

2022 Annual Report

















BUILD DE SOMETHING DE A

A message from **our CEO**



March 2023

Dear Fellow Shareholders:

At Manitowoc, our vision is to build the physical communities for current and future generations. To achieve this vision, for more than 120 years, Manitowoc has thrived as a product-driven company – developing, manufacturing, and selling a comprehensive portfolio of new cranes. In 2022, we continued to make progress on our growth strategy. We gained a deeper appreciation of how to better serve our customers by managing the lifecycle of our machines through: 1) enhanced service and product support; 2) more comprehensive selling options, like trade-ins and RPOs (Rent-to-Purchase options); and 3) enhanced digital solutions. I am pleased to report that we continued to better serve our customers in 2022 while growing the less cyclical, more profitable segment of our business: Non-New Machine Sales (i.e., aftermarket parts, services, rentals, used cranes, crane remanufacturing, training services, and digital solutions).

2022 Financial Summary

Driven by our acquisitions, increased volume, and pricing actions, Manitowoc grew revenue in 2022 by 18.2% to \$2.0 billion. Our order intake for 2022 was \$2.1 billion, and we ended the year with over \$1.0 billion in backlog. Despite the persistent headwinds of inflation, labor shortages, supply chain disruptions, and the Ukraine crisis, we achieved adjusted EBITDA of \$143.1 million, or a margin of 7.0%.

In 2021, we launched our **CRANES+50** strategy with the objective to increase our non-new machine sales by 50% over the next five years; the baseline in 2021 was \$448.6 million. Our emphasis on growing our aftermarket is paying off – in 2022, non-new machine sales grew by 21.5% to \$545.3 million.

In addition, we remained prudent in managing our balance sheet, ending the year with a cash balance of \$64.4 million while reducing our debt and maintaining healthy liquidity in excess of \$295 million.

The Manitowoc Way: Our Culture

The culture at Manitowoc embodies *The Manitowoc Way*, which is built on the principle of continuous improvement ("kaizen"). *The Manitowoc Way* is our business operating system, and it guides how we serve our customers, employees, and shareholders. While this approach was rooted on the shop floor, we have migrated this philosophy across the business to health & safety, back-office support, innovation, employee development, and sustainability. During 2022, we began to implement these Lean tools to improve our environmental footprint and our service operations.

Health & Safety: Our team works in potentially highrisk environments, whether on the shop floor or on job sites, and health & safety is a never-ending journey at Manitowoc. In 2022, we completed over 87,000 safety observations – or SLAMs (Stop-Look-Assess-Manage) – the largest number in our history and an increase of almost 50% year-over-year. The Recordable Injury Rate was 1.53, which is slightly lower than the previous year, and our Lost Time Incident Rate was 0.92, down 10%. While these results are encouraging, we still have more work to do. The goal is to achieve zero injuries.

Lean Adoption: With the integration of the recent acquisitions of Aspen Equipment and the crane business of H&E Equipment Services (rebranded MGX Equipment Services) complete, we have begun to accelerate our implementation of *The Manitowoc Way* at these new businesses. Although we are in the initial stages of this journey for these businesses, I am proud of the team's receptiveness to *The Manitowoc Way*, and I look forward to additional successes. For example, we completed a kaizen at our location in Bloomington, Minnesota, to increase productivity in one of the truck-body upfitting cells. The team is on track to eliminate approximately 80% of the waste in this cell and improve its capacity by 30%. This embodies the spirit of *The Manitowoc Way*.

Innovation: Product innovation is essential in the crane industry. Our new product development process is based on Voice of the Customer research which ensures our investments in innovation align with the needs of our customers. During the bauma trade show last October, we introduced 12 new cranes and launched three new technologies, including Grove Connect and Potain Connect telematics systems. Among the highlights of the show was a 4-axle, 100-ton capacity All-terrain electric/gas hybrid concept crane that garnered significant attention.

Sustainability: We are very proud that Manitowoc was named one of "America's Most Responsible Companies" by *Newsweek* in 2022; this award validates our work on ESG. In 2022, we made significant progress in reducing our energy consumption and carbon footprint by focusing our initiatives to reduce our Greenhouse Gas (GHG) emissions and landfill waste. On GHG emissions, we met our 2025 normalized GHG target three years ahead of schedule. In addition, we reduced the amount of waste we send to landfills by 36% year-over-year by reusing welding slag, improving the waste sorting on-site to increase recycling, and other actions. In addition, all of our manufacturing facilities have achieved ISO 50001 certification, a global energy management standard.

CRANES+50: Our Strategy for Growth

CRANES+50 is our strategy to reduce the impact of the cyclical nature of the crane industry while improving our margin profile. This is achieved by growing our nonnew machine sales. The following four breakthrough initiatives represent the foundation of this strategy:

- > Grow our Tower crane rental and aftermarket business in Europe
- > Build out our China Belt and Road tower crane business

- > Re-invigorate our All-terrain crane product offerings to grow market share, field population, and services
- > Expand our aftermarket activities in North America

Complementing the two acquisitions completed in 2021, we recently acquired certain crane assets owned by Honnen Equipment in the Great Plains region; opened a new service center in Kansas City; and are in the process of adding a location in Denver. Through these growth efforts, we now have direct-to-customer territories serving customers with 16 branch locations in 13 states and over 150 field service technicians.

Conclusion

It's been seven years since Manitowoc became a standalone crane company. During the first five years of our transformation, we restructured the Company to ensure our financial stability through the crane cycle. Although we faced numerous public health and geopolitical-driven economic challenges over the last two years, I am extremely pleased with how our team has taken steps to reposition Manitowoc to grow and thrive.

Although we cannot predict the near-term global economy, I am confident that Manitowoc is well-positioned to capitalize on an eventual crane renaissance. Manitowoc stands to benefit from the U.S. Infrastructure Bill and CHIPS Act; Saudi Arabia's Vision 2030 initiatives; and global electrification. These are the type of long-term megatrends that will provide the confidence that is required for the industry to refresh its aging fleets.

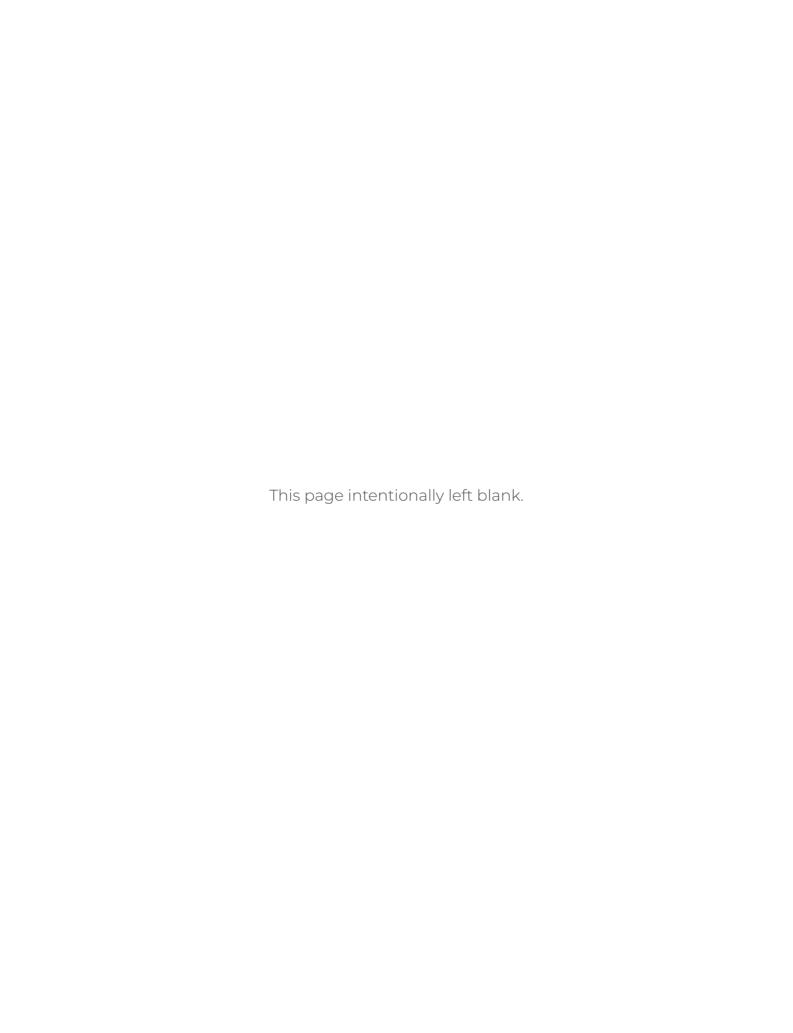
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Aaron H. Ravenscroft

President & Chief Executive Officer The Manitowoc Company, Inc.







UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

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			name of registrant as specified	
	W	isconsin		39-0448110
	,	other jurisdiction corporation)		(I.R.S. Employer Identification Number)
		est Park Place nite 1000		
		kee, Wisconsin		53224
	(Address of prin	cipal executive offices)	(414) 760 4600	(Zip Code)
		(Registra	(414) 760-4600 ant's telephone number, inclu	ding area code)
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	Indicate by check mark if the	registrant is a well-known	seasoned issuer, as defined in	Rule 405 of the Securities Act. Yes □ No ⊠
	Indicate by check mark if the	Registrant is not required t	to file reports pursuant to Sect	tion 13 or 15(d) of the Act. Yes \square No \boxtimes
the pred				Section 13 or 15(d) of the Securities Exchange Act of 1934 during ch reports), and (2) has been subject to such filing requirements for the
				Data File required to be submitted pursuant to Rule 405 of Regulation t the registrant was required to submit such files). Yes \boxtimes No \square
growth				a non-accelerated filer, smaller reporting company, or an emerging reporting company," and "emerging growth company" in Rule 12b-2
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on the	closing per share price of \$10.	53 on that date.	·	n-affiliates of the registrant was approximately \$362.9 million based the most recent practicable date, was 35,085,341.
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THE MANITOWOC COMPANY, INC.

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Cautionary Statements Regarding Forward-Looking Information

All of the statements in this Annual Report on Form 10-K, other than historical facts, are forward-looking statements, including, without limitation, the statements made in the "Management's Discussion and Analysis of Financial Condition and Results of Operations." As a general matter, forward-looking statements are those focused upon anticipated events or trends, expectations and beliefs relating to matters that are not historical in nature. The words "could," "should," "may," "feel," "anticipate," "aim," "preliminary," "expect," "believe," "estimate," "intend," "intent," "plan," "will," "foresee," "project," "forecast," or the negative thereof or variations thereon, and similar expressions identify forward-looking statements.

The Private Securities Litigation Reform Act of 1995 provides a "safe harbor" for these forward-looking statements. In order to comply with the terms of the safe harbor, The Manitowoc Company, Inc. ("Manitowoc," the "Company," "we," "us," or "our") notes that forward-looking statements are subject to known and unknown risks, uncertainties and other factors relating to the Company's operations and business environment, all of which are difficult to predict and many of which are beyond the control of the Company. These known and unknown risks, uncertainties and other factors could cause actual results to differ materially from those matters expressed in, anticipated by or implied by such forward-looking statements. These risks, uncertainties and other factors include, but are not limited to:

- Macroeconomic conditions, including inflation, rising interest rates, recessionary concerns and distress in global
 credit markets, as well as ongoing global supply chain constraints, labor availability and cost pressures such as
 changes in raw material and commodity costs, and logistics constraints, have had, and may continue to have, a
 negative impact on Manitowoc's business, financial condition, cash flows and results of operations (including
 future uncertain impacts);
- actions of competitors;
- changes in economic or industry conditions generally or in the markets served by Manitowoc;
- geopolitical events, including the ongoing conflict between Russia and Ukraine, other political and economic conditions and risks and other geographic factors, has had and may continue to lead to market disruptions, including volatility in commodity prices (including oil and gas), energy prices, inflation, consumer behavior, supply chain, and credit and capital markets, and could result in the impairment of assets and result in higher than expected charges to curtail the Company's operations in Russia;
- changes in customer demand, including changes in global demand for high-capacity lifting equipment, changes in demand for lifting equipment in emerging economies and changes in demand for used lifting equipment including changes in government approval and funding of projects;
- failure to comply with regulatory requirements related to the products the Company sells;
- the ability to capitalize on key strategic opportunities and the ability to implement Manitowoc's long-term initiatives;
- impairment of goodwill and/or intangible assets;
- changes in revenues, margins and costs;
- the ability to increase operational efficiencies across Manitowoc and to capitalize on those efficiencies;
- the ability to generate cash and manage working capital consistent with Manitowoc's stated goals;
- work stoppages, labor negotiations, labor rates and labor costs;
- the ability to convert backlog, orders and order activity into sales and the timing of those sales;
- the Company's ability to attract and retain qualified personnel;
- changes in the capital and financial markets;
- the ability to complete and appropriately integrate acquisitions, strategic alliances, joint ventures or other significant transactions;
- issues associated with the availability and viability of suppliers;
- the ability to significantly improve profitability;

- realization of anticipated earnings enhancements, cost savings, strategic options and other synergies, and the
 anticipated timing to realize those savings, synergies and options;
- the ability to focus on customers, new technologies and innovation;
- uncertainties associated with new product introductions, the successful development and market acceptance of new and innovative products that drive growth;
- the replacement cycle of technologically obsolete products;
- risks associated with high debt leverage;
- foreign currency fluctuation and its impact on reported results;
- the ability of Manitowoc's customers to receive financing;
- risks associated with data security and technological systems and protections;
- the ability to direct resources to those areas that will deliver the highest returns;
- risks associated with manufacturing or design defects;
- natural disasters, other weather events, epidemics, pandemics and other public health crises disrupting commerce in one or more regions of the world;
- issues relating to the ability to timely and effectively execute on manufacturing strategies, general efficiencies and capacity utilization of the Company's facilities;
- the ability to focus and capitalize on product quality and reliability;
- issues associated with the quality of materials, components and products sourced from third parties and the ability to successfully resolve those issues;
- issues related to workforce reductions and potential subsequent rehiring;
- changes in laws throughout the world, including governmental regulations on climate change;
- the inability to defend against potential infringement claims on intellectual property rights;
- the ability to sell products through distributors and other third parties;
- issues affecting the effective tax rate for the year;
- acts of terrorism; and
- other risks factors detailed in Manitowoc's filings with the United States Securities and Exchange Commission, including risk factors in Item 1A, "Risk Factors" of this Annual Report on Form 10-K, as such may be amended or supplemented in Manitowoc's subsequently filed Quarterly Reports on Form 10-Q.

These statements reflect the current views and assumptions of management with respect to future events. Except to the extent required by the federal securities laws, the Company does not undertake, and hereby disclaims, any duty to update these forward-looking statements, even though its situation and circumstances may change in the future. Readers are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date of this report. The inclusion of any statement in this report does not constitute an admission by the Company or any other person that the events or circumstances described in such statement are material.

PART I

Item 1. BUSINESS

General

The Manitowoc Company, Inc. ("Manitowoc," the "Company," "we," "us," or "our") was founded in 1902 and has over a 120-year tradition of providing high-quality, customer-focused products and support services to its markets. Headquartered in Milwaukee, Wisconsin, United States, Manitowoc is one of the world's leading providers of engineered lifting solutions. Manitowoc, through its wholly-owned subsidiaries, designs, manufactures, markets, distributes and supports comprehensive product lines of mobile hydraulic cranes, lattice-boom crawler cranes, boom trucks, and tower cranes under the Aspen Equipment, Grove, Manitowoc, MGX Equipment Services, National Crane, Potain and Shuttlelift brand names.

Reporting Segments

The Company has three reportable segments, the Americas segment, the Europe and Africa ("EURAF") segment and the Middle East and Asia Pacific ("MEAP") segment. The Americas reporting segment includes the North America and South America continents. The EURAF reporting segment includes the Europe and Africa continents, excluding the Middle East region. The MEAP reporting segment includes the Asia and Australia continents and the Middle East region. The segments were identified using the "management approach," which designates the internal organization that is used by management for making operating decisions and assessing performance. Refer to Part II, Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Note 18, "Segments," for additional information on our reporting segments.

The Manitowoc Way

Manitowoc plays an integral role in building the physical communities and structures for current and future generations. Our Mission is integral to this vision, aspiring to deliver the highest level of customer confidence and trust in the lifting industry. Our Core Values are the guiding principles for our employees to ensure that we meet our Vision and Mission. These Core Values are:

- (1) Do what is right: We work in a safe and environmentally responsible way, we respect others and behave in an ethical way, we deliver quality work.
- (2) Work as a team: We help each other to meet customer needs, we put the team first, we collaborate and support team members and we foster open, two-way communication.
- (3) Deliver results: We do what we say we will do, we focus on continuous improvement and innovation and we strive to exceed customer expectations.
- (4) Act as a role model: We celebrate successes and learn from failures, we approach every day with a can-do-attitude and we have fun.

Encompassing these Core Values, The Manitowoc Way is our business system for executing our Vision and Mission. The Manitowoc Way includes our continuous improvement process, focused on delivering value to our customers, shareholders and employees. This includes lean tools such as the Toyota Production System to eliminate waste from processes, reduce lead times, increase safety within our facilities, improve the quality of our products and drive our sustainability. The Manitowoc Way also encompasses our Voice of the Customer process which has allowed us to introduce innovative, customer-focused products to the market.

The Manitowoc Way has played a critical role in our success to build a sustainable, stand-alone crane company. As we execute our growth strategies, The Manitowoc Way will remain our guiding force for building processes that enhance our new product development; sales strategies; service and rental operations; and acquisition integration.

Business Strategy and Initiatives

In 2021, we introduced our CRANES+50 strategy which is to grow our non-new machine sales by 50%, or to approximately \$675 million, by 2026. Supporting our CRANES+50 strategy are four breakthrough initiatives launched in 2020: 1) grow our tower crane rental and aftermarket business in Europe; 2) build out our China Belt and Road tower crane business; 3)

reinvigorate our all-terrain crane product offerings to grow market share, field population and services; and 4) expand our aftermarket activities in North America.

Grow our tower crane rental and aftermarket business in Europe: Since the launch of the initiative, the Company has invested \$30.0 million of capital expenditures to grow our European tower rental fleet. The Company continues to enhance the portfolio of aftermarket services performed in Europe, such as sale of parts and whole goods accessories, on-site repairs, technical support, erection and decommissioning services, crane remanufacturing, training services and digital solutions. In addition, the Company plans to expand the rental fleet in the United Kingdom and Germany.

Build out our China Belt and Road tower crane business: The Company has invested in research and development to design and manufacture innovative topless tower cranes for the China Belt and Road market. Since the launch of the initiative, seven new models have been developed. Consistent with The Manitowoc Way, the engineering team reduced the new product development cycle from 18-24 months to 12-14 months while ensuring strict adherence to quality. The shorter product development cycle enables us to quickly seize market opportunities and gain market share.

Reinvigorate our all-terrain crane product offerings to grow market share, field population and services: The Company has invested in research and development to design and manufacture innovative all-terrain cranes. Since the launch of the initiative, the Company has announced ten new all-terrain cranes which include enhancements such as longer boom lengths, increased load capacity, reduced weight and improved roadability, new cab designs and the Grove CONNECT telematics system. Offering an innovative and wide breadth of cranes to customers enables us to be more competitive in the market.

Expand our aftermarket activities in North America: In 2021, the Company acquired the assets of two companies, Aspen Equipment Company ("Aspen") and the crane business of H&E Equipment Services, Inc. (now MGX Equipment Services, LLC, or "MGX"), which expanded our ability to provide new machine sales, used machine sales, aftermarket parts and service support to a variety of end market customers. Additionally, in 2022, the Company completed the acquisition of certain assets of the crane rental fleet of Honnen Equipment Company ("Honnen"), which expanded our rental portfolio and direct-to-customer footprint in Colorado, Wyoming and Nebraska. The acquisition of the assets of these businesses advances our strategy to expand our aftermarket activities within North America. We currently offer 16 full-service branch locations in 13 states with over 150 field service technicians that provide industry-leading technical competencies and exceptional customer support.

Products and Aftermarket Services

Our crane products are used in a wide variety of applications throughout the world, including energy production/distribution and utility, petrochemical and industrial, infrastructure, such as road, bridge and airport construction, as well as commercial and residential construction. We design, manufacture and distribute a diversified line of crawler-mounted lattice-boom cranes, sold under the Manitowoc brand name, an expansive line of top-slewing and self-erecting tower cranes, sold under the Potain brand name, and a diversified line of mobile hydraulic cranes, sold under the Grove, Shuttlelift and National Crane brand names. We also provide an expansive array of aftermarket services and we continue to invest in our rental fleet to further expand our aftermarket services to customers. We sell our entire product offering to most regions of the world and offer our full line of services primarily in the United States and Europe. Moreover, we report under a geographic reporting structure to better align with the location of our customers and the unique market dynamics of each geographic region. We primarily distribute our products through a global network of independent distributors and or rental companies. Additionally, we distribute our products through our wholly-owned distribution network under the brand name of MGX and Aspen in the United States and Manitowoc Crane Company in other parts of the world. The main products we sell are:

Lattice-boom crawler cranes. Under the Manitowoc brand name, we design, manufacture, market and sell lattice-boom crawler cranes. Lattice-boom crawler cranes weigh less and provide higher lifting capacities than a mobile telescopic crane of similar boom length. The lattice-boom crawler cranes are the only category of crane that can pick and move simultaneously with a full-rated load. The lattice-boom sections, together with the crane base, are transported to and erected at a project site. We offer our lattice-boom crawler crane customers various attachments that provide our cranes with greater capacity in terms of height, movement and lifting. These cranes are used to lift material and equipment in a wide variety of applications, including heavy construction, bridge and highway, infrastructure and energy-related projects. These cranes are also used by the crane rental industry, which serves all the aforementioned end markets. Lattice boom crawler cranes are produced in the U.S.

Tower cranes. Under the Potain brand name, we design, manufacture, market, rent and sell tower cranes primarily used in the commercial and residential construction end markets. Tower cranes offer the ability to lift and distribute material at the point of use, more quickly and accurately than other types of lifting machinery, without utilizing substantial square footage on the

ground. We offer a complete line of tower crane products, including top slewing, luffing jib, topless, self-erecting and special cranes for large building projects.

Top-slewing tower cranes are the most traditional category of tower cranes and have a tower and a multi-sectioned horizontal jib. These cranes rotate from the top of their mast and can increase in height with the project. These cranes are generally sold to medium to large building and construction groups, as well as to rental companies. There are three styles of top-slewing tower cranes: hammerhead/cathead; topless; and luffing jib. These cranes are produced in France, Portugal, India and China.

Self-erecting tower cranes are bottom-slewing cranes which have a counterweight located at the bottom of the mast and are able to be erected, used and dismantled on job sites without assist cranes. Self-erecting tower cranes are mounted on axles or transported on a trailer. The lower segment of the range unfolds in four sections, two for the mast and two for the jib. Self-erecting cranes rotate from the bottom of their mast and are utilized primarily in low to medium rise construction and residential applications. The Company's self-erecting tower cranes are produced in France, Italy and Portugal.

Mobile hydraulic cranes. Under the Grove, Shuttlelift and National Crane brand names, we design, manufacture, market, rent and sell mobile hydraulic cranes utilized in industrial, commercial, construction and maintenance applications. Mobile hydraulic cranes consist of a telescopic boom mounted on a carrier with the ability to easily move in or between job sites, with some permitted on public roadways. We currently offer the following six types of mobile hydraulic cranes: rough-terrain, all-terrain, truck-mounted, telescopic crawler, industrial and boom truck.

Rough-terrain cranes are designed to lift materials and equipment on rough or uneven terrain, and their versatility allows them to carry out many different lifts within the boundaries of given sites. These cranes cannot be driven on public roadways, and, accordingly, must be transported by truck to a job site. Rough-terrain cranes are produced in the U.S. and Italy and sold under the Grove brand name.

All-terrain cranes are versatile cranes designed to perform a wide range of lifts on rough or uneven terrain. These cranes are highly maneuverable and roadable at highway speeds. All-terrain cranes are produced in Germany and sold under the Grove brand name.

Truck-mounted cranes provide simple set-up, long reach, high-capacity booms and are roadable at highway speeds. These cranes are produced in the U.S and sold under the Grove brand name.

Telescopic crawler cranes consist of a telescopic boom superstructure mounted on a crawler crane chassis. These cranes are purchased as complete units from a strategic manufacturing partner and sold under the Grove brand name.

Industrial cranes are designed primarily for plant maintenance, storage yard and material handling applications. These cranes allow for lifting and carrying loads on a smooth, flat surface. These cranes are produced in the U.S. and sold under the Grove and Shuttlelift brand names.

Hydraulic boom trucks are hydraulically powered telescopic cranes mounted on a conventional truck chassis. Hydraulic boom trucks are used primarily for lifting material on a job site. These cranes are produced in the U.S. under the National Crane brand name.

Aftermarket services.

We provide expansive aftermarket services such as sale of parts and accessories, field service work, routine maintenance services, technical support, erection and decommissioning services, crane remanufacturing and training services. Additionally, we continue to invest in our rental fleet in the United States and Europe to provide additional options and flexibility to our customers. Our aftermarket services are offered through our crane product brand names, Manitowoc, Potain, Grove, Shuttlelift and National Crane as well as through our wholly-owned distributors, MGX and Aspen.

Parts and accessories. Parts and accessories are stocked at our parts distribution centers around the world and sold through our distribution networks to ensure parts availability to our customers. Our distribution locations also stock operational critical and frequently used parts to increase parts fulfillment velocity and reduce customer downtime.

On-site repairs. Our certified technicians can provide troubleshooting, remote diagnostic, maintenance service and repairs for our crane products. Our technicians provide customers with efficient and high-quality repairs to ensure the crane products can operate to the original crane product specification and performance. Our wholly-owned distributors in North America, MGX

and Aspen, have over 150 technicians which provide on-site repair services to our customers in the region. Additionally, we have over 100 technicians which provide on-site repair services to our customers in Europe.

