experience with the Company's business objectives and encourages them to take ownership of their development and career paths.

We use regular talent management and performance evaluation processes to inform the Company's internal development processes and to calibrate assessment of individual performance organizationally. These activities form the basis for succession planning activities, up to and including the senior leadership level.

We also have apprenticeships, internships, and cooperative education programs in place at certain locations, which we intend to expand more broadly across the company. These programs allow us to provide a combination of education and employment options that deliver depth and context and help them build a long-term career path.

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; Brovedani 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 our technical competence, proven track record of successful product development and global platform, as well as on quality, price, and service.

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 end market 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 risk of price changes from procurement to product shipment.

Supply and Cost Pressures

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 COVID-19 pandemic and ongoing supply chain disruptions, resulting in supply shortages and higher shipping charges, have impacted our suppliers and could continue to impact our ability

to maintain supplies of products and the costs associated with obtaining raw materials and key components. We continue to monitor the effects 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 and Environmental Matters

Our operations are subject to extensive federal, state, local, and foreign regulatory requirements, including those intended to protect public health and the environment. In the U.S. certain of our products and operations are regulated by the Environmental Protection Agency. Similar regulations have been adopted by authorities in foreign countries where we sell our products, and by state and local authorities in the U.S. In order to conduct our operations in compliance with these laws and regulations we must obtain and maintain numerous permits, approvals and certificates from various federal, state, local, and foreign governmental authorities.

We are also required to comply with increasingly complex and changing laws and regulations enacted to protect business and personal data in the U.S. and other jurisdictions regarding privacy, data protection, and data security, including those related to the collection, storage, use, transmission, and protection of personal information and other customer, supplier or employee data. Such privacy and data protection laws and regulations, and the interpretation and enforcement of such laws and regulations, are continuously developing and evolving and there is significant uncertainty with respect to how compliance with these laws and regulations may evolve and the costs and complexity of future compliance.

Based on information compiled to date, management believes that our current operations are in substantial compliance with applicable governmental laws and regulations, the violation of which could have a material adverse effect on our business and financial condition. 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.”

The potential impact of climate change on our operations is unclear. Climate change could result in an increase in severe weather events, such as hurricanes, tropical storms, blizzards and ice storms, which often results in delays or other negative consequences for our manufacturing operations, which could negatively impact our financial results. We have not identified any, and we do not believe there to be in the near term, material impacts on our business, financial condition or results of operations as a result of compliance with legislation or regulatory rules regarding climate change or from the known physical effects of climate change. Increased regulation and other climate change concerns, however, could subject us to additional costs and restrictions and could negatively affect our business, operations and financial results.

On May 5, 2022, we released our 2021 Sustainability Report which established our global sustainability strategy. We conducted a comprehensive environmental, social and governance (“ESG”) materiality assessment to identify our most significant economic, environmental and social impacts. The material ESG topics identified during this process enable our organization to prioritize our investments and actions and provide meaningful disclosures throughout this report. We intend to regularly review and update our ESG priorities on an ongoing basis to ensure they continue to reflect our evolving business operations. The information provided in our 2021 Sustainability Report as well as on our website, is not part of this Annual Report, and is therefore not incorporated by reference into this Annual Report or other filings with the SEC.

Information about our Executive Officers

Our executive officers are:

Name	Age	Position
Warren A. Veltman	61	President and Chief Executive Officer
Michael C. Felcher	50	Senior Vice President – Chief Financial Officer
John R. Buchan	61	Executive Vice President – Mobile Solutions and Power Solutions
Matthew S. Heiter	62	Senior Vice President, General Counsel and Secretary
D. Gail Nixon	52	Senior Vice President and Chief Human Resources Officer
J. Andrew Wall	44	Senior Vice President and Chief Commercial 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. As previously announced, Mr. Veltman will retire as President and Chief Executive Officer on March 31, 2023; however, such date may be extended in order to facilitate an orderly transition.

Michael C. Felcher was appointed Senior Vice President and Chief Financial Officer in July 2021 having previously served as Vice President, Chief Accounting Officer since June 2018. Prior to joining the Company, Mr. Felcher served as the Vice President, North America Chief Financial Officer for JELD-WEN, Inc., a publicly held, global manufacturer of doors and windows, from 2013 to 2017. Before assuming his role at JELD-WEN, Inc., Mr. Felcher served as a Director of Finance for United Technologies Corp. following its acquisition of Goodrich Corporation in 2012. Previously, Mr. Felcher served in a variety of finance roles at Goodrich. Mr. Felcher began his career at PricewaterhouseCoopers and is a licensed CPA.

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. As previously announced, Mr. Buchan will retire as Executive Vice President of Mobile Solutions and Power Solutions on March 31, 2023; however, such date may be extended in order to facilitate an orderly transition.

Matthew S. Heiter joined us as Senior Vice President, General Counsel and Secretary 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 (“SHRM”) and has earned her Senior Professional in Human Resources and SHRM – Senior Certified Professional designations. 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.

J. Andrew Wall joined us as Senior Vice President and Chief Commercial Officer in January 2022. Prior to joining NN, he served in numerous management positions for ABB, Ltd. (“ABB”), a publicly held, global manufacturer of heavy electrical equipment and automation technology. Mr. Wall served as ABB's Vice President, Product Marketing and Sales, Electrification U.S. from January 2018 through December 2021, where he was responsible for leading the creation and implementation of ABB's U.S. product marketing strategy. Before that, Mr. Wall served as Vice President and General Manager, Power Products Services U.S. for ABB from July 2015 through December 2017.

Available Information - 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 Exchange Act, as soon as reasonably practicable after electronically filing such material with, or furnishing it to, the SEC.

Item 1A. Risk Factors

The following risks and uncertainties may have a material affect on our business, prospects, financial condition, results of operations, and cash flows, and should be considered in connection with the other information 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. The risks and uncertainties described below are not the only risks facing our company. Risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, prospects, financial condition, results of operations, and cash flows.

Risks Related to Our Operations

Pandemics, epidemics, disease outbreaks and other public health crises, such as the COVID-19 pandemic, could materially adversely impact our business, financial condition, results of operations and cash flows.

Pandemics, epidemics or disease outbreaks in the U.S. or globally, including the COVID-19 pandemic, have disrupted, and may in the future disrupt, our business, which could materially affect our results of financial condition, results of operations and cash flows. Any such events may adversely impact our global supply chain and global manufacturing operations and cause us to again suspend our operations in countries and states where we operate. In particular, we have experienced, and could continue to experience, among other things: (1) global supply disruptions, especially in China; (2) labor disruptions; (3) an inability to manufacture; (4) an inability to sell and distribute our products to our customers; (5) a decline in customer demand during and following the pandemic, whether as a result of our inability to satisfy customer demand in a timely manner due to raw material shortages, supply chain disruptions, inflationary cost pressures, or work stoppages experienced by one or more of our customers; and (6) an impaired ability to access credit and the capital markets, especially in light of the rising interest rates. Any new pandemic or other public health crises, or future public health crises, could have a material impact on our business, financial condition, results of operations and cash flows going forward. To the extent any new pandemic or other public health crises adversely affects our business, financial condition, results of operation and cash flows, it may also have the effect of heightening other risks and uncertainties 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 2022, sales to various U.S. and foreign divisions of our ten largest customers accounted for approximately 48% 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.

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 supply chain disruptions, weather, raw material shortages, natural disasters, fires or explosions, political unrest, terrorism, generalized labor unrest, or public health crises, such as the COVID-19 pandemic, 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, 2022, sales to customers located outside of the U.S. accounted for 39% 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;
- political uncertainty, instability, civil unrest, government controls over certain sectors and human rights concerns in countries, including but not limited to, China, in which our suppliers, manufacturing operations, and customers are located; and
- changes in the geopolitical environment, wars, conflicts, or trade barriers or blockades in the European Union and Asia, which may adversely affect business activity and economic conditions globally and could continue to contribute to instability in global financial and foreign exchange markets, as well as disrupt the free movement of goods, services, and people between countries.

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.

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. We cannot predict whether, and to what extent, there may be changes to international trade agreements or whether quotas, duties, tariffs, exchange controls or other restrictions on our products will be changed or imposed. In addition, an open conflict or war across any region could affect our ability to obtain raw materials. The current military conflict between Russia and Ukraine, and related sanctions, export controls or other actions that may be initiated by nations could adversely affect our business and our supply chain or our business partners or customers in other countries. Although we currently do not source raw materials directly from Russia or Ukraine, if we are unable to source our products from the countries where we wish to purchase them, either because of the occurrence or threat of wars or other conflicts, regulatory changes or for any other reason, or if the cost of doing so increases, it could have a material adverse effect on our business, financial condition and results of operations. Disruptions in the supply of raw materials and components could temporarily impair our ability to manufacture our products for our customers or require us to pay higher prices to obtain these raw materials or components from other sources, which could have a material adverse effect on our business and our results of operations.

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.

Any security breach or disruption to our information technology systems could materially adversely affect our business, financial condition, results of operations, and reputation.

We rely on proprietary and third-party information technology systems to process, transmit and store information and to manage or support our business processes. We store and maintain confidential financial and business information regarding us and persons with whom we do business on our information technology systems. We also collect and hold personally identifiable information of our employees in connection with their employment. In addition, we engage third-party service providers that may collect and hold personally identifiable information of our employees in connection with providing business services to us, including web hosting, accounting, payroll and benefit services. The protection of the information technology systems on which we rely is critically important to us. We take steps, and generally require third-party service providers to take steps, to protect the security of the information maintained in our and our service providers' information technology systems, including the use of systems, software, tools, and monitoring to provide security for processing, transmitting, and storing of the information. Despite our security measures and business continuity plans, we face risks associated with security breaches or disruptions to the information technology systems on which we rely, which could result from, among other incidents, attacks by hackers, computer viruses, malware (including "ransomware"), phishing attacks or breaches due to errors or malfeasance by employees, contractors and others who have access to these systems. Our third-party service providers could also be the source of a cybersecurity attack on, or breach of, our information technology systems. Techniques used in cybersecurity attacks to obtain unauthorized access, disable or sabotage information technology systems change frequently, as data breaches and other cybersecurity events have become increasingly commonplace, including as a result of the intensification of state-sponsored cybersecurity attacks during periods of geopolitical conflict, such as the ongoing conflict in Ukraine.

The security measures put in place by us and our service providers cannot provide absolute security and there can be no assurance that we or our service providers will not suffer a data security incident in the future, that unauthorized parties will not gain access to sensitive information stored on our or our service providers' systems, that such access will not, whether temporarily or permanently, impact, interfere with, or interrupt our operations, or that any such incident will be discovered in a timely manner. Even the most well-protected information, networks, systems, and facilities remain potentially vulnerable as the techniques used in such attempted security breaches evolve and generally are not recognized until launched against a target, and in some cases are designed to not be detected and, in fact, may not be detected. In addition, third-party information technology providers may not provide us with fixes or updates to hardware or software in a manner as to avoid an unauthorized loss or disclosure or to address a known vulnerability, which may subject us to known threats or downtime as a result of those delays. Accordingly, we and our service providers may be unable to anticipate these techniques or to implement adequate security barriers or other preventative measures. Further, we may be required to expend significant additional resources to continue to enhance information security measures and internal processes and procedures or to investigate and remediate any information security vulnerabilities.

A data security incident could compromise our or our service providers' information technology systems, and the information stored by us or our service providers, including personally identifiable information of employees, could be accessed, misused, publicly disclosed, corrupted, lost, or stolen. Any failure to prevent a data breach or a security failure of our or our service providers' information technology systems could interrupt our operations, result in downtime, divert our planned efforts and resources from other projects, damage our reputation and brand, damage our competitive position, subject us to liability claims or regulatory penalties under laws protecting the privacy of personal information. Similarly, if our third-party service providers fail to use adequate security or data protection processes, or use personal information in an unpermitted or improper manner, we may be liable for certain losses and it may damage our reputation. Various events described above have occurred in the past and may occur in the future. Although impacts of past events have been immaterial, the impacts of such events in the future may materially and adversely affect our business, financial condition, or results of operations.

Our international operations and business, financial condition, and prospects may be adversely affected by the current military conflict between Russia and Ukraine, other future social and geopolitical instability and resulting domestic and foreign economic instability.

We are exposed to the risk of changes in social, geopolitical, legal, and economic conditions. The global economy has been, and may continue to be, negatively impacted by Russia's invasion of Ukraine. As a result of Russia's invasion of Ukraine, the United States, the European Union, the United Kingdom, and other G7 countries, among other countries, have imposed substantial financial and economic sanctions on certain industry sectors and parties in Russia. Broad restrictions on exports to Russia have also been imposed. These measures include: (i) comprehensive financial sanctions against major Russian banks; (ii) additional designations of Russian individuals with significant business interests and government connections; (iii) designations of individuals and entities involved in Russian military activities; and (iv) enhanced export controls and trade sanctions limiting Russia's ability to import various goods. The negative impacts arising from the conflict and these sanctions and export restrictions, including those imposed by Russia, may include reduced consumer demand, supply chain disruptions and increased costs for transportation, energy, and raw materials. Although none of our operations are physically located in Russia or Ukraine, further escalation of geopolitical tensions could have a broader impact that expands into other markets where we do business, which may adversely affect our business, financial condition, results of operations and prospects.

Physical effects of climate change or legal, regulatory or market measures intended to address climate change could materially adversely affect our business and operations.

Risks associated with climate change are subject to increasing societal, regulatory and political focus in the U.S. and globally. Shifts in weather patterns caused by climate change could increase the frequency, severity, or duration of certain adverse weather conditions and natural disasters, such as hurricanes, tornadoes, earthquakes, wildfires, droughts, extreme temperatures, or flooding, which could result in more significant business and supply chain interruptions, damage to our products and facilities as well as the infrastructure of our customers, reduced workforce availability, increased costs of raw materials and components, increased liabilities, and decreased revenues than what we have experienced in the past from such events. In addition, increased public concern over climate change could result in new legal or regulatory requirements designed to mitigate the effects of climate change, which could include the adoption of more stringent environmental laws and regulations or stricter enforcement of existing laws and regulations. Such developments could result in increased compliance costs and adverse impacts on raw material sourcing, manufacturing operations, and the distribution of our products, which could adversely affect our business and operations.

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.

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.

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 Food and Drug Administration (“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.

Increasing scrutiny and evolving expectations with respect to our environmental, social and governance practices may impose additional costs on us or expose us to new or additional risks.

In addition to the increased legislative and regulatory attention to climate change, customer, investor, and employee expectations in ESG have been rapidly evolving and increasing. While we have been committed to continuous improvements to our product portfolio to meet anticipated regulatory standard levels, if customers, regulators or investors demand we increase our greenhouse gas emission or renewable energy disclosures or our ESG initiatives, we may have to implement additional reporting standards and reporting requirements. If we fail to meet customer, investor, or employee expectations, we may be unable to attract or retain our consumer base or talent. Further, there can be no assurance that our commitments will be successful, that our products will be accepted by the market, that proposed regulation or deregulation will not have a negative competitive impact or that economic returns will reflect our investments in new product development.

The standards by which ESG efforts and related matters are measured are developing and evolving, and we could be criticized for the scope of our initiatives and goals, or lack thereof. If we fail to comply with the evolving customer or investor or employee expectations and standards, or if we are perceived to have failed to adequately respond to such expectations and standards, we may suffer from reputational damage, which could have an adverse impact on our business or financial condition.

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, 2022, we had \$157.1 million of indebtedness outstanding and \$35.3 million available for future borrowings under our asset backed credit facility (the “ABL Facility”). 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 25% 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 2022, the U.S. dollar strengthened against foreign currencies which unfavorably affected our revenue by \$4.2 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 stockholders from receiving a takeover premium for their shares. These provisions include, for example, the authorization of our board of directors to issue up to five million preferred shares without a stockholder vote and 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.

The U.S. tax laws and regulations, as well as the administrative interpretations of those laws and regulations, are constantly under review and may be changed at any time, possibly with retroactive effect. No assurance can be given as to whether, when, or in what form changes to the U.S. tax laws applicable to us may be enacted. 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.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

As of December 31, 2022, we owned or leased 31 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. Due to a strategic shift to focus on growth opportunities and ongoing efforts to optimize the Company’s manufacturing footprint, we plan to cease manufacturing operations at several facilities during 2023. The following table lists the current locations of our facilities by segment.

Mobile Solutions Group

Location	General Character	Country	Owned or Leased
Boituva, Brazil (1)	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 (1)	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 (1)	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 (1)	Plant	U.S.A.	Leased
Lubbock, Texas	Plant	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 (1)	Plant	U.S.A.	Leased

Joint Venture

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

(1) Facilities that we plan to close during 2023.

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 13 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 13 relating to certain commitments and contingencies is incorporated herein by reference.

Item 4. Mine Safety Disclosures

Not applicable.

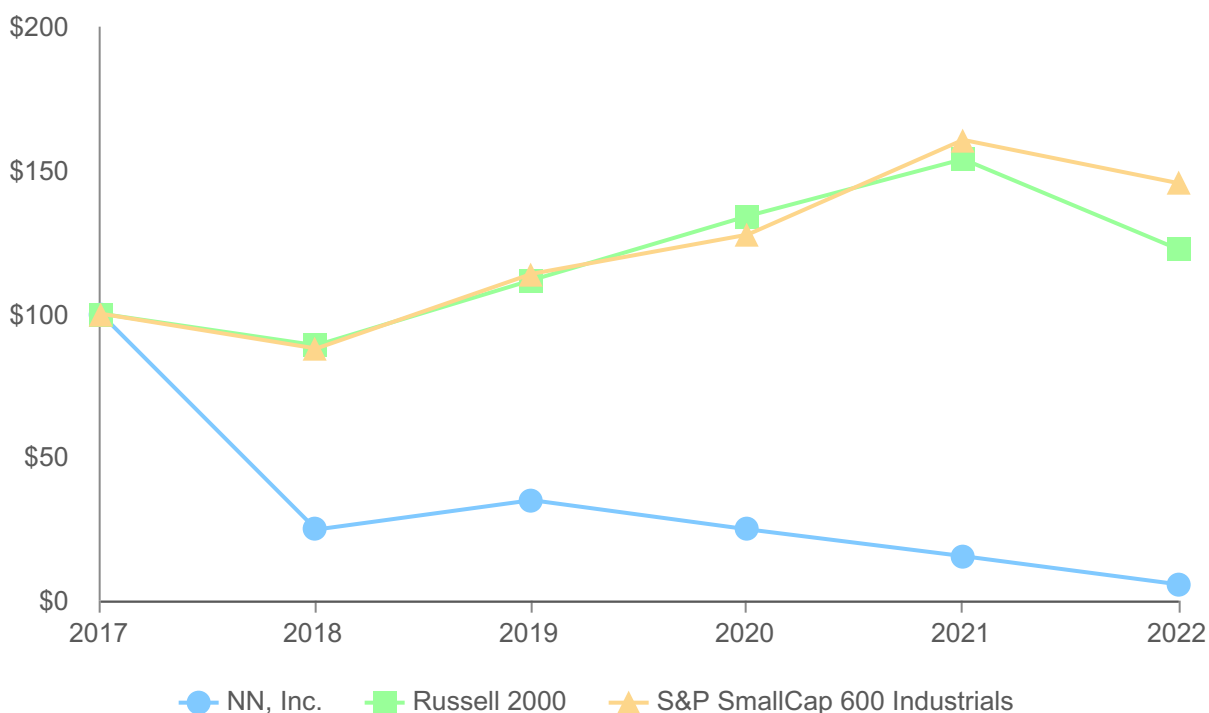
PART II

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 February 24, 2023, there were 3,878 beneficial owners of record of our common stock.

The following graph and table compare the cumulative total shareholder return on our common stock with the cumulative total shareholder return of: (i) the Russell 2000[®] Index, which is a broad equity market index, and (ii) the S&P SmallCap 600[®] Industrials Index, which is a published industry index, for the period from December 31, 2017, to December 31, 2022. The following graph and table assume that a \$100 investment was made at the close of trading on December 31, 2017. 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
(Performance results through December 31, 2022)



	2017	2018	2019	2020	2021	2022
NN, Inc.	\$ 100.00	\$ 24.78	\$ 35.02	\$ 24.87	\$ 15.52	\$ 5.68
Russell 2000	\$ 100.00	\$ 88.99	\$ 111.70	\$ 134.00	\$ 153.85	\$ 122.41
S&P SmallCap 600 Industrials	\$ 100.00	\$ 87.85	\$ 113.89	\$ 127.53	\$ 160.56	\$ 145.46

Source: Zachs Investment Research, Inc.

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. Reserved

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.

A detailed discussion of our results of operations and liquidity and capital resources for the year ended December 31, 2021 compared to the year ended December 31, 2020 are not included herein and can be found in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations of our [Annual Report on Form 10-K](#) for the fiscal year ended December 31, 2021, filed with the SEC on March 11, 2022.

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;
- optimization of manufacturing footprint;
- Efficient capital deployment;
- Debt leverage ratio improvement;
- Capital management initiatives; and
- Employee health, safety, and satisfaction;

Management generally focuses on these trends and relevant market indicators

- Trends related to the geographic migration of competitive manufacturing, electric vehicles, and electrification;
- Costs subject to regional and global inflationary environments, including, but not limited to:
 - Raw materials;
 - Wages and benefits, including health care costs;
 - Regulatory compliance; and
 - Energy;
- Global automotive production rates;
- Global industrial growth and economics;
- Residential and non-residential construction rates;
- 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;
- Net income;
- Leverage ratio
- Cash flow from operations and capital spending;
- Certain non-GAAP measures as defined in our quarterly earnings releases and investor presentations;
- Customer service reliability;
- External and internal quality indicators; and

- Employee development.

Critical Accounting Estimates

Our significant accounting policies, including the assumptions and judgment underlying them, are disclosed in Note 1 of the Notes to Consolidated Financial Statements. As disclosed in Note 1, the preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions about future events that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ significantly from those estimates. We believe that the following discussion addresses our most critical accounting estimates, which are those that are most important to the portrayal of our financial condition and results of operations and require management's most difficult, subjective, and complex judgments.

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. A significant piece of objective negative evidence evaluated is cumulative losses incurred over the three-year period ended December 31, 2022. Such objective evidence limits the ability to consider other subjective evidence, such as our projections for future earnings growth. 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.

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 deemed 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.

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. Fair value principles prioritize valuation inputs across three broad levels. 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.

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, 2022, that management believes are important to provide an understanding of the business and results of operations or that may influence operations in the future.

Macroeconomic Conditions

We continue to monitor the ongoing impacts of current macroeconomic and geopolitical events, including changing conditions from the COVID-19 pandemic, the ongoing Russia-Ukraine conflict, inflationary cost pressures, rising interest rates, supply chain disruptions, and labor shortages.

The COVID-19 pandemic and governmental responses thereto, including COVID-19 lockdowns in China, continue to impact our business operations and our customers' and suppliers' ability to operate at normal levels. Disruptions in normal operating levels continue to create supply chain disruptions and inflationary cost pressures within our end-markets. We anticipate that supply chain constraints and the inflationary environment, as impacted by the COVID-19 pandemic, will continue into 2023.

The Russia-Ukraine conflict also continues to create volatility in global financial and energy markets, creating energy and supply chain shortages, which has added to the inflationary pressures experienced by the global economy. We continue to actively work with our suppliers to minimize impacts of supply shortages on our manufacturing capabilities. Although our business has not been materially impacted by the ongoing Russia-Ukraine conflict we cannot predict the extent to which our operations, or those of our customers or suppliers, will be impacted in the future, or the ways in which the conflict may impact our business, financial condition, results of operations and cash flows.

The U.S. economy is experiencing broad and rapid inflation and rising interest rates, as well as supply issues in materials, services, and labor due to economic policy, the COVID-19 pandemic and, more recently, the Russia-Ukraine conflict. These impacts are likely to persist into 2023 and beyond. We cannot predict the impact on the Company's end-markets or input costs nor the ability of the Company to recover cost increases through pricing.

Sales Concentration

During the years ended December 31, 2022, 2021 and 2020, no single customer accounted for 10% or more of consolidated net sales.

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.

	Years Ended December 31,		
	2022	2021	2020
Net sales	100.0 %	100.0 %	100.0 %
Cost of sales (exclusive of depreciation and amortization shown separately below)	84.4 %	81.7 %	80.4 %
Selling, general, and administrative expense	10.0 %	10.8 %	13.6 %
Depreciation and amortization	9.5 %	9.7 %	10.7 %
Goodwill impairment	— %	— %	21.7 %
Other operating expense (income), net	0.4 %	(0.2)%	1.1 %
Loss from operations	(4.2)%	(1.9)%	(27.5)%
Interest expense	3.0 %	2.7 %	4.4 %
Loss on extinguishment of debt and write-off of debt issuance costs	— %	0.5 %	— %
Derivative payments on interest rate swap	— %	0.4 %	1.0 %
Loss on interest rate swap	— %	0.4 %	2.7 %
Other income, net	(1.0)%	(1.1)%	— %
Loss from continuing operations before benefit (provision) for income taxes and share of net income from joint venture	(6.2)%	(4.7)%	(35.6)%
Benefit (provision) for income taxes	(0.3)%	0.4 %	2.1 %
Share of net income from joint venture	1.3 %	1.3 %	0.8 %
Loss from continuing operations	(5.2)%	(3.0)%	(32.6)%
Income from discontinued operations, net of tax	— %	0.3 %	9.1 %
Net loss	(5.2)%	(2.8)%	(23.5)%

Year Ended December 31, 2022 compared to the Year Ended December 31, 2021

	Years Ended December 31,		
	2022	2021	\$ Change
Net sales	\$ 498,738	\$ 477,584	\$ 21,154
Cost of sales (exclusive of depreciation and amortization shown separately below)	421,105	389,995	\$ 31,110
Selling, general, and administrative expense	49,635	51,489	(1,854)
Depreciation and amortization	47,231	46,195	1,036
Other operating expense (income), net	1,859	(1,091)	2,950
Loss from operations	(21,092)	(9,004)	(12,088)
Interest expense	15,041	12,664	2,377
Loss on extinguishment of debt and write-off of debt issuance costs	—	2,390	(2,390)
Derivative payments on interest rate swap	—	1,717	(1,717)
Loss on interest rate swap	—	2,033	(2,033)
Other income, net	(5,064)	(5,366)	302
Loss from continuing operations before benefit (provision) for income taxes and share of net income from joint venture	(31,069)	(22,442)	(8,627)
Benefit (provision) for income taxes	(1,621)	1,756	(3,377)
Share of net income from joint venture	6,592	6,261	331
Loss from continuing operations	(26,098)	(14,425)	(11,673)
Income from discontinued operations, net of tax	—	1,200	(1,200)
Net loss	\$ (26,098)	\$ (13,225)	\$ (12,873)

Net Sales. Net sales increased by \$21.2 million, or 4.4%, during the year ended December 31, 2022, compared to the year ended December 31, 2021, primarily due to increased pricing partially offset by lower volume and unfavorable foreign exchange effects of \$4.2 million.

Cost of Sales. Cost of sales increased by \$31.1 million, or 8.0%, during the year ended December 31, 2022, compared to the year ended December 31, 2021, primarily due to inflationary costs and unfavorable overhead absorption, partially offset by lower sales volume and favorable foreign exchange effects.

Selling, General, and Administrative Expense. Selling, general, and administrative expense decreased by \$1.9 million during the year ended December 31, 2022, compared to the year ended December 31, 2021, primarily due to lower incentive compensation, severance and retention expense. These decreases were partially offset by higher stock compensation expense, higher professional fees and increased travel costs.

Other Operating Expense (Income), Net. Other operating expense (income), net changed unfavorably by \$3.0 million primarily due to a legal settlement reached during the first quarter of 2022 and the gain on the sale of a facility that was recognized in the third quarter of 2021.

Interest Expense. Interest expense increased by \$2.4 million during the year ended December 31, 2022, compared to the year ended December 31, 2021, primarily due to higher interest rates and a larger average debt balance as a result of the credit facility and preferred stock refinance that occurred during the first quarter of 2021. In addition, borrowings on the ABL Facility during the year ended December 31, 2022 contributed to higher interest expense. These increases were partially offset by a higher amount of interest expense that was capitalized in 2022 compared with the prior year and the positive impact of the interest rate swap.

	Years Ended December 31,	
	2022	2021
Interest on debt	\$ 14,071	\$ 10,800
Interest rate swap settlements	(428)	77
Amortization of debt issuance costs and discount	1,361	1,381
Capitalized interest	(610)	(300)
Other	647	706
Total interest expense	<u>\$ 15,041</u>	<u>\$ 12,664</u>

[Table of Contents](#)

Loss on Extinguishment of Debt and Write-off of Debt Issuance Costs. We recognized \$2.4 million in the first quarter of 2021 for the write-off of unamortized debt issuance costs associated with the credit facility that was terminated in March 2021.