Technical support. We have product-based technical support teams that provide advanced troubleshooting, major repair procedures, incident reporting and repair consultation services. Our technical support team has extensive subject matter expertise and work closely with our engineering and manufacturing teams to provide prompt and expert advice to our customers.

Erection and decommissioning services. Our qualified crane service technicians from our company-owned and independent distributors assist customers in safely erecting and decommissioning cranes on job sites.

Remanufacturing. Under the brand name EnCORE, our remanufacturing services offer cost-effective ways for our customers to restore a crane to its original specifications and performance. As part of this service, complete machine or major components are disassembled, cleaned, repaired, or replaced to meet manufacturer's specifications, using genuine parts. All controls and safety devices are updated to current regulatory standards. Finally, the machine or component is thoroughly inspected and tested. Additionally, EnCORE remanufactured cranes benefit from up to a one year manufacturer's warranty, including applicable software and hardware updates, and genuine parts installed with our technical expertise.

Training. Our Manitowoc Training Center offers extensive technical training on all our crane products which are conducted at our training facilities or on-site for our distribution service technicians and some customers.

Manufacturing Process

Manitowoc operates eleven manufacturing facilities (including remanufacturing facilities) across the world that utilize a variety of processes. In general, the manufacturing process involves the fabrication and machining of raw materials, primarily steel, which are then manufactured into sub-assemblies. Sub-assemblies are then assembled with purchased components into a complete crane. In our manufacturing operations, we maintain advanced manufacturing, quality assurance and testing equipment and utilize extensive process automation. We have invested in Product Verification Centers at our major manufacturing facilities to support new product development, testing and qualification of sub-systems and final product designs.

Competition

We sell our products in highly competitive end markets. We compete in each of our end markets based on product design, quality of products, aftermarket support services, product performance, maintenance costs, energy and resource savings and other contributions to sustainability and price. Given the expense that can be caused by operational disruption, our customers generally view quality and reliability as critical factors in their purchasing decision. We believe that we benefit from the following competitive advantages which create customer loyalty: strong brand names with competitive resale values, a reputation for quality and reliable products and aftermarket support and solution services, an established network of global distributors and customer relationships, broad product line offerings in the markets we serve, a commitment to customer-focused engineering design and product innovation and in-house service and distribution. The following table sets forth our primary competitors:

Products	Primary Competitors
Tower Cranes	Benazzato; Cattaneo; Comansa; FM Gru; Jaso; Liebherr; Raimondi; Saez; Sany; Terex Comedil/Peiner; Vicario; Wolffkran; Yongmao; XCMG; and Zoomlion
Mobile Telescopic Cranes	Altec; Broderson; Elliott; Hitachi Sumitomo; Kobelco; Liebherr; Load King; Manitex; Sany; Link-Belt; Tadano; Terex; XCMG; and Zoomlion

Major Customers

We did not have any customers that individually comprised more than 10% of our consolidated net sales in the years ended December 31, 2022, 2021 or 2020.

Raw Material and Component Sources and Availability

We globally source raw material and components such as semi- and fully-finished-processed materials from suppliers. Our primary raw materials are structural and rolled steel and our purchased semi- and fully-finished processed materials are primarily steel structures, hydraulic components and powertrains. We utilize a global sourcing strategy by maintaining alternate sources of supply for our critical materials and parts around the globe, wherever possible. This sourcing strategy mitigates the risk of being dependent on a single supplier and that raw materials and components are available in the regions we operate. For the majority of our critical suppliers, we have long-term agreements.

During 2022, we experienced supply chain, labor and logistics constraints, especially on electronic components and hydraulics, which impacted our ability to source parts and complete units, in addition to inflation. These challenges negatively impacted our results of operations and cash flows for 2022. We continue to actively manage these challenges through price increases, alternative sourcing of parts and adapting production to limit waste and inefficiencies in the facilities. Continuing inflation or supply chain constraints are expected to occur through 2023 and may have a material adverse impact on our financial condition, results of operations or cash flows. For a more detailed description of the risks related to the availability of raw materials, components and other certain commodities, refer to Item 1A. "Risk Factors."

Patents, Trademarks and Licenses

We utilize patent rights to protect our intellectual property and our position as a leading provider of engineered lifting solutions. We hold numerous patents globally pertaining to our products in addition to having pending applications for additional patents. Further, we have various registered and unregistered trademarks, copyrights and licenses. We believe our patents, trademarks and copyrights are adequately protected in customary fashions under applicable laws and we actively enforce our patents, trademarks and copyrights.

Engineering, Research and Development

We believe our extensive engineering, research and development capabilities are key drivers of our success in creating innovative and quality products. Our dedicated locations for research and development activities are staffed by in-house engineers and technicians on three continents, supplemented with external engineering resources, who are responsible for enhancing our existing products and developing new products.

Our team of engineers focus on developing high performance, low maintenance, innovative products intended to create significant brand loyalty among customers. Design engineers work closely with our customers and our manufacturing and marketing staffs, enabling us to identify real-time changing end-user requirements, implement new technologies and effectively introduce product innovations. Closely managed relationships with dealers, distributors and end users help us identify their needs, not only for products, but for the service and support level that are critical to their profitable operations. As part of our ongoing commitment to provide superior products, we intend to continue our efforts to design products that meet evolving customer demands and reduce the period from product conception to product introduction.

Seasonality

Due to seasonal conditions in the northern hemisphere impacting customer buying behaviors, particularly in the construction industry, net sales in the first quarter of the year are generally the lowest.

Human Capital Management

Employment

As of December 31, 2022, we employed approximately 4,800 people worldwide, of which approximately 1,700 were employed in the Americas segment, approximately 2,600 were employed in the EURAF segment and approximately 500 were employed in the MEAP segment. A large majority of our European employees belong to various European trade unions. Additionally, we

have one trade union in China and one trade union in India. In North America, a small number of our employees belong to two trade unions.

Health and Safety

The health and safety of our employees is our number one priority and our Company goal is to be a zero-injury workplace. We are committed to maintaining an injury-free workplace through the daily implementation of our Safety Management Systems ("SMS"), focusing on safe working behavior and emphasizing that all injuries are preventable. To track the health and safety performance across our global manufacturing locations we utilize a mixture of leading and lagging indicators. The two lagging indicators are Recordable Injury Rate ("RIR") and Loss Time Injury Frequency Rate ("LTIFR") which are both calculated in line with the United States Department of Labor Occupational Safety and Health Administration standards. In 2022, our year end RIR was 1.53 compared to the industry average of 3.6 and our LTIFR was 0.92 compared to the industry average of 1.0. Industry standards are per the U.S. Bureau of Labor and Statistics. In addition to our focus on lagging indicators, we have developed pro-active programs to track our leading indicators which include reporting of "near misses" and daily hazard observations through our "SLAM" (Stop-Look-Assess-Manage) and "Interactive Observation" Programs. In 2022, we recorded 87,124 SLAMs and Interactive Observations which had a positive impact on our RIR and LTIFR by helping our workforce to identify hazards and implement pro-active mitigation measures to avoid injury or loss. More information about our health and safety is in our latest Corporate Sustainability Report ("CSR") which can be found on our Company website. The information provided in our CSR or on our website is not part of this Annual Report on Form 10-K and is not incorporated by reference as part of this report.

Diversity, Equity and Inclusion ("DEI")

At Manitowoc, we remain fully committed to building a culture of inclusion and expanding the diversity of our workforce. We strive to create a diverse and inclusive workplace where all of our team members can perform to their full potential. As stewards of our diversity and inclusion initiatives, our leadership team takes a proactive approach to build and develop a diverse pipeline of talent and in 2022 the Company launched its first women's resource group. We place particular emphasis on developing our people and building a deep and diverse talent pool to ensure sustained success over the long-term. In addition, we work with various outside organizations focused on equitable hiring practices for underrepresented populations. More information about our DEI initiatives can be found in our latest CSR.

Training and Talent Development

We invest in our workforce by offering programs to develop and grow throughout an employee's careers. Programs designed to help our employees effectively perform their duties include training courses in: environmental health and safety, welding apprenticeships, sales skills development, Lean manufacturing methodologies, The Manitowoc Way and corporate compliance (Ethics & Code of Conduct, DEI, Insider Trading and Workplace Harassment, among others). The Company also provides tuition reimbursement and routinely invests in seminars, conferences and other training or continuing education for employees. Additionally, the CEO and SVP, Human Resources conduct annual global succession planning meetings with senior leadership and the Board of Directors to review the Company's top talent. To support the ongoing development of the Company's top talent, we have implemented several programs such as the Manitowoc Mentorship Program, the Supervisor Leadership Program and ongoing individual development programs designed to build the leadership capabilities of our existing and future leaders. More information about our training and development can be found in our latest CSR.

Available Information

We make available, free of charge, at our website (www.manitowoc.com), our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, our proxy statements and any amendments to those reports, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission ("SEC"). The information on our website is not part of this or any other report we file with or furnish to the SEC.

The SEC also maintains electronic versions of our reports on its website at www.sec.gov.

Item 1A. RISK FACTORS

The Company's financial position, results of operations and cash flows are subject to various risks, many of which are not exclusively within the Company's control, which may cause actual performance to differ materially from historical or projected future performance. Investors should carefully consider information in this Annual Report on Form 10-K in light of the risk factors described below.

Risks Relating to Our Business, Operations and Industry

Macroeconomic conditions and geopolitical events could have a material adverse impact on our business, financial condition, cash flows and results of operations.

Macroeconomic conditions, including inflation, rising interest rates, recessionary concerns and distress in global credit markets, as well as ongoing global supply chain constraints, labor availability and cost pressures such as changes in raw material and commodity costs, and logistics constraints have had, and may continue to have, a negative impact on our business, financial condition, cash flows and results of operations. For instance, we were negatively impacted in 2022 by continued inflation, mainly related to wages, logistics, energy, raw material and component costs, which we expect to continue in 2023. In addition, supply chain and logistics constraints impacted our ability to source parts and complete and ship units in 2022, which negatively impacted our results of operations and cash flows. Global supply chain and logistics constraints have also impacted end market customers, particularly in the European construction industry which resulted in the postponement of certain construction projects in 2022. While we have implemented price increases and provisional pricing strategies, we may not be able to fully mitigate the impact of cost inflation on margins. Additionally, there is a delay in the realization of pricing due to longer lead times of orders in our backlog, exacerbated by supply chain and logistics constraints that have impacted our ability to convert backlog into revenue, and shipping constraints that have resulted in delays in shipments in certain regions. Continuing or worsening inflation and/or supply chain and logistics constraints may have a material adverse impact on our financial condition, results of operations and/or cash flows.

Geopolitical events, including the ongoing conflict between Russia and Ukraine and the related economic sanctions by Western governments on Russia, have had and may continue to lead to significant volatility in raw material and component costs in Europe, exacerbating the inflation and supply chain situation. Ongoing economic sanctions targeting Russia may cause further disruptions to our supply chain and impact access to certain materials in our European operations, which may have a material adverse impact on our financial condition, results of operations and/or cash flows. The conflict could also result in the impairment of assets and result in higher than expected charges to curtail our operations in Russia.

Because we participate in end markets that are highly competitive, our net sales and profits could decline as we respond, or fail to effectively respond, to competition.

We sell most of our products in highly competitive end markets. We compete in each of those end markets based on product design, quality of products, quality and responsiveness of product support services, product performance, maintenance costs and price. Some of our competitors may have greater financial, marketing, manufacturing and distribution resources than we do. These competitors may, among others:

- respond more quickly to new or emerging technologies;
- have greater name recognition, critical mass or geographic market presence;
- be better able to take advantage of acquisition opportunities;
- adapt more quickly to changes in customer requirements;
- devote greater resources to the development, promotion and sale of their products;
- be better positioned to compete on price for their products, due to any combination of low-cost labor, raw materials, components, facilities or other operating items, or willingness to sell at lower margins than us;
- consolidate with other competitors in the industry which may create increased pricing and competitive pressures on our business; and
- be better able to utilize excess capacity which may reduce the cost of their products or services.

We cannot be certain that our products and services will continue to compete successfully with those of our competitors or that we will be able to retain our customer base or improve or maintain our profit margins on sales to our customers, any of which could materially and adversely affect our financial condition, results of operations and cash flows.

Sales of our products are cyclical and/or are otherwise sensitive to volatile or variable factors. A downturn or weakness in overall economic activity, or fluctuations in those other factors could have a material adverse impact on our operating results.

Historically, sales of products that we manufacture and sell have been subject to cyclical variations caused by changes in general economic conditions and other factors. In particular, demand for our products is cyclical and is impacted by the strength of the economy, generally, the availability of financing and other factors, including crude oil prices, that may have an effect on the level of construction activity on an international, national or regional basis, each of which have been and/or continue to be negatively impacted by global supply chain constraints, labor availability and cost pressures, logistics constraints, inflation, rising interest rates, recessionary concerns and geopolitical events. Additionally, the level of construction activity and customer demand has been and may continue to be impacted by pandemics or global health crises, such as the COVID-19 pandemic. We have significant operations worldwide, including in the United States, France, Germany, Portugal, Italy and China, and each of these countries, albeit at varying degrees, have been affected by the COVID-19 pandemic, since the first quarter of 2020. Further, global trade conditions and customer trends that originated during the pandemic continue to persist and may have a long-lasting adverse impact on our results independently of the progress of the pandemic. The extent to which our operations may continue to be impacted by the COVID-19 pandemic will depend largely on future developments, including the severity of new variants and resulting government actions that could negatively impact global supply chain and customer demand.

During periods of expansion in construction activity, we generally have benefited from increased demand for our products. Conversely, during recessionary periods, we have been adversely affected by reduced demand for our products, and challenging conditions can continue well beyond the end of such periods. Furthermore, any economic recession may impact leveraged companies, such as Manitowoc, more than competing companies with less leverage and may have a material adverse effect on our financial condition, results of operations and cash flows.

Demand for our products also depends in part on federal, state, local and foreign governmental spending and appropriations, including infrastructure, security and defense outlays. Reductions in governmental spending can reduce demand for our products, which in turn, can negatively affect our performance. Our sales depend, in part, upon our customers' replacement or repair cycles. Adverse economic conditions, including global supply chain constraints, labor availability and cost pressures, logistics constraints, pandemics or public health crises, inflation, rising interest rates, recessionary concerns and geopolitical events, have caused and may continue to cause customers to forego or postpone new purchases in favor of repairing existing machinery.

If we are unable to sufficiently adjust to market conditions, among other potential adverse effects on our financial condition, results of operations and cash flows, we could fail to deliver on planned results, incur high fixed costs and/or fail to benefit from higher than expected customer demand resulting in loss of market share.

Large or rapid increases in the cost of raw material or components, substantial decreases in their availability, or our dependence on particular suppliers of raw material and components has had and will continue to have a negative impact on our operating results.

We use large amounts of steel, among other items, in the manufacture of our products. Occasionally, market prices of some of our key raw materials increase significantly, including as a result of tariffs, other trade barriers, macroeconomic conditions or geopolitical events, resulting in shortages. If in the future we are not able to reduce product costs in other areas, or pass raw material price increases on to our customers, our margins could be adversely affected. In addition, because we maintain limited raw material and component inventories, even brief unanticipated delays in delivery by suppliers - including those due to supply chain constraints, labor availability and cost pressures, logistic constraints, geopolitical events, capacity constraints, labor disputes, impaired financial condition of suppliers, epidemics, pandemics, global health crises, other infectious diseases, weather emergencies or other natural disasters - may impair our ability to satisfy our customers, as well as delay our ability to produce and ship certain of our products, and have had and may continue to adversely affect our financial performance.

The Company purchases one branded crane and parts under strategic alliances from third-party suppliers which are then sold into our markets. If we are not able to effectively manage pricing from these suppliers, our financial performance could be

adversely affected. Likewise, if our suppliers terminate these agreements and we are unable to procure alternate products at substantially similar competitive pricing, our financial performance could be adversely affected.

Unfair foreign competition could adversely affect our financial results.

Many of our foreign competitors benefit from government policies that could give them a competitive advantage in the United States, including currency devaluation and erecting trade barriers that prevent American manufacturers from selling cranes in those markets. Low-cost competition from China and developing markets could also result in decreased demand for our products. If competition in our industry intensifies or if our current competitors lower their prices for competing products, we may lose sales or be required to lower the prices we charge for our products, which may undermine our ability to generate returns on our investments.

We have incurred and may incur in the future additional expenses and delays due to interruptions at our manufacturing facilities as a result of supply chain constraints, and in the future we may also incur additional expenses and delays due to technical problems or other interruptions at our manufacturing facilities.

Disruptions in operations, including supply chain constraints, technical problems or other interruptions, such as floods, fire, natural disasters, epidemics, pandemics or other public health crises, have and in the future may adversely affect the manufacturing capacity of our facilities and delay our ability to produce and ship certain of our products. Such interruptions have caused, and in the future could cause, delays in production and cause us to incur additional expenses such as charges for expedited deliveries for products that are delayed. Additionally, our customers may have the ability to cancel purchase orders in the event of any delays in production and may decrease future orders if delays are persistent. To the extent that such disruptions do not result from damage to our physical property, these disruptions may not be covered by our business interruption insurance. Any such disruptions may adversely affect our business, operations and financial results.

We depend on our key executive officers, managers and skilled personnel and may have difficulty retaining and recruiting qualified employees.

Our success depends to a large extent upon the continued services of our executive officers, senior management personnel, managers and other skilled personnel and our ability to recruit and retain skilled personnel to maintain and expand our operations. We could be affected by the loss of any of our executive officers who are responsible for formulating and implementing our business plan and strategy. In addition, we need to recruit and retain additional management personnel and other skilled employees. However, competition is high for skilled technical personnel among companies that rely on engineering and technology, especially in light of the labor pressures resulting from the COVID-19 pandemic, and the loss of qualified employees or an inability to attract, retain and motivate additional skilled employees required for the operation and expansion of our business could hinder our ability to conduct design, engineering and manufacturing activities successfully and develop marketable products. We may not be able to attract the skilled personnel we require or retain those whom we have trained at our own cost. If we are not able to do so, our business and our ability to continue to grow could be negatively affected and we could face additional competition from those employees who leave and work for our competitors.

We may not be able to maintain our engineering, technological and manufacturing expertise.

The markets for our products are characterized by changing technology and evolving process development. The continued success of our business will depend upon our ability to:

- hire, retain and expand our pool of qualified engineering and technical personnel;
- maintain technological leadership in our industry;
- successfully anticipate or respond to changes in manufacturing processes in a cost-effective and timely manner; and
- successfully anticipate or respond to changes in cost to serve in a cost-effective and timely manner.

We cannot be certain that we will develop the capabilities required by our customers in the future. The emergence of new technologies, industry standards or customer requirements may render our equipment, inventory or processes obsolete or uncompetitive. We may have to acquire new technologies and equipment to remain competitive. The acquisition and implementation of new technologies and equipment may require us to incur significant expense and capital investment, which could reduce our margins and affect our operating results. When we establish new facilities, we may not be able to maintain or

develop our engineering, technological and manufacturing expertise due to a lack of trained personnel, effective training of new staff or technical difficulties with machinery. Failure to anticipate and adapt to customers' changing technological needs and requirements or to hire and retain a sufficient number of engineers and maintain engineering, technological and manufacturing expertise may have a material adverse effect on our business.

If we fail to identify, manage, complete and appropriately integrate acquisitions, strategic alliances, joint ventures or other significant transactions, it could adversely affect our future results.

We completed two acquisitions in 2021 and expect to continue to pursue acquisitions, strategic alliances, joint ventures or other significant transactions. In order to pursue this strategy successfully, we must identify attractive acquisitions, strategic alliances, joint venture opportunities, potentially obtain financing for future acquisitions on satisfactory terms, successfully complete the transaction, some of which may be large and complex, and manage post-closing issues such as integration of the acquired company or employees. We may not be able to identify or complete appealing acquisition, strategic alliance or joint venture opportunities given the intense competition for these transactions. Even if we identify and complete suitable transactions, we may not be able to successfully address inherent risks in a timely manner, or at all. These inherent risks include, among other things: failure to achieve all or any projected synergies, performance targets or other anticipated benefits of the acquisition, strategic alliance, joint venture; failure to successfully integrate the purchased operations, technologies, products or services and maintain uniform standard controls, policies and procedures; incurring substantial unanticipated integration costs; the loss of key employees, including those of an acquired business; diversion of management's attention from other business concerns; failure to retain the customers of the acquired business; additional debt and/or assumption of known or unknown liabilities; potential dilutive issuances of equity securities; and a write-off of goodwill, customer lists, other intangibles and amortization of expenses. If we fail to successfully integrate an acquisition, we may not realize all or any of the anticipated benefits of the acquisition, and our future results of operations could be adversely affected.

If we do not develop new and innovative products or if customers in our markets do not accept them, our results could be negatively affected.

Our products must be kept current to meet our customers' needs. To remain competitive, we therefore must develop new and innovative products on an on-going basis. If we fail to make innovations or the market does not accept our new products, our sales and results would likely suffer. We invest significantly in the research and development of new products. These expenditures do not always result in products that will be accepted by the market. To the extent they do not, whether as a function of the product or the business cycle, we will have increased expenses without significant sales to benefit us. Failure to develop successful new products may also cause potential customers to purchase competitors' products, rather than products manufactured by us.

An inability to successfully manage information systems, or to adequately maintain these systems and their security, as well as to protect data and other confidential information, could adversely affect our business and reputation.

In the ordinary course of business, we collect and store sensitive data and information, including our proprietary and regulated business information and that of our customers, suppliers and business partners, as well as personally identifiable information about our employees. We depend on our information systems to successfully manage our business. We have taken steps to maintain adequate data security by implementing cyber security technologies, internal controls, and network and data center resiliency and recovery processes. However, an inability to successfully manage these systems, including matters related to system and data security, privacy, reliability, compliance, performance and access, as well as an inability of these systems to fulfill their intended purpose within our business, could have an adverse effect on our business.

Despite our efforts, our information systems, like those of other companies, are susceptible to damage or interruption due to natural disasters, power loss, telecommunications failures, viruses, breaches of security, system upgrades or new system implementations. Furthermore, like the cybersecurity incident that occurred in June 2021, our security measures may not detect or prevent all security threats, whether from intentional or inadvertent breaches by our employees or attacks designed to gain unauthorized access to our systems, networks and data, such as denial-of-service attacks, viruses, malicious software, break-ins, phishing attacks, social engineering, security breaches or other attacks and similar disruptions. Any operational failure or breach of security from increasingly sophisticated cyber threats could lead to the loss or disclosure of both our and our customers' financial, product and other confidential information, result in regulatory actions and legal proceedings, and/or have an adverse effect on our business and reputation.

Any disruption in our information systems could disrupt our operations and would be adverse to our business and financial operations.

We depend on various information systems to successfully manage our business, including managing orders, suppliers, accounting controls and payroll. The inability to successfully manage the procurement, development, implementation or execution of our information systems and back-up systems, including matters related to system security, reliability, performance and access, as well as the inability of these systems to fulfill their intended purpose within our business, could have an adverse effect on our business and financial performance. Such disruptions may not be covered by our business interruption insurance.

We have significant manufacturing and sales of our products outside of the United States and such international operations could be subject to a number of risks specific to these countries.

For the years ended December 31, 2022, 2021 and 2020, approximately 55%, 61% and 61%, respectively, of our net sales were attributable to products sold outside of the United States. Expanding the Company's international sales is part of our growth strategy. Our international operations across many different jurisdictions may be subject to a number of risks specific to these countries, including:

- less flexible employee relationships which can be difficult and expensive to terminate;
- labor unrest:
- political and economic instability (including war and acts of terrorism);
- inadequate infrastructure for our operations (i.e., lack of adequate power, water, transportation and raw materials);
- health concerns and related government actions (including as a result of pandemics like COVID-19);
- risk of governmental expropriation of our property;
- less favorable, or relatively undefined, intellectual property laws;
- changes in regulatory requirements and laws;
- longer customer payment cycles and difficulty in collecting trade accounts receivable;
- export duties, tariffs, import controls and trade barriers (including quotas);
- adverse trade policies or adverse changes to any of the policies of either the United States or any of the foreign jurisdictions in which we operate;
- adverse changes in tax rates or regulations;
- legal or political constraints on our ability to maintain or increase prices;
- burdens of complying with a wide variety of labor practices and foreign laws, including those relating to export and import duties, environmental policies and privacy issues;
- inability to utilize net operating losses incurred by our foreign operations against future income in the same jurisdiction; and
- economies that are emerging or developing, that may be subject to greater currency volatility, negative growth, or recession, high inflation, limited availability of foreign exchange and other risks.

These factors may harm our results of operations, and any measures that we may implement to reduce the effect of volatile currencies and other risks of our international operations may not be effective. In our experience, entry into new international markets requires considerable management time as well as start-up expenses for market development, hiring and establishing office facilities before any significant revenue is generated. As a result, initial operations in a new market may operate at low margins or may be unprofitable.

We face risks related to sales through distributors and other third parties.

We sell some of our products through third parties such as distributors, agents and channel partners (collectively referred to as distributors). Using distributors exposes us to many risks, including competitive pressure, concentration risk, credit risk, and

compliance risks. Distributors may sell products that compete with our products, and we may need to provide financial and other incentives to focus distributors on the sale of our products. We may rely on one or more key distributors for a product, and the loss of these distributors could negatively impact our sales. Distributors may face financial difficulties, including bankruptcy, which could harm our collection of accounts receivable and financial results. Violations of the Foreign Corrupt Practices Act or similar laws by distributors or other third-party intermediaries could have a material impact on our business. Failing to manage risks related to our use of distributors may reduce sales, increase expenses, and weaken our competitive position.

Increasing costs of doing business in many countries in which we operate may adversely affect our business and financial results.

Increasing costs such as labor costs, raw material and component costs, logistic costs, unfavorable absorption of overhead costs due to inefficiencies from supply chain constraints, and energy costs, in the countries in which we operate may erode our profit margins and compromise our price competitiveness. Our profitability also depends on our ability to manage and contain our other operating expenses such as the cost of utilities, factory supplies, factory space costs, equipment rental, repairs and maintenance and freight and packaging expenses. In the event we are unable to manage any increase in our labor and other operating expenses in an environment where revenue does not increase proportionately, our financial results would be adversely affected.

Our operations and profitability could suffer if we experience problems with labor relations.

As of December 31, 2022 we employed approximately 4,800 people worldwide, of which approximately 1,700 were employed in the Americas segment, approximately 2,600 were employed in the EURAF segment and approximately 500 were employed in the MEAP segment. A large majority of our European employees belong to various European trade unions. Additionally, we have one trade union in China and one trade union in India. In North America, a small number of our employees belong to two trade unions.

Any significant labor relations issues with our various employee unions could have an adverse effect on our operations, reputation, results of operations and financial condition.

Our inability to recover from natural or man-made disasters or public health crises could adversely affect our business.

Our business and financial results may be affected by certain events that we cannot anticipate or that are beyond our control, such as natural or manmade disasters, epidemics, pandemics or other public health crises, national emergencies, significant labor strikes, work stoppages, the effects of climate change, political unrest, war or terrorist activities that could curtail production at our facilities and cause delayed deliveries and canceled orders. For example, we began to curtail our operations in Russia in 2022 due to the ongoing conflict in Ukraine, which caused us to cancel \$21.0 million of orders in Russia and stop taking new orders. In addition, we purchase raw material and components, information technology and other services from numerous suppliers, and, even if our facilities were not directly affected by such events, we have been and in the future could be affected by interruptions at such suppliers. Such suppliers may be less likely than our own facilities to be able to quickly recover from such events and may be subject to additional risks such as financial problems that limit their ability to conduct their operations. We cannot be assured that we will have insurance to adequately compensate us for any of these events.

Our restructuring plans and other cost savings initiatives may not be as effective as we anticipate, and we may fail to realize the cost savings and increased efficiencies that we expect from these actions. Our operating results could be negatively affected by our inability to effectively implement such restructuring plans and other cost saving initiatives.

We continually seek ways to simplify or improve processes, eliminate excess capacity and reduce costs in all areas of our operations, which from time to time includes restructuring activities. In prior years we implemented significant restructuring activities across our global manufacturing, sales and distribution footprint, which includes workforce reductions and facility consolidations.

Our restructuring actions may not be as effective as we anticipate, and we may fail to realize the cost savings we expect from these actions. Actual charges, costs and adjustments due to restructuring activities may vary materially from our estimates. Our restructuring plans will require significant cash and non-cash integration and implementation costs or charges in order to achieve those cost savings, which could offset any such savings and other benefits.

Although we have considered the impact of local regulations, negotiations with employee representatives and the related costs associated with our restructuring activities, factors beyond the control of management may affect the timing of these projects and therefore affect when savings will be achieved under the plans. Further, our operating results could be negatively affected if we are not successful in completing the restructuring projects in the time frames contemplated or if additional issues arise during the projects that add costs to or disrupt our operations.

Financial Risks

Our goodwill and other intangible assets represent a material amount of our total assets; as a result, impairment charges have had, and future impairment charges may have, a material adverse effect on our results of operations.

As of December 31, 2022, goodwill and other intangible assets totaled \$206.8 million, or approximately 12.8% of our total assets. The Company performs its annual goodwill and indefinite-lived intangible assets impairment test during the fourth-quarter, or more frequently if events or changes in circumstances indicate that the asset might be impaired. Based on the results of the test, performed as of October 31, 2022, the carrying values of the Americas – Manufacturing reporting unit and Grove trademark, tradename and distribution network assets ("Grove Tradename") exceeded their respective fair value. As a result, the Company recognized a \$171.9 million non-cash impairment charge, including a \$166.5 million impairment charge to write-down the carrying value of goodwill in the Americas – Manufacturing reporting unit to zero and a \$5.4 million impairment charge to write-down the carrying value of the Grove Tradename to its fair value of \$39.0 million. Deterioration in macroeconomic conditions, a decline in actual results as compared with the Company's projections, a prolonged low Company equity market capitalization, or material changes to management's assumptions could require the Company to recognize additional non-cash charges to operating earnings from goodwill and/or other intangible asset impairment charges. Material changes to management's assumptions include weakening industry or economic trends, disruptions to the Company's business, unexpected significant changes or planned changes in the use of the assets or in entity structure. Goodwill or intangible asset impairments have had, and any future impairments may have, a material adverse effect on our results of operations.

Our results of operations are subject to exchange rate and other currency risks. A significant movement in exchange rates could adversely impact our results of operations and cash flows.

Some of our operations are and will continue to be conducted by subsidiaries in foreign countries. The results of the operations and the financial position of these subsidiaries will be reported in the relevant foreign currencies and then translated into U.S. dollars at the applicable exchange rates for inclusion in our consolidated financial statements, which are stated in U.S. dollars. The exchange rates between foreign currencies and the U.S. dollar have fluctuated significantly in recent years and may continue to fluctuate in the future. Such fluctuations may have a material effect on our results of operations and financial position and may significantly affect the comparability of our results between financial periods.

We also incur currency transaction risk whenever one of our operating subsidiaries enters into a transaction using a different currency than its functional currency. We attempt to reduce currency transaction risk whenever one of our operating subsidiaries enters into a material transaction in a currency other its functional currency by:

- matching cash receipts and payments in the same currency;
- direct foreign currency borrowing; and
- entering into foreign exchange contracts for hedging purposes.

However, we may not be able to hedge this risk completely or at an acceptable cost, which may adversely affect our results of operations, financial condition and cash flows in future periods.

Our leverage could impair our operations and financial condition.

As of December 31, 2022, our total consolidated debt was \$385.6 million compared to \$407.2 million as of December 31, 2021.

On March 25, 2019, we and certain of our subsidiaries (the "Loan Parties") entered into a credit agreement (the "ABL Credit Agreement") with JP Morgan Chase Bank, N.A. as administrative and collateral agent, and certain financial institutions party thereto as lenders, providing for a senior secured asset-based revolving credit facility (the "ABL Revolving Credit Facility") of up to \$275.0 million. The borrowing capacity under the ABL Revolving Credit Facility is based on the value of inventory,

accounts receivable and certain fixed assets of the Loan Parties. The Loan Parties' obligations under the ABL Revolving Credit Facility are secured on a first-priority bases, subject to certain exceptions and permitted liens, by substantially all of the personal property and fee-owned real property of the Loan Parties. The liens securing the ABL Revolving Credit Facility are senior in priority to the second-priority liens securing the obligations under the 2026 Notes (as defined below) and the related guarantees. The ABL Revolving Credit Facility includes a \$75.0 million letter of credit sub-facility, \$10.0 million of which is available to our German subsidiary that is a borrower under the ABL Revolving Credit Facility.

On June 17, 2021, the Company amended the ABL Credit Agreement to adjust certain negative covenants which reduces restrictions on the Company's ability to expand its rental business. On May 19, 2022, the Company further amended the ABL Credit Agreement to (i) extend the maturity date to May 19, 2027 (subject to a springing maturity date of December 30, 2025 if the 2026 Notes have not been repaid in full or refinanced prior to December 30, 2025), (ii) permit the inclusion, subject to certain limitations, of the crane rental assets of certain subsidiaries in the borrowing base used to calculate availability under the ABL Credit Agreement, (iii) permit separate financing of crane rental assets not included in the borrowing base and (iv) replace U.S. dollar London Inter-bank Offered Rate with interest rates based on the secured overnight financing rate plus a credit spread adjustment ("SOFR").

On March 25, 2019, we and certain of our subsidiaries also entered into an indenture with U.S. Bank National Association as trustee and notes collateral agent, pursuant to which we issued \$300.0 million aggregate principal amount of senior secured second lien notes due on April 1, 2026 with an annual coupon rate of 9.000% (the "2026 Notes"). Interest on the 2026 Notes is payable in cash semi-annual in arrears on April 1 and October 1 of each year. The 2026 Notes are fully and unconditionally guaranteed on a senior secured second lien basis, jointly and severally, by each of our existing and future domestic subsidiaries that is either a guarantor or a borrower under the ABL Revolving Credit Facility or that guarantees certain other debt of us or a guarantor. The 2026 Notes and the related guarantees are secured on a second-priority basis, subject to certain exceptions and permitted liens, by pledges of capital stock and other equity interests and other security interests in substantially all of the personal property and fee-owned real property of us and of the guarantors that secure obligations under the ABL Revolving Credit Facility.

The amount of debt we maintain could have consequences, including increasing our vulnerability to general adverse economic and industry conditions; requiring a substantial portion of our cash flows from operations be used for the payment of interest rather than to fund working capital, capital expenditures, acquisitions and general corporate requirements; limiting our ability to obtain additional financing; and limiting our flexibility in planning for, or reacting to, changes in our business and the end markets in which we operate.

The agreements governing our debt include covenants that restrict, among other matters, our ability to assume or guarantee additional debt or issue certain preferred shares, pay dividends on or make other distributions in respect of our capital stock or make other restricted payments, make certain investments, sell or transfer certain assets, create liens on certain assets to secure debt, consolidate, merge, sell, or otherwise dispose of all or substantially all of our assets, enter into certain transactions with affiliates and designate our subsidiaries as unrestricted. Certain of our debt facilities require or will require us to maintain specified financial ratios and satisfy certain financial condition tests. Our ability to comply with these covenants may be affected by events beyond our control, including prevailing economic, financial and industry conditions. Adhering to these covenants may also require that we take disadvantageous actions, including reducing spending on marketing, advertising and new product innovation, reducing future financing for working capital, capital expenditures and general corporate purposes, selling assets or dedicating an unsustainable level of cash flows from operations to the payment of principal and interest on our indebtedness. Our leverage could also put us at a disadvantage compared to any competitors that are less leveraged. We cannot be certain that we will meet any future financial tests or that the lenders would waive any such failure to meet those tests. Refer to Note 12, "Debt," to the Consolidated Financial Statements.

If we default under our debt agreements, our lenders could elect, among other potential remedies, to declare all amounts outstanding under our debt agreements to be immediately due and payable and could proceed against any collateral securing the debt, which would adversely affect our results of operations, financial condition and cash flows in future periods.

Some of our customers may not be able to obtain financing with third parties to purchase our products, and we could incur expenses associated with our assistance to customers in securing third-party financing.

A portion of our sales are financed by third-party finance companies on behalf of our customers. The availability of financing from third parties is affected by general economic conditions, the creditworthiness of our customers and the estimated residual value of our equipment. In certain transactions, we provide residual value guarantees and buyback commitments to our customers or to third-party financial institutions. Deterioration in the credit quality of our customers or the overall health of the

finance industry could negatively impact our customers' ability to obtain the resources needed to make purchases of our equipment or their ability to obtain third-party financing. In addition, if the actual value of the equipment for which we have provided a residual value guaranty declines below the amount of our guaranty, we may incur additional costs, which may negatively impact our financial condition, results of operations and cash flows.

Exposure to additional tax liabilities could have a negative impact on our operating results.

We regularly undergo tax audits in various jurisdictions in which we operate. Although we believe that our tax estimates are reasonable and that we prepare our tax filings in accordance with all applicable tax laws, the final determination with respect to any tax audits, and any related contests thereto, could be materially different from our estimates or from our historical income tax provisions and accruals. The results of an audit or contests thereto could have a material adverse effect on operating results and/or cash flows in the periods for which that determination is made. In addition, future period earnings may be adversely impacted by litigation costs, settlements, penalties and/or interest assessments.

We face risks associated with our pension and other postretirement benefit obligations.

We have both funded and unfunded pension and other postretirement benefit plans worldwide. As of December 31, 2022, our projected benefit obligations under our pension and other postretirement benefit plans exceeded the fair value of plan assets by an aggregate of approximately \$62.9 million ("unfunded status"), as compared to \$84.6 million as of December 31, 2021. Estimates for the amount and timing of the future funding obligations of these benefit plans are based on various assumptions. These assumptions include discount rates, rates of compensation increases, expected long-term rates of return on plan assets and expected healthcare cost trend rates. If our assumptions prove incorrect, our funding obligations may increase, which may have a material adverse effect on our financial results.

We have invested the plan assets of our funded benefit plans in various equity and debt securities. A deterioration in the value of plan assets could cause the unfunded status of these benefit plans to increase, thereby increasing our obligation to make additional contributions to these plans. An obligation to make contributions to our benefit plans could reduce the cash available for working capital and other corporate uses, and may have an adverse impact on our operations, financial condition and cash flows.

Legal and Regulatory Risks

Environmental liabilities that may arise could be material.

Our operations, facilities and properties are subject to extensive and evolving laws and regulations pertaining to air emissions, wastewater discharges, the handling and disposal of solid and hazardous materials and wastes, the remediation of contamination, and otherwise relating to health, safety and the protection of the environment. As a result, we are involved from time to time in administrative or legal proceedings relating to environmental and health and safety matters and have in the past and will continue to incur capital costs and other expenditures relating to such matters. For example, we are engaged in confidential discussions with the United States government concerning our participation in the Environmental Protection Agency's Transition Program for Equipment Manufacturers and related matters. Refer to Note 19, "Commitments and Contingencies" to the Consolidated Financial Statements.

We cannot be certain that identification of presently unidentified environmental conditions, more vigorous enforcement by regulatory authorities or other unanticipated events will not arise in the future and give rise to additional environmental liabilities, compliance costs and/or penalties that could be material. Further, environmental laws and regulations are constantly evolving, and it is impossible to predict accurately the effect they may have upon our financial condition, results of operations or cash flows.

In addition, increasing laws and regulations dealing with environmental aspects of the products we manufacture can result in significant expenditures in designing and manufacturing new products that satisfy such new laws and regulations. In particular, climate change is receiving increasing attention worldwide. Many scientists, legislators and others attribute climate change to increased levels of greenhouse gas emissions. While additional regulation of emissions in the future appears likely, how such new regulations would ultimately affect our business, operations or financial results is unknown at this time.

If our manufacturing processes and products do not comply with applicable statutory and regulatory requirements, or if we manufacture products containing design or manufacturing defects, demand for our products could decline and we could be subject to product liability claims.

Our designs, manufacturing processes and facilities need to comply with applicable statutory and regulatory requirements. We may also have the responsibility to ensure that products we design satisfy safety and regulatory standards including those applicable to our customers and to obtain any necessary certifications. As a result, products that we manufacture may at times contain manufacturing or design defects, and our manufacturing processes may be subject to errors or not be in compliance with applicable statutory and regulatory requirements or demands of our customers. Potential defects in the products we manufacture or design, whether caused by a design, manufacturing or component failure or error, or deficiencies in our manufacturing processes, may result in delayed shipments to customers, replacement costs or reduced or canceled customer orders. If these defects or deficiencies are significant, our business reputation may also be damaged. The failure of the products that we manufacture or our manufacturing processes and facilities to comply with applicable statutory and regulatory requirements may subject us to legal fines or penalties and, in some cases, require us to shut down or incur considerable expense to correct a manufacturing process or facility.

Any manufacturing or design defects may also result in product liability claims. Furthermore, customers use some of our products in potentially hazardous applications that can cause injury or loss of life and damage to property, equipment or the environment. We may be named as a defendant in product liability or other lawsuits asserting potentially large claims if an accident occurs at a location where our equipment and services have been or are being used. Certain of our businesses also have experienced claims relating to past alleged asbestos exposure. We have not to date incurred material costs related to these asbestos claims. We vigorously defend ourselves against current claims and intend to do so against future claims. We also have certain insurance policies which may limit our financial exposures. Any significant liabilities which are not covered by insurance could have an adverse effect on our financial condition, results of operation and cash flows. Likewise, a substantial increase in the number of claims that are made against us or the amounts of any judgments or settlements could materially and adversely affect our reputation and our financial condition, results of operations and cash flows.

If we do not meet customers' product quality, reliability standards and expectations, we may experience increased or unexpected product warranty claims and other adverse consequences to our business.

Product quality and reliability are significant factors influencing customers' decisions to purchase our products. Inability to maintain the high quality of our products relative to the perceived or actual quality of similar products offered by competitors could result in the loss of market share, loss of revenue, reduced profitability, an increase in warranty costs, government investigations and/or damage to our reputation.

Product quality and reliability are determined in part by factors that are not entirely within our control. We depend on our suppliers for parts and components that meet our standards. If our suppliers fail to meet those standards, we may not be able to deliver the quality of products that our customers expect, which may impair our reputation, resulting in lower revenue and higher warranty costs.

We provide our customers a warranty covering workmanship, and in some cases materials, on products we manufacture. Such warranties generally provide that products will be free from defects for periods ranging from 12 months to 60 months. If a product fails to comply with the warranty, we may be obligated, at our expense, to correct any defect by repairing or replacing the defective product. Although we maintain warranty reserves in an amount based primarily on the number of units shipped and on historical and anticipated warranty claims, there can be no assurance that future warranty claims will follow historical patterns or that we can accurately anticipate the level of future warranty claims. An increase in the rate of warranty claims or the occurrence of unexpected warranty claims, for which we do not have a reserve or where we cannot recover from our vendors to the extent their materials or workmanship were defective, could materially and adversely affect our financial condition, results of operations and cash flows.

Compliance or the failure to comply with regulations and governmental policies could cause us to incur significant expense.

Changes in laws or regulations, or a failure to comply with laws and regulations, may adversely affect our business, investments and results of operations. We are subject to laws and regulations enacted by national, regional and local governments, including non-U.S. governments. In particular, we are required to comply with certain SEC and other legal requirements. Compliance with, and monitoring of, applicable laws and regulations may be difficult, time consuming and costly. Those laws and regulations and their interpretation and application may also change from time to time and those

changes could have a material adverse effect on our business, investments and results of operations. In addition, a failure to comply with applicable laws or regulations, as interpreted and applied, could have a material adverse effect on our business and results of operations. Additionally, we may need to obtain and maintain licenses and permits to conduct business in various jurisdictions. If we or the businesses or companies we acquire have failed or fail in the future to comply with such laws and regulations, then we could incur liabilities and fines and our operations could be suspended. Such laws and regulations could also restrict our ability to modify or expand our facilities, could require us to acquire costly equipment, or could impose other significant expenditures.

Our international sales and operations are subject to applicable laws relating to trade, export controls and foreign corrupt practices, the violation of which could adversely affect our operations.

We must comply with all applicable international trade, customs, export controls and economic sanctions laws and regulations of the United States and other countries. We are also subject to the Foreign Corrupt Practices Act and other anti-bribery laws that generally bar bribes or gifts to foreign governments or officials. The existing presidential administration in the United States has taken, and make take additional, actions that may inhibit international trade by U.S.-based companies. Changes in trade sanctions laws may restrict our business practices, including cessation of business activities in sanctioned countries or with sanctioned parties, and may result in modifications to compliance programs. Violation of these laws or regulations could result in sanctions or fines and could have a material adverse effect on our financial condition, results of operations and cash flows.

If we fail to protect our intellectual property rights or maintain our rights to use licensed intellectual property, our business could be adversely affected.

Our intellectual property, including our patents, trade secrets, trademarks and licenses are important in the operation of our business. Although we intend to protect our intellectual property rights vigorously, we cannot be certain that we will be successful in doing so. Third parties may assert or prosecute infringement claims against us in connection with the services and products that we offer, and we may or may not be able to successfully defend these claims. Litigation, either to enforce our intellectual property rights or to defend against claimed infringement of the rights of others, could result in substantial costs and in a diversion of our resources. In addition, if a third party would prevail in an infringement claim against us, then we would likely need to obtain a license from the third party on commercial terms, which would likely increase our costs. Our failure to maintain or obtain necessary licenses or an adverse outcome in any litigation relating to patent infringement or other intellectual property matters could have a material adverse effect on our financial condition, results of operations and cash flows.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 2. PROPERTIES

Manitowoc maintains leased and owned manufacturing, warehouse, field testing, service and distribution and office facilities throughout the world. The Company's corporate office is located in Milwaukee, Wisconsin. The Company believes that its facilities currently in use are suitable and have adequate capacity to meet its present and foreseeable future demand. Manitowoc management continually monitors the Company's capacity needs and makes adjustments as dictated by market and other conditions.

The following table provides information about material facilities owned or leased by the Company as of December 31, 2022.

Facility Location	Type of Facility
Milwaukee, Wisconsin	Global Headquarters
Americas	
Shady Grove, Pennsylvania	Manufacturing/Office
Dallas, Texas	Distribution/Service
Houston, Texas	Distribution/Service
Phoenix, Arizona	Distribution/Service
EURAF	
Wilhelmshaven, Germany	Manufacturing/Office
Niella Tanaro, Italy	Manufacturing/Office
Moulins, France	Manufacturing/Office
Charlieu, France	Manufacturing/Office
Saint Pierre de Chandieu, France	Warehouse/Office
Baltar, Portugal	Manufacturing/Office
MEAP	
Zhangjiagang, China	Manufacturing/Office

Item 3. LEGAL PROCEEDINGS

From time to time, the Company is subject to litigation incidental to its business, as well as other litigation of a non-material nature in the ordinary course of business. Refer to Note 19, "Commitments and Contingencies," to the Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K for further information.

Item 4. MINE SAFETY DISCLOSURE

Not Applicable.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

Each of the following executive officers of the Company has been elected by the Board of Directors. The information presented below is as of February 24, 2023.

None	A	Design With The Design	Principal Position Held
Name	Age	Position With The Registrant	Since
Aaron H. Ravenscroft	44	President and Chief Executive Officer	2020
Brian P. Regan	49	Executive Vice President and Chief Financial Officer	2022
Jennifer L. Peterson	46	Executive Vice President, General Counsel and Secretary	2022
Leslie L. Middleton	53	Executive Vice President, Americas and EU	2020
		Mobile Cranes	

The following paragraphs provide further information as to our executive officers' duties and their employment history:

Aaron H. Ravenscroft has served as the President and Chief Executive Officer of the Company since August 2020. Prior to his appointment, he was the Executive Vice President of Cranes since 2017, overseeing the company's operational activities. Mr. Ravenscroft joined Manitowoc in 2016 as the Executive Vice President of Mobile Cranes. Before joining Manitowoc, Mr. Ravenscroft served as Regional Managing Director of the North American Minerals business for the Weir Group (2013-2016);

President and Group Executive of Process & Flow Control Group of Robbins & Myers (2011-2013); and Regional Vice President of Industrial Products Group for Gardner Denver, Inc. (2008-2011). Mr. Ravenscroft also worked at Westinghouse Air Brake Technologies and Janney Montgomery Scott. He holds an MBA from Carnegie Mellon University and a Bachelor of Arts in Economics from Bucknell University.

Brian P. Regan has served as Executive Vice President and Chief Financial Officer of the Company since May 2022. Prior to his appointment, he was the Vice President, Corporate Controller and Principal Accounting Officer since November 2018, overseeing the Company's accounting and financial reporting teams and was also responsible for the Treasury function from 2020-2021. Before joining Manitowoc, Mr. Regan served in positions of increasing responsibility at SPX Corporation (2006-2018) where he most recently served as Vice President Finance, Chief Financial Officer of SPX Transformer Solutions. Prior to SPX Corporation, Mr. Regan served in positions of increasing responsibility at Ernst & Young LLP (2000-2006) and Ogilvy & Mather (1997-2000). He holds a Bachelor of Arts in Economics and Accounting from the College of the Holy Cross and earned his Certified Public Accountant license in New York.

Jennifer L. Peterson has served as the Executive Vice President, General Counsel and Secretary of the Company since August 2022. Prior to her appointment, she was the Interim General Counsel and Assistant Secretary since May 2022, Vice President and Associate General Counsel since April 2021, and Associate General Counsel – Litigation and Product Safety since January 2018. Before joining Manitowoc, Ms. Peterson served as Director of Litigation, Americas for Adient plc (2016-2018); Senior Group Counsel for Johnson Controls, Inc. (2014-2016); Deputy General Counsel for Journal Communications, Inc. (2009-2014); worked at the law firm Godfrey & Kahn, S.C. (2002-2009); and was Law Clerk to the Honorable N. Patrick Crooks on the Wisconsin Supreme Court (2001-2002). She holds a Bachelor of Arts in Public Communications from the University of Wisconsin Law School.

Leslie L. Middleton has served as the Executive Vice President, Americas and EU Mobile Cranes of the Company since November 2020. Prior to his appointment he was the Senior Vice President of Americas Mobile Cranes. Mr. Middleton joined Manitowoc in February 2016 and is responsible for optimizing operations, development and implementation of lean strategies, increased new product development, and growth in the Americas business and Germany mobiles. Before joining Manitowoc, Mr. Middleton served as Managing Director U.S. Minerals and Executive Vice President Operations at Weir Minerals North America (2014-2016); Vice President and General Manager of Gardner Denver (2009-2013); Director of Manufacturing at Magnet Schultz of America (2004-2009); and Director of Manufacturing and Performance Systems at Vapor Corporation (1995-2004).

PART II

Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PRUCHASES OF EQUITY SECURITIES

The Company's common stock is traded on the New York Stock Exchange ("NYSE") under the symbol MTW. The number of shareholders of record of common stock as of December 31, 2022 was 509.