Derivative Payments on Interest Rate Swap. Derivative payments on interest rate swap represent cash settlements of an interest rate swap which was terminated in the first quarter of 2021. We entered into a new interest rate swap in the third quarter of 2021, which is designated as a cash flow hedge with the impact of settlements recognized in interest expense.

Loss on Interest Rate Swap. We recognized a \$2.0 million loss in the first quarter of 2021 related to the termination of the previous interest rate swap in March 2021.

Other Income, Net. Other income, net changed unfavorably by \$0.3 million during the year ended December 31, 2022, compared to the year ended December 31, 2021, primarily due to lower derivative mark-to-market gains recognized in 2022, partially offset by the impact of a litigation settlement in 2021 and more favorable foreign exchange effects associated with intercompany borrowings.

Benefit (Provision) for Income Taxes. Our effective tax rate was (5.2)% for the year ended December 31, 2022, compared to 7.8% for the year ended December 31, 2021. Our effective tax rate for the year ended December 31, 2022 was unfavorably impacted by the accrual of tax on non-permanently reinvested unremitted earnings of foreign subsidiaries and by the limitation on the amount of tax benefit recorded for loss carryforwards in certain jurisdictions where we believe it is more likely than not that a portion of the future tax benefit may not be realized. The effective tax rate for the year ended December 31, 2022 was favorably impacted by the recording of interest income on the Company's federal income tax refund requested as a result of the Coronavirus Aid, Relief, and Economic Security Act, as well as the recording of a benefit of a pending state refund claim. Our effective tax rate for the year ended December 31, 2021 was favorably impacted by the change in assertion and reduction in the accrual of tax on non-permanently reinvested unremitted earnings of foreign subsidiaries and unfavorably impacted by the limitation on the amount of tax benefit recorded for loss carryforwards in certain jurisdictions where we believe it is more likely than not that a portion of the future tax benefit may not be realized.

Share of Net Income from Joint Venture. Share of net income from the JV increased by \$0.3 million during the year ended December 31, 2022, compared to the year ended December 31, 2021, primarily due to higher sales partially offset by higher operating costs in the current year. The JV, in which we own a 49% investment, recognized net sales of \$101.6 million and \$94.8 million for the years ended December 31, 2022 and 2021, respectively.

Income from Discontinued Operations, Net of Tax. We recognized a gain of \$1.2 million during the year ended December 31, 2021, due to the favorable resolution of a tax indemnity that resulted from the sale of our Life Sciences business in 2020.

Results by Segment

MOBILE SOLUTIONS

	Year Ended December 31,		
	2022	2021	\$ Change
Net sales	\$ 293,536	\$ 285,863	\$ 7,673
Income (loss) from operations	\$ (2,165)	\$ 9,039	\$ (11,204)

Net sales increased by \$7.7 million, or 2.7%, during the year ended December 31, 2022, compared to the year ended December 31, 2021, primarily due to increased pricing, partially offset by lower sales of diesel components due to lower European demand which was impacted by the war in Ukraine, COVID-19 interruptions in China, lost sales associated with certain fuel systems reaching end of production, and unfavorable foreign exchange effects of \$4.1 million.

Income (loss) from operations decreased by \$11.2 million during the year ended December 31, 2022 compared to the prior year, primarily due to inflationary costs not fully recovered in customer pricing, unfavorable overhead absorption, start-up costs associated with Mexico new business launches, and variable cost inefficiencies associated with supply chain interruptions, uneven customer ordering patterns, and labor constraints caused by pandemic interruptions. These decreases were partially offset by lower incentive compensation expense.

POWER SOLUTIONS

	Year Ended December 31,		
	2022	2021	\$ Change
Net sales	\$ 205,204	\$ 191,800	\$ 13,404
Income from operations	\$ 3,536	\$ 6,493	\$ (2,957)

Net sales increased by \$13.4 million, or 7.0%, during the year ended December 31, 2022, compared to the year ended December 31, 2021, primarily due to higher customer pricing.

Income from operations decreased by \$3.0 million during the year ended December 31, 2022 compared to the same period in the prior year, primarily due to a \$1.8 million litigation settlement to resolve a claim from 2016, an increase in amortization expense, and the absence of a gain on the sale of a facility in the third quarter of 2021. These decreases were partially offset by the impact of higher customer pricing.

Changes in Financial Condition from December 31, 2021 to December 31, 2022

Overview

From December 31, 2021 to December 31, 2022, total assets decreased by \$33.0 million primarily due to normal depreciation and amortization of fixed assets and intangible assets. These decreases were partially offset by increases in accounts receivable and inventories during the year ended December 31, 2022. The increase in accounts receivable is due to higher sales during the end of the current year compared with the end of 2021. The value of inventory increased due to higher material and labor costs as well as higher quantities to maintain customer safety stock due to ongoing supply chain interruptions, especially in China.

From December 31, 2021 to December 31, 2022, total liabilities decreased by \$5.9 million, primarily due to lower employee incentive compensation accruals and a decrease in the valuation of certain derivatives. These decreases were offset by an increase in accounts payable attributed to higher inventory balances at December 31, 2022.

Working capital, which consists of current assets less current liabilities, was \$112.9 million as of December 31, 2022, compared to \$122.3 million as of December 31, 2021. The decrease was primarily due to increases in accounts payable and other current liabilities, partially offset by increases in accounts receivable and inventory.

Cash Flows

Cash provided by operations was \$7.7 million for the year ended December 31, 2022, compared with cash provided by operations of \$15.6 million for the year ended December 31, 2021. The decrease was primarily due to an increase in net loss and increases in accounts receivable and inventory, partially offset by dividends received from our unconsolidated joint venture and lower income tax payments in 2022.

Cash used in investing activities was \$17.5 million for the year ended December 31, 2022, compared with cash used in investing activities of \$36.1 million for the year ended December 31, 2021. The decrease was primarily due to cash paid to settle the interest rate swap in the first quarter of 2021.

Cash used in financing activities was \$5.2 million for the year ended December 31, 2022, compared with cash provided by financing activities of \$2.6 million for the year ended December 31, 2021. The difference was primarily due to the debt and preferred stock refinancing in the first quarter of 2021.

Liquidity and Capital Resources

Credit Facility

The principal amount outstanding under our term loan facility (the “Term Loan Facility”) as of December 31, 2022, was \$147.4 million, without regard to unamortized debt issuance costs and discount. As of December 31, 2022, we had \$35.3 million available for future borrowings under the ABL Facility. This amount of borrowing capacity is net of \$1.0 million of outstanding borrowings and \$11.0 million of outstanding letters of credit at December 31, 2022, which are considered as usage of the ABL Facility.

The Term Loan Facility requires quarterly principal payments of \$0.4 million with the remaining unpaid principal amount due on the final maturity date of September 22, 2026. We may be required to make additional principal payments annually that are calculated as a percentage of our excess cash flow, as defined by the lender, based on our net leverage ratio. Outstanding borrowings under the Term Loan Facility bear interest at either 1) one-month LIBOR (subject to a 1.000% floor) plus an applicable margin of 6.875% or 2) the greater of various benchmark rates plus an applicable margin of 5.875%. Based on the interest rate in effect at December 31, 2022, and the fixed rate on the 2021 interest rate swap, annual interest payments would be approximately \$14.7 million.

The ABL Facility bears interest on a variable rate structure with borrowings bearing interest at one-month LIBOR plus an applicable margin of 1.75%. The interest rate in effect at December 31, 2022, was 6.00%. We pay a commitment fee of 0.375% for unused capacity under the ABL Facility.

We were in compliance with all requirements under our Term Loan Facility and ABL Facility as of December 31, 2022. Both credit facilities allow for optional expansion of available borrowings, subject to certain terms and conditions. On March 3, 2023, we amended our Term Loan Facility and ABL Facility to adjust certain covenants under the agreements, as well as to change the applicable base rate on which interest expense is determined. See Note 11 of the Notes to Consolidated Financial Statements.

Accounts Receivable Sales Programs

We participate in programs established by our customers which allows us to sell certain receivables from that customer on a non-recourse basis to a third-party financial institution. In exchange, we receive payment on the receivables, less a discount, sooner than under the customary credit terms we have extended to that customer. These programs allow us to improve working capital and cash flows at the same or lower interest rates as available on our ABL Facility. Our access to these programs is dependent on our customers ongoing agreements with the third-parties. Our participation in these programs is based on our specific cash needs throughout the year, the discount charged to receive payment earlier, the length of the payment terms with our customers, as well being subject to limits in our ABL Facility and Term Loan Facility agreements.

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.

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.

On July 22, 2021, we entered into a fixed-rate interest rate swap agreement to change the LIBOR-based component of the interest rate on a portion of our variable rate debt to a fixed rate of 1.291% (the “2021 Swap”). The 2021 Swap has a notional amount of \$60.0 million and a maturity date of July 31, 2024. The objective of the 2021 Swap is to eliminate the variability of cash flows in interest payments on the first \$60.0 million of variable rate debt attributable to changes in benchmark one-month LIBOR interest rates. The hedged risk is 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. The changes in cash flows of the interest rate swap are expected to exactly offset changes in cash flows of the variable rate debt. We designated the 2021 Swap as a cash flow hedge at inception. Cash settlements of the 2021 Swap are recognized in interest expense. Refer to Note 19 in the Notes to Consolidated Financial Statements included in this Annual Report for further discussion about the interest rate swap.

At December 31, 2022, we had \$147.4 million of principal outstanding under the Term Loan Facility without regard to capitalized debt issuance costs. A one-percent increase in one-month LIBOR would have resulted in a net increase in interest expense of \$0.9 million on an annualized basis.

At December 31, 2022, using one-month LIBOR plus a 1.75% spread, the interest rate on the \$1.0 million of outstanding borrowings under the ABL Facility was 6.00%.

Foreign Currency Risk

Translation of our operating cash flows denominated in foreign currencies is impacted by changes in foreign exchange rates. We invoice and receive payment from many of our customers in various other currencies. Additionally, we are party to 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. Various strategies to manage this risk are available to management, including producing and selling in local currencies and hedging programs. We did not hold a position in any foreign currency derivatives as of December 31, 2022.

Item 8. Financial Statements and Supplementary Data

Index to Financial Statements

	Page
Reports of Independent Registered Public Accounting Firm (PCAOB ID: 248)	31
Consolidated Statements of Operations and Comprehensive Income (Loss)	33
Consolidated Balance Sheets	34
Consolidated Statements of Changes in Stockholders' Equity	35
Consolidated Statements of Cash Flows	36
Notes to Consolidated Financial Statements	38
Note 1. Significant Accounting Policies	38
Note 2. Discontinued Operations	41
Note 3. Segment Information	43
Note 4. Accounts Receivable	45
Note 5. Inventories	45
Note 6. Property, Plant and Equipment	45
Note 7. Goodwill	46
Note 8. Intangible Assets	46
Note 9. Investment in Joint Venture	47
Note 10. Income Taxes	47
Note 11. Debt	51
Note 12. Leases	52
Note 13. Commitments and Contingencies	54
Note 14. Preferred Stock and Stockholders' Equity	55
Note 15. Revenue from Contracts with Customers	56
Note 16. Share-Based Compensation	58
Note 17. Accumulated Other Comprehensive Income	61
Note 18. Net Income (Loss) Per Common Share	62
Note 19. Fair Value Measurements	62

REPORT 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, 2022, 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, 2022, 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, 2022, and our report dated March 10, 2023 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. 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 10, 2023

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders
NN, Inc.

Opinion on the financial statements

We have audited the accompanying consolidated balance sheets of NN, Inc. (a Delaware corporation) and subsidiaries (the “Company”) as of December 31, 2022 and 2021, the related consolidated statements of operations and comprehensive income (loss), changes in stockholders’ equity, and cash flows for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, 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, 2022, 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 10, 2023 expressed an unqualified opinion.

Basis for opinion

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

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

Critical audit matters

Critical audit matters are matters arising from the current period audit of the 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 financial statements and (2) involved our especially challenging, subjective, or complex judgments. We determined that there are no critical audit matters.

/s/ GRANT THORNTON LLP

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

Charlotte, North Carolina
March 10, 2023

NN, Inc.

Consolidated Statements of Operations and Comprehensive Income (Loss)

(in thousands, except per share data)	Years Ended December 31,		
	2022	2021	2020
Net sales	\$ 498,738	\$ 477,584	\$ 427,534
Cost of sales (exclusive of depreciation and amortization shown separately below)	421,105	389,995	343,594
Selling, general, and administrative expense	49,635	51,489	58,055
Depreciation and amortization	47,231	46,195	45,680
Goodwill impairment	—	—	92,942
Other operating expense (income), net	1,859	(1,091)	4,720
Loss from operations	(21,092)	(9,004)	(117,457)
Interest expense	15,041	12,664	18,898
Loss on extinguishment of debt and write-off of debt issuance costs	—	2,390	144
Derivative payments on interest rate swap	—	1,717	4,133
Loss on interest rate swap	—	2,033	11,669
Other income, net	(5,064)	(5,366)	(213)
Loss from continuing operations before benefit (provision) for income taxes and share of net income from joint venture	(31,069)	(22,442)	(152,088)
Benefit (provision) for income taxes	(1,621)	1,756	8,972
Share of net income from joint venture	6,592	6,261	3,626
Loss from continuing operations	(26,098)	(14,425)	(139,490)
Income from discontinued operations, net of tax (Note 2)	—	1,200	38,898
Net loss	\$ (26,098)	\$ (13,225)	\$ (100,592)
Other comprehensive income (loss):			
Foreign currency translation loss	\$ (8,156)	\$ (1,135)	\$ (1,683)
Reclassification adjustment for discontinued operations	—	—	5,961
Interest rate swap:			
Change in fair value, net of tax	3,358	59	(12,443)
Reclassification adjustment for (gains) losses included in net loss, net of tax	(420)	2,906	18,987
Other comprehensive income (loss)	\$ (5,218)	\$ 1,830	\$ 10,822
Comprehensive loss	\$ (31,316)	\$ (11,395)	\$ (89,770)
Basic net loss per common share:			
Loss from continuing operations per common share	\$ (0.83)	\$ (0.82)	\$ (3.60)
Income from discontinued operations per common share	—	0.03	0.92
Net loss per common share	\$ (0.83)	\$ (0.79)	\$ (2.68)
Weighted average common shares outstanding	44,680	44,011	42,199
Diluted net loss per common share:			
Loss from continuing operations per common share	\$ (0.83)	\$ (0.82)	\$ (3.60)
Income from discontinued operations per common share	—	0.03	0.92
Net loss per common share	\$ (0.83)	\$ (0.79)	\$ (2.68)
Weighted average common shares outstanding	44,680	44,011	42,199

See Notes to Consolidated Financial Statements.