The amount and timing of any dividends are determined by the Board of Directors at its regular meetings each year, subject to limitations within the indenture governing the Company's 2026 Notes and the Company's ABL Revolving Credit Facility described below. For the years ended December 31, 2022 and 2021, no cash dividends were declared or paid.

The Company's ABL Revolving Credit Facility and Indenture governing the 2026 Notes defines certain payments the Company can make, such as the repurchase or retirement of Company stock, prepayment of debt principal and distribution of dividends to holders of Company stock as "Restricted Payments." These Restricted Payments may be constrained by a provision requiring a minimum fixed charge coverage ratio after giving effect to the Restricted Payments under the ABL Credit Agreement and a provision requiring a minimum consolidated total debt ratio under the 2026 Notes indenture. Refer to Note 12, "Debt," to the Company's Consolidated Financial Statements.

See Part III, Item 12 of this Annual Report on Form 10-K for certain information regarding the Company's equity compensation plans.

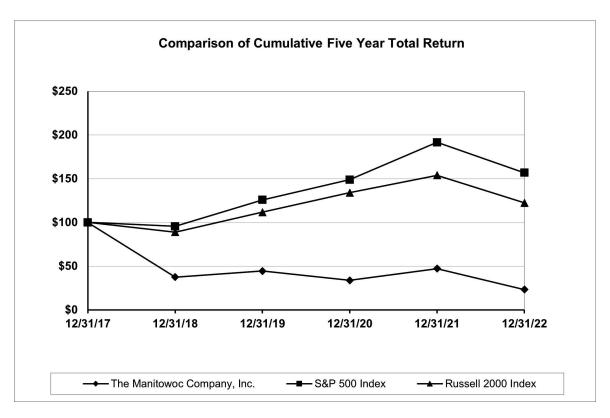
Issuer Purchases of Equity Securities

As of December 31, 2022, the Company has authorization from the Board of Directors to purchase up to \$30.0 million of the Company's common stock at management's discretion. The Company's share repurchases program purchases shares in the open market to offset stock-based awards issued in conjunction with the Company's 2013 Omnibus Incentive Plan. As of December 31, 2022, the Company has \$7.6 million remaining under this authorization.

The Company's purchases of equity securities in the fourth quarter of fiscal 2022 are summarized as follows:

Periods	Total Number of Shares Purchased	age Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Program	Value of Sha Yet B	ximate Dollar (in millions) res That May be Purchased the Program
October 2022		\$ 		\$	8.7
November 2022	112,000	\$ 9.88	112,000	\$	7.6
December 2022		\$ _		\$	7.6
Total	112 000		112 000		

Shares withheld to satisfy statutory tax withholding requirements related to the vesting of stock-based awards are not issued or considered share repurchases under the Company's share repurchase program and, therefore, are excluded from the table above.



Total Return to Shareholders

(Includes reinvestment of dividends)

		Annual Return Percentages							
		Years Ending December 31,							
	2018	2019	2020	2021	2022				
The Manitowoc Company, Inc.	(62.46)%	18.48%	(23.94)%	39.67%	(50.73)%				
S&P 500 Index	(4.38)%	31.49%	18.40%	28.71%	(18.11)%				
Russell 2000 Index	(11.01)%	25.53%	19.96%	14.82%	(20.44)%				

	Indexed Returns								
		Years Ending December 31,							
	2018	2019	2020	2021	2022				
The Manitowoc Company, Inc.	100.00	37.54	44.48	33.83	47.25	23.28			
S&P 500 Index	100.00	95.62	125.72	148.85	191.58	156.88			
Russell 2000 Index	100.00	88.99	111.70	134.00	153.85	122.41			

Item 6. RESERVED

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis should be read in conjunction with the consolidated financial statements and accompanying notes appearing in Part II, Item 8 of this Annual Report on Form 10-K.

Overview: The Manitowoc Company, Inc. ("Manitowoc" or the "Company") is a leading provider of engineered lifting solutions headquartered in Milwaukee, Wisconsin, United States. Through its wholly-owned subsidiaries, Manitowoc designs, manufacturers, markets, distributes and supports comprehensive product lines of mobile hydraulic cranes, lattice-boom crawler cranes, boom trucks and tower cranes. The Company has three reportable segments, the Americas segment, the Europe and Africa ("EURAF") segment and the Middle East and Asia Pacific ("MEAP") segment. The segments were identified using the "management approach," which designates the internal organization that is used by the CEO, who is also the Company's Chief Operating Decision Maker ("CODM"), for making decisions about the allocation of resources and assessing performance. Further information regarding the Company's reportable segments can be found in Note 18, "Segments," to the Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

All dollar amounts are in millions throughout the tables included in Management's Discussion and Analysis of Financial Conditions and Results of Operations unless otherwise indicated.

Current Events

Inflation

The Company was negatively impacted by inflation in wages, logistics, energy, raw material and component costs for the years ended December 31, 2022 and 2021. The Company has implemented price increases and provisional pricing strategies to mitigate the impact of cost inflation on margins and continues to actively monitor costs. There is a delay, however, in the realization of pricing due to long lead times of orders in the backlog, exacerbated by global supply chain and logistics constraints. In response to high inflation, the U.S. Federal Reserve and other central banks around the globe, have increased interest rates throughout 2022 and into the first quarter of 2023. The pace of interest rate increases and rising interest rates have resulted in further macroeconomic uncertainty and could impact our customer's decision to purchase cranes. Further inflationary pressure could increase our input costs and negatively impact our margins if we cannot obtain a corresponding increase in the pricing of our products. Furthermore, persistent inflation may prompt further governmental monetary policy response, such as continued interest rate increases by central banks, that in combination with higher pricing could negatively impact customer demand for our products. Continuing or worsening inflation may have a material adverse impact on the Company's financial condition, results of operations or cash flows.

Supply Chain and Logistics Constraints

The Company continues to actively monitor global supply chain and logistics constraints which had a negative impact on the Company's ability to source parts and complete and ship units for the years ended December 31, 2022 and 2021. While the Company experienced some relief with supply chain and logistics constraints in the fourth-quarter of 2022, the Company anticipates these constraints to persist throughout 2023. Further, global supply chain and logistics constraints have also impacted end market customers, particularly in the European construction industry, which resulted in the postponement of certain construction projects in 2022 and negatively impacted customer demand for our products. The Company continues to actively monitor and manage supply chain constraints through alternative sourcing of parts and adapting production to limit waste and inefficiencies in the facilities. Continuing or worsening supply chain and logistics constraints may have a material adverse impact on the Company's financial condition, results of operations or cash flows. Refer to Item 1. "Business," section, Raw Material Sources and Availability for more information.

Conflict in Ukraine

Russia's invasion and the related economic sanctions by Western governments on Russia resulted in volatile raw material and component costs in Europe during 2022, exacerbating the inflation and supply chain situation. Ongoing economic sanctions targeting Russia may cause further disruptions to the Company's supply chain and impact access to certain materials in its European operations which may have a material adverse impact on the Company's financial condition, results of operations or cash flows. Further, the conflict has also heightened the threat of cybersecurity attacks. In response, the Company has increased monitoring of such threats and continues to take steps to enhance the security of its systems.

In the second quarter of 2022, the Company began to curtail its operations in Russia due to the ongoing conflict in Ukraine. The Company's operations in Russia accounted for less than two percent of consolidated net sales in 2021 and were primarily limited to sales and aftermarket support with less than twenty employees. As part of the curtailment, the Company cancelled

\$21.0 million of orders in Russia and stopped taking new orders. For the year ended December 31, 2022, the Company recorded \$0.8 million of restructuring expense in the Consolidated Statements of Operations. The Company expects future charges of \$5.0 million to \$10.0 million related to the non-cash write-off of foreign currency adjustments recorded in accumulated other comprehensive loss in the Consolidated Balance Sheets.

Segment Operating Performance

	2022	Change	2021	Change	2020
Net Sales					
Americas	\$ 1,013.0	33.7%	\$ 757.6	21.0%	\$ 626.1
EURAF	761.5	12.5%	677.0	13.1%	598.7
MEAP	258.0	(9.7)%	285.6	30.6%	218.6
Segment Operating Income (Loss)					
Americas	\$ (88.8)	*	\$ 57.3	78.5%	\$ 32.1
EURAF	(3.2)	*	8.9	(25.8)%	12.0
MEAP	40.2	30.1%	30.9	1.6%	30.4

^{*}Measure not meaningful

Americas

Americas net sales increased 33.7% in 2022 to \$1,013.0 million from \$757.6 million in 2021. The increase was primarily attributable to higher new machine and non-new machine sales, inclusive of the acquisitions, and pricing actions. The acquisitions contributed to the increase in net sales by \$189.8 million. While backlog was higher entering the year, supply chain constraints negatively impacted the Company's ability to produce and ship certain products.

Americas operating loss of \$88.8 million in 2022 was primarily attributable to \$171.9 million of non-cash goodwill and indefinite-lived intangible asset impairment charges. Refer to Note 10, "Goodwill and Other Intangible Assets," to the Consolidated Financial Statements for further information. Excluding this item, operating income was \$83.1 million, an increase of \$25.8 million or 45.0% from 2021. This increase was primarily attributable to higher net sales and favorable product mix, partially offset by higher raw material, component, logistics and employee related costs.

Americas net sales increased 21.0% in 2021 to \$757.6 million from \$626.1 million in 2020. The increase was primarily attributable to favorable product mix and pricing actions taken during the year. While demand for cranes was higher year-over-year, supply chain constraints impacted the Company's ability to produce and ship certain products. The acquisitions of Aspen Equipment Company ("Aspen") and the crane business of H&E Equipment Services, Inc. ("H&E") contributed to the increase of net sales by \$26.7 million. However, the acquisitions generated \$74.2 million of net sales during the period on a standalone basis.

Americas operating income increased 78.5% in 2021 to \$57.3 million from \$32.1 million in 2020. The increase was primarily attributable to higher net sales, favorable product mix and the impact of pricing actions taken during the year. This was partially offset by unfavorable impacts from higher material and transportation costs, increased short-term incentive compensation costs and a \$1.9 million asset impairment charge to write-down the value of one of the Company's Brazilian entities to its expected sale price.

EURAF

EURAF net sales increased 12.5% in 2022 to \$761.5 million from \$677.0 million in 2021. The increase was primarily attributable to higher new machine sales and pricing actions. While backlog was higher entering the year, supply chain constraints negatively impacted the Company's ability to produce and ship certain products. EURAF net sales were unfavorably impacted by \$88.7 million from changes in foreign currency exchange rates.

EURAF operating loss of \$3.2 million decreased \$12.1 million in 2022 from operating income of \$8.9 million in 2021. The decrease was primarily attributable to higher raw material, component and logistics costs, tradeshow costs related to the triennial bauma tradeshow and unfavorable absorption of overhead and labor costs due to inefficiencies from the supply chain constraints. This was partially offset by higher net sales and price increases. Operating loss was favorably impacted by \$1.3 million from changes in foreign currency exchange rates.

EURAF net sales increased 13.1% in 2021 to \$677.0 million from \$598.7 million in 2020. The increase was primarily due to higher shipments of cranes compared to the year ended December 31, 2020, which was negatively impacted by the COVID-19 pandemic. While demand for cranes was higher year-over-year, supply chain constraints impacted the ability to produce and ship certain products. EURAF net sales were favorably impacted by \$20.9 million from changes in foreign currency exchange rates.

EURAF operating income decreased 25.8% in 2021 to \$8.9 million from \$12.0 million in 2020. The decrease was primarily due to higher material and transportation costs and engineering, selling and administrative expenses including short-term incentive compensation costs. This was partially offset by higher net sales. Operating income was favorably impacted by \$2.4 million from changes in foreign currency exchange rates.

MEAP

MEAP net sales decreased 9.7% in 2022 to \$258.0 million from \$285.6 million in 2021. The decrease was primarily due to lower new machine sales, partially offset by pricing actions. MEAP net sales were unfavorably impacted by \$18.1 million from changes in foreign currency exchange rates.

MEAP operating income increased 30.1% in 2022 to \$40.2 million from \$30.9 million in 2021. The increase was primarily attributable to lower engineering, selling and administrative expenses as a result of \$3.6 million of higher prior year expense due to a write-off of a long-term note receivable from the 2014 divestiture of the Company's Chinese joint venture, \$4.8 million of benefit in the current year from the partial recovery of the previously written-off long-term note receivable and realization of pricing in net sales. This was partially offset by lower net sales and higher raw material, component and logistics costs. Operating income was unfavorably impacted by \$2.7 million from changes in foreign currency exchange rates.

MEAP net sales increased 30.6% in 2021 to \$285.6 million from \$218.6 million in 2020. The increase was primarily due to higher crane shipments compared to the year ended December 31, 2020, which was negatively impacted by the COVID-19 pandemic. MEAP net sales were favorably impacted by \$10.0 million from changes in foreign currency exchange rates.

MEAP operating income increased 1.6% in 2021 to \$30.9 million from \$30.4 million in 2020. The increase was primarily due to higher net sales. This was partially offset by higher material and transportation costs, engineering, selling and administrative expenses including short-term incentive compensation costs and a \$3.6 million loss from a write-off of a long-term note receivable resulting from the 2014 divestiture of the Company's Chinese joint venture. MEAP operating income was favorably impacted by \$0.3 million from changes in foreign currency exchange rates.

Results of Operations for the Years Ended December 31, 2022, 2021 and 2020:

	2022	2021		2020	2022 to 2021 % Change	2021 to 2020 % Change
Orders	\$ 2,095.5	\$ 2,166.6	\$	1,511.4	(3.3)%	43.4%
Backlog	1,056.0	1,010.9		543.2	4.5%	86.1%
Net sales	2,032.5	1,720.2		1,443.4	18.2%	19.2%
Gross profit	364.5	307.2		254.7	18.7%	20.6%
Gross profit %	17.9%	17.9%	ó	17.6%		
Engineering, selling and administrative						
expenses	281.0	258.5		208.8	8.7%	23.8%
Asset impairment expense	171.9	1.9			*	*
Restructuring (income) expense	1.5	(1.1)		7.0	*	(115.7)%
Interest expense	31.6	28.9		29.1	9.3%	(0.7)%
Other income (expense) - net	5.8	1.0		(10.0)	*	110.0%
Provision for income taxes	3.4	6.1		17.1	44.3%	64.3%

^{*}Measure not meaningful

Orders and Backlog

Backlog represents the dollar value of orders which are expected to be recognized in net sales in the future. Orders are included in backlog when an executed binding contract has been received but has not been recognized in net sales. Orders and backlog are not measures defined by accounting principles generally accepted in the United States of America ("GAAP") and our methodology for determining orders and backlog may vary from the methodology used by other companies. Management uses orders and backlog for capacity and resource planning purposes. We believe this information is useful to investors to provide an indication of our future revenues.

Orders for the year ended December 31, 2022 decreased 3.3% to \$2,095.5 million from \$2,166.6 million for the same period in 2021. The decrease in orders was primarily attributable to softening demand in the EURAF segment and certain regions of the MEAP segment as a result of macroeconomic conditions and geopolitical uncertainty. This was partially offset by an increase in demand in the Americas segment. In addition, the Company cancelled \$21.0 million of orders in Russia, which were included in backlog as of December 31, 2021, as a result of Russia's invasion of Ukraine and the Company's curtailment of its operations in Russia. Orders were unfavorably impacted by \$92.3 million from changes in foreign currency exchange rates.

The Company's backlog as of December 31, 2022, 2021, and 2020, was \$1,056.0 million, \$1,010.9 million and \$543.2 million, respectively. The increase in backlog from December 31, 2021, was primarily attributable to an increase in demand in the Americas segment and continued delays in shipments due to supply chain constraints. This was partially offset by lower orders due to softening demand in the EURAF segment. Backlog was unfavorably impacted by \$24.5 million from changes in foreign currency exchange rates.

Net Sales

Consolidated net sales for the year ended December 31, 2022 increased 18.2% to \$2,032.5 million from \$1,720.2 million for the same period in 2021. The increase was primarily attributable to higher new machine sales in the Americas and EURAF segments, pricing actions and higher non-new machine sales in the Americas segment, inclusive of the acquisitions. The acquisitions contributed to the increase in net sales by \$189.8 million. While the higher backlog entering the year contributed to the increase in net sales, this was partially offset by supply chain constraints which negatively impacted the Company's ability to produce and ship certain products. Net sales were unfavorably impacted by \$106.5 million from changes in foreign currency exchange rates.

Consolidated net sales for the year ended December 31, 2021 increased 19.2% to \$1,720.2 million from \$1,443.4 million for the same period in 2020. The increase was primarily attributable to higher crane shipments due to increased demand as compared to the year ended December 31, 2020, which was negatively impacted by the COVID-19 pandemic. While demand for cranes was higher year-over-year, supply chain constraints negatively impacted the Company's ability to produce and ship certain products. The acquisitions of Aspen and the crane business of H&E contributed to the increase of net sales by \$26.7 million. However, the acquisitions generated \$74.2 million of net sales during the period on a standalone basis. Net sales were favorably impacted by \$31.0 million from changes in foreign currency exchange rates.

Gross Profit

Gross profit for the year ended December 31, 2022 increased 18.7% to \$364.5 million compared to \$307.2 million for the year ended December 31, 2021. The increase was primarily attributable to higher net sales and pricing actions. This was partially offset by higher employee related, raw material, component and logistics costs and unfavorable absorption of overhead and labor costs due to inefficiencies from the supply chain constraints. Gross profit was unfavorably impacted by \$15.6 million from changes in foreign currency exchange rates.

Gross profit percentage in 2022 and 2021 was 17.9%.

Gross profit for the year ended December 31, 2021 increased by 20.6% to \$307.2 million compared to \$254.7 million for the year ended December 31, 2020. The increase was primarily due to the increase in net sales, partially offset by increases in material and transportation costs. Gross profit was favorably impacted by \$7.1 million from changes in foreign currency exchange rates.

Gross profit percentage in 2021 was 17.9% compared to 17.6% in 2020.

Engineering, Selling and Administrative Expenses

Engineering, selling and administrative expenses for the year ended December 31, 2022 increased \$22.5 million to \$281.0 million. The increase was primarily attributable to the acquisitions which accounted for incremental costs of \$36.9 million and higher stock-based compensation expense, other employee related costs and tradeshow costs related to the triennial bauma tradeshow. This was partially offset by a \$13.9 million charge recorded in the prior year related to a legal matter with the U.S. Environmental Protection Agency, \$3.6 million of higher prior year expense due to a write-off of a long-term note receivable from the 2014 divestiture of the Company's Chinese joint venture and \$4.8 million of benefit in the current year from the partial

recovery of the previously written-off long-term note receivable. Engineering, selling and administrative expenses were favorably impacted by \$14.6 million from changes in foreign currency exchange rates.

Engineering, selling and administrative expenses for the year ended December 31, 2021 increased \$49.7 million to \$258.5 million. The increase was primarily due to a \$13.9 million charge related to a legal matter with the U.S. Environmental Protection Agency, higher employee-related costs, inclusive of short-term incentive compensation costs, a \$3.6 million loss from a write-off of a long-term note receivable resulting from the 2014 divestiture of the Company's Chinese joint venture and acquisition related costs. This was partially offset by lower tradeshow costs from the triennial ConExpo trade show in March 2020. Engineering, selling and administrative expenses were unfavorably impacted by \$4.4 million from changes in foreign currency exchange rates.

Asset Impairment Expense

During the year ended December 31, 2022, the Company recorded non-cash charges in the Americas segment of \$171.9 million consisting of a \$166.5 million goodwill impairment charge and a \$5.4 million indefinite-lived intangible asset impairment charge. Refer to Note 10, "Goodwill and Other Intangible Assets," to the Consolidated Financial Statements for further information.

During the year ended December 31, 2021, the Company recorded an asset impairment charge of \$1.9 million to write-down the value of one of the Company's Brazilian entities to its expected sale price.

Restructuring (Income) Expense

Restructuring expense for the year ended December 31, 2022 was immaterial to the financial statements.

Restructuring income for the year ended December 31, 2021 primarily related to adjustments of previously recorded costs associated with a lease write-off in the Americas and headcount reduction in Europe. In addition, the Company recorded income on the sale of previously expensed Brazilian tax credits.

Restructuring expense for the year ended December 31, 2020 primarily related to costs associated with headcount reductions in Europe and North America, partially offset by \$2.5 million of income primarily related to the forfeiture of equity compensation awards associated with employee separation agreements.

Interest Expense

Interest expense for the year ended December 31, 2022 was \$31.6 million compared to \$28.9 million for the year ended December 31, 2021. The increase in interest expense is due to higher average outstanding balances of debt with higher variable interest rates. Refer to Note 12, "Debt," to the Consolidated Financial Statements.

Interest expense remained flat for the year ended December 31, 2021 at \$28.9 million compared to \$29.1 million for the year ended December 31, 2020.

Other Income (Expense) – Net

Other income (expense) – net for the year ended December 31, 2022 was \$5.8 million of income and was primarily composed of \$5.5 million of net foreign currency gains and a \$0.9 million gain on disposal of property, plant and equipment, partially offset by a \$0.5 million charge related to non-capitalizable one-time legal and debt related costs.

Other income (expense) - net for the year ended December 31, 2021 was \$1.0 million of income and was primarily composed of \$1.1 million of net foreign currency gains.

Other income (expense) - net for the year ended December 31, 2020 was \$10.0 million of expense was primarily composed of \$3.9 million of net foreign currency losses, \$3.7 million charge related to the settlement of a legal matter and \$1.6 million of pension benefit costs.

Provision for Income Taxes

During the year ended December 31, 2022, 2021 and 2020 the Company recorded a provision for income taxes of \$3.4 million, \$6.1 million and \$17.1 million respectively.

Due to the Company's historic losses, impacts from United States tax reform and full valuation allowances in certain jurisdictions, the effective annual tax rate is not a meaningful measure of the Company's cash tax position or performance of the business.

The 2022 effective tax rate was favorably impacted by the net release of unrecognized tax positions of \$11.5 million. The rate was unfavorably impacted primarily by the goodwill impairment charge for which there was no related tax asset, additional valuation allowances recorded during the year and the jurisdictional mix of the financial results.

The 2021 effective tax rate was favorably impacted primarily by the release of unrecognized tax positions of \$2.8 million and a \$2.7 million partial release of a Chinese valuation allowance. The rate was unfavorably impacted by the jurisdictional mix of the financial results which included recognition of additional valuation allowances in certain jurisdictions.

The 2020 effective tax rate was favorably impacted primarily by the passing of The Coronavirus Aid, Relief and Economic Security Act by \$3.7 million that allowed the Company to implement certain United States tax planning strategies. The rate was unfavorably impacted primarily by additional valuation allowances recorded during the year and the jurisdictional mix of the financial results.

Refer to Note 14, "Income Taxes," to the Consolidated Financial Statements.

Financial Condition

Cash Flows

The table below shows a summary of cash flows for the years ended December 31, 2022, 2021 and 2020:

	Year Ended December 31,							
		2022		2021		2020		
Net cash provided by (used for) operating activities	\$	76.9	\$	76.2	\$	(35.1)		
Net cash used for investing activities	\$	(58.0)	\$	(226.3)	\$	(25.8)		
Net cash provided by (used for) financing activities	\$	(29.9)	\$	100.9	\$	(14.8)		
Cash and cash equivalents	\$	64.4	\$	75.4	\$	128.7		

Cash Flows from Operating Activities

Net cash provided by operating activities of \$76.9 million in 2022 increased \$0.7 million from net cash provided by operating activities of \$76.2 million in 2021. The increase in net cash provided by operating activities was due to higher net income adjusted for non-cash items including higher depreciation and amortization due to the acquisitions, non-cash goodwill and indefinite-lived intangible asset impairment charges of \$171.9 million and higher stock-based compensation expense. The higher non-cash items were partially offset by unfavorable changes in working capital due to higher inventory from supply chain constraints and inflation and accounts receivable driven by the timing of shipments in the fourth quarter.

Net cash provided by operating activities of \$76.2 million in 2021 increased \$111.3 million from net cash used for operating activities of \$35.1 million in 2020. The increase in net cash provided by operating activities was due to higher net income adjusted for non-cash items such as higher depreciation due to the acquisitions as well as favorable changes in working capital primarily due to lower accounts receivable and higher accrued expenses and other liabilities year-over-year.

Cash Flows from Investing Activities

Net cash used for investing activities of \$58.0 million in 2022 decreased \$168.3 million from net cash used for investing activities of \$226.3 million in 2021. The decrease in net cash used for investing activities was primarily due to \$186.2 million of cash paid for the acquisitions in 2021 and a \$2.3 million cash receipt related to the finalization of the purchase price for the acquisition of the crane business of H&E in 2022. This was partially offset by higher capital expenditures of \$21.4 million which included \$16.5 million of incremental capital expenditures for the rental fleet year-over-year.

Net cash used for investing activities of \$226.3 million in 2021 increased \$200.5 million from net cash used for investing activities of \$25.8 million in 2020. The increase in net cash used for investing activities was primarily due to \$186.2 million of cash paid for the acquisitions in 2021 and higher capital expenditures which included \$14.1 million of incremental capital expenditures for the rental fleet year-over-year.

Cash Flows from Financing Activities

Net cash used for financing activities of \$29.9 million in 2022 compares to net cash provided by financing activities of \$100.9 million in 2021. The change in net cash from financing activities was primarily due to \$20.0 million in repayments of borrowings from the Company's ABL Revolving Credit Facility in 2022, as compared to \$100.0 million of proceeds on the ABL revolving Credit Facility in 2021. Additionally, there was \$1.9 million of payments for debt issuance and other debt related costs, \$3.0 million of common stock repurchases and \$5.7 million of lower proceeds from the exercises of stock options compared to the prior year.