NN, Inc.
Consolidated Balance Sheets

(in thousands, except per share data)	December 31,	
	2022	2021
Assets		
Current assets:		
Cash and cash equivalents	\$ 12,808	\$ 28,656
Accounts receivable, net of allowances of \$1,469 and \$1,352 at December 31, 2022 and 2021, respectively	74,129	71,419
Inventories	80,682	75,027
Income tax receivable	12,164	11,808
Prepaid assets	2,794	2,172
Other current assets	9,123	7,200
Total current assets	191,700	196,282
Property, plant and equipment, net	197,637	209,105
Operating lease right-of-use assets	46,713	46,443
Intangible assets, net	72,891	88,718
Investment in joint venture	31,802	34,045
Deferred tax assets	102	314
Other non-current assets	5,282	4,194
Total assets	\$ 546,127	\$ 579,101
Liabilities, Preferred Stock, and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 45,871	\$ 36,710
Accrued salaries, wages and benefits	11,671	17,739
Income tax payable	926	2,072
Current maturities of long-term debt	3,321	3,074
Current portion of operating lease liabilities	5,294	5,704
Other current liabilities	11,723	8,718
Total current liabilities	78,806	74,017
Deferred tax liabilities	5,596	7,456
Long-term debt, net of current portion	149,389	151,052
Operating lease liabilities, net of current portion	51,411	51,295
Other non-current liabilities	9,960	17,289
Total liabilities	295,162	301,109
Commitments and contingencies (Note 13)		
Series D perpetual preferred stock - \$0.01 par value per share, 65 shares authorized, issued and outstanding at December 31, 2022 and 2021, respectively	64,701	53,807
Stockholders' equity:		
Common stock - \$0.01 par value per share, 90,000 shares authorized, 43,856 and 43,027 shares issued and outstanding at December 31, 2022 and 2021, respectively	439	430
Additional paid-in capital	468,143	474,757
Accumulated deficit	(245,198)	(219,100)
Accumulated other comprehensive loss	(37,120)	(31,902)
Total stockholders' equity	186,264	224,185
Total liabilities, preferred stock, and stockholders' equity	\$ 546,127	\$ 579,101

See Notes to Consolidated Financial Statements.

NN, Inc.

Consolidated Statements of Changes in Stockholders' Equity

(in thousands)	Common Stock			Warrants	Accumulated deficit	Accumulated other comprehensive income (loss)	Total
	Number of shares	Par value	Additional paid-in capital				
Balance as of 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)
Shares issued under stock incentive plans, net of forfeitures	417	4	(4)	—	—	—	—
Share-based compensation expense	—	—	4,251	—	—	—	4,251
Restricted shares forgiven for taxes	(44)	—	(157)	—	—	—	(157)
Reclassification of warrants to liabilities	—	—	—	(1,076)	—	—	(1,076)
Other comprehensive income	—	—	—	—	—	10,822	10,822
Balance as of December 31, 2020	42,686	\$ 427	\$493,332	\$ —	\$ (205,875)	\$ (33,732)	\$254,152
Net loss	—	—	—	—	(13,225)	—	(13,225)
Dividends accrued for preferred stock	—	—	(21,478)	—	—	—	(21,478)
Shares issued under stock incentive plans, net of forfeitures	387	4	(4)	—	—	—	—
Share-based compensation expense	—	—	3,221	—	—	—	3,221
Restricted shares forgiven for taxes	(52)	(1)	(362)	—	—	—	(363)
Shares issued for option exercises	6	—	48	—	—	—	48
Other comprehensive income	—	—	—	—	—	1,830	1,830
Balance as of December 31, 2021	43,027	\$ 430	\$474,757	\$ —	\$ (219,100)	\$ (31,902)	\$224,185
Net loss	—	—	—	—	(26,098)	—	(26,098)
Dividends accrued for preferred stock	—	—	(10,894)	—	—	—	(10,894)
Shares issued under stock incentive plans, net of forfeitures	860	9	(9)	—	—	—	—
Share-based compensation expense	—	—	4,377	—	—	—	4,377
Restricted shares forgiven for taxes	(31)	—	(88)	—	—	—	(88)
Other comprehensive loss	—	—	—	—	—	(5,218)	(5,218)
Balance as of December 31, 2022	43,856	\$ 439	\$468,143	\$ —	\$ (245,198)	\$ (37,120)	\$186,264

See Notes to Consolidated Financial Statements.

NN, Inc.
Consolidated Statements of Cash Flows

(in thousands)	Years Ended December 31,		
	2022	2021	2020
Cash flows from operating activities			
Net loss	(26,098)	(13,225)	(100,592)
Adjustments to reconcile net loss to net cash provided by operating activities:			
Depreciation and amortization of continuing operations	47,231	46,195	45,680
Depreciation and amortization of discontinued operations	—	—	35,731
Amortization of debt issuance costs and discount	1,361	1,381	15,692
Goodwill impairment of continuing operations	—	—	92,942
Goodwill impairment of discontinued operations	—	—	146,757
Impairments of property, plant and equipment	—	—	4,148
Loss on extinguishment of debt and write-off of debt issuance costs	—	2,390	1,532
Total derivative loss (gain), net of cash settlements	(5,265)	(3,259)	15,309
Share of net income from joint venture, net of cash dividends received	(347)	(6,261)	(3,626)
Gain on disposal of discontinued operations, net of tax and cost to sell	—	(1,200)	(233,824)
Share-based compensation expense	4,377	3,216	4,226
Deferred income taxes	(1,814)	(4,845)	(21,697)
Other	(3,207)	(2,611)	(4,730)
Changes in operating assets and liabilities:			
Accounts receivable	(4,920)	13,698	10,831
Inventories	(6,672)	(12,959)	5,114
Accounts payable	8,619	343	(8,606)
Income taxes receivable and payable, net	(1,457)	(4,516)	(633)
Other	(4,091)	(2,761)	11,295
Net cash provided by operating activities	7,717	15,586	15,549
Cash flows from investing activities			
Acquisition of property, plant and equipment	(17,952)	(18,221)	(23,773)
Proceeds from (cash paid for post-closing adjustments on) sale of business, net of cash sold	—	(3,880)	743,178
Proceeds from sale of property, plant, and equipment	460	1,418	3,317
Cash settlements of interest rate swap	—	(15,420)	(4,133)
Other	—	—	695
Net cash provided by (used in) investing activities	(17,492)	(36,103)	719,284
Cash flows from financing activities			
Cash paid for debt issuance costs	(136)	(7,360)	(661)
Proceeds from issuance of preferred stock	—	61,793	—
Redemption of preferred stock	—	(122,434)	—
Proceeds from long-term debt	46,000	171,000	66,195
Repayments of long-term debt	(47,958)	(93,729)	(776,331)
Repayments of short-term debt, net	—	(1,563)	(924)
Other	(3,092)	(5,150)	(3,133)
Net cash provided by (used in) financing activities	(5,186)	2,557	(714,854)
Effect of exchange rate changes on cash flows	(887)	(1,522)	(3,544)
Net change in cash and cash equivalents	(15,848)	(19,482)	16,435
Cash and cash equivalents at beginning of year (1)	28,656	48,138	31,703
Cash and cash equivalents at end of year	12,808	28,656	48,138

See Notes to Consolidated Financial Statements.

NN, Inc.
Consolidated Statements of Cash Flows

(in thousands)	Years Ended December 31,		
	2022	2021	2020
Supplemental schedule of non-cash investing activities:			
Non-cash additions to property, plant and equipment	1,266	4,438	9,644
Supplemental disclosures:			
Cash paid for interest	13,344	10,739	51,542
Cash paid for income taxes	4,739	7,624	2,241

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

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 diversified industrial company that combines in-depth materials science expertise with advanced engineering and production capabilities to design and manufacture high-precision metal and plastic components and assemblies for a variety of end markets on a global basis. 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 31 facilities in North America, Europe, South America, and Asia.

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. 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.

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 9). 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

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. The adoption of ASU 2020-06 effective January 1, 2022 did not have a material impact on our consolidated financial statements and related disclosures.

In May 2021, the FASB issued ASU 2021-04, *Issuer’s Accounting for Certain Modifications or Exchanges of Freestanding Equity-Classified Written Call Options* (“ASU 2021-04”), which clarifies the accounting for modifications or exchanges of freestanding equity-classified written call options that remain equity classified after modification or exchange. Specifically, ASU 2021-04 requires the issuer to treat a modification of an equity-classified warrant as an exchange of the original warrant. The difference between the fair value of the modified warrant and the fair value of the warrant immediately before modification is then recognized as an issuance cost or discount of the related transaction. Since we do not have any equity-classified written call options that would be subject to this guidance, the adoption of ASU 2021-04 did not have any impact on our consolidated financial statements and related disclosures during the year ended December 31, 2022.

In November 2021, the FASB issued ASU 2021-10, *Government Assistance (Topic 832): Disclosures by Business Entities about Government Assistance* (“ASU 2021-10”), which requires business entities to provide certain annual disclosures when they have received government assistance and use a grant or contribution accounting model by analogy to other accounting guidance. We have adopted ASU 2021-10 prospectively for the year ended December 31, 2022.

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 \$12.5 million and \$17.6 million in cash and cash equivalents as of December 31, 2022 and 2021, 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.

Leases

We determine whether an arrangement is a lease at inception. Lease right-of-use ("ROU") 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. Lease ROU 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 lease ROU assets is recognized in expense on a straight-line basis over the lease term.

We recognize short-term leases, which have a term of twelve months or less, 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 of four years to eight years. Operating lease ROU assets consist of the following:

- Equipment used in the manufacturing process as well as office equipment with terms of two years to five years; and
- Manufacturing plants and office facilities with terms of four years to 20 years.

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, or asset groups, 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, or asset group, 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 deemed 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 generally transfer control and recognize revenue 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 product. In limited circumstances, we recognize revenue over time as services are rendered. 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.

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, 2022, 2021, and 2020. 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, 2022, 2021, and 2020, transaction gains (losses) on intercompany loan transactions were \$0.2 million, \$(0.5) million, and \$(0.8) million, respectively.

Net Income (Loss) Per Common Share

In accordance with ASC 260, *Earnings Per Share*, we allocate earnings or losses to common stockholders and participating securities using the two-class method to compute earnings per share ("EPS") unless the treasury stock method results in a lower EPS. 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. We have elected to allocate undistributed income to participating securities based on year-to-date results. Our participating securities, which include preferred stock, 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, and stock options unless inclusion would not be dilutive.

Government Assistance

For the year ended December 31, 2022, we received \$1.4 million in grants and other programs from various governments outside of the U.S. These amounts were received as employment programs, rent abatements, and incentives for capital expenditures in specific locations. Amounts received were recognized as reductions to the underlying expense or capital assets.

Note 2. Discontinued Operations

In October 2020, we sold our Life Sciences business under the terms of a Stock Purchase Agreement (the "SPA") with affiliates of American Securities LLC for \$753.3 million cash. The Life Sciences business included facilities that were 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 furthered management's strategy to improve liquidity and create the financial flexibility to pursue key growth areas in the Mobile Solutions and Power Solutions segments. The SPA included a potential earnout payment of up to \$70.0 million based on the performance of the Life Sciences business during the year ended December 31, 2022. Since the sold Life Sciences business did not meet the minimum threshold as defined by the SPA, no earnout payment will be received.

After working capital and other closing adjustments, we received cash proceeds at closing of \$757.2 million in 2020 and paid \$3.9 million to the buyer during the year ended December 31, 2021, for post-closing adjustments. Under the terms of a transition services agreement, we provided certain support services after 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 recognized a tax indemnification of \$1.2 million during the year ended December 31, 2020 which was reversed during the year ended December 31, 2021, as the actual tax liability was determined to be \$0.

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 the 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,	
	2021	2020
Net sales	\$ —	\$ 225,255
Cost of sales (exclusive of depreciation and amortization shown separately below)	—	160,464
Selling, general, and administrative expense	—	20,779
Depreciation and amortization	—	35,731
Goodwill impairment	—	146,757
Other operating expense, net	—	41
Income from operations	—	(138,517)
Interest expense	—	48,893
Loss on extinguishment of debt and write-off of debt issuance costs	—	1,388
Other expense, net	—	(322)
Loss from discontinued operations before costs of disposal and benefit for income taxes	—	(188,476)
Benefit for income taxes	—	12,468
Loss from discontinued operations before costs of disposal	—	(176,008)
Gain on disposal of discontinued operations	1,200	212,319
Benefit for income taxes on costs of disposal	—	2,587
Income (loss) from discontinued operations, net of tax	<u>\$ 1,200</u>	<u>\$ 38,898</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 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 during the year ended December 31, 2020. The judgments, assumptions, and estimates involved in the goodwill impairment analysis for the Life Sciences reporting unit are consistent with those discussed in Note 7.

Our previous credit facility, which was in place at the time, required us to use proceeds from the sale of the Life Sciences business to prepay a portion of our previous debt. We paid \$700.0 million in the aggregate on our term loans during the fourth quarter of 2020. The prepayment was applied to debt in accordance with the prepayment provisions of the previous credit agreement, which was in place at the time. Average quarterly interest rates were multiplied by the required prepayment amounts to calculate interest expense to be reclassified to discontinued operations for historical periods presented.

The following table summarizes the amount of interest expense related to the previous credit facility that was reclassified to discontinued operations.

	Years Ended December 31,	
	2021	2020
Interest on debt	\$ —	\$ 35,147
Amortization of debt issuance costs	—	13,990
Capitalized interest and other	—	(244)
Total interest expense of discontinued operations	<u>\$ —</u>	<u>\$ 48,893</u>

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,	
	2021	2020
Depreciation and amortization	\$ —	\$ 35,731
Goodwill impairment	—	146,757
Amortization of debt issuance costs	—	13,990
Loss on extinguishment of debt and write-off of debt issuance costs	—	1,388
Acquisition of property, plant and equipment	—	8,416
Right-of-use assets obtained in exchange for new finance lease liabilities	—	695
Right-of-use assets obtained in exchange for new operating lease liabilities (1)	—	6,174

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

Note 3. Segment Information

Our business is aggregated into the following two reportable segments.