Net cash provided by financing activities of \$100.9 million in 2021 compares to net cash used for financing activities of \$14.8 million in 2020. The change in net cash from financing activities was primarily due to \$100.0 million of borrowings from the ABL Revolving Credit Facility to fund the acquisitions and higher proceeds from exercise of stock options. This was partially offset by no repurchases of common stock in 2021, compared to \$12.0 million of repurchases in 2020.

Liquidity and Capital Resources

Liquidity

The Company's liquidity position as of December 31, 2022 and 2021 is summarized as follows:

	 2022	2021		
Cash and cash equivalents	\$ 64.4	\$	75.4	
Revolver borrowing capacity	275.0		239.3	
Other debt availability	43.8		47.2	
Less: Borrowings on revolver	(80.0)		(100.0)	
Less: Borrowings on other debt	(4.3)		(4.7)	
Less: Outstanding letters of credit	(3.0)		(3.0)	
Total liquidity	\$ 295.9	\$	254.2	

The Company's revolving credit facility, or other future facilities, may be used for working capital requirements, capital expenditures, funding future acquisitions (within the Company's debt limitations), and other operating, investing and financing needs. The Company believes its liquidity and expected cash flows from operations are sufficient to meet expected working capital, capital expenditures, contractual obligations and other ongoing operational needs in the subsequent twelve months.

Cash Sources

The Company has historically relied primarily on cash flows from operations, borrowings under revolving credit facilities, issuances of notes and other forms of debt financing as its sources of cash.

The maximum availability under the Company's current ABL Revolving Credit Facility is \$275.0 million. The borrowing capacity under the ABL Revolving Credit Facility is based on the value of inventory, accounts receivable and certain fixed assets of the Loan Parties. The Loan Parties' obligations under the ABL Revolving Credit Facility are secured on a first-priority basis, subject to certain exceptions and permitted liens, by substantially all of the personal property and fee-owned real property of the Loan Parties. The liens securing the ABL Revolving Credit Facility are senior in priority to the second-priority liens securing the obligations under the 2026 Notes and the related guarantees. The ABL Revolving Credit Facility has a maturity date of May 19, 2027 (with a springing maturity date of December 30, 2025 if the 2026 Notes have not been repaid in full or refinanced prior to December 30, 2025), and includes a \$75.0 million letter of credit sub-facility, \$10.0 million of which is available to the Company's German subsidiary that is a borrower under the ABL Revolving Credit Facility.

In addition to the ABL Revolving Credit Facility, the Company has access to non-committed overdraft facilities to fund working capital in Europe and China. There are six facilities, of which four are denominated in Euros totaling €28.0 million, one facility denominated in U.S. dollars totaling \$9.5 million and one denominated in Chinese Yuan totaling ¥30.0 million. Total U.S. dollar availability as of December 31, 2022 for the six overdraft facilities is \$43.8 million, with \$4.3 million outstanding.

Debt

On March 25, 2019, the Company and certain subsidiaries of the Company (the "Loan Parties") entered into a credit agreement (the "ABL Credit Agreement") with JP Morgan Chase Bank, N.A as administrative and collateral agent, and certain financial institutions party thereto as lenders, providing for a senior secured asset-based revolving credit facility (the "ABL Revolving Credit Facility") of up to \$275.0 million. The borrowing capacity under the ABL Revolving Credit Facility is based on the value of inventory, accounts receivable and certain fixed assets of the Loan Parties. The Loan Parties' obligations under the ABL Revolving Credit Facility are secured on a first-priority basis, subject to certain exceptions and permitted liens, by substantially all of the personal property and fee-owned real property of the Loan Parties. The liens securing the ABL Revolving Credit Facility are senior in priority to the second-priority liens securing the obligations under the 2026 Notes and the related guarantees. The ABL Revolving Credit Facility includes a \$75.0 million letter of credit sub-facility, \$10.0 million of which is available to the Company's German subsidiary that is a borrower under the ABL Revolving Credit Facility.

On June 17, 2021, the Company amended the ABL Credit Agreement to adjust certain negative covenants which reduces restrictions on the Company's ability to expand its rental business. On May 19, 2022, the Company further amended the ABL Credit Agreement to (i) extend the maturity date to May 19, 2027 (subject to a springing maturity date of December 30, 2025 if the 2026 Notes have not been repaid in full or refinanced prior to December 30, 2025), (ii) permit the inclusion, subject to certain limitations, of the crane rental assets of certain subsidiaries in the borrowing base used to calculate availability under the ABL Credit Agreement, (iii) permit separate financing of crane rental assets not included in the borrowing base and (iv) replace U.S. dollar London Inter-bank Offered Rate with interest rates based on the secured overnight financing rate plus a credit spread adjustment ("SOFR"). Refer to Note 12, "Debt," to the Consolidated Financial Statements for further information regarding the ABL Credit Agreement.

As of December 31, 2022, the Company had \$80.0 million of borrowings outstanding under the ABL Revolving Credit Facility and \$100.0 million of borrowings outstanding as of December 31, 2021. During the year ended December 31, 2022, the highest daily borrowing under the ABL Revolving Credit Facility was \$112.5 million and the average borrowing was \$90.9 million, while the weighted-average annual interest rate was 3.1%. During the year ended December 31, 2021, the highest daily borrowing under the ABL Revolving Credit Facility was \$100.0 million and the average borrowing was \$26.0 million, while the weighted-average annual interest rate was 1.4%. The interest rate of the ABL Revolving Credit Facility fluctuates based on excess availability. During the year ended December 31, 2022, the spreads for SOFR and Eurodollar, and Alternative Base Rate borrowings were 1.25% and 0.25%, respectively. Excess availability as of December 31, 2022 was \$192.0 million, which represents revolver borrowing capacity of \$275.0 million less \$80.0 million in borrowings outstanding and U.S. letters of credit outstanding of \$3.0 million.

On March 25, 2019, the Company and certain of its subsidiaries entered into an indenture with U.S. Bank National Association as trustee and notes collateral agent, pursuant to which the Company issued \$300.0 million aggregate principal amount of the 2026 Notes with an annual coupon rate of 9.000%. Interest on the 2026 Notes is payable in cash semi-annually in arrears on April 1 and October 1 of each year. The 2026 Notes are fully and unconditionally guaranteed on a senior secured second lien basis, jointly and severally, by each of the Company's existing and future domestic subsidiaries that is either a guarantor or a borrower under the ABL Revolving Credit Facility or that guarantees certain other debt of the Company or a guarantor. The 2026 Notes and the related guarantees are secured on a second-priority basis, subject to certain exceptions and permitted liens, by pledges of capital stock and other equity interests and other security interests in substantially all of the personal property and fee-owned real property of the Company and of the guarantors that secure obligations under the ABL Revolving Credit Facility.

As of December 31, 2022, the Company was in compliance with all affirmative and negative covenants in its debt instruments, inclusive of the financial covenants pertaining to the ABL Revolving Credit Facility and 2026 Notes. Based upon management's current plans and outlook, the Company believes it will be able to comply with these covenants during the subsequent twelve months. From time to time, the Company seeks to opportunistically raise capital in the debt capital markets and bank credit markets.

Other Financing Arrangements

The Company has two non-U.S. accounts receivable financing programs with no maximum availability and one U.S. accounts receivable financing program with maximum availability of \$36.0 million. Transactions under the U.S. and non-U.S. programs were accounted for as sales in accordance with Accounting Standards Codification ("ASC") 860, "Transfers and Servicing." Under these financing programs, the Company has the ability to sell eligible receivables up to the maximum limit. Refer to Note 13, "Accounts Receivable Factoring," to the Consolidated Financial Statements.

Off-Balance Sheet Arrangements

The Company's disclosures concerning transactions, arrangements and other relationships with unconsolidated entities or other persons that are reasonably likely to materially affect liquidity or the availability of or requirements for capital resources are as follows:

• As of December 31, 2022, the Company had buyback commitments with a balance outstanding of \$42.5 million. This amount is not reduced for amounts the Company would recover from the repossession and subsequent resale of collateral. Refer to Note 20, "Guarantees," to the Consolidated Financial Statements for further information.

Contractual Obligations and Commercial Commitments

The Company's material cash requirements, contractual obligations and commercial commitments include the following:

Debt

As of December 31, 2022, the Company had outstanding debt of \$385.6 million with \$6.1 million payable within one year. The Company is committed to pay 9.000% of annual interest on the \$300.0 million 2026 Notes that mature on April 1, 2026. Additionally, the Company's debt outstanding under the ABL Revolving Credit Facility is subject to variable interest based on prevailing rates. For the year ended December 31, 2022, the Company incurred \$2.8 million of interest on borrowings from the ABL Revolving Credit Facility. Refer to Note 12, "Debt," to the Consolidated Financial Statements for further information.

Purchase Obligations

As of December 31, 2022, the Company has purchase obligations of \$1,017.9 million with \$667.6 million due within one year. Purchase obligations consist primarily of open purchase orders for raw materials and various components used in the manufacturing process and purchase obligations from agreements with various suppliers that include a right of cancellation.

Leases

As of December 31, 2022, the Company had contractual fixed costs related to operating lease commitments of \$64.6 million with \$13.5 million due within one year. Refer to Note 23, "Leases," to the Consolidated Financial Statements for further information.

Capital Expenditures

The Company funds capital expenditures that are intended to improve the cost structure of the Company's business; invest in new processes, products and technology; maintain high-quality production standards; and maintain and expand the Company's rental fleet.

The Company paid a total of \$61.8 million during 2022 for capital expenditures. For the year ended December 31, 2022, depreciation was \$60.6 million. The Company anticipates that capital expenditures for 2023 will be approximately \$65.0 million to \$75.0 million, of which approximately \$25.0 million will be funded from sales of the Company's existing rental fleet through rent to own programs and sales of older cranes. If the value of rental fleet sales is less than expected, capital expenditures will be reduced accordingly.

Other Cash Requirements

The Company has unrecognized tax benefits totaling \$9.1 million as of December 31, 2022, excluding related interest and penalties. During the next twelve months, the unrecognized tax benefits are not expected to significantly increase or decrease due to audit settlements or lapsing statuses of limitations. Refer to Note 14, "Income Taxes," to the Consolidated Financial Statements for disclosures surrounding uncertain income tax positions under ASC Topic 740 "Income Taxes."

The Company maintains defined benefit pension plans for some of the Company's employees and retirees. The Board of Directors has established the Retirement Plan Committee to manage the operations and administration of all benefit plans and related trusts. Refer to Note 22, "Employee Benefit Plans," to the Consolidated Financial Statements.

In 2022, cash contributions by the Company to defined benefit pension plans were \$3.9 million, and the Company estimates that its contributions in 2023 will be approximately \$3.7 million. Cash contributions to the Company's 401(k) plan were \$7.2 million in 2022. Cash contributions to the 401(k) plan earned in 2022 and committed to be paid in 2023 is \$6.6 million.

Non-GAAP Measures

The Company uses EBITDA, adjusted EBITDA, adjusted operating income and free cash flows, which are financial measures that are not prepared in accordance with GAAP, as additional metrics to evaluate the Company's performance. The Company believes these non-GAAP measures provide important supplemental information to readers regarding business trends that can be used in evaluating its results of operations because these financial measures provide a consistent method of comparing financial performance and are commonly used by investors to assess performance. These non-GAAP financial measures should be considered together with, and are not substitutes for, the GAAP financial information provided herein.

EBITDA, Adjusted EBITDA and Adjusted Operating Income

The Company defines EBITDA as net income (loss) before interest, taxes, depreciation and amortization. The Company defines adjusted EBITDA as EBITDA plus the addback or subtraction of restructuring, other income (expense) and certain other charges. The Company defines adjusted operating income as operating income (loss) plus the addback or subtraction of restructuring and certain other charges.

The reconciliation of net income (loss) to EBITDA, and further to adjusted EBITDA and to adjusted operating income and operating income (loss):

	Year Ended December 31,				
	2022	2021	2020		
Net income (loss)	\$ (123.6	5) \$ 11.0	\$ (19.1)		
Interest expense and amortization of deferred					
financing fees	33.0	30.4	30.6		
Provision for income taxes	3.4	6.1	17.1		
Depreciation expense	60.6	45.5	37.2		
Amortization of intangible assets	3.1	1.4	0.3		
EBITDA	(23.5	5) 94.4	66.1		
Restructuring (income) expense	1.5	(1.1)	7.0		
Asset impairment expense ⁽¹⁾	171.9	1.9	_		
Other non-recurring charges (2)	(1.0	21.8	_		
Other (income) expense - net (3)	(5.8	(1.0)	10.0		
Adjusted EBITDA	143.1	116.0	83.1		
Depreciation expense	(60.6	(45.5)	(37.2)		
Amortization of intangible assets	(3.1	(1.4)	(0.3)		
Adjusted operating income	79.4	69.1	45.6		
Restructuring income (expense)	(1.5	5) 1.1	(7.0)		
Asset impairment expense	(171.9	(1.9)	_		
Other non-recurring charges (2)	1.0	(21.8)			
Operating income (loss)	\$ (93.0	9) \$ 46.5	\$ 38.6		

- (1) Asset impairment expense in 2022 represents non-cash goodwill and indefinite-lived intangible asset impairment charges. Asset impairment expense in 2021 represents a write-down of one of the Company's Brazilian entities to its expected sale price.
- (2) Other non-recurring charges for the year ended December 31, 2022 relate to the fair value step up on rental fleet assets sold during the period that was expensed within cost of sales, one-time costs associated with the acquired businesses, income from the partial recovery of the previously written off long-term note receivable from the 2014 divestiture of the Company's Chinese joint venture and other one-time charges. Other non-recurring charges for the year ended December 31, 2021 relate to acquisition costs, certain purchase accounting impacts from the acquisitions, a write off of a long-term note receivable from the 2014 divestiture of the Company's Chinese joint

- venture, and costs associated with the U.S. Environmental Protection Agency. Costs are included in engineering, selling and administrative expenses or cost of sales in the Consolidated Statement of Operations.
- (3) Other income net includes net foreign currency (gains) losses, other components of net periodic pension costs, costs associated with legal matters and other items in the years ended December 31, 2022 and 2021.

Free Cash Flows

Free cash flows is defined as net cash provided by (used for) operating activities less capital expenditures. The reconciliation of net cash provided by (used for) operating activities to free cash flows for the year ended December 31, 2022, 2021 and 2020 are summarized as follows:

	Year Ended December 31,						
		2022		2021		2020	
Net cash provided by (used for) operating activities	\$	76.9	\$	76.2	\$	(35.1)	
Capital expenditures		(61.8)		(40.4)		(26.3)	
Free cash flows	\$	15.1	\$	35.8	\$	(61.4)	

Financial Risk Management

The Company is exposed to market risks from changes in interest rates, commodities and foreign currency exchange rates. To reduce these risks, the Company selectively makes use of derivative financial instruments and other proactive management techniques. The Company has written policies and procedures that place financial instruments under the direction of corporate finance and restrict all derivative transactions to those intended for hedging purposes. The use of financial instruments for trading purposes or speculation is strictly prohibited.

For a more detailed discussion of our accounting policies and the financial instruments that we use, refer to Note 2, "Summary of Significant Accounting Policies," Note 5, "Fair Value of Financial Instruments," and Note 12, "Debt," to the Consolidated Financial Statements.

Interest Rate Risk

As previously discussed, the Company's long-term debt primarily consists of \$300.0 million on the 2026 Notes and borrowings under its ABL Revolving Credit Facility. Borrowings under the ABL Revolving Credit Facility bear interest at a variable rate using either the Alternative Base Rate or SOFR plus a spread. The variable interest rate is based upon the average availability as of the most recent determination date. As of December 31, 2022, the Company had borrowings on the ABL Revolving Credit Facility of \$80.0 million. At any time, the Company could be party to various interest rate swaps in connection with its fixed or floating rate debt. No interest rate swaps were entered into or outstanding during 2022 or 2021. A hypothetical 100 basis point increase/decrease in the average interest rate of the Company's annual average borrowings under its ABL Revolving Credit Facility would have resulted in approximately a \$1.0 million increase/decrease to interest expense for the year ended December 31, 2022.

Commodity Prices

The Company is exposed to fluctuating market prices for commodities, including steel, copper, aluminum and petroleum-based products. From time to time the Company may use commodity financial instruments to hedge commodity prices. No commodity financial instruments were entered into or outstanding during 2022 and 2021. For more information on commodities risk, see Part I, Item 1A. – "Risk Factors."

Currency Risk

The Company has manufacturing, sales and distribution facilities around the world, and therefore, makes investments and enters into transactions denominated in various currencies, which introduces transactional currency exchange risk.

To mitigate transactional currency exchange risk, the Company, from time-to-time, enters into foreign exchange contracts to 1) reduce the earnings and cash flows impact on non-functional currency denominated receivables and payables and 2) reduce the impact of changes in foreign currency rates between a budgeted rate and the rate realized at the time it recognizes a particular purchase or sale transaction. Gains and losses resulting from hedging instruments either impact the Company's Consolidated Statements of Operations in the period of the underlying purchase or sale transaction, or offset the foreign exchange gains and losses on the underlying receivables and payables being hedged. The maturities of these foreign exchange contracts coincide with the expected underlying settlement date of the related cash inflow or outflow. The hedges of anticipated transactions are

designated as cash flow hedges as required under ASC Topic 815 "Derivatives and Hedging." As of December 31, 2022, the Company was party to foreign currency forward contracts with a notional value of \$87.7 million all of which are carried on the Company's balance sheet at fair value. As of December 31, 2022, a hypothetical 10% increase or decrease in the exchange rate in the Company's portfolio of foreign currency contracts would result in a \$13.7 million unrealized gain and a \$4.1 million unrealized loss, respectively. Consistent with the use of these contracts to neutralize the effect of exchange rate fluctuations, such unrealized losses or gains would be offset by corresponding gains or losses, respectively, in the remeasurement of the underlying transactions being hedged.

Amounts invested in non-U.S. based subsidiaries are translated into U.S. dollars at the exchange rate in effect at year-end. Results of operations are translated into U.S. dollars at an average exchange rate for the period. The resulting translation adjustments are recorded in stockholders' equity as other comprehensive income (loss). The cumulative translation adjustment recorded in accumulated other comprehensive loss as of December 31, 2022 was a loss of \$27.9 million.

Environmental, Health, Safety, Contingencies and Other Matters

Refer to Part II, Item 8, Note 19, "Commitments and Contingencies," where the Company has disclosed environmental, health, safety, contingencies and other matters.

Critical Accounting Policies and Estimates

The Consolidated Financial Statements include the accounts of the Company and all its subsidiaries. The preparation of financial statements in conformity with GAAP requires the Company to make estimates and assumptions in certain circumstances that affect amounts reported in the accompanying Consolidated Financial Statements and related footnotes. In preparing these Consolidated Financial Statements, the Company has made its best estimates and judgments of certain amounts included in the Consolidated Financial Statements giving due consideration to materiality. However, application of these accounting policies involves the exercise of judgment and use of assumptions as to future uncertainties and, as a result, actual results could differ from these estimates. Although the Company has listed a number of accounting policies below which the Company believes to be most critical, the Company also believes that all of the Company's accounting policies are important to the reader. Refer to Part II, Item 8, Note 2, "Summary of Significant Accounting Policies," for a detailed description of these and other accounting policies of the Company.

Revenue Recognition – The Company records revenue in accordance with ASC Topic 606 – "Revenue from Contracts with Customers." Below are the Company's revenue recognition policies by performance obligation.

• Crane Sales

Crane sales are primarily generated through the sale of new and used cranes. Contracts with customers are generally in the form of a purchase order. Based on the nature of the Company's contracts, the Company does not have any significant financing terms. Contracts may have variable consideration in the form of early pay discounts or rebates. Revenue is earned under these contracts when control of the product is transferred to the customer. Control transfers to the customer generally upon delivery to the carrier or acceptance through an independent inspection company that acts as an agent of the customer.

From time to time, the Company enters into agreements where the customer has the right to exercise a put option requiring the Company to buyback a crane at an agreed upon price. The Company evaluates each agreement at the inception of the order to determine if the customer has a significant economic incentive to exercise that right. If it is determined that the customer has a significant economic incentive to exercise that right, the agreement is accounted for as a lease in accordance with ASC Topic 842 – "Leases." If it is determined that the customer does not have a significant economic incentive to exercise that right, then revenue is recognized when control of the asset is transferred to the customer.

Given the nature of the Company's products, the customer may request that the product be held until a delivery location is identified. Under these "bill and hold" arrangements, sales are recognized when all of the following criteria are met: 1) the reason for the bill-and-hold arrangement is substantive, 2) the product is separately identified as belonging to the customer, 3) the product is ready for transfer to the customer and 4) the Company does not have the ability to use the product or direct it to another customer.

• Aftermarket Part Sales

Aftermarket part sales are generated through the sale of new and used parts to end customers and distributors. Aftermarket part sales are recognized when control of the product is transferred to the customer. Control transfers to the customer generally upon delivery to the carrier. Customers generally have a right of return which the Company estimates using historical information. The amount of estimated returns is deducted from net sales.

Other Sales

The Company's other sales consist primarily of sales from:

- Repair and field service work;
- Rental of cranes; and
- Training and technical publications.

As it relates to the Company's other sales, the Company's performance obligations generally relate to performing specific agreed upon services. Sales are earned upon the completion of those services.

Inventories and Related Reserve for Obsolete and Excess Inventory – Inventories are valued at the lower of cost or net realizable value. Finished goods and work-in-process inventories include material, labor and manufacturing overhead costs. Inventories are reduced by a reserve for excess and obsolete inventories. The estimated reserve is based upon specific identification of excess or obsolete inventories based on historical usage, estimated future usage, sales requiring the inventory and historical write-off experience and are subject to change if experience improves or deteriorates.

Goodwill, Other Intangible Assets and Other Long-Lived Assets – The Company accounts for goodwill and other intangible assets under the guidance of ASC Topic 350-10, "Intangibles – Goodwill and Other." Under ASC Topic 350-10, goodwill is not amortized; instead, the Company performs an annual impairment test. The Company has three reporting units with goodwill: Americas – Manufacturing, Americas – Distribution and MEAP. The date for the annual impairment test is October 31, 2022, or more frequently if events or changes in circumstances indicate that the assets might be impaired. To perform its goodwill impairment test, the Company uses a combination of the income approach and market approach with a weighting of 70/30, respectively, to determine the fair value of the Americas – Manufacturing and MEAP reporting units. The Company determined a 70% weighting toward the income approach was appropriate as cash flows for each reporting unit are better aligned to the cyclical nature of the crane business and its unique market dynamics. The Company determined a 30% weighting toward the market approach was appropriate as the valuation is indicative of the fair value of the Company and its reporting units but there is a lack of comparable peer companies. The Company uses only the income approach to determine the fair value of the Americas – Distribution reporting unit due to the lack of comparable peer companies to determine fair value under the market approach. Impairment is determined based on the amount in which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill at the reporting unit.

The Company has two indefinite-lived intangible assets subject to an annual impairment test: the Potain trademark, tradename and distribution network assets ("Potain Tradename") and the Grove trademark, tradename and distribution network assets ("Grove Tradename"). To perform its indefinite-lived intangible assets impairment test, the Company uses a fair-value method, based on a relief of royalty valuation approach. Management's judgments and assumptions about the amounts of those cash flows and the discount rates are inputs to the annual impairment test. Impairment is determined based on the amount in which the carrying value of the indefinite-lived intangible asset exceeds its fair value, not to exceed the carrying amount of the indefinite-lived intangible asset.

As of October 31, 2022, the Company performed its annual goodwill impairment test. Based on the results of the test, the carrying value of the Americas – Manufacturing reporting unit exceeded its fair value. As a result, the Company recorded a \$166.5 million non-cash impairment charge to write down the carrying value of goodwill to zero. The goodwill impairment charge resulted from a reduction in the estimated fair value of the reporting unit based on a prolonged low Company equity market capitalization that continued into the fourth quarter of 2022 and a higher discount rate. The fair value of the Americas – Distribution and MEAP reporting units were substantially in excess of their carrying values as of the date of the annual impairment test and, therefore, were not at risk of impairment as of December 31, 2022.

As of October 31, 2022, the Company performed its annual indefinite-lived intangible assets impairment test of the Potain Tradename and Grove Tradename. Based on the results of the test, the carrying value of the Grove Tradename exceeded its fair value. As a result, the Company recorded a \$5.4 million non-cash impairment charge to write down the carrying value to its fair value of \$39.0 million. The Grove Tradename impairment charge was a result of downward pressure from the use of similar

assumptions to those used in the annual goodwill impairment test which included revenue growth and discount rate. The fair value of the Potain Tradename was substantially in excess of its carrying value as of the date of the annual impairment test and, therefore, was not at risk of impairment as of December 31, 2022.

A considerable amount of management judgment and assumptions are required in performing the goodwill and indefinite-lived asset impairment tests as it relates to revenue growth rates, projected operating income, the discount rate and relevant market multiples, as applicable. While the Company believes the judgments and assumptions are reasonable, different assumptions could change the estimated fair value and, therefore, additional impairments could be required. Weakening industry or economic trends, disruptions to the Company's business, unexpected significant changes or planned changes in the use of the assets or in entity structure are all factors which may adversely impact the assumptions used in the valuations.

Other intangible assets with definite lives continue to be amortized over their estimated useful lives. Definite-lived intangible assets are also subject to impairment testing whenever events or circumstances indicate that the carrying value of the assets may not be recoverable. If an indicator of impairment is identified, the Company would use the income approach, which is based on the present value of expected future cash flows.

The Company also reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the asset's carrying amount may not be recoverable. The Company conducts its long-lived asset impairment analyses in accordance with ASC Topic 360-10-5, "Property, Plant, and Equipment." ASC Topic 360-10-5 requires the Company to group assets and liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities and to evaluate the asset group against the sum of the undiscounted future cash flows.

The Company monitors for events and market conditions to determine if any interim impairment tests of goodwill, other intangibles or long-lived assets are warranted. Deterioration in macroeconomic conditions, a decline in actual results as compared with the Company's projections, or a low equity market capitalization for a prolonged period, are factors which could indicate an interim triggering event has occurred. In the event the Company determines that assets are impaired in the future, the Company would recognize a non-cash impairment charge, which could have a material adverse effect on the Company's Consolidated Balance Sheet and Results of Operations.

Employee Benefit Plans – The Company provides a range of benefits to its employees and retired employees, including pensions and postretirement health care coverage. Plan assets and obligations are recorded annually based on the Company's measurement date utilizing various actuarial assumptions such as discount rates, expected return on plan assets, compensation increases, retirement and mortality rates and health care cost trend rates as of that date. The approach the Company used to determine the annual assumptions are as follows:

- Discount Rate The Company's discount rate assumptions are based on the interest rate of noncallable high-quality corporate bonds, with appropriate consideration of pension plan participant demographics and benefit payment terms. The Company's discount rate is provided by an independent third party calculated based on an appropriate mix of high-quality bonds.
- Expected Return on Plan Assets The Company's expected return on plan assets assumptions are based on the
 Company's expectation of the long-term average rate of return on assets in the pension funds, which is reflective of
 the current and projected asset mix of the funds and considers the historical returns earned on the funds, net of
 estimated fees.
- *Compensation increase* The Company's compensation increase assumptions reflect its long-term actual experience, the near-term outlook and assumed inflation.
- Retirement and Mortality Rates The Company's retirement and mortality rate assumptions are based primarily on actual plan experience and mortality tables.
- *Health Care Cost Trend Rates* The Company's health care cost trend rate assumptions are developed based on historical cost data, near-term outlook and an assessment of likely long-term trends.

Measurements of net periodic benefit cost are based on the assumptions used for the previous year-end measurements of assets and obligations. The Company reviews its actuarial assumptions on an annual basis and makes modifications to the assumptions when appropriate. As required by GAAP, the effects of the modifications are recorded currently or amortized over future periods. The Company has developed the assumptions with the assistance of its independent actuaries and other relevant sources, and believes the assumptions used are reasonable; however, changes in these assumptions could impact the Company's financial position, results of operations or cash flows. Refer to Note 22, "Employee Benefit Plans," to the Consolidated

Financial Statements, for a summary of the impact of a 0.50% change in the discount rate and rate of return on plan assets would have on the Company's financial statements.

Product Liability – The Company is subject, in the normal course of business, to product liability lawsuits. To the extent permitted under applicable laws, the Company's exposure to losses from these lawsuits is mitigated by insurance with self-insurance retention limits. The Company's reserve is based upon two estimates. First, the Company tracks the population of all outstanding product liability cases to determine an appropriate case reserve for each based upon its best judgment and the advice of legal counsel. These estimates are continuously evaluated and adjusted based upon changes to the facts and circumstances surrounding the case. Second, the Company determines the amount of additional reserve required to cover incurred, but not reported, product liability issues and to account for possible adverse development of the established case reserves (collectively referred to as "IBNR"). The Company has established a position within the actuarially determined range, which it believes is the best estimate of the IBNR liability.

Income Taxes – The Company accounts for income taxes under the guidance of ASC Topic 740-10, "Income Taxes." Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between 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 Company records a valuation allowance that represents a reserve on deferred tax assets for which utilization is not more likely than not. Management judgment is required in determining its provision for income taxes, deferred tax assets and liabilities, and the valuation allowance recorded against its net deferred tax assets. The Company does not currently provide for additional U.S. and foreign income taxes which would become payable upon repatriation of undistributed earnings of foreign subsidiaries.

The Company measures and records income tax contingency accruals under the guidance of ASC Topic 740-10. The Company recognizes liabilities for uncertain income tax positions based on a two-step process. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step requires the Company to estimate and measure the tax benefit as the largest amount that is more than 50% likely to be realized upon ultimate settlement. It is inherently difficult and subjective to estimate such amounts, as the Company must determine the probability of various possible outcomes. The Company reevaluates these uncertain tax positions on a quarterly basis or when new information becomes available to management. These reevaluations are based on factors including, but not limited to, changes in facts or circumstances, changes in tax law, successfully settled issues under audit, expirations due to statutes, and new audit activity. Such a change in recognition or measurement could result in the recognition of a tax benefit or an increase to the tax accrual.

Warranties – In the normal course of business, the Company provides its customers warranties covering workmanship, and in some cases materials, on products manufactured. Such warranties generally provide that products will be free from defects for periods ranging from 12 months to 60 months with certain equipment having longer-term warranties. If a product fails to comply with the Company's warranties, it may be obligated, at its expense, to correct any defect by repairing or replacing such defective product. The Company provides for an estimate of costs that may be incurred under its warranties at the time product revenue is recognized based on historical warranty experience for the related product or estimates of projected losses due to specific warranty issues on new products. These costs primarily include labor and materials, as necessary, associated with repair or replacement. The primary factors that affect the Company's warranty liabilities include the number of shipped units and historical and anticipated rates or warranty claims. As these factors are impacted by actual experience and future expectations, the Company assesses the adequacy of its recorded warranty liability and adjusts the amounts as necessary.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Refer to Liquidity and Capital Resources, and Financial Risk Management in Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" for a description of the quantitative and qualitative disclosure about market risk.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of The Manitowoc Company, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of The Manitowoc Company, Inc. and its subsidiaries (the "Company") as of December 31, 2022 and 2021, and the related consolidated statements of operations, of comprehensive income, of equity and of cash flows for each of the three years in the period ended December 31, 2022, including the related notes and schedule of valuation and qualifying accounts for each of the three years in the period ended December 31, 2022 appearing under Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above 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. Also 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 Internal Control - Integrated Framework (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

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

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

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and

expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

Critical Audit Matters

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

Goodwill and Grove Tradename Impairment Assessments

As described in Notes 2 and 10 to the consolidated financial statements, the Company's consolidated goodwill and indefinitelived intangible assets balances were \$80.1 million and \$105.0 million, respectively, as of December 31, 2022. The indefinitelived intangible assets associated with the Grove trademark, tradenames and distribution network assets ("Grove Tradename") represent a portion of the total indefinite-lived intangible assets balance. Management tests both goodwill and indefinite-lived intangible assets for impairment at least annually during the fourth quarter, or more frequently if events or changes in circumstances indicate that the assets might be impaired. Impairment is determined based on the amount in which the carrying value exceeds its fair value, not to exceed the carrying amount. To perform the goodwill impairment assessment, management uses a combination of the income approach and market approach with a weighting of 70/30, respectively, to determine the fair value of the Americas-Manufacturing and MEAP reporting units. Management uses only the income approach to determine the fair value of the Americas-Distribution reporting unit. To perform its indefinite-lived intangible assets impairment assessment related to the Grove Tradename, management uses the relief from royalty valuation approach. Management completed the annual impairment analyses of goodwill at the reporting unit level and of indefinite-lived intangible assets related to the Grove Tradename as of October 31, 2022. A considerable amount of management judgment and assumptions are required in performing the goodwill and the Grove Tradename impairment assessments as it relates to revenue growth rates, projected operating income, the discount rate and relevant market multiples, as applicable. During the year ended December 31, 2022, the Company recorded \$166.5 million and \$5.4 million of total impairment charges related to goodwill and the Grove Tradename intangible assets, respectively.

The principal considerations for our determination that performing procedures relating to the goodwill and Grove Tradename impairment assessments is a critical audit matter are (i) the significant judgment by management when developing the fair value estimates of the Company's reporting units and the Grove Tradename; (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating management's significant assumptions related to the revenue growth rates, projected operating income, and the discount rate related to goodwill and projected revenue growth rates and the discount rate related to the Grove Tradename; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's goodwill and indefinite-lived intangible assets impairment assessments, including controls over the valuation of the reporting units and the Grove Tradename. These procedures included, among others, (i) testing management's process for developing the fair value estimates, (ii) evaluating the appropriateness of the valuation methods, (iii) testing the completeness, accuracy and relevance of certain of the underlying data used in the valuation methods, and (iv) evaluating the reasonableness of the significant assumptions used by management related to revenue growth rates, projected operating income and the discount rate related to goodwill and revenue growth rates and the discount rate related to the Grove tradename. Evaluating management's assumptions related to the revenue growth rates and projected operating income involved evaluating whether the

assumptions used by management were reasonable considering (i) the current and past performance of the reporting units and the business related to the Grove Tradename, as applicable, (ii) the consistency with external market and industry data, and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in evaluating (i) the appropriateness of the Company's valuation methods, and (ii) the reasonableness of the discount rates assumption.

/s/ PricewaterhouseCoopers LLP Milwaukee, Wisconsin February 24, 2023

We have served as the Company's auditor since 1995.

The Manitowoc Company, Inc. **Consolidated Statements of Operations**For the years ended December 31, 2022, 2021 and 2020

Millions of dollars, except per share data	2022	2021	2020
Net sales	\$ 2,032.5	\$ 1,720.2	\$ 1,443.4
Cost of sales	1,668.0	1,413.0	1,188.7
Gross profit	 364.5	307.2	254.7
Operating costs and expenses:			
Engineering, selling and administrative expenses	281.0	258.5	208.8
Asset impairment expense	171.9	1.9	
Amortization of intangible assets	3.1	1.4	0.3
Restructuring (income) expense	 1.5	(1.1)	7.0
Total operating costs and expenses	457.5	260.7	216.1
Operating income (loss)	 (93.0)	46.5	38.6
Other income (expense):			
Interest expense	(31.6)	(28.9)	(29.1)
Amortization of deferred financing fees	(1.4)	(1.5)	(1.5)
Other income (expense) — net	5.8	1.0	(10.0)
Total other expense - net	(27.2)	(29.4)	(40.6)
Income (loss) before income taxes	 (120.2)	17.1	(2.0)
Provision for income taxes	3.4	6.1	17.1
Net income (loss)	\$ (123.6)	\$ 11.0	\$ (19.1)
Per Share Data			
Basic income (loss) per common share	\$ (3.51)	\$ 0.32	\$ (0.55)
Diluted income (loss) per share	\$ (3.51)	\$ 0.31	\$ (0.55)

The Manitowoc Company, Inc. Consolidated Statements of Comprehensive Income (Loss) For the years ended December 31, 2022, 2021 and 2020

Millions of dollars	2022	2021	2020
Net income (loss)	\$ (123.6)	\$ 11.0	\$ (19.1)
Other comprehensive income (loss), net of income tax:			
Unrealized gains (losses) on derivatives,			
net of income tax provision of \$0.0, \$0.0 and \$0.0,			
respectively	5.4	_	_
Employee pension and postretirement benefit income			
(expense), net of income tax (provision) benefit			
of \$(1.1), \$(0.4) and \$0.6, respectively	17.0	15.6	(8.0)
Foreign currency translation adjustments, net of income tax			
(provision) benefit of \$(0.4), \$5.1 and \$(4.6), respectively	 (27.9)	 (20.5)	 31.5
Total other comprehensive income (loss), net of income tax	 (5.5)	(4.9)	23.5
Comprehensive income (loss)	\$ (129.1)	\$ 6.1	\$ 4.4

The Manitowoc Company, Inc. **Consolidated Balance Sheets**As of December 31, 2022 and 2021

Dollars in millions, except par value and share amounts	 2022	2021		
Assets				
Current Assets:				
Cash and cash equivalents	\$ 64.4	\$	75.4	
Accounts receivable, less allowances of \$5.3 and \$7.3, respectively	266.3		236.1	
Inventories — net	611.9		576.8	
Notes receivable — net	10.6		16.7	
Other current assets	 45.3		36.8	
Total current assets	998.5		941.8	
Property, plant and equipment — net	335.3		358.8	
Operating lease right-of-use assets	45.2		40.6	
Goodwill	80.1		249.7	
Other intangible assets — net	126.7		139.6	
Other non-current assets	29.7		44.7	
Total assets	\$ 1,615.5	\$	1,775.2	
Liabilities and Stockholders' Equity	 		-	
Current Liabilities:				
Accounts payable and accrued expenses	\$ 446.4	\$	413.4	
Short-term borrowings and current portion of long-term debt	6.1		7.3	
Product warranties	48.8		49.0	
Customer advances	21.9		28.7	
Other liabilities	24.6		22.6	
Total current liabilities	547.8		521.0	
Non-Current Liabilities:				
Long-term debt	379.5		399.9	
Operating lease liabilities	34.3		29.2	
Deferred income taxes	4.9		6.5	
Pension obligations	51.7		69.4	
Postretirement health and other benefit obligations	8.2		12.1	
Long-term deferred revenue	15.6		22.9	
Other non-current liabilities	35.7		51.8	
Total non-current liabilities	 529.9		591.8	
Commitments and contingencies (Note 19)				
Total stockholders' equity:				
Preferred stock (3,500,000 shares authorized of \$.01 par value; none outstanding)				
Common stock (75,000,000 shares authorized, 40,793,983				
shares issued, 35,085,008 and 35,056,252 shares outstanding, respectively)	0.4		0.4	
Additional paid-in capital	606.7		602.4	
Accumulated other comprehensive loss	(107.9)		(102.4)	
Retained earnings	104.3		227.9	
Treasury stock, at cost (5,708,975 and 5,737,731 shares, respectively)	(65.7)		(65.9)	
Total stockholders' equity	537.8		662.4	
Total liabilities and stockholders' equity	\$ 1,615.5	\$	1,775.2	

The Manitowoc Company, Inc.

Consolidated Statements of Cash Flows
For the years ended December 31, 2022, 2021 and 2020

Millions of dollars	20	2022		2021		2020
Cash Flows From Operating Activities						
Net income (loss)	\$	(123.6)	\$	11.0	\$	(19.1)
Adjustments to reconcile net income (loss) to cash						
provided by (used for) operating activities:						
Asset impairment expense		171.9		1.9		_
Depreciation		60.6		45.5		37.2
Amortization of intangible assets		3.1		1.4		0.3
Stock-based compensation expense		8.5		7.1		6.0
Amortization of deferred financing fees		1.4		1.5		1.5
Loss (gain) on sale of property, plant and equipment		(0.9)		0.2		_
Net unrealized foreign currency transaction losses (gains)		(3.2)		0.7		3.6
Income tax benefit from change in reserve of						
uncertain tax positions		(11.0)		_		_
Deferred income taxes - net		4.4		0.6		4.8
Other		0.9		3.2		0.5
Changes in operating assets and liabilities						
Accounts receivable		(36.4)		(5.2)		(37.7)
Inventories		(42.0)		(68.3)		8.3
Notes receivable		8.3		1.0		7.4
Other assets		5.8		(7.6)		(7.1)
Accounts payable		40.4		62.9		(20.1)
Accrued expenses and other liabilities		(11.3)		20.3		(20.7)
Net cash provided by (used for) operating activities		76.9		76.2		(35.1)
Cash Flows From Investing Activities						
Capital expenditures		(61.8)		(40.4)		(26.3)
Proceeds from sale of fixed assets		1.5		0.3		0.5
Acquisition of business (Note 3)		2.3		(186.2)		<u> </u>
Net cash used for investing activities		(58.0)		(226.3)		(25.8)
Cash Flows From Financing Activities						
Proceeds from (payments) on revolving credit facility - net		(20.0)		100.0		_
Other debt - net		(5.1)		(4.9)		(2.9)
Debt issuance and other debt related costs		(1.9)				_
Exercises of stock options		0.1		5.8		0.1
Common stock repurchases		(3.0)		_		(12.0)
Net cash provided by (used for) financing activities		(29.9)		100.9		(14.8)
Effect of exchange rate changes on cash and cash equivalents				(4.1)		5.1
Net decrease in cash and cash equivalents		(11.0)		(53.3)		(70.6)
Cash and cash equivalents at beginning of period		75.4		128.7		199.3
Cash and cash equivalents at end of period	\$	64.4	\$	75.4	\$	128.7
Supplemental Cash Flow Information	<u> </u>					
Interest paid	\$	30.8	\$	28.9	\$	28.8
Income taxes (paid) refunded	Ψ	(7.3)	4	3.7	4	(13.6)
Chara, resulted		(7.5)		5.,		(13.0)

The Manitowoc Company, Inc.

Consolidated Statements of Equity

For the years ended December 31, 2022, 2021 and 2020

Millions of dollars, except shares amounts	2022		2022 2021		2020	
Common Stock - Par Value						
Balance at beginning of year	\$	0.4	\$	0.4	\$	0.4
Balance at end of year	\$	0.4	\$	0.4	\$	0.4
Additional Paid-in Capital						
Balance at beginning of year	\$	602.4	\$	595.1	\$	592.2
Stock options exercised and issuance of other stock awards		(4.2)		0.2		(3.1)
Stock-based compensation expense		8.5		7.1		6.0
Balance at end of year	\$	606.7	\$	602.4	\$	595.1
Accumulated Other Comprehensive Loss						
Balance at beginning of year	\$	(102.4)	\$	(97.5)	\$	(121.0)
Other comprehensive income (loss)		(5.5)		(4.9)		23.5
Balance at end of year	\$	(107.9)	\$	(102.4)	\$	(97.5)
Retained Earnings		_				_
Balance at beginning of year	\$	227.9	\$	216.9	\$	236.2
Adoption of accounting standards update						(0.2)
Net income (loss)		(123.6)		11.0		(19.1)
Balance at end of year	\$	104.3	\$	227.9	\$	216.9
Treasury Stock						
Balance at beginning of year	\$	(65.9)	\$	(71.4)	\$	(61.9)
Stock options exercised and issuance of other stock awards		3.2		5.5		2.5
Common stock repurchases		(3.0)				(12.0)
Balance at end of year	\$	(65.7)	\$	(65.9)	\$	(71.4)
Total equity	\$	537.8	\$	662.4	\$	643.5

Notes to Consolidated Financial Statements

1. Company and Basis of Presentation

The Manitowoc Company, Inc. ("Manitowoc" and the "Company") was founded in 1902 and has over a 120-year tradition of providing high-quality, customer-focused products and support services to its markets. Headquartered in Milwaukee, Wisconsin, United States, Manitowoc is one of the world's leading providers of engineered lifting solutions. Manitowoc, through its wholly-owned subsidiaries, designs, manufactures, markets, distributes and supports comprehensive product lines of mobile hydraulic cranes, lattice-boom crawler cranes, boom trucks, and tower cranes under the Aspen Equipment, Grove, Manitowoc, MGX Equipment Services, National Crane, Potain and Shuttlelift brand names. The Company serves a wide variety of customers, including dealers, rental companies, contractors, and government entities, across the petrochemical, industrial, commercial construction, power and utilities, infrastructure and residential construction end markets. Due to the ongoing and predictable maintenance needed by cranes, as well as the high cost of crane downtime, Manitowoc's aftermarket support operations provide the Company with a consistent stream of recurring revenue. Manitowoc is a Wisconsin corporation and its principal executive offices are located at 11270 West Park Place Suite 1000, Milwaukee, Wisconsin 53224.

Basis of Presentation The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany balances and transactions have been eliminated. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

All amounts, except per share data and share amounts, are in millions throughout the tables in these notes unless otherwise indicated.

2. Summary of Significant Accounting Policies

Cash and Cash Equivalents The Company considers all cash and short-term investments purchased with an original maturity of three months or less as cash and cash equivalents.

Allowance for Doubtful Accounts Accounts receivable are reduced by an allowance for amounts that may become uncollectible in the future. The Company's allowance for doubtful accounts is based on an estimate of the losses inherent in amounts billed, pools of receivables with similar risk characteristics, existing and future economic conditions, reasonable and supportable forecasts that affect the collectability of the related receivable and any specific customer collection issues the Company has identified.

The following table is a rollforward of the allowance for doubtful accounts for the years ended December 31, 2022 and 2021.

	2022	2021
Balance at beginning of period	\$ 7.3	\$ 8.5
Bad debt expenses	0.1	_
Use of reserve	(1.8)	(1.3)
Currency translation	(0.3)	0.1
Balance at end of period	\$ 5.3	\$ 7.3

Inventories Inventories are valued at the lower of cost or net realizable value. Finished goods and work-in-process inventories include material, labor and manufacturing overhead costs. The Company determines inventory value using the first-in, first-out method.

Business Combinations The Company accounts for business combinations under the acquisition method in accordance with Accounting Standards Codification ("ASC") Topic 805, Business Combinations ("Topic 805"). The acquisition method requires identifiable assets acquired and liabilities assumed and any non-controlling interest in the business acquired be recognized and measured at fair value on the acquisition date, which is the date that the Company obtains control of the acquired business. The amount by which the fair value of consideration transferred as the purchase price exceeds the net fair

value of assets acquired and liabilities assumed is recorded as goodwill. The Company expenses transaction costs in a business combination.

Goodwill and Other Intangible Assets The Company accounts for goodwill and other intangible assets under the guidance of ASC Topic 350-10, "Intangibles — Goodwill and Other" ("Topic 350"). Under ASC Topic 350, goodwill is not amortized; instead, the Company performs an annual impairment test. The date for the annual impairment test is October 31, 2022 or more frequently if events or changes in circumstances indicate that the assets might be impaired. To perform its goodwill impairment test, the Company uses a combination of the income approach and market approach with a weighting of 70/30, respectively, to determine the fair value of the Americas — Manufacturing and Middle East and Asia Pacific ("MEAP") reporting units. The Company determined a 70% weighting toward the income approach was appropriate as cash flows for each reporting unit are better aligned to the cyclical nature of the crane business and its unique market dynamics. The Company determined a 30% weighting toward the market approach was appropriate as the valuation is indicative of the fair value of the Company and its reporting units but there is a lack of comparable peer companies. The Company uses only the income approach to determine the fair value of the Americas — Distribution reporting unit due to a lack of comparable peer companies to determine fair value under the market approach. Impairment is determined based on the amount in which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill at the reporting unit. In addition, goodwill of a reporting unit is tested for impairment between annual tests if an event occurs or circumstances change that would more-likely-than-not reduce the fair value of a reporting unit below its carrying value.

The Company's indefinite-lived intangible assets are not amortized but are subject to an annual impairment test. To perform its indefinite-lived intangible assets impairment test, the Company uses a fair-value method based on a relief of royalty valuation approach to determine the fair value of its indefinite-lived intangible assets. Management's judgments and assumptions about the amounts of those cash flows and the discount rates are inputs to the annual impairment test. Impairment is determined based on the amount in which the carrying value of the indefinite-lived intangible asset exceeds its fair value, not to exceed the carrying amount of the indefinite-lived intangible asset. Refer to Note 10, "Goodwill and Other Intangible Assets," for further details on the Company's impairment assessments. The Company's definite-lived intangible assets subject to amortization are subject to impairment testing whenever events or changes in circumstances indicate that the carrying value of the assets may not be recoverable. If an indicator of impairment is identified, the Company would use the undiscounted cash flow model.

The Company's other intangible assets subject to amortization are amortized straight-line over the following minimum and maximum estimated useful lives:

	Useful lives
Patents	20 years
Customer relationships	12 - 18 years
Trademarks and tradenames	5 years
Noncompetition agreements	5 years

Property, Plant and Equipment Property, plant and equipment are stated at cost. Expenditures for maintenance, repairs and minor renewals are charged against earnings as incurred. Expenditures for major renewals and improvements that substantially extend the capacity or useful life of an asset are capitalized and depreciated over the remaining estimated useful life. The cost and accumulated depreciation for property, plant and equipment sold, retired or otherwise disposed of are relieved from the accounts, and resulting gains or losses are reflected in earnings. Property, plant and equipment are depreciated over the asset's estimated useful life using the straight-line depreciation method for financial reporting and accelerated methods for income tax purposes.

Property, plant and equipment are generally depreciated over the following estimated useful lives:

	Years
Building and improvements	15 - 40
Machinery, equipment and tooling	10 - 15
Furniture and fixtures	5 - 10
Computer hardware and software	3
Rental cranes	5 - 15

Property, plant and equipment also includes cranes accounted for as operating leases which are included in rental cranes. Equipment accounted for as operating leases includes rental cranes leased directly to the customer and cranes for which the Company has assisted in the financing arrangement, whereby the Company has made a buyback commitment in which the customer at the time of the order had a significant economic incentive to exercise. Equipment that is leased directly to the

customer is accounted for as an operating lease with the related assets capitalized and depreciated over their estimated economic life. Equipment involved in a financing arrangement is depreciated over the life of the underlying arrangement to the buyback amount at the end of the lease period. The amount of rental cranes included in property, plant and equipment amounted to \$119.9 million and \$119.5 million, net of accumulated depreciation, as of December 31, 2022 and 2021, respectively.

The Company reviews property, plant and equipment for impairment whenever events or changes in circumstances indicate that the assets' carrying amount may not be recoverable. The Company conducts its impairment analyses in accordance with ASC Topic 360-10-5 "Property, Plant and Equipment" ("Topic 360"). Topic 360 requires the Company to group assets and liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities and to evaluate the asset group against the sum of the undiscounted future cash flows. If an impairment is determined to exist, any related impairment loss is calculated based upon comparison of the expected undiscounted future cash flows to the net book value of the assets.

Warranties Estimated manufacturing warranty costs are recorded in cost of sales at the time of sale of the warranted products based on historical warranty experience for the related product or estimates of projected costs due to specific warranty issues on new products. These estimates are reviewed periodically and are adjusted based on changes in facts, circumstances or actual experience. When a customer purchases an extended warranty, revenue associated with the extended warranty is deferred and recognized over the life of the extended warranty period. Costs during the extended warranty period are expensed as incurred. Costs associated with other warranty activity not related to a manufacturers standard or extended warranty are recorded in the period a loss is probable and can be reasonably estimated in accordance with ASC Topic 450-20 "Loss Contingencies."