- Mobile Solutions.* Mobile Solutions is focused on growth in the automotive and general industrial end markets. We have developed an expertise in manufacturing highly complex, tight tolerance, system critical components. Our technical capabilities can be utilized in numerous applications including for use in battery electric, hybrid electric, and internal combustion engine vehicles. The group currently manufactures components on a high-volume basis for use in power steering, braking, transmissions, and gasoline fuel system applications, along with components utilized in heating, ventilation and air conditioning and diesel injection and diesel emissions treatment applications. This expertise has been gained through investment in technical capabilities, processes and systems, and allows us to provide skilled program management and product launch capabilities.
- Power Solutions.* Power Solutions is focused on growth in the electrical, general industrial, 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 transportation electrification. 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.

These divisions are considered our two 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.

The following table presents our financial performance by reportable segment.

	Year Ended December 31,		
	2022	2021	2020
Net sales:			
Mobile Solutions	\$ 293,536	\$ 285,863	\$ 256,360
Power Solutions	205,204	191,800	171,269
Corporate and Consolidations (1)	(2)	(79)	(95)
Total	<u>\$ 498,738</u>	<u>\$ 477,584</u>	<u>\$ 427,534</u>
Income (loss) from operations:			
Mobile Solutions	\$ (2,165)	\$ 9,039	\$ 5,228
Power Solutions	3,536	6,493	(85,983)
Corporate and Consolidations	(22,463)	(24,536)	(36,702)
Total	<u>\$ (21,092)</u>	<u>\$ (9,004)</u>	<u>\$ (117,457)</u>
Depreciation and amortization:			
Mobile Solutions	\$ 28,192	\$ 28,769	\$ 28,298
Power Solutions	17,483	15,892	15,730
Corporate and Consolidations	1,556	1,534	1,652
Total	<u>\$ 47,231</u>	<u>\$ 46,195</u>	<u>\$ 45,680</u>
Expenditures for long-lived assets:			
Mobile Solutions	\$ 14,590	\$ 15,411	\$ 12,400
Power Solutions	2,401	2,200	2,754
Corporate and Consolidations	961	610	203
Total	<u>\$ 17,952</u>	<u>\$ 18,221</u>	<u>\$ 15,357</u>

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

The following table summarizes total assets by reportable segment.

	As of December 31,	
	2022	2021
Mobile Solutions (1)	\$ 338,338	\$ 357,171
Power Solutions	178,129	184,196
Corporate and Consolidations	29,660	37,734
Total	<u>\$ 546,127</u>	<u>\$ 579,101</u>

(1) Total assets in Mobile Solutions includes \$31.8 million and \$34.0 million as of December 31, 2022 and 2021, respectively, related to the investment in our 49% owned joint venture (Note 9).

The following table summarizes long-lived tangible assets by country.

	As of December 31,	
	2022	2021
United States	\$ 104,360	\$ 112,430
China	29,603	32,605
France	24,536	26,977
Mexico	15,235	12,056
Brazil	14,829	15,042
Poland	9,074	9,995
All foreign countries	<u>\$ 93,277</u>	<u>\$ 96,675</u>
Total	<u>\$ 197,637</u>	<u>\$ 209,105</u>

Note 4. Accounts Receivable

The following table presents changes in the allowance for credit losses.

	Years Ended December 31,		
	2022	2021	2020
Balance at beginning of year	\$ 1,352	\$ 2,044	\$ 2,044
Additions	326	78	505
Write-offs and other	(182)	(734)	(562)
Currency impact	(27)	(36)	57
Balance at end of year	<u>\$ 1,469</u>	<u>\$ 1,352</u>	<u>\$ 2,044</u>

As of December 31, 2022 and 2021, no customer represented greater than 10% of our consolidated accounts receivable balance.

Accounts Receivable Sales Programs

We participate in programs established by our customers which allows us to sell certain receivables from that customer on a non-recourse basis to a third-party financial institution. During the year ended December 31, 2022, we incurred fees of \$0.6 million related to the sale of receivables which is recorded in the Other income, net line item on the Consolidated Statements of Operations and Comprehensive Income (Loss).

Note 5. Inventories

Inventories are comprised of the following amounts:

	As of December 31,	
	2022	2021
Raw materials	\$ 32,146	\$ 27,221
Work in process	24,610	24,960
Finished goods	23,926	22,846
Total inventories	<u>\$ 80,682</u>	<u>\$ 75,027</u>

Note 6. Property, Plant and Equipment

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

	As of December 31,	
	2022	2021
Land and buildings	\$ 58,256	\$ 57,991
Machinery and equipment	353,364	344,041
Construction in progress	11,063	5,009
Total	422,683	407,041
Less: Accumulated depreciation	225,046	197,936
Property, plant and equipment, net	<u>\$ 197,637</u>	<u>\$ 209,105</u>

For the years ended December 31, 2022, 2021, and 2020, we recorded depreciation expense of \$31.4 million, \$31.8 million, and \$31.3 million, respectively.

We monitor property, plant and equipment for any indicators of potential impairment. There were no impairment charges for the years ended December 31, 2022 and 2021. We recognized an impairment charge of \$4.1 million for the year ended December 31, 2020, related to the early retirement of identified fixed assets. The impairment charge was recorded to the “Other operating expense (income), net,” line item on the Consolidated Statements of Operations and Comprehensive Income (Loss). The impairment charge was determined by writing the assets down to the estimated salvage value, less disposal costs.

Note 7. Goodwill

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 the COVID-19 pandemic. 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) for the year ended December 31, 2020. As of December 31, 2022 and 2021, there was no remaining goodwill balance.

Note 8. Intangible Assets

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, 2020	\$ 29,062	\$ 74,003	\$ 103,065
Amortization	(3,353)	(10,994)	(14,347)
Balance as of December 31, 2021	25,709	63,009	88,718
Amortization	(3,353)	(12,474)	(15,827)
Balance as of December 31, 2022	<u>\$ 22,356</u>	<u>\$ 50,535</u>	<u>\$ 72,891</u>

The following table shows the cost and accumulated amortization of our intangible assets as of December 31, 2022 and 2021.

	December 31, 2022			December 31, 2021		
	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	\$ 173,746	\$ (103,021)	\$ 70,725	\$ 173,746	\$ (87,895)	\$ 85,851
Trademark and trade name	7,527	(5,361)	2,166	7,527	(4,660)	2,867
Total identified intangible assets	<u>\$ 181,273</u>	<u>\$ (108,382)</u>	<u>\$ 72,891</u>	<u>\$ 181,273</u>	<u>\$ (92,555)</u>	<u>\$ 88,718</u>

At December 31, 2022, the estimated useful life of customer relationships and trademarks and trade names was 5.3 years and 5.7 years, respectively. 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 each of the next five years.

Year Ending December 31,	
2023	\$ 14,167
2024	13,824
2025	13,824
2026	13,824
2027	11,663

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, 2022, our market capitalization was at a level that was less than the net book value of our stockholders' equity, which was deemed a triggering event that caused us to perform impairment analyses on our long-lived assets. Based on our analyses, the carrying values of the long-lived assets were recoverable and no impairment charge was recorded during the year ended December 31, 2022.

Note 9. 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, with the share of net income from the joint venture recorded in the Mobile Solutions segment.

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

Balance as of December 31, 2021	\$ 34,045
Share of earnings	6,592
Dividends paid by joint venture	(6,245)
Foreign currency translation loss	(2,590)
Balance as of December 31, 2022	<u>\$ 31,802</u>

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

	Year Ended December 31,		
	2022	2021	2020
Net sales	101,565	94,846	68,216
Cost of sales	84,654	77,620	56,669
Income from operations	15,111	15,429	10,202
Net income	13,453	12,777	7,401
		December 31,	
		2022	2021
Current assets		63,141	65,465
Noncurrent assets		79,473	75,222
Current liabilities		66,960	67,206
Noncurrent liabilities		8,695	10,006

We recognized sales to the JV of \$0.1 million, \$0.4 million, and \$0.1 million during the years ended December 31, 2022, 2021, and 2020, respectively. Amounts due to us from the JV as of December 31, 2022 were \$0.1 million.

Note 10. Income Taxes

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

	Years Ended December 31,		
	2022	2021	2020
United States	\$ (40,543)	\$ (35,325)	\$ (146,963)
Foreign	9,474	12,883	(5,125)
Loss from continuing operations before benefit (provision) for income taxes and share of net income from joint venture	<u>\$ (31,069)</u>	<u>\$ (22,442)</u>	<u>\$ (152,088)</u>

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

	Years Ended December 31,		
	2022	2021	2020
Current taxes:			
U.S. Federal	\$ (545)	\$ (19)	\$ (299)
State	(625)	(615)	4,599
Foreign	4,576	3,014	2,250
Total current tax expense	3,406	2,380	6,550
Deferred taxes:			
U.S. Federal	\$ (6,245)	\$ (8,421)	\$ (10,368)
State	70	(1,099)	(5,368)
Foreign	(986)	(154)	(1,852)
U.S. federal, state and foreign valuation allowance	5,376	5,538	2,066
Total deferred tax benefit	(1,785)	(4,136)	(15,522)
Total income tax expense (benefit)	\$ 1,621	\$ (1,756)	\$ (8,972)

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

	Years Ended December 31,		
	2022	2021	2020
U.S federal statutory income tax rate	21.0 %	21.0 %	21.0 %
Change in valuation allowance, exclusive of state	(17.5)%	(20.0)%	(1.3)%
State taxes, net of federal taxes, exclusive of tax reform	1.6 %	4.5 %	0.2 %
Non-U.S. earnings taxed at different rates	0.7 %	3.0 %	1.4 %
GILTI	(3.9)%	(6.0)%	(0.1)%
Goodwill impairment	— %	— %	(12.7)%
Deferred true-up	(6.4)%	— %	— %
Research and development tax credit	1.5 %	2.3 %	0.4 %
Change in uncertain tax positions	— %	0.7 %	2.2 %
CARES Act	— %	— %	2.7 %
Interest on CARES Act refund	1.8 %	— %	— %
Return to provision	1.3 %	0.8 %	(0.5)%
Taxes on unremitted foreign earnings	(3.9)%	2.0 %	(3.9)%
Restructuring gain	— %	— %	(2.6)%
Intercompany lending	(2.7)%	(5.3)%	— %
Warrant revaluation	3.6 %	6.5 %	— %
Other adjustments, net	(2.3)%	(1.7)%	(0.9)%
Effective tax rate	(5.2)%	7.8 %	5.9 %

Our effective tax rate was (5.2)% for 2022 which differed from the U.S. federal statutory tax rate of 21% primarily due to the impact of our valuation allowance change during the year.

Our effective tax rate for continuing operations was 7.8% for 2021. The 2021 effective tax rate for continuing operations differs from the U.S. federal statutory tax rate of 21% primarily due to the impact of our valuation allowance change during the year.

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 accrual of taxes on unremitted earnings of the foreign subsidiaries which may be repatriated.

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

	As of December 31,	
	2022	2021
Deferred income tax liabilities:		
Tax in excess of book depreciation	\$ 24,045	\$ 25,732
Intangible assets	16,978	20,812
Operating leases	10,669	10,473
Interest rate swap	754	37
Taxes on unremitted foreign earnings	4,961	5,630
Other deferred tax liabilities	761	1,007
Total deferred income tax liabilities	58,168	63,691
Deferred income tax assets:		
Interest expense limitation	10,723	7,141
Goodwill	22,277	24,262
Inventories	2,292	3,368
Section 174 research and development costs	1,859	—
Pension and personnel accruals	1,717	2,422
Operating leases	12,852	12,834
Net operating loss carryforwards	24,299	23,629
Credit carryforwards	2,803	3,044
Accruals and reserves	978	1,435
Other deferred tax assets	3,086	4,223
Deferred income tax assets before valuation allowance	82,886	82,358
Valuation allowance on deferred tax assets	(30,212)	(25,809)
Total deferred income tax assets	52,674	56,549
Net deferred income tax liabilities	\$ 5,494	\$ 7,142

As of December 31, 2022, we had a \$33.4 million U.S. federal net operating loss (“NOL”) carryover. The federal NOL has an indefinite life, but utilization within any tax year is limited to 80% of taxable income. Therefore, a valuation allowance of \$4.4 million has been established to reduce the attribute balance to the amount expected to be utilized. As of December 31, 2022, we had \$239.5 million of state NOL carryovers, which 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 \$15.8 million (prior to federal benefit) has been established to reduce the state attribute balance to the amount expected to be utilized before expiration. We also have \$4.8 million, tax-effected, of foreign NOL carryovers at December 31, 2022. 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 \$1.8 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 and \$2.6 million of U.S. federal tax credits and tax credits in foreign jurisdictions, respectively, as of December 31, 2022. We have recognized a valuation allowance of \$1.9 million for the foreign tax credits. In addition, we have \$2.1 million (prior to federal benefit) of state deferred tax assets for which we believe recognition is not appropriate.

We have a U.S. federal and state deferred tax asset related to interest expense carryforwards. Management believes it is more likely than not that the benefit for this assets will not be realized. We have established a valuation allowance of \$8.0 million to eliminate the carrying value of this asset.

Management assesses available positive and negative evidence to estimate whether it is more likely than not sufficient future taxable income will be generated to provide use of the existing deferred tax assets. A significant piece of objective negative evidence evaluated is cumulative losses incurred over the three-year period ended December 31, 2022. Such objective evidence limits the ability to consider other subjective evidence, such as our projections for future earnings growth. On the basis of this evaluation, as of December 31, 2022, a valuation allowance of \$30.2 million has been recorded to recognize only the portion of the deferred tax asset that is more likely than not to be realized without consideration of future earnings growth.

Management believes all remaining tax assets will more likely than not be realized. However, the amount of the deferred tax asset realized will change based on future conditions, and the amount considered realizable will be adjusted if objective negative evidence in the form of cumulative losses is no longer present allowing additional weight to be given to subjective evidence such as our projections for growth.

During 2022, the valuation allowance increased by \$4.4 million, primarily due to allowances recorded against U.S. federal net operating loss carryforwards and carryforwards of disallowed interest expense which are subject to certain annual deduction limitations. The increase was partially offset by utilization of previously reserved net operating loss carryforwards in certain foreign jurisdictions, the write-off of deferred tax assets and adjustments to state net operating losses resulting from amended returns for which a full valuation allowance was recorded.

As a result of the deemed mandatory repatriation provisions in the U.S. Tax Cuts and Jobs Act of 2017 and subsequent recognition in income of GILTI, we do not have material basis differences related to cumulative unremitted earnings for U.S. income tax purposes. However, we continue to evaluate the impact that repatriation of foreign earnings would have on withholding and other taxes. As of December 31, 2022, we have recorded a liability of \$5.0 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.

In 2021, the Company asserted that it was permanently reinvested in certain jurisdictions for which it previously was unable to assert permanent reinvestment. Prior to the Company's debt refinancing in 2021, the Company had recorded a liability on all unremitted earnings. However, upon completion of the debt refinancing, the Company reevaluated repatriation plans, changed its assertion for certain jurisdictions and recorded the resulting tax benefit of \$2.4 million.

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. 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 \$0.5 million, \$0.5 million, and \$0.6 million are included in other non-current liabilities as of December 31, 2022, 2021, and 2020, respectively. In 2022, we accrued \$0.6 million of interest on IRS refunds relating to the CARES Act. We initially filed refund claims in 2021 and will be accruing interest quarterly until refunds are received.

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

	Years Ended December 31,		
	2022	2021	2020
Balance at beginning of year	\$ 125	\$ 247	\$ 2,589
Additions for tax positions of prior years	—	—	121
Reductions for tax positions of prior years	(7)	(122)	(2,463)
Balance at end of year	<u>\$ 118</u>	<u>\$ 125</u>	<u>\$ 247</u>

The reduction to unrecognized tax benefits in 2022 is related to the foreign currency remeasurement of previously unrecognized tax benefits. As of December 31, 2022, the unrecognized tax benefits would, if recognized, impact our effective tax rate by \$0.6 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 tax holidays did not impact our 2022 foreign taxes. The impact of these tax holidays decreased foreign taxes by \$0.2 million and \$0.2 million for 2021 and 2020, respectively.

Note 11. Debt

On March 22, 2021, we entered into a new \$150.0 million term loan facility (the “Term Loan Facility”) and a new \$50.0 million asset backed credit facility (the “ABL Facility”). The following table presents the outstanding debt balances.

	As of December 31,	
	2022	2021
Term Loan Facility	\$ 147,375	\$ 148,875
ABL Facility	1,000	—
International loans	8,729	10,930
Total principal	157,104	159,805
Less-current maturities of long-term debt	3,321	3,074
Principal, net of current portion	153,783	156,731
Less-unamortized debt issuance costs and discount (1)	4,394	5,679
Long-term debt, net of current portion	<u>\$ 149,389</u>	<u>\$ 151,052</u>

(1) In addition to this amount, costs of \$0.6 million and \$0.7 million related to the ABL Facility were recorded in other non-current assets as of December 31, 2022 and 2021, respectively.

We capitalized interest costs of \$0.6 million, \$0.3 million, and \$0.2 million in the years ended December 31, 2022, 2021, and 2020, respectively, related to construction in progress.

Term Loan Facility

Outstanding borrowings under the Term Loan Facility bear interest at either 1) one-month LIBOR (subject to a 1.000% floor) plus an applicable margin of 6.875% or 2) the greater of various benchmark rates plus an applicable margin of 5.875%. At December 31, 2022, the Term Loan Facility bore interest, based on one-month LIBOR, at 11.259%. We have an interest rate swap, which expires in July 2024, that changes the one-month LIBOR to a fixed rate of 1.291% on \$60.0 million of the outstanding balance of the Term Loan Facility. Refer to Note 19 for further discussion of the interest rate swap agreement.

The Term Loan Facility requires quarterly principal payments of \$0.4 million with the remaining unpaid principal amount due on the final maturity date of September 22, 2026. We may be required to make additional principal payments annually that are calculated as a percentage of our excess cash flow, as defined by the lender, based on our net leverage ratio. The Term Loan Facility is collateralized by all of our assets. The Term Loan Facility has a first lien on all assets other than accounts receivable and inventory and has a second lien on accounts receivable and inventory. On March 3, 2022, we amended our Term Loan Facility, which increased the quarterly maximum consolidated net leverage ratio. We were in compliance with all requirements under the Term Loan Facility as of December 31, 2022.

The Term Loan Facility was issued at a \$3.8 million discount and we capitalized an additional \$2.8 million in new debt issuance costs. These costs are recorded as a direct reduction to the carrying amount of the associated long-term debt and amortized over the term of the debt.

ABL Facility

The ABL Facility provides for a senior secured revolving credit facility in the amount of \$50.0 million, of which \$30.0 million is available in the form of letters of credit and \$5.0 million is available for the issuance of short-term swingline loans. The availability of credit under the ABL Facility is limited by a borrowing base calculation derived from accounts receivable and inventory held in the United States. Outstanding borrowings under the ABL Facility bear interest on a variable rate structure plus an interest rate spread that is based on the average amount of aggregate revolving commitment available. The variable borrowing rate is either 1) LIBOR plus an applicable margin of 1.75% or 2.00%, depending on availability, or 2) the greater of the federal funds rate or prime, plus an applicable margin of 0.75% or 1.00%, depending on availability. We may elect whether to use one-month, three-month, or six-month LIBOR, subject to a 0.50% floor. Interest payments are due monthly on borrowings that utilize one-month LIBOR and quarterly on borrowings that utilize three-month or six-month LIBOR. At December 31, 2022, using one-month LIBOR plus a 1.75% spread, the weighted average interest rate on outstanding borrowings under the ABL Facility was 6.00%. We pay a commitment fee of 0.375% for unused capacity under the ABL Facility and a 1.875% fee on the amount of letters of credit outstanding. The final maturity date of the ABL Facility is March 22, 2026.

As of December 31, 2022, we had \$1.0 million of outstanding borrowings under the ABL Facility, \$11.0 million of outstanding letters of credit, and \$35.3 million available for future borrowings under the ABL Facility. The ABL Facility has a first lien on accounts receivable and inventory. We were in compliance with all requirements under the ABL Facility as of December 31, 2022.

Loan Amendments

On March 3, 2023, we amended our Term Loan Facility (the “Term Loan Amendment”) and ABL Facility (the “ABL Amendment”) to adjust certain covenants under the agreements, as well as to change the applicable base rate on which interest expense is determined.

The Term Loan Amendment increases the quarterly maximum consolidated net leverage ratio covenant beginning in 2023 and waived the required excess cash flow payment that would have been paid in 2023. The Term Loan Amendment provides for increased utilization of customer programs to accelerate payment terms and also introduces a quarterly domestic liquidity covenant. Interest under the Term Loan Amendment is increased on a paid-in-kind basis at a rate dependent on the Company’s leverage ratio and whether the Company completes a qualifying junior equity raise by June 30, 2023. The Company also issued penny warrants in connection with the Term Loan Amendment. In addition, the base rate for interest expense has been changed from LIBOR to the secured overnight financing rate (“SOFR”).

The ABL Amendment provides for increased utilization of customer programs to accelerate payment terms and also introduces a quarterly domestic liquidity covenant. In addition, the base rate for interest expense has been changed from LIBOR to SOFR.

Future Maturities

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

Years Ending December 31,	
2023	\$ 3,321
2024	3,166
2025	3,181
2026	143,887
2027	364

Debt Issuance Costs

We recognized a \$2.4 million loss on extinguishment for unamortized debt issuance costs that were written off in the year ended December 31, 2021, in connection with the termination of our previous credit facility.

Note 12. Leases

The following table presents components of lease expense:

	Years Ended December 31,		
	2022	2021	2020
Finance lease cost:			
Amortization of right-of-use assets	\$ 1,318	\$ 1,451	\$ 1,272
Interest expense	351	213	192
Operating lease cost	8,285	8,015	8,397
Short-term lease cost (1)	438	655	591
Sublease income	(195)	—	—
Total lease cost	\$ 10,197	\$ 10,334	\$ 10,452

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

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

		As of December 31,	
		2022	2021
Financial Statement Line Item			
Assets:			
Operating lease assets	Operating lease right-of-use assets	\$ 46,713	\$ 46,443
Finance lease assets	Property, plant and equipment, net	12,989	13,641
Total lease assets		<u>\$ 59,702</u>	<u>\$ 60,084</u>
Liabilities:			
Current liabilities:			
Operating lease liabilities	Current portion of operating lease liabilities	\$ 5,294	\$ 5,704
Finance lease liabilities	Other current liabilities	2,610	3,111
Non-current liabilities:			
Operating lease liabilities	Operating lease liabilities, net of current portion	51,411	51,295
Finance lease liabilities	Other non-current liabilities	3,828	5,446
Total lease liabilities		<u>\$ 63,143</u>	<u>\$ 65,556</u>

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

	Years Ended December 31,		
	2022	2021	2020
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash flows used in finance leases	\$ 351	\$ 213	\$ 192
Operating cash flows used in operating leases	14,214	13,434	13,498
Financing cash flows used in finance leases	3,003	4,836	2,018
Right-of-use assets obtained in exchange for new finance lease liabilities	\$ 1,263	\$ 2,814	\$ 728
Right-of-use assets obtained in exchange for new operating lease liabilities (1)	5,181	—	8,682

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

The weighted average remaining lease term and weighted-average discount rate for finance and operating leases were as follows:

	As of December 31,	
	2022	2021
Weighted-average remaining lease term - finance leases	3.1 years	3.3 years
Weighted-average remaining lease term - operating leases	10.1 years	11.1 years
Weighted-average discount rate - finance leases	5.3 %	3.0 %
Weighted-average discount rate - operating leases	7.5 %	7.0 %

The maturities of lease liabilities as of December 31, 2022, is as follows:

	Operating Leases	Finance Leases
2023	\$ 9,250	\$ 2,913
2024	8,419	1,819
2025	8,352	1,017
2026	8,193	950
2027	7,983	509
Thereafter	37,655	—
Total future minimum lease payments	<u>79,852</u>	<u>7,208</u>
Less: imputed interest	23,147	770
Total lease liabilities	<u>\$ 56,705</u>	<u>\$ 6,438</u>

In August 2022, we began subleasing a portion of our leased corporate headquarters office space. Since the Company retains the obligation to the lessor, the underlying lease continues to be accounted for as operating leases. Sublease income is recognized on a straight-line basis over the lease terms.

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. 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 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 (income), net,” on the Consolidated Statements of Operations and Comprehensive Income (Loss) for the year ended December 31, 2020. 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 (income), net” for the year ended December 31, 2020.

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 were deferred over a period ranging from April 2020 to December 2020 and were repaid 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 elected to apply lease accounting relief announced by the FASB in April 2020 and 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 years ended December 31, 2022, 2021, and 2020, was \$(0.3) million, \$(0.2) million, and \$0.7 million, respectively.

Note 13. Commitments and Contingencies

Brazil ICMS Tax Matter

Prior to the acquisition of Autocam Corporation (“Autocam”) in 2014, Autocam’s Brazilian subsidiary (“Autocam Brazil”) received notification from the Brazilian tax authority regarding ICMS (state value added tax) 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 do not 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, 2022.

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 us, certain of our current and former officers and directors, and each of the underwriters involved in our public offering and sale of 14.4 million shares of our 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 our effective shelf registration statement on Form S-3 (File No. 333-216737) (the “Offering”). The amended complaint alleged violations of Sections 11, 12(a)(2), and 15 of the Securities Act in connection with the Offering.

On July 25, 2022, the parties filed a Stipulation of Settlement to settle the securities offering action. Under the terms of the Stipulation of Settlement, which was approved and finalized by the court on December 1, 2022, the Company and/or its insurance carriers were to make cash payments to the plaintiff in the amount of \$9.5 million (the “Settlement Amount”), in exchange for which the Company and the other named defendants were released from all claims related to the securities offering action. Since we had previously paid covered expenses totaling \$1.0 million meeting our directors’ and officers’ retention requirement, the Settlement Amount was covered and paid by our directors’ and officers’ insurance carriers during the fourth quarter of 2022.

Other Legal Matters

On April 25, 2022, we reached an agreement to settle breach of contract claims brought by a former customer regarding the sale of products by us in 2016. Under the agreement, we are paying \$1.8 million to the customer in specified installments through July 2023. The \$1.8 million settlement is included in the “Other operating expense (income), net” line in the Condensed Consolidated Statements of Operations and Comprehensive Income (Loss).

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 14. Preferred Stock and Stockholders’ Equity

Series D Perpetual Preferred Stock

On March 22, 2021, we completed a private placement of 65,000 shares of newly designated Series D Perpetual Preferred Stock, with a par value of \$0.01 per share (the “Series D Preferred Stock”), at a price of \$1,000 per share, together with detachable warrants (the “2021 Warrants”) to purchase up to 1.9 million shares of our common stock at an exercise price of \$0.01 per share. The Series D Preferred Stock has an initial liquidation preference of \$1,000 per share and is redeemable at our option in cash at a redemption price equal to the liquidation preference then in effect. Series D Preferred Stock shares earn cash dividends at a rate of 10.0% per year, payable quarterly in arrears, accruing whether or not earned or declared. If no cash dividend is paid, then the liquidation preference per share effective on the dividend date increases by 12.0% per year. On March 22, 2026, the cash dividend rate and in-kind dividend rate increase by 2.5% per year. Cash dividends are required beginning on September 30, 2027.

The Series D Preferred Stock is classified as mezzanine equity, between liabilities and stockholders’ equity, because certain features of the Series D Preferred Stock could require redemption of the Series D Preferred Stock upon a change of control event that is considered not solely within our control. For initial recognition, the Series D Preferred Stock was recognized at a discounted value, net of issuance costs and allocation to warrants and a bifurcated embedded derivative. The aggregate discount is amortized as a deemed dividend through March 22, 2026, which is the date the dividend rate begins to increase by 2.5% per year. 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*, certain features of the Series D Preferred Stock were bifurcated and accounted for as derivatives separately. Note 19 discusses the accounting for these features.

As of December 31, 2022, the carrying value of the Series D Preferred Stock shares was \$64.7 million, which included \$18.0 million of accumulated unpaid and deemed dividends. The following table presents the change in the Series D Preferred Stock carrying value.

	Years Ended December 31,	
	2022	2021
Balance at beginning of year	\$ 53,807	\$ —
Proceeds from issuance of shares, net of issuance costs	—	61,793
Fair value of 2021 Warrants issued	—	(14,839)
Recognition of bifurcated embedded derivative	—	(282)
Accrual of in-kind dividends	8,961	6,222
Amortization	1,933	913
Balance at end of year	<u>\$ 64,701</u>	<u>\$ 53,807</u>

Net cash proceeds of \$61.8 million from the issuance of the Series D Preferred Stock, along with part of the proceeds from the Term Loan Facility, were used to redeem all of the outstanding shares of the Company’s Series B Convertible Preferred Stock (the “Series B Preferred Stock”).