Product Liabilities The Company records product liability reserves for its self-insured portion of any outstanding product liability cases when losses are probable and reasonably estimable. The reserve is based upon two estimates. First, the Company tracks the population of all outstanding product liability cases to determine an appropriate case reserve for each based upon the Company's best judgment with the advice of legal counsel. These estimates are continually evaluated and adjusted based upon changes to facts and circumstances surrounding the case. Second, the Company determines the amount of additional reserve required to cover incurred, but not reported, product liability obligations and to account for possible adverse development of the established case reserves utilizing actuarially developed estimates.

Derivative Financial Instruments and Hedging Activities The Company has policies and procedures that place all financial instruments under the direction of corporate treasury and restrict all derivative transactions to those intended for hedging purposes. The use of financial instruments for trading purposes is strictly prohibited. The Company uses financial instruments to manage the market risk from changes in foreign exchange rates, commodities and interest rates. The Company follows the guidance in accordance with ASC Topic 815 "Derivatives and Hedging" ("Topic 815"). The fair values of all outstanding derivatives are recorded in the Consolidated Balance Sheets. The change in a derivative's fair value is recorded each period in current earnings or accumulated other comprehensive income (loss) ("AOCI") depending on whether the derivative is designated and qualifies as a cash flow hedge.

The Company selectively hedges anticipated transactions that are subject to foreign exchange exposure, commodity price exposure or variable interest rate exposure, primarily using foreign currency exchange contracts ("FX Forward Contracts"), commodity contracts and interest rate contracts, respectively. These instruments are designated as cash flow hedges in accordance with Topic 815 and are recorded in the Consolidated Balance Sheets at fair value. The effective portion of the contracts' gains or losses due to changes in fair value are initially recorded as a component of AOCI and are subsequently reclassified into earnings when the hedged transactions, typically sales and costs related to sales and interest expense, occur and affect earnings. These contracts are highly effective in hedging the variability in future cash attributable to changes in currency exchange rates, commodity prices or interest rates.

The amount reported as derivative instrument fair market value adjustment in the AOCI account within the Consolidated Statements of Comprehensive Income (Loss) represents the net gain (loss) on foreign currency exchange contracts designated as cash flow hedges, net of income taxes.

Stock-Based Compensation The Company recognizes expense net of estimated future forfeitures for non-performance stock-based awards on a straight-line basis over the vesting period of the entire award. The Company recognizes expense net of estimated future forfeitures for stock-based awards with performance goals based on actual or estimated achievement of those goals on a straight-line basis over the vesting period of the entire award. Estimated future forfeiture rates are based on the Company's historical experience. Refer to Note 17, "Stock-Based Compensation," for more information on stock-based compensation plans.

Research and Development Research and development costs are charged to expense as incurred and amounted to \$33.5 million, \$29.1 million and \$30.6 million for the years ended December 31, 2022, 2021 and 2020, respectively. Research and development costs include salaries, materials, contractor fees and other administrative costs.

Income Taxes The Company utilizes the liability method to recognize deferred tax assets and liabilities for the expected future income tax consequences of events that have been recognized in the Company's financial statements. Under this method, deferred tax assets and liabilities are determined based on the temporary difference between financial statement carrying amounts and the tax basis of assets and liabilities using enacted tax rates in effect in the years in which the temporary differences are expected to reverse. Valuation allowances are provided for deferred tax assets where it is considered more likely than not that the Company will not realize the benefit of such assets. The Company evaluates its uncertain tax positions as new information becomes available. Tax benefits are recognized to the extent a position is more likely than not to be sustained upon examination by the taxing authority.

Net Income (Loss) Per Share Net income (loss) per share is computed by dividing net income (loss) by the weighted average number of common shares outstanding during each year or period. The calculation of diluted net income (loss) per share reflects the effect of all potential dilutive shares that were outstanding during the respective periods, unless the effect of doing so would be antidilutive. The Company uses the treasury stock method to calculate the effect of outstanding stock-based compensation awards.

Comprehensive Income (Loss) Comprehensive income (loss) includes, in addition to net income (loss), other items that are reported as direct adjustments to Manitowoc stockholders' equity. These items are foreign currency translation adjustments, employee postretirement benefit adjustments and the change in fair value of certain derivative instruments.

Net Sales Sales are recognized when obligations under the terms of a contract with the Company's customer are satisfied; generally this occurs with the transfer of control of the Company's cranes or aftermarket parts or completion of performance of services. Sales are measured as the amount of consideration the Company expects to receive in exchange for transferring goods or providing services. The Company recognizes sales for extended warranties over the life of the extended warranty period.

Taxes assessed by a governmental authority that are both imposed on and concurrent with a specific revenue-producing transaction, and are collected by the Company from a customer, are excluded from sales.

Shipping and handling costs associated with outbound freight after control over a product has transferred to a customer are categorized as a fulfillment cost and are included in cost of sales on the Consolidated Statement of Operations.

Performance Obligations

The following is a description of principle activities from which the Company generates sales. Disaggregation of the Company's revenue sources are disclosed in Note 18. "Segments."

Crane Sales

Crane sales are primarily generated through the sale of new and used cranes. Contracts with customers are generally in the form of a purchase order. Based on the nature of the Company's contracts, the Company does not have any significant financing terms. Contracts may have variable consideration in the form of early pay discounts or rebates, however variable consideration is not material to the overall contract with the customer. Sales are earned under these contracts when control of the product is transferred to the customer. Control transfers to the customer generally upon delivery to the carrier or acceptance through an independent inspection company that acts as an agent of the customer.

From time to time, the Company enters into agreements where the customer has the right to exercise a put option requiring the Company to buyback a crane at an agreed upon price. The Company evaluates each agreement at inception to determine if the customer has a significant economic incentive to exercise that right. If it is determined that the customer has a significant economic incentive to exercise that right, the agreement is accounted for as a lease in accordance with ASC Topic 842 "Leases" ("Topic 842"). If it is determined that the customer does not have a significant economic incentive to exercise that right, then revenue is recognized when control of the asset is transferred to the customer. Refer to Note 20, "Guarantees," for additional information.

Given the nature of the Company's products, the customer may request that the product be held until a delivery location is identified. Under these "bill and hold" arrangements, sales are recognized when all of the following criteria are met: 1) the reason for the bill-and-hold arrangement is substantive, 2) the product is separately identified as belonging to the customer, 3)

the product is ready for transfer to the customer, and 4) the Company does not have the ability to use the product or direct it to another customer.

Aftermarket Part Sales

Aftermarket part sales are generated through the sale of new and used parts to end customers and distributors. Aftermarket part sales are recognized when control of the product is transferred to the customer. Control transfers to the customer generally upon delivery to the carrier. Customers generally have a right of return which the Company estimates using historical information. The amount of estimated returns is deducted from net sales.

Other Sales

The Company's other sales consist primarily of sales from:

- Repair and field service work;
- Rental of cranes; and
- Training and technical publications.

The Company's performance obligations for other sales generally relates to performing specific agreed upon services. Sales are earned upon the completion of those services.

Practical Expedients and Exemptions

The Company expenses sales commissions when incurred because the amortization period would be one year or less. These costs are recorded within engineering, selling and administrative expenses in the Consolidated Statement of Operations.

The Company does not disclose the value of unsatisfied performance obligations for (i) contracts with an original expected length of one year or less and (ii) contracts for which it recognizes revenue at the amount to which it has the right to invoice for services performed.

3. Business Combinations

Acquisition of the H&E Crane Business

On October 1, 2021, the Company completed the acquisition of substantially all of the assets and certain liabilities of the crane business of H&E Equipment Services, Inc. ("H&E") for a transaction price of approximately \$136.8 million which is inclusive of the purchase price of \$130.0 million, working capital and other adjustments of \$3.7 million and settlement of outstanding balances between the Company and the acquired company of \$3.1 million. The acquisition was funded from existing cash resources, including the use of the Company's asset-based revolving credit facility. At the time of acquisition, the acquired crane business of H&E operated with ten full-service branch locations under the Company's wholly owned subsidiary, MGX Equipment Services, LLC ("MGX"). The acquired crane business expands Manitowoc's ability to provide new sales, used sales, aftermarket parts, service and crane financing options to a variety of end market customers.

The transaction price was allocated to underlying assets acquired and liabilities assumed based upon their estimated fair values at the date of the combination as follows:

Net working capital	\$ 48.8
Property, plant and equipment	13.1
Rental fleet	48.2
Goodwill	7.8
Noncompetition agreement intangible	3.8
Customer relationships intangible	15.1
Total fair value consideration	\$ 136.8

The amount of net sales generated by MGX during the years ended December 31, 2022 and 2021 was \$218.4 million and \$50.6 million, respectively.

Acquisition of Aspen Equipment Company

On September 1, 2021, the Company completed the acquisition of substantially all of the assets of Aspen Equipment Company ("Aspen"), a diversified crane dealer and a leading final stage purpose built work truck upfitter, for a purchase price of approximately \$50.2 million. The acquisition of Aspen was funded from existing cash resources and expands Manitowoc's direct-to-customer footprint in Iowa, Nebraska and Minnesota with new sales, used sales, parts, service and rentals to a variety of end markets.

Included in the purchase price was \$12.9 million of net working capital, \$5.6 million of property, plant and equipment, \$19.3 million of rental fleet, \$0.4 million of other assets, \$6.6 million of goodwill and \$5.4 million of intangible assets. Refer to Note 10, "Goodwill and Other Intangible Assets," for additional information on the class of intangibles acquired and goodwill recorded.

The amount of net sales generated by Aspen during the years ended December 31, 2022 and 2021 was \$79.8 million and \$23.6 million, respectively.

4. Net Sales

The Company defers revenue when cash payments are received in advance of satisfying the related performance obligation. These amounts are recorded as customer advances in the Consolidated Balance Sheets. The table below shows the change in the customer advances balance for the year ended December 31, 2022 and 2021.

	 2022	 2021
Balance at beginning of period	\$ 28.7	\$ 25.5
Cash received in advance of satisfying		
performance obligations	130.6	128.4
Revenue recognized	(139.2)	(124.5)
Currency translation	 1.8	 (0.7)
Balance at end of period	\$ 21.9	\$ 28.7

Disaggregation of the Company's revenue sources are disclosed in Note 18, "Segments."

5. Fair Value of Financial Instruments

ASC Topic 820-10 ("ASC 820") defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. ASC Topic 820 classifies the inputs used to measure fair value into the following hierarchy:

- Level 1 Unadjusted quoted prices in active markets for identical assets or liabilities
- Level 2 Unadjusted quoted prices in active markets for similar assets or liabilities, or

 Unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or

 Inputs other than quoted prices that are observable for the asset or liability
- Level 3 Unobservable inputs for the asset or liability

The following tables sets forth the Company's financial assets and liabilities related to FX Forward Contracts that were accounted for at fair value as of December 31, 2022 and 2021.

	Fair Value as of December 31, 2022									
	Level 1		Level	el 2 Level 3 Total		otal	Recognized Location			
Current Assets:										
FX Forward Contracts	\$		\$ 5	.7	\$	_	\$	5.7	Other current assets	
Current Liabilities:										
FX Forward Contracts	\$	_	\$ 0	0.3	\$		\$	0.3	Accounts payable and accrued expenses	
Fair Value as of December 31, 2021										
	Leve	el 1_	Level	2	Le	vel 3		otal	Recognized Location	
FX Forward Contracts									Accounts payable and	
	\$	—	\$ 0	0.3	\$	—	\$	0.3	accrued expenses	

The fair value of the senior secured second lien notes due on April 1, 2026, with an annual coupon rate of 9.000% (the "2026 Notes"), was approximately \$284.0 million as of December 31, 2022. Refer to Note 12, "Debt," for a description of the 2026 Notes and the related carrying value.

The Company endeavors to utilize the best available information in measuring fair value. Financial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company estimates the fair value of its 2026 Notes based on quoted market prices of the instruments; because these markets are typically actively traded, the liabilities are classified as Level 1 within the valuation hierarchy. The carrying values of cash and cash equivalents, accounts receivable, accounts payable and short-term variable debt, including any amounts outstanding under the Company's revolving credit facility, approximate fair value, without being discounted as of December 31, 2022 due to the short-term nature of these instruments.

FX Forward Contracts are valued through an independent valuation source which uses an industry standard data provider, with resulting valuations periodically validated through third-party or counterparty quotes. As such, these derivative instruments are classified within Level 2. Refer to Note 6, "Derivative Financial Instruments," for additional information.

6. Derivative Financial Instruments

The Company's risk management objective is to ensure that business exposures to risks are minimized using the most effective and efficient methods to eliminate, reduce, or transfer such exposures. Operating decisions consider these associated risks and, whenever possible, transactions are structured to avoid or mitigate these risks.

From time to time, the Company enters into FX Forward Contracts to manage the exposure on forecasted transaction denominated in non-functional currencies and to manage the risk of transaction gains and losses associated with assets/liabilities in currencies other than the functional currency of certain subsidiaries. Certain of these FX Forward Contracts are designated as cash flow hedges. To the extent these derivatives are effective in offsetting the variability of the hedged cash flows, changes in the derivatives' fair value are not included in current earnings but are included in AOCI. These changes in fair value are reclassified into earnings as a component of cost of sales, as applicable, when the forecasted transaction impacts earnings. In addition, if the forecasted transaction is no longer probable, the cumulative change in the derivatives' fair value is recorded as a component of other income (expense) – net in the period in which the transaction is no longer considered probable of occurring. No amounts were recorded related to forecasted transactions no longer being probable during the years ended December 31, 2022, 2021 or 2020.

The Company had FX Forward Contracts with an aggregate notional amount of \$87.7 million and \$11.3 million outstanding as of December 31, 2022 and 2021, respectively. The aggregate notional amount outstanding as of December 31, 2022 is scheduled to mature within one year. The FX Forward Contracts purchased are denominated in various foreign currencies. As of December 31, 2022 and 2021, the net fair value of these contracts was a net short-term asset of \$5.4 million and net short-term liability of \$0.3 million, respectively. Net unrealized gains (losses), net of income tax, recorded in AOCI were \$5.4 million as of December 31, 2022 and zero as of December 31, 2021.

The gains (losses) recorded in the Consolidated Statement of Operations for FX Forward Contracts for the years ended December 31, 2022, 2021 and 2020 are summarized as follows:

	Recognized Location	2022	2021	2020
Designated	Cost of sales	\$ (5.8)	\$ (1.1)	\$ (0.3)
	Other income			
Non-Designated	(expense) - net	7.2	0.4	0.6

7. Inventories

The components of inventories as of December 31, 2022 and 2021 are summarized as follows:

	2022	2021
Raw materials	\$ 161.2	\$ 157.4
Work-in-process	141.3	140.4
Finished goods	 309.4	 279.0
Total Inventories — net	\$ 611.9	\$ 576.8

8. Notes Receivable

The Company's notes receivable balances are classified as current or long-term based on the timing of amounts due. Long-term notes receivable are included within other non-current assets in the Consolidated Balance Sheet. In 2022, the Company recorded income of \$4.8 million in engineering, selling and administrative expenses in the Consolidated Statements of Operations to recognize the partial recovery of the previously written off long-term note receivable from the 2014 divestiture of the Company's Chinese joint venture. As of December 31, 2022, the Company had current and long-term notes receivable in the amounts of \$10.6 million and \$2.0 million, respectively. As of December 31, 2021, the Company had current and long-term notes receivable in the amounts of \$16.7 million and \$5.2 million, respectively.

9. Property, Plant and Equipment

The components of property, plant and equipment as of December 31, 2022 and 2021 are summarized as follows:

	2022	2021
Land	\$ 17.9	\$ 19.4
Building and improvements	194.7	203.4
Machinery, equipment and tooling	300.6	298.9
Furniture and fixtures	13.8	14.5
Computer hardware and software	129.4	125.6
Rental cranes	157.8	144.2
Construction in progress	8.4	15.1
Total cost	822.6	821.1
Less accumulated depreciation	(487.3)	(462.3)
Property, plant and equipment — net	\$ 335.3	\$ 358.8

Assets Held for Sale

As of December 31, 2022, the Company had \$6.7 million of property, plant and equipment classified as assets held for sale recorded in other current assets in the Consolidated Balance Sheets. This amount relates to the assets of one of the Company's Brazilian subsidiaries, Manitowoc Brasil Guindastes Ltda, that the Company committed to sell in 2022 and a manufacturing building and land in Fanzeres, Portugal. Refer to Note 24, "Subsequent Event," for additional information on the sale of the Company's Brazilian entity.

As of December 31, 2021, the Company had \$3.1 million of property, plant and equipment classified as assets held for sale recorded in other current assets in the Consolidated Balance Sheets. This amount relates to a manufacturing building and land in Fanzeres, Portugal.

10. Goodwill and Other Intangible Assets

The changes in carrying amount of goodwill for the years ended December 31, 2022 and 2021 are summarized as follows:

	Americas -		Americas - Americas -		
	Manu	facturing	Distribution	MEAP_	Consolidated
Balance as of January 1, 2021	\$	166.5	\$ —	\$ 68.6	\$ 235.1
Foreign currency impact		_		(0.5)	(0.5)
Acquisitions			15.1		15.1
Net balance as of December 31, 2021		166.5	15.1	68.1	249.7
Goodwill impairment		(166.5)	_	_	(166.5)
Purchase accounting adjustments		_	(0.7)) —	(0.7)
Foreign currency impact				(2.4)	(2.4)
Net balance as of December 31, 2022	\$		\$ 14.4	\$ 65.7	\$ 80.1

As of December 31, 2021, the Company recorded goodwill of \$6.2 million and \$8.9 million from the acquisitions of Aspen and the crane business of H&E, respectively. As of December 31, 2022, final purchase accounting adjustments were recorded resulting in goodwill of \$6.6 million and \$7.8 million from the acquisitions of Aspen and the crane business of H&E, respectively. Management determined the goodwill represents the assembled workforce and synergies between the acquired companies and Manitowoc that are not individually identified and separately recognized. The total goodwill related to the acquisitions is deductible for tax purposes over 15 years. Refer to Note 3, "Business Combinations," for additional information.

The Company performs its annual goodwill impairment test during the fourth quarter, or more frequently if events or changes in circumstances indicate that the asset might be impaired. The Company will continue to monitor changes in circumstances and test more frequently if those changes indicate that assets might be impaired. As of October 31, 2022, the Company performed its annual goodwill impairment test. Based on the results of the test, the carrying value of the Americas – Manufacturing reporting unit exceeded its fair value. As a result, the Company recorded a \$166.5 million non-cash impairment charge to write down the carrying value of goodwill to zero. The goodwill impairment charge resulted from a reduction in the estimated fair value of the reporting unit based on a prolonged low Company equity market capitalization that continued into the fourth quarter of 2022 and a higher discount rate. The fair values of the Americas – Distribution and MEAP reporting units were substantially in excess of their carrying values as of the date of the annual impairment test and, therefore, were not at risk of impairment as of December 31, 2022.

The gross carrying amount, accumulated amortization and net book value of the Company's intangible assets other than goodwill as of December 31, 2022 and 2021 are summarized as follows:

	December 31, 2022						December 31, 2021				
	Gross Accumulated Net		Net	Gross		Gross Accumulated					
	C	arrying	Am	ortization		Book (arrying	Amortization	Book	
	A	mount		Amount Value Amount Am		Amount	Value	_			
Definite lived intangible assets:											
Customer relationships	\$	26.5	\$	(10.0)	\$	16.5	\$	27.0	\$ (9.0)	\$ 18.0)
Patents		28.7		(28.2)		0.5		29.7	(29.1)	0.6	í
Noncompetition agreements		4.2		(1.2)		3.0		4.2	(0.4)	3.8	3
Trademarks and tradenames		2.2		(0.6)		1.6		2.2	(0.1)	2.1	
Other intangibles		0.6		(0.5)		0.1		0.6	(0.2)	0.4	ļ
Total		62.2		(40.5)		21.7		63.7	(38.8)	24.9)
Indefinite lived intangible assets:											
Trademarks and tradenames		91.0		_		91.0		95.9	_	95.9)
Distribution network		14.0				14.0		18.8		18.8	3
Total		105.0				105.0		114.7		114.7	7
Total other intangible assets	\$	167.2	\$	(40.5)	\$	126.7	\$	178.4	\$ (38.8)	\$ 139.6	ó

Amortization expense of intangible assets for the years ended December 31, 2022, 2021 and 2020 was \$3.1 million, \$1.4 million and \$0.3 million, respectively.

As a result of the acquisition of Aspen during the year ended December 31, 2021, intangible assets of approximately \$2.2 million for customer relationships, \$2.2 million for tradenames, \$0.8 million for other intangibles and \$0.2 million for a noncompetition agreement was acquired. The useful life for each intangible asset class is 18 years, 5 years, 9 months and 5 years, respectively. The weighted average useful life for acquired intangibles is 3.2 years. The fair value of identifiable intangible assets has been determined using the income approach which involves significant unobservable inputs.

As a result of the acquisition of H&E's crane business during the year ended December 31, 2021, intangible assets of approximately \$15.1 million for customer relationships and \$3.8 million for a noncompetition agreement was acquired. The useful life for each intangible asset class is 12 years and 5 years, respectively. The weighted average useful life for the acquired intangibles is 9.4 years. The fair value of identifiable intangible assets has been determined using the income approach which involves significant unobservable inputs.

Excluding the impact of any future acquisitions, divestitures or impairments, the Company's anticipated future amortization of intangible assets as of December 31, 2022 is summarized as follows:

<u>Year</u>	
2023	\$ 2.9
2024	2.9
2025	2.9
2026	2.7
2027	1.4
Thereafter	8.7
Total	\$ 21.5

Definite lived intangible assets and long-lived assets are subject to impairment testing whenever events or circumstances indicate that the carrying value of the assets may not be recoverable. The Company determined there was not a triggering event during the year ended December 31, 2022.

The Company performs its annual indefinite-lived intangible assets impairment testing during the fourth quarter, or more frequently if events or changes in circumstances indicate that the asset might be impaired. The Company will continue to monitor changes in circumstances and test more frequently if those changes indicate that assets might be impaired. The Company has two indefinite-lived intangible assets subject to an annual impairment test: the Potain trademark, tradename and distribution network assets ("Potain Tradename") and the Grove trademark, tradename and distribution network assets ("Grove Tradename"). As of October 31, 2022, the Company performed its annual indefinite-lived intangible assets impairment test. Based on the results of the test, the Company recorded a non-cash impairment charge of \$5.4 million to write down the carrying value of the Grove Tradename to its fair value of \$39.0 million. The Grove Tradename impairment charge was recorded in the Americas segment and was a result of downward pressure from the use of similar assumptions to those used in the annual goodwill impairment test which included revenue growth rate and discount rate. The fair value of the Potain Tradename was substantially in excess of its carrying value as of the date of the annual impairment test and, therefore, was not at risk of impairment as of December 31, 2022.

A considerable amount of management judgment and assumptions are required in performing the goodwill and indefinite-lived asset impairment tests as it relates to revenue growth rates, projected operating income, the discount rate and relevant market multiples, as applicable. While the Company believes the judgments and assumptions are reasonable, different assumptions could change the estimated fair value and, therefore, additional impairments could be required. Weakening industry or economic trends, disruptions to the Company's business, unexpected significant changes or planned changes in the use of the assets or in entity structure are all factors which may adversely impact the assumptions used in the valuations.

The Company continually monitors market conditions and determines if any additional interim reviews of other intangibles or long-lived assets are warranted. In the event the Company determines that assets are impaired in the future, the Company would recognize a non-cash impairment charge, which could have a material adverse effect on the Company's Consolidated Balance Sheets and Results of Operations.

11. Accounts Payable and Accrued Expenses

Accounts payable and accrued expenses as of December 31, 2022 and 2021 are summarized as follows:

	2022	2021
Trade accounts payable	\$ 274.6	\$ 238.8
Employee-related expenses	51.0	51.9
Accrued vacation	22.4	22.2
Miscellaneous accrued expenses	98.4	100.5
Total accounts payable and accrued expenses	\$ 446.4	\$ 413.4

12. Debt

Outstanding debt as of December 31, 2022 and 2021 is summarized as follows:

	2022	2021
Borrowing under senior secured asset based revolving		
credit facility	\$ 80.0	\$ 100.0
2026 Notes	300.0	300.0
Other	8.0	10.3
Deferred financing costs	(2.4)	(3.1)
Total debt	385.6	407.2
Short-term borrowings and current portion of		
long-term debt	(6.1)	(7.3)
Long-term debt	\$ 379.5	\$ 399.9

On March 25, 2019, the Company and certain subsidiaries of the Company (the "Loan Parties") entered into a credit agreement (the "ABL Credit Agreement") with JP Morgan Chase Bank, N.A. as administrative and collateral agent, and certain financial institutions party thereto as lenders, providing for a senior secured asset-based revolving credit facility (the "ABL Revolving Credit Facility") of up to \$275.0 million. The borrowing capacity under the ABL Revolving Credit Facility is based on the value of inventory, accounts receivable and certain fixed assets of the Loan Parties. The Loan Parties' obligations under the

ABL Revolving Credit Facility are secured on a first-priority basis, subject to certain exceptions and permitted liens, by substantially all of the personal property and fee-owned real property of the Loan Parties. The liens securing the ABL Revolving Credit Facility are senior in priority to the second-priority liens securing the obligations under the 2026 Notes and the related guarantees. The ABL Revolving Credit Facility includes a \$75.0 million letter of credit sub-facility, \$10.0 million of which is available to the Company's German subsidiary that is a borrower under the ABL Revolving Credit Facility.