Series B Convertible Preferred Stock

The Series B Preferred Stock had a liquidation preference of \$1,000 per share and was redeemable in cash at our option, subject to the applicable redemption premium. Series B Preferred Stock shares earned cumulative dividends at a rate of 10.625% per year, and accrued whether or not earned or declared. The Series B Preferred Stock was recognized at a discounted value, net of issuance costs and allocation to warrants and bifurcated embedded derivatives. The aggregate discount was amortized as a deemed dividend through December 31, 2023, which is the date the holders had 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).

At redemption on March 22, 2021, the carrying value of the Series B Preferred Stock shares included \$14.3 million of accumulated unpaid and deemed dividends. The following table presents the change in the Series B Preferred Stock carrying value.

	Years Ended December 31,	
	2021	2020
Balance at beginning of year	\$ 105,086	\$ 93,012
Accrual of in-kind dividends	14,008	11,121
Amortization	335	953
Redemption	(119,429)	—
Balance at end of year	<u>\$ —</u>	<u>\$ 105,086</u>

Note 15. 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. During the year ended December 31, 2022, we received equipment from a customer as part of the selling price of goods transferred. This noncash consideration was recognized as revenue equal to the fair value of the equipment received.

The following tables summarize revenue by customer geographical region.

Year Ended December 31, 2022	Mobile Solutions	Power Solutions	Intersegment Sales Eliminations	Total
United States and Puerto Rico	\$ 140,931	\$ 160,894	\$ (2)	\$ 301,823
China	46,045	5,511	—	51,556
Brazil	47,266	950	—	48,216
Mexico	23,348	17,297	—	40,645
Germany	5,158	348	—	5,506
Poland	5,031	11	—	5,042
Other	25,757	20,193	—	45,950
Total net sales	<u>\$ 293,536</u>	<u>\$ 205,204</u>	<u>\$ (2)</u>	<u>\$ 498,738</u>

Year Ended December 31, 2021	Mobile Solutions	Power Solutions	Intersegment Sales Eliminations	Total
United States and Puerto Rico	\$ 140,383	\$ 152,931	\$ (79)	\$ 293,235
China	52,227	4,745	—	56,972
Brazil	34,644	811	—	35,455
Mexico	19,520	16,177	—	35,697
Germany	5,230	546	—	5,776
Poland	3,743	18	—	3,761
Other	30,116	16,572	—	46,688
Total net sales	<u>\$ 285,863</u>	<u>\$ 191,800</u>	<u>\$ (79)</u>	<u>\$ 477,584</u>

[Table of Contents](#)

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	<u>\$ 256,360</u>	<u>\$ 171,269</u>	<u>\$ (95)</u>	<u>\$ 427,534</u>

The following tables summarize revenue by customer industry. Our products in the automotive industry include high-precision components and assemblies for electric power steering systems, electric braking, electric motors, fuel systems, emissions control, transmissions, moldings, stampings, sensors, and electrical contacts. Our products in the general industrial industry include high-precision metal and plastic components for a variety of industrial applications including diesel industrial motors, heating and cooling systems, fluid power systems, power tools, and more. While many of the industries we serve include electrical components, our products in the residential/commercial electrical industry category in the following tables include components used in smart meters, charging stations, circuit breakers, transformers, electrical contact assemblies, precision stampings, welded contact assemblies, and specification plating and surface finishing.

Year Ended December 31, 2022	Mobile Solutions	Power Solutions	Intersegment Sales Eliminations	Total
Automotive	\$ 197,341	\$ 40,890	\$ —	\$ 238,231
General Industrial	78,142	61,828	—	139,970
Residential/Commercial Electrical	—	70,055	—	70,055
Other	18,053	32,431	(2)	50,482
Total net sales	<u>\$ 293,536</u>	<u>\$ 205,204</u>	<u>\$ (2)</u>	<u>\$ 498,738</u>

Year Ended December 31, 2021	Mobile Solutions	Power Solutions	Intersegment Sales Eliminations	Total
Automotive	\$ 182,094	\$ 38,779	\$ —	\$ 220,873
General Industrial	90,290	60,312	—	150,602
Residential/Commercial Electrical	—	61,748	—	61,748
Other	13,479	30,961	(79)	44,361
Total net sales	<u>\$ 285,863</u>	<u>\$ 191,800</u>	<u>\$ (79)</u>	<u>\$ 477,584</u>

Year Ended December 31, 2020	Mobile Solutions	Power Solutions	Intersegment Sales Eliminations	Total
Automotive	\$ 170,389	\$ 31,422	\$ —	\$ 201,811
General Industrial	75,610	52,714	—	128,324
Residential/Commercial Electrical	—	58,143	—	58,143
Other	10,361	28,990	(95)	39,256
Total net sales	<u>\$ 256,360</u>	<u>\$ 171,269</u>	<u>\$ (95)</u>	<u>\$ 427,534</u>

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.

Deferred Revenue

The timing of revenue recognition, billings, and cash collections results in billed accounts receivable and customer advances and deposits (e.g. contract liability) on the Consolidated Balance Sheets. These contract liabilities are reported on the Consolidated Balance Sheets on a contract-by-contract basis at the end of each reporting period as deferred revenue, which is reported in the “Other current liabilities” line on the Consolidated Balance Sheets.

Deferred revenue relates to payments received in advance of performance under the contract and recognized as revenue as (or when) we perform under the contract. Changes in the contract liability balances during the year ended December 31, 2022, were not materially impacted by any other factors. The balance of deferred revenue was \$0.7 million and \$0.5 million as of December 31, 2022 and December 31, 2021, respectively. Revenue recognized for performance obligations satisfied or partially satisfied during the year ended December 31, 2022 included \$0.5 million that was included in deferred revenue as of December 31, 2021.

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, 2022, 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

No single customer accounted for 10% or more of consolidated net sales, during the years ended December 31, 2022, 2021, and 2020.

Note 16. Share-Based Compensation

As of December 31, 2022, we have 3.4 million shares available that can be issued to employees and non-executive directors under the 2022 Omnibus Incentive Plan 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 attributable to discontinued operations for the year ended December 31, 2020. The following table lists the components of share-based compensation expense by type of award.

	Years Ended December 31,		
	2022	2021	2020
Restricted stock	3,635	2,166	3,393
Performance share units	602	797	199
Stock options	\$ 140	\$ 253	\$ 634
Share-based compensation expense	<u>\$ 4,377</u>	<u>\$ 3,216</u>	<u>\$ 4,226</u>

Unrecognized compensation cost related to unvested awards was \$3.1 million as of December 31, 2022, which will be recognized over a weighted-average period of 1.7 years.

Restricted Stock

During the years ended December 31, 2022, 2021, and 2020, we granted 897,000, 459,000, and 460,000 shares of restricted stock to non-executive directors, officers, and certain other key employees. Shares of restricted stock vest pro-rata generally over three years for employees and over one year for non-executive directors. The fair value of restricted stock awards is based on 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, 2022, 2021, and 2020, was \$3.31, \$6.84, and \$9.35 per share, respectively. The total grant-date fair value of restricted stock that vested in the years ended December 31, 2022, 2021, and 2020, was \$2.1 million, \$2.8 million, and \$1.9 million, respectively.

The following table presents the status of unvested restricted stock awards as of December 31, 2022 and changes during the year then ended.

	Nonvested Restricted Shares	Weighted Average Grant-Date Fair Value
Unvested at January 1, 2022	469,000	\$ 7.28
Granted	897,000	3.31
Vested	(291,000)	7.05
Forfeited	(37,000)	3.93
Unvested at December 31, 2022	<u>1,038,000</u>	<u>\$ 4.03</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. Some PSUs are based on total shareholder return (“TSR Awards”), and other PSUs are based on return on invested capital (“ROIC Awards”). TSR Awards granted in 2022, 2021, and 2020 were made pursuant to the 2019 Omnibus Plan and a Performance Share Unit Agreement (the “2019 Omnibus Agreement”). ROIC Awards granted in 2022 were made pursuant to the 2022 Omnibus Incentive Plan and a Performance Share Unit Agreement. ROIC Awards granted in 2021 and 2020 were made pursuant to the 2019 Omnibus Agreement.

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 a specified index during specified performance periods as defined in the 2019 Omnibus Agreement. The ROIC Awards 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 3 years later on December 31. If the PSUs do not vest at the end of the performance periods, then the PSUs will expire automatically.

PSUs that vest will be settled by the issuance of shares of our common stock with the actual number of shares 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.

A participant will earn 25% or 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.” 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 2022, 2021, and 2020.

TSR Awards:	Threshold Performance (25% or 50% of Shares)⁽¹⁾	Target Performance (100% of Shares)	Maximum Performance (150% of Shares)
2022 grants	25th Percentile	55th Percentile	75th Percentile
2021 grants	35th Percentile	50th Percentile	75th Percentile
2020 grants	35th Percentile	50th Percentile	75th Percentile

ROIC Awards:	Threshold Performance (50% of Shares)	Target Performance (100% of Shares)	Maximum Performance (150% of Shares)
2022 grants	6.4%	8.6%	10.0%
2021 grants	6.3%	7.0%	8.6%
2020 grants	6.7%	7.9%	8.7%

(1) Threshold performance will earn 25% of the target number of PSUs for the 2022 grants and 50% for the 2021 grants and 2020 grants.

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	
	Performance Units	Grant-Date Fair Value	Performance Units	Grant-Date Fair Value
2022	382,000	\$ 2.53	408,000	\$ 2.62
2021	142,000	\$ 8.58	172,000	\$ 7.20
2020	139,000	\$ 10.88	157,000	\$ 9.44

The grant-date fair value of TSR Awards is determined using the Monte Carlo simulation model, as the total shareholder return metric is considered a market condition under ASC Topic 718, *Compensation – stock compensation*, and expense is recognized over the performance period regardless of actual award payout. 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 and compensation expense is recognized over the performance period based on the estimated outcome of the performance condition.

The following table presents the status of unvested PSUs as of December 31, 2022 and changes during the year then ended.

	Nonvested TSR Awards		Nonvested ROIC Awards	
	Number of Performance Units	Weighted Average Grant-Date Fair Value	Number of Performance Units	Weighted Average Grant-Date Fair Value
Nonvested at January 1, 2022	194,000	\$ 9.59	228,000	\$ 8.14
Granted	382,000	2.53	408,000	2.62
Expired	(84,000)	10.88	(96,000)	9.44
Nonvested at December 31, 2022	<u>492,000</u>	\$ 3.87	<u>540,000</u>	\$ 3.74

None of the PSUs that were granted in 2018, 2019, and 2020 vested in 2020, 2021, and 2022, respectively, because the actual performance achieved was below the “Threshold Performance” level as defined by the grant agreements.

Stock Options

Stock options have an exercise price equal to the closing price of our stock on the date of grant, an exercise term of ten years with a vesting period of three years. No options were granted in 2022 or 2021. We granted 159,000 options during the year ended December 31, 2020 with a weighted average grant-date fair value of \$4.76 per share.

The following table presents stock option activity for the year ended December 31, 2022.

	Number of Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at January 1, 2022	621,000	\$ 12.24		
Forfeited	(4,000)	9.44		
Expired	(79,000)	9.71		
Outstanding at December 31, 2022	<u>538,000</u>	\$ 12.63	3.0 years	\$ — (1)
Exercisable at December 31, 2022	<u>515,000</u>	\$ 12.77	2.8 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, 2022, was greater than the exercise price of any individual option grant.

Note 17. Accumulated Other Comprehensive Income

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

	Foreign Currency Translation	Interest rate swap	Income taxes (1)	Total
Balance as of 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 other comprehensive income (loss)	4,278	8,522	(1,978)	10,822
Balance as of December 31, 2020	\$ (30,881)	\$ (3,712)	\$ 861	\$ (33,732)
Other comprehensive income (loss) before reclassifications	(1,135)	78	(19)	(1,076)
Amounts reclassified from AOCI to interest expense (2)	—	73	(18)	55
Amounts reclassified from AOCI to loss on interest rate swap (3)	—	3,712	(861)	2,851
Net other comprehensive income (loss)	(1,135)	3,863	(898)	1,830
Balance as of December 31, 2021	\$ (32,016)	\$ 151	\$ (37)	\$ (31,902)
Other comprehensive income (loss) before reclassifications	(8,156)	3,426	(68)	(4,798)
Amounts reclassified from AOCI to interest expense (2)	—	(428)	8	(420)
Net other comprehensive income (loss)	(8,156)	2,998	(60)	(5,218)
Balance as of December 31, 2022	\$ (40,172)	\$ 3,149	\$ (97)	\$ (37,120)

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

(2) Represents interest rate swap settlements of effective hedge.

(3) Represents reclassification of derivative loss and settlements after discontinuation of hedge accounting. See Note 19 for further discussion of the interest rate swap.

Note 18. Net Income (Loss) Per Common Share

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

	Years Ended December 31,		
	2022	2021	2020
Numerator:			
Loss from continuing operations	\$ (26,098)	\$ (14,425)	\$ (139,490)
Adjustment for preferred stock cumulative dividends and deemed dividends	(10,894)	(21,478)	(12,373)
Numerator for basic and diluted net loss from continuing operations per common share	(36,992)	(35,903)	(151,863)
Income from discontinued operations, net of tax	—	1,200	38,898
Numerator for basic and diluted net loss per common share	\$ (36,992)	\$ (34,703)	\$ (112,965)
Denominator:			
Weighted average common shares outstanding	43,738	42,991	42,692
Adjustment for participating securities	(951)	(461)	(493)
Adjustment for 2021 Warrants outstanding (1)	1,893	1,481	—
Shares used to calculate basic and diluted net loss per share	<u>44,680</u>	<u>44,011</u>	<u>42,199</u>
Per common share net income (loss):			
Basic and diluted net loss from continuing operations per common share	\$ (0.83)	\$ (0.82)	\$ (3.60)
Basic and diluted net income from discontinued operations per common share	—	0.03	0.92
Basic and diluted net loss per common share	\$ (0.83)	\$ (0.79)	\$ (2.68)
Cash dividends declared per common share	\$ —	\$ —	\$ —

(1) Weighted average 2021 Warrants outstanding are included in shares outstanding for calculation of basic earnings per share because they are exercisable at an exercise price of \$0.01 per share, subject to certain adjustments (see Note 19).

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.

	Years Ended December 31,		
	2022	2021	2020
Options	557	766	871
2019 Warrants	1,500	1,500	1,500
Series B Preferred Stock, as-converted	—	—	19,021
	<u>2,057</u>	<u>2,266</u>	<u>21,392</u>

Stock options excluded from the EPS calculations had a per share exercise price ranging from \$7.93 to \$25.16 for the year ended December 31, 2022. The 2019 Warrants excluded from the EPS calculations for the year ended December 31, 2022 had a per share exercise price of \$11.49.

Note 19. Fair Value Measurements

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

Preferred Stock Related Derivatives

Certain features were bifurcated and accounted for separately from the Series B Preferred Stock. The following features were recorded as derivatives.

- *Warrants.* In conjunction with our placement of the Series B Preferred Stock, we issued detachable warrants to purchase up to 1.5 million shares of our common stock (the “2019 Warrants”), which are exercisable, in full or in part, at any time prior to December 11, 2026. The original exercise price was \$12.00 per share, subject to anti-dilution adjustments in the event of future below market issuances, stock splits, stock dividends, combinations or similar events. The issuance of the 2021 Warrants resulted in an adjusted exercise price of \$11.49 per share for the 2019 Warrants because the new warrants have an exercise price below market value.

Certain features were bifurcated and accounted for separately from the Series D Preferred Stock. The following features were recorded as derivatives.

- *Warrants.* In conjunction with our placement of the Series D Preferred Stock, we issued detachable warrants to purchase up to 1.9 million shares of our common stock. The 2021 Warrants are exercisable, in full or in part, at any time prior to March 22, 2027, at an exercise price of \$0.01 per share, subject to anti-dilution adjustments in the event of certain future equity issuances, stock splits, stock dividends, combinations or similar events.
- *Change-in-control put feature.* The Series D Preferred Stock includes a put feature that allows the holder to redeem the Series D Preferred Stock upon a change in control at the greater of 1) the liquidation preference plus accrued dividends or 2) 140% of the liquidation preference. The put feature is considered a redemption right at a premium and is not clearly and closely related to the debt host.

The following table presents the changes in liability balance of the preferred stock related derivatives.

	Years Ended December 31,	
	2022	2021
Balance at beginning of year	\$ 8,224	\$ 3,117
Issuances	—	15,121
Change in fair value (1)	(5,265)	(7,009)
Settlements	—	(3,005)
Balance at end of year	<u>\$ 2,959</u>	<u>\$ 8,224</u>

(1) Changes in the fair value are recognized in the “Other income, net” line in the Consolidated Statements of Operations and Comprehensive Income (Loss).

The following tables show the fair values of the preferred stock related derivatives within the fair value hierarchy.

<u>December 31, 2022</u>	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Derivative liability - other non-current liabilities	2,831	—	128

<u>December 31, 2021</u>	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Derivative liability - other non-current liabilities	7,771	—	453

The fair value of the 2019 Warrants is determined using a valuation model that utilizes unobservable inputs to determine the probability that the 2019 Warrants will remain outstanding for future periods. The probabilities resulted in a weighted average term of 2.9 years as of December 31, 2022 and 3.6 years as of December 31, 2021.

The fair value of the 2021 Warrants is determined using the observable market price of a share of our common stock, less the \$0.01 per share exercise price.

The fair value of the change-in-control put feature utilizes unobservable inputs based on the Company’s assessment of the probability of a change-in-control event occurring in a future period. The probability of a change-in-control event ranged from 3% to 10% as of December 31, 2022 and 1% to 10% as of December 31, 2021.

Interest Rate Swaps

We manage our exposure to fluctuations in interest rates using a mix of fixed and variable rate debt. We utilize fixed-rate interest rate swap agreements to change the variable interest rate to a fixed rate on a portion of our variable rate debt.

On July 22, 2021, we entered into a fixed-rate interest rate swap agreement to change the LIBOR-based component of the interest rate on a portion of our variable rate debt to a fixed rate of 1.291% (the “2021 Swap”). The 2021 Swap has a notional amount of \$60.0 million and a maturity date of July 31, 2024. The objective of the 2021 Swap is to eliminate the variability of cash flows in interest payments on the first \$60.0 million of variable rate debt attributable to changes in benchmark one-month LIBOR interest rates. The hedged risk is 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. The changes in cash flows of the interest rate swap are expected to exactly offset changes in cash flows of the variable rate debt. We designated the 2021 Swap as a cash flow hedge at inception. Cash settlements of the 2021 Swap are recognized in interest expense.

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 “2019 Swap”). On March 22, 2021, we terminated the 2019 Swap with a \$13.7 million cash payment in connection with the extinguishment of our previously outstanding long-term variable-rate debt. The 2019 Swap was designated as a cash flow hedge at inception. However, in the fourth quarter of 2020, the 2019 Swap no longer qualified as an effective hedge, and subsequent changes in fair value of the 2019 Swap were recognized in earnings. Amounts recognized in earnings related to the 2019 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 prior to termination are recognized in “Derivative payments on interest rate swap.” Cash settlements during 2021 and the fourth quarter of 2020 are presented in investing activities on the Consolidated Statements of Cash Flows.

The following table presents the effect of the interest rate swaps on the Consolidated Statements of Operations and Comprehensive Income (Loss).

	Years Ended December 31,		
	2022	2021	2020
Interest expense (benefit) (1)	\$ (428)	\$ 73	\$ 8,906
Derivative payments on interest rate swap (2)	—	1,717	4,133
Loss on interest rate swap (2)	—	2,033	11,669

(1) Represents settlements on the interest rate swaps while the hedges are effective.

(2) Represents settlements and changes in fair value on the 2019 Swap while the hedge was ineffective.

As of December 31, 2022 and 2021, we reported a \$3.1 million gain and a \$0.1 million gain, respectively, net of tax, in accumulated other comprehensive income related to the interest rate swap.

The following tables show the fair values of the interest rate swaps within the fair value hierarchy.

	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
December 31, 2022			
Derivative asset - other current assets	\$ —	\$ 2,130	\$ —
Derivative asset - other non-current assets	—	1,023	—
Total	\$ —	\$ 3,153	\$ —

	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
December 31, 2021			
Derivative asset - other non-current assets	\$ —	\$ 284	\$ —
Derivative liability - other current liabilities	—	(129)	—
Total	\$ —	\$ 155	\$ —

The fair value of the interest rate swap is calculated through standard pricing models which use inputs derived from or corroborated by observable market data such as interest rate yield curves, index forward curves, discount curves, and volatility surfaces. The counterparty to these derivative contracts is a highly rated financial institution which we believe carries only a minimal risk of nonperformance.

Fair Value Disclosures

Our financial instruments that are subject to fair value disclosure consist of cash and cash equivalents, accounts receivable, accounts payable, and debt. As of December 31, 2022, the carrying values of these financial instruments, except for debt, approximated fair value. The fair value of our debt was \$155.2 million with a carrying amount of \$152.7 million as of December 31, 2022. The fair value of debt was calculated by discounting the future cash flows to its present value using prevailing market interest rates for debt with similar creditworthiness, terms and maturities and is considered a Level 3 fair value measurement.

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

None.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

Under the supervision and with the participation of management, including our Chief Executive Officer and Chief Financial Officer, we evaluated the effectiveness of disclosure controls and procedures (as defined in 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, 2022, 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, 2022, 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, 2022.

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, 2022, as stated in their report included in Item 8 of this Annual Report.

Changes in Internal Control Over Financial Reporting

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, 2022, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers, and Corporate Governance

The information required by this Item 10 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, 2022 (“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	538	\$ 12.63	3,421
Equity compensation plans not approved by security holders	—	—	—
Total	538	\$ 12.63	3,421

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 Firm	31
Consolidated Statements of Operations and Comprehensive Income (Loss)	33
Consolidated Balance Sheets	34
Consolidated Statements of Changes in Stockholders' Equity	35
Consolidated Statements of Cash Flows	36
Notes to Consolidated Financial Statements	38

2. Financial Statement Schedules

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

3. Exhibits

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

Exhibit Number	Description of Exhibit	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

[Table of Contents](#)

Exhibit Number	Description of Exhibit	Incorporation by Reference			
		Form	SEC File No.	Exhibit	Filing Date
3.7	Amended and Restated By-Laws of NN, Inc.	8-K	001-39268	3.1	January 20, 2023
3.8	Certificate of Designation of Series D Preferred Stock	8-K	000-39268	3.1	March 22, 2021
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-K	000-39268	4.5	March 15, 2021
4.6	Common Stock Warrant	8-K	000-39268	4.1	March 22, 2021
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
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

[Table of Contents](#)

Exhibit Number	Description of Exhibit	Incorporation by Reference			
		Form	SEC File No.	Exhibit	Filing Date
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
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	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
10.27*	Form of Incentive Stock Option Agreement under the 2019 Omnibus Incentive Plan.	10-Q	000-23486	10.4	August 9, 2019
10.28*	Form of Nonqualified Stock Option Agreement under the 2019 Omnibus Incentive Plan.	10-Q	000-23486	10.5	August 9, 2019
10.29*	Form of Restricted Share Award Agreement under the 2019 Omnibus Incentive Plan.	10-Q	000-23486	10.6	August 9, 2019

[Table of Contents](#)

Exhibit Number	Description of Exhibit	Incorporation by Reference			
		Form	SEC File No.	Exhibit	Filing Date
10.30*	Form of Performance Share Unit Award Agreement under the 2019 Omnibus Incentive Plan.	10-Q	000-23486	10.7	August 9, 2019
10.31*	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
10.32*	Form of Separation Agreement.	8-K	000-23486	10.2	August 27, 2019
10.33*	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
10.34	Securities Purchase Agreement, dated December 5, 2019, by and among NN, Inc. and the Investors.	8-K	000-23486	10.1	December 11, 2019
10.35	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
10.36	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
10.37*	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
10.38*	Executive Employment Agreement dated October 3, 2014, between the Company and John R. Buchan	10-Q	001-39268	10.1	May 11, 2020
10.39	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
10.40	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
10.41*	Form of Retention Bonus Agreement	8-K	001-39268	10.1	October 19, 2020
10.42	Securities Purchase Agreement, dated March 22, 2021, by and between NN, Inc. and the NGTV Nevada Holdings LP	8-K	001-39268	10.1	March 22, 2021
10.43	Board Observer Agreement, dated March 22, 2021, by and between NN, Inc. and the NHTV Nevada Holdings LP	8-K	001-39268	10.2	March 22, 2021
10.44	Term Loan Credit Agreement, dated March 22, 2021, by and among NN, Inc., as borrower, and Oaktree Fund Administration, LLC, as administrative agent	8-K	001-39268	10.3	March 22, 2021
10.45	Credit Agreement, dated March 22, 2021, by and among NN, Inc., as borrower, and JPMorgan Chase Bank, N.A., as administrative agent	8-K	001-39268	10.4	March 22, 2021
10.46	Cooperation Agreement, dated May 13, 2021, among NN, Inc., Corre Partners Management, LLC, and each of the persons listed on the signature page thereto	8-K	001-39268	10.1	May 14, 2021

[Table of Contents](#)

Exhibit Number	Description of Exhibit	Incorporation by Reference			
		Form	SEC File No.	Exhibit	Filing Date
10.47*	Separation Agreement and General Release, dated June 14, 2021, by and between NN, Inc. and Thomas D. DeByle	8-K	001-39268	10.1	June 15, 2021
10.48*	Separation Agreement by and between NN, Inc. and Michael C. Felcher	8-K	001-39268	10.2	June 15, 2021
10.49	Amendment No. 1 to Term Loan Credit Agreement, dated as of March 3, 2022, by and among NN, Inc., certain subsidiaries of NN, Inc., the lenders party thereto, and Oaktree Fund Administration, LLC, as administrative agent.	8-K	001-39268	10.1	March 4, 2022
10.50*	2022 Omnibus Incentive Plan	DEF14A	001-39268	Appendix A	April 15, 2022
21.1#	List of Subsidiaries of NN, Inc.				
23.1#	Consent of Grant Thornton 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 (the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document)				
101.SCH#	XBRL Taxonomy Extension Schema Document				
101.CAL#	XBRL Taxonomy Extension Calculation Linkbase Document				
101.LAB#	XBRL Taxonomy Extension Label Linkbase Document				
101.PRE#	XBRL Taxonomy Extension Presentation Linkbase Document				
101.DEF#	XBRL Taxonomy Extension Definition Linkbase Document				
104#	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)				

* 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.

Item 16. Form 10-K Summary

None.

SIGNATURES

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

NN, Inc.

By: /s/ Warren A. Veltman
Warren A. Veltman
President, Chief Executive Officer and Director

Date: March 10, 2023

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 10, 2023
<u>/s/ Michael C. Felcher</u> Michael C. Felcher	Senior Vice President – Chief Financial Officer (Principal Financial and Accounting Officer)	March 10, 2023
<u>/s/ Jeri J. Harman</u> Jeri J. Harman	Non-Executive Chairman, Director	March 10, 2023
<u>/s/ Raynard D. Benvenuti</u> Raynard D. Benvenuti	Director	March 10, 2023
<u>/s/ Robert E. Brunner</u> Robert E. Brunner	Director	March 10, 2023
<u>/s/ Christina E. Carroll</u> Christina E. Carroll	Director	March 10, 2023
<u>/s/ João Faria</u> João Faria	Director	March 10, 2023
<u>/s/ Rajeev Gautam, Ph.D.</u> Rajeev Gautam, Ph.D.	Director	March 10, 2023
<u>/s/ Shihab Kuran, Ph.D.</u> Shihab Kuran, Ph.D.	Director	March 10, 2023
<u>/s/ Tom H. Wilson, Jr.</u> Tom H. Wilson, Jr.	Director	March 10, 2023

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.

Date: March 10, 2023

/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, Michael C. Felcher, certify that:

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

Date: March 10, 2023

/s/ Michael C. Felcher

Michael C. Felcher

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, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, in the capacity and date indicated below, hereby certifies pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge: (1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods indicated.

Date: March 10, 2023

/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, 2022, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), the undersigned, in the capacity and date indicated below, hereby certifies pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge: (1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods indicated.

Date: March 10, 2023

/s/ Michael C. Felcher

Michael C. Felcher

Senior Vice President – Chief Financial Officer

(Principal Financial Officer)