On June 17, 2021, the Company amended the ABL Credit Agreement to adjust certain negative covenants which reduces restrictions on the Company's ability to expand its rental business. On May 19, 2022, the Company further amended the ABL Credit Agreement to (i) extend the maturity date to May 19, 2027 (subject to a springing maturity date of December 30, 2025 if the 2026 Notes have not been repaid in full or refinanced prior to December 30, 2025), (ii) permit the inclusion, subject to certain limitations, of the crane rental assets of certain subsidiaries in the borrowing base used to calculate availability under the ABL Credit Agreement, (iii) permit separate financing of crane rental assets not included in the borrowing base and (iv) replace U.S. dollar London Inter-bank Offered Rate with interest rates based on the secured overnight financing rate plus a credit spread adjustment ("SOFR").

Borrowings under the ABL Revolving Credit Facility bear interest at a variable rate using either the Alternative Base Rate or SOFR plus the spread set forth below. The variable interest rate is based upon the average availability as of the most recent determination date as follows:

Average quarterly availability	Alternative base rate spread	SOFR spread
≥ 50% of Aggregate Commitment	0.25%	1.25%
< 50% of Aggregate Commitment	0.50%	1.50%

As of December 31, 2022, the Company had \$80.0 million of borrowings outstanding under the ABL Revolving Credit Facility and \$100.0 million of borrowings outstanding as of December 31, 2021. During the year ended December 31, 2022, the highest daily borrowing under the ABL Revolving Credit Facility was \$112.5 million and the average borrowing was \$90.9 million, while the weighted-average annual interest rate was 3.1%. During the year ended December 31, 2021, the highest daily borrowing under the ABL Revolving Credit Facility was \$100.0 million and the average borrowing was \$26.0 million, while the weighted-average annual interest rate was 1.4%. The interest rate of the ABL Revolving Credit Facility fluctuates based on excess availability. During the year ended December 31, 2022, the spreads for SOFR and Eurodollar, and Alternative Base Rate borrowings were 1.25% and 0.25%, respectively. Excess availability as of December 31, 2022 was \$192.0 million, which represents revolver borrowing capacity of \$275.0 million less \$80.0 million in borrowings outstanding and U.S. letters of credit outstanding of \$3.0 million.

As of December 31, 2022, the Company had outstanding \$8.0 million of other indebtedness that has a weighted-average interest rate of approximately 3.9%. This debt includes balances on local credit lines and other financing arrangements.

On March 25, 2019, the Company and certain of its subsidiaries entered into an indenture with U.S. Bank National Association as trustee and notes collateral agent, pursuant to which the Company issued \$300.0 million aggregate principal amount of the 2026 Notes with an annual coupon rate of 9.000%. Interest on the 2026 Notes is payable in cash semi-annual in arrears on April 1 and October 1 of each year. The 2026 Notes are fully and unconditionally guaranteed on a senior secured second lien basis, jointly and severally, by each of the Company's existing and future domestic subsidiaries that is either a guarantor or a borrower under the ABL Revolving Credit Facility or that guarantees certain other debt of the Company or a guarantor. The 2026 Notes and the related guarantees are secured on a second-priority basis, subject to certain exceptions and permitted liens, by pledges of capital stock and other equity interests and other security interests in substantially all of the personal property and fee-owned real property of the Company and of the guarantors that secure obligations under the ABL Revolving Credit Facility.

Both the ABL Revolving Credit Facility and the 2026 Notes include customary covenants which include, without limitation, restrictions on, the Company's ability and the ability of the Company's restricted subsidiaries to incur, assume or guarantee additional debt or issue certain preferred shares, pay dividends on or make other distributions in respect of the Company's capital stock or make other restricted payments, make certain investments, sell or transfer certain assets, create liens on certain assets to secure debt, consolidate, merge, sell, or otherwise dispose of all or substantially all of the Company's assets, enter into certain transactions with affiliates and designate the Company's subsidiaries as unrestricted. Both the ABL Revolving Credit Facility and the 2026 Notes also include customary events of default. The ABL Revolving Credit Facility has customary representations and warranties including, as a condition to borrowing, that all such representations and warranties are true and correct, in all material respects, on the date of the borrowing, including representations as to no material adverse change in the Company's business or financial condition since December 31, 2018.

Additionally, the ABL Revolving Credit Facility contains a covenant requiring the Company to maintain a minimum fixed charge coverage ratio under certain circumstances set forth in the ABL Credit Agreement.

The aggregate scheduled future maturities of outstanding debt obligations as of December 31, 2022 is summarized as follows:

<u>Year</u>	
<u>Year</u> 2023	\$ 6.1
2024	1.5
2025	80.4
2026	300.0
2027	_
Thereafter	_
Total	\$ 388.0

The table of scheduled maturities above does not agree to the Company's total debt as of December 31, 2022 as shown on the Consolidated Balance Sheet due to \$2.4 million of deferred financing costs.

As of December 31, 2022, the Company was in compliance with all affirmative and negative covenants in its debt instruments, inclusive of the financial covenants pertaining to the ABL Revolving Credit Facility and 2026 Notes. Based upon management's current plans and outlook, the Company believes it will be able to comply with these covenants during the subsequent twelve months.

13. Accounts Receivable Factoring

The Company has two non-U.S. accounts receivable financing programs with no maximum availability and one U.S. accounts receivable financing program with maximum availability of \$36.0 million. Transactions under the U.S. and non-U.S. programs were accounted for as sales in accordance with ASC 860, "Transfers and Servicing." Under these financing programs, the Company has the ability to sell eligible receivables up to the maximum limit.

For the year ended December 31, 2022, cash proceeds from the factoring of accounts receivable qualifying as sales were \$234.5 million. For the year ended December 31, 2021, cash proceeds from the factoring of accounts receivable qualifying as sales were \$228.6 million.

Financing charges associated with the factoring of receivables qualifying as sales are included in interest expense in the Consolidated Statements of Operations. Financing charges incurred from the factoring of accounts receivable qualifying as sales for the year ended December 31, 2022 were immaterial.

14. Income Taxes

Income (loss) before income taxes for the years ended December 31, 2022, 2021 and 2020 is summarized as follows:

	2022	2	2021	2020
Income (loss) before income taxes:	 			
United States	\$ (203.8)	\$	(39.0)	\$ (51.6)
Foreign	 83.6		56.1	49.6
Total	\$ (120.2)	\$	17.1	\$ (2.0)

Income tax provision for the years ended December 31, 2022, 2021 and 2020 is summarized as follows:

	2022	2021	2020
Current:			
United States federal and state	\$ (11.7)	\$ (1.2)	\$ (4.3)
Foreign	10.9	7.9	16.6
Total current	\$ (0.8)	\$ 6.7	\$ 12.3
Deferred:			
United States federal and state	\$ (2.4)	\$ 0.6	\$ 0.3
Foreign	6.6	(1.2)	4.5
Total deferred	\$ 4.2	\$ (0.6)	\$ 4.8
Income tax provision	\$ 3.4	\$ 6.1	\$ 17.1

The items accounting for the difference between income taxes computed at the United States federal statutory rate and the Company's effective rate for the years ended December 31, 2022, 2021 and 2020 is summarized as follows:

	 2022	2021	2020
Federal income tax at statutory rate	\$ (25.2)	\$ 3.6	\$ (0.4)
State income tax provision	0.9	0.3	1.9
Manufacturing and research incentives	(0.5)	(0.2)	(0.8)
Taxes on foreign income which differ from the federal			
statutory rate	(1.9)	1.5	
Adjustments for unrecognized tax benefits	(11.0)	(2.3)	10.7
Adjustments for valuation allowances	5.2	4.5	22.2
United States tax reform	4.8	(1.6)	(14.6)
Goodwill impairment	31.7		
Other items	(0.6)	0.3	(1.9)
Income tax provision	\$ 3.4	\$ 6.1	\$ 17.1

For the year ended December 31, 2022, the benefit for income taxes related to unrecognized tax benefits was primarily driven by a release of a \$12.1 million uncertain tax position, inclusive of \$1.2 million of interest, related to U.S. Federal tax planning strategies implemented as a result of the Coronavirus Aid, Relief and Economic Security Act. For the year ended December 31, 2021, the only significant item included in "other items" per the federal statutory reconciliation was a \$1.9 million benefit relating to a French income tax refund as a result of a Mutually Agreed upon Procedure for 2006 between the Italian and French tax authorities. There were no significant items included in "other items" for the years ended December 31, 2022 and 2020.

For the years ended December 31, 2022, 2021 and 2020 the Company recorded a net income tax inclusion for the global intangible low-taxed income ("GILTI") in the amount of \$22.9 million, \$2.5 million and zero, respectively, which is fully offset by the valuation allowance recorded in the United States. The GILTI inclusion for each respective year is reflective of the final regulations issued in 2020 relating to Internal Revenue Code Section 951A and the treatment of foreign income subject to a high tax rate. While effective beginning in 2021, the regulations allowed for retroactive application which the Company elected in the period of issuance for 2020 and 2019. In 2021, the Company filed an amended return to adopt the regulations for the 2018 tax year, resulting in the recognition of a net income tax benefit of \$1.6 million for the year ended December 31, 2021.

As of each reporting date, the Company considers new evidence, both positive and negative, that could impact its assessment related to future realization of deferred tax assets. The income tax provision for the year ended December 31, 2022 includes a \$1.2 million income tax benefit for the release of a valuation allowance in India. As of December 31, 2022, the Company has recorded valuation allowances on deferred tax assets for certain legal entities in Brazil, China, Chile, Germany, Russia, the U.K. and the United States as it is more likely than not that the assets will not be realized. The income tax provision for the year ended December 31, 2021 includes a \$7.2 million net increase to valuation allowances for other jurisdictions, partially offset by a \$2.7 million income tax benefit for the partial release of a valuation allowance in China. The income tax provision for the year ended December 31, 2020 includes a \$22.2 million net increase in valuation allowances for other jurisdictions.

It is reasonably possible that sufficient positive evidence required to release all, or a portion of, certain valuation allowances in the Company's German business within the next twelve months may result in a reduction of the valuation allowance of

approximately \$20.0 million. Such changes in the realizability of deferred tax assets will be reflected in continuing operations and could have a material effect on the Company's financial position and results of operations.

Temporary differences and carryforwards that give rise to deferred tax assets and liabilities are summarized as follows:

	2022	2021
Deferred income tax assets:		
Inventories	\$ 25.3	\$ 23.9
Deferred employee benefits	28.2	30.8
Product warranty reserves	8.7	8.9
Product liability reserves	2.2	2.0
Tax credits	7.2	7.4
Loss and other tax attribute carryforwards	129.6	151.1
Deferred revenue	0.2	2.4
Other	18.6	20.6
Total deferred income tax assets	220.0	247.1
Less valuation allowance	(174.1)	(170.5)
Net deferred income tax assets	\$ 45.9	\$ 76.6
Deferred income tax liabilities		,
Accounts receivable	\$ 4.0	\$ 1.5
Property, plant and equipment	5.1	23.0
Intangible assets	28.0	34.7
Total deferred income tax liabilities	\$ 37.1	\$ 59.2
Net deferred income tax assets	\$ 8.8	\$ 17.4

The net deferred tax assets reflected in the Consolidated Balance Sheets for the years ended December 31, 2022 and 2021 are summarized as follows:

	 2022	2021	
Long-term income tax assets, included in			
other non-current assets	\$ 13.7	\$	23.9
Long-term deferred income tax liability	(4.9)		(6.5)
Net deferred income tax asset	\$ 8.8	\$	17.4

The Company believes that certain offshore cash can be accessed in a tax efficient manner and therefore, as of December 31, 2022, deferred taxes were not provided on approximately \$242.1 million of unremitted earnings of foreign subsidiaries that may be remitted to the United States without material tax cost. The Company had approximately \$478.1 million and \$481.5 million of cumulative foreign earnings as of December 31, 2022 and December 31, 2021, respectively, which are asserted to be permanently reinvested. Determination of the amount of unrecognized deferred tax liability related to these earnings is not practicable.

As of December 31, 2022, the Company had approximately \$96.8 million of federal net operating loss carryforwards, which are available to reduce future federal tax liabilities. \$13.5 million of the federal net operating loss carryforwards expire in 2036 and the remaining \$83.3 million is not subject to any time restrictions for future use. As of December 31, 2021, the Company had approximately \$189.0 million of federal loss carryforwards, which are available to reduce future federal tax liabilities. \$24.4 million of the federal net operating loss carryforward expire in 2036 and the remaining \$164.6 million is not subject to any time restrictions for future use. However, utilization of the 2022 and 2021 indefinite lived loss carryforwards is limited annually to 80% of adjusted taxable income. The carryforward was offset by a valuation allowance as of December 31, 2022 and 2021.

As of December 31, 2022 and 2021, the Company had approximately \$26.8 million and \$9.0 million, respectively, of federal interest expense carryforward that is not subject to any time restrictions for future use. The utilization of the interest expense carryforward is limited annually to 30% of adjusted taxable income. The carryforward was offset by a full valuation allowance as of December 31, 2022 and 2021.

As of December 31, 2022 and 2021, the Company had approximately \$651.9 million and \$772.0 million, respectively, of state net operating loss carryforwards, which are available to reduce future state tax liabilities. As of December 31, 2022 and 2021,

these state net operating loss carryforwards expire at various times through 2042 and 2041, respectively. The carryforward was offset by a full valuation allowance as of December 31, 2022 and 2021.

As of December 31, 2022 and 2021, the Company had approximately \$263.5 million and \$281.2 million, respectively, of foreign loss carryforwards, which are available to reduce future foreign tax liabilities. Substantially all the foreign loss carryforwards have an indefinite carryforward period of which \$163.7 million were offset by a valuation allowance as of December 31, 2022 and \$151.9 million as of December 31, 2021.

The Company or one of its subsidiaries files income tax returns in the United States and certain foreign jurisdictions. The following table provides the open tax years for which the Company could be subject to income tax examination by the tax authorities in its major jurisdictions:

Jurisdiction	Open Years
U.S. federal	2016 — 2022
China	2013 - 2022
France	2020 - 2022
Germany	2018 - 2022

During 2021, the Company closed the audit with the German tax authorities for calendar years 2015 to 2017. There have been no significant developments with respect to the Company's ongoing tax audits.

The Company regularly assesses the likelihood of an adverse outcome resulting from examinations to determine the adequacy of its tax reserves. As of December 31, 2022, the Company believes that it is more likely than not that the tax positions it has taken will be sustained upon the resolution of its audits resulting in no material impact on its consolidated financial position and the results of operations and cashflows. However, the final determination with respect to any tax audits, including any related litigation costs, settlements, penalties and/or interest assessments, could be materially different from the Company's accruals and could have a material effect on its financial position, results of operations and/or cashflows in the periods for which that determination is made.

During the years ended December 31, 2022, 2021 and 2020, the Company recorded an increase (decrease) to the gross unrecognized tax benefits including interest and penalties of \$(11.0) million, \$(2.1) million and \$5.5 million, respectively, of which \$(1.7) million, \$(0.4) million and \$(3.1) million, respectively, are a result of the net reductions to interest and penalties.

A reconciliation of the beginning and ending amount of unrecognized tax benefits excluding interest and penalties as of December 31, 2022, 2021 and 2020 are summarized as follows:

	2	2022	2021	2020
Balance at beginning of year	\$	18.4	\$ 20.1	\$ 11.5
Additions for tax positions of current year		0.1	0.1	0.3
Additions for tax positions of prior years		3.6	_	10.9
Reductions for tax positions of prior years		(11.0)	(0.2)	(0.4)
Reductions based on settlements with tax				
authorities		_	(0.2)	(2.1)
Reductions for lapse of statute of limitations		(2.0)	(1.4)	(0.1)
Balance at end of year	\$	9.1	18.4	\$ 20.1

As of December 31, 2022, 2021 and 2020, the Company accrued interest and penalties of \$1.2 million, \$2.9 million and \$3.3 million, respectively.

Approximately \$4.7 million, \$14.0 million and \$15.4 million of the Company's unrecognized tax benefits as of December 31, 2022, 2021 and 2020, respectively, would impact the effective tax rate.

During the next twelve months, the unrecognized tax benefits are not expected to significantly increase or decrease due to audit settlements or lapsing statutes of limitations.

15. Net Income (Loss) Per Share

The following is a reconciliation of the weighted average common shares outstanding used to compute basic and diluted net income (loss) per share:

	2022	2021	2020
Basic weighted average common shares outstanding	35,184,336	34,903,189	34,691,063
Effect of dilutive securities - equity			
compensation awards		549,366	
Diluted weighted average common shares outstanding	35,184,336	35,452,555	34,691,063

Equity compensation awards for which total employee proceeds from exercise exceed the average fair value of the same equity instrument over the period have an anti-dilutive effect on earnings per share during periods with net income, and accordingly, are excluded from diluted weighted average common shares outstanding. Anti-dilutive equity instruments of 358,706 common shares were excluded from the computation of diluted net income per share for the year ended December 31, 2021. Due to the net loss during the years ended December 31, 2022 and 2020, the assumed exercise of all equity instruments was anti-dilutive and, therefore, not included in the diluted loss per share calculation for those periods.

16. Equity

Authorized capitalization consists of 75.0 million shares of \$0.01 par value common stock and 3.5 million shares of \$0.01 par value preferred stock. None of the preferred shares have been issued.

As of December 31, 2022, the Company has authorization from the Board of Directors to purchase up to \$30.0 million of the Company's common stock at management's discretion. The Company's share repurchases program purchases shares in the open market to offset stock-based awards issued in conjunction with the Company's 2013 Omnibus Incentive Plan. During 2022, the Company repurchased 262,000 shares of the Company's common stock for \$3.0 million under this authorization. As of December 31, 2022, the Company has \$7.6 million remaining under this authorization.

The components of accumulated other comprehensive loss as of December 31, 2022 and 2021 are summarized as follows:

	2022	2021
Foreign currency translation, net of income tax		
benefit of \$0.1 and \$0.6	\$ (98.0)	\$ (70.1)
Derivative instrument fair market value, net of income		
tax provision of \$0.0 and \$0.0	5.4	_
Employee pension and postretirement benefit adjustments,		
net of income tax benefit of \$12.9 and \$13.9	(15.3)	(32.3)
Total accumulated other comprehensive loss	\$ (107.9)	\$ (102.4)

A reconciliation of the changes in accumulated other comprehensive loss, net of income tax, by component as of December 31, 2022 and 2021 are summarized as follows:

	Gains		Eausian	
	(Losses) on Cash Flow	Pension &	Foreign Currency	
	Hedges	Postretirement	Translation	Total
Balance as of December 31, 2020	\$ —	\$ (47.9)	\$ (49.6)	\$ (97.5)
Other comprehensive income (loss) before				
reclassifications	(1.1)	14.5	(20.5)	(7.1)
Amounts reclassified from accumulated other				
comprehensive income	1.1	1.1	_	2.2
Net other comprehensive income (loss)		15.6	(20.5)	(4.9)
Balance as of December 31, 2021	_	(32.3)	(70.1)	(102.4)
Other comprehensive income (loss) before				
reclassifications	(0.4)	15.5	(27.9)	(12.8)
Amounts reclassified from accumulated other				
comprehensive income	5.8	1.5	_	7.3
Net other comprehensive income (loss)	5.4	17.0	(27.9)	(5.5)
Balance as of December 31, 2022	\$ 5.4	\$ (15.3)	\$ (98.0)	\$ (107.9)

A reconciliation of the reclassifications out of accumulated other comprehensive loss, net of income taxes, for the years ended December 31, 2022, 2021 and 2020 are summarized as follows:

	A		rom Accumu ensive Loss	lated O	ther	
	20)22	2021		2020	Recognized Location
Losses on cash flow hedges						
FX Forward Contracts	\$	(5.8)	\$ (1.1)	\$	(0.3)	Cost of sales
Total before income taxes		(5.8)	(1.1)		(0.3)	
Provision for income taxes		_	_			
Total, net of income taxes	\$	(5.8)	\$ (1.1)	\$	(0.3)	
Amortization of pension and postretirement items			 			
Actuarial losses	\$	(2.9)	\$ (4.7)	\$	(4.5) (a) (Other expense - net
Amortization of prior service cost		1.3	2.6		2.6 (a)	Other expense - net
Pension settlement gain		0.1	0.9		(a) (Other expense - net
Total before income taxes		(1.5)	(1.2)		(1.9)	
Benefit for income taxes		_	0.1		<u> </u>	
Total, net of income taxes	\$	(1.5)	\$ (1.1)	\$	(1.9)	
Total reclassifications for the period, net of income taxes	\$	(7.3)	\$ (2.2)	\$	(2.2)	

(a) These accumulated other comprehensive loss components are components of net periodic pension cost (refer to Note 22, "Employee Benefit Plans," for further details).

17. Stock-Based Compensation

The Company's 2013 Omnibus Incentive Plan (the "2013 Omnibus Plan") was approved by shareholders on May 7, 2013 and replaced the 2003 Incentive Stock and Awards Plan (the "2003 Stock Plan"). The 2013 Omnibus Plan also replaced the Company's Short-Term Incentive Plan (the "STIP") as of December 31, 2013. The 2003 Stock Plan and the STIP are referred to cumulatively as the "Prior Plans." No new awards may be granted under the Prior Plans after the respective termination dates, but the Prior Plans continue to govern awards outstanding issued thereunder; outstanding awards will continue in force and effect until vested, exercised or forfeited pursuant to their terms. The 2013 Omnibus Plan provides for both short-term and long-term incentive awards for employees and non-employee directors. Stock-based awards may take the form of stock options, stock appreciation rights, restricted stock, restricted stock units, and performance share or performance unit awards. The total number of shares of the Company's common stock available for awards under the 2013 Omnibus Plan is 7,477,395 shares. The total number of shares of the Company's common stock still available for issuance as of December 31, 2022 is 3,965,516.

The Company recognizes expense net of estimated future forfeitures for all stock-based compensation on a straight-line basis over the vesting period of the entire award. Estimated future forfeitures are based on the Company's historical experience.

During the years ended December 31, 2022 and 2021, the Company recorded stock-based compensation expense of \$8.5 million and \$7.1 million, respectively, in engineering, selling and administrative expense in the Consolidated Statement of Operations.

During the year ended December 31, 2020, the Company recorded stock-based compensation expense of \$6.0 million of which \$8.5 million was recorded in engineering, selling and administrative expense and \$2.5 million of income was recorded in restructuring expense in the Consolidated Statement of Operations. Income recorded in restructuring expense was primarily related to the forfeiture of grants associated with employee separation agreements.

Shares are issued out of treasury stock upon exercise for stock options and vesting of restricted stock units and performance share units.

Stock Options

Stock option grants to employees are exercisable in three annual increments over a three-year period beginning on the first anniversary of the grant date and expire 10 years subsequent to the grant date.

The Company did not grant employees stock options in 2022 or 2021. The Company granted stock options to employees to acquire 250,432 shares of common stock during the year ended December 31, 2020. Stock-based compensation expense is calculated by estimating the fair value of non-qualified stock options at the time of grant and is amortized over the stock options' vesting period. The Company recognized \$0.1 million, \$0.6 million and \$1.3 million of expense before income taxes associated with stock options during the years ended December 31, 2022, 2021 and 2020, respectively.

The activity for stock options is summarized as follows:

	Shares	Weighted Average Exercise Price Per Share	Aggregate Intrinsic Value
Options outstanding as of December 31, 2021	625,317	\$ 20.76	
Granted	_	_	
Exercised	(10,728)	13.29	
Forfeited	(14,145)	12.37	
Cancelled	(47,521)	20.64	
Options outstanding as of December 31, 2022	552,923	\$ 21.13	\$ —
•			
Options exercisable as of December 31, 2022	527,852	\$ 21.55	<u>\$</u>

The Company uses the Black-Scholes valuation model to value stock options. The Company's volatility assumption was based on a blend of its historical stock price and an average of historical stock prices of selected peers. The assumed risk-free rate was based on U.S. Treasury rates in effect at the time of grant with varying maturities weighted commensurately with the expected life assumption. The expected option life represents the period of time options are expected to be outstanding and is based on historical experience.

The weighted average fair value per share of options granted during the year ended December 31, 2020 was \$5.35. The fair value of each option grant was estimated at the date of grant using the following assumptions:

	2020
Expected life (years)	6.5
Risk-free interest rate	1.2%
Expected volatility	42.3%
Expected dividend yield	<u> </u>

Restricted Stock Units

The Company granted 413,543, 417,535 and 410,877 restricted stock units inclusive of director awards in 2022, 2021 and 2020, respectively. A total of 56,640, 59,280 and 77,608 equity compensation awards were granted to directors in 2022, 2021 and 2020, respectively, which vested immediately upon the grant date. The Company recognized \$5.2 million, \$4.7 million and \$4.5 million of compensation expense associated with restricted stock units during the years ended December 31, 2022, 2021 and 2020, respectively.

With the exception of director grants, the restricted stock units are earned based on service over the vesting period. Restrictions on restricted stock units granted to employees lapse in three annual increments over a three-year period beginning on the first anniversary of the grant date. The expense is based on the fair value of the Company's shares as of the grant date which is the grant date closing stock price.

The activity for restricted stock units is summarized as follows:

	Av Gra	eighted verage int Date Value Per
Shares	S	hare
614,984	\$	15.93
413,543		17.00
(290,876)		16.03
(90,439)		17.08
647,212	\$	16.45
	614,984 413,543 (290,876) (90,439)	Shares S

As of December 31, 2022, the Company has \$5.2 million of unrecognized compensation expense before income tax related to restricted stock units which will be recognized over a weighted average period of 1.8 years.

Performance Share Units

The Company granted 122,280, 159,247 and 328,310 of performance share units in 2022, 2021 and 2020, respectively. The performance share units are earned based on service over the vesting period and only to the extent to which performance goals are met over the applicable three-year performance period. The performance goals vary for performance share units each grant year. The Company recognized \$3.2 million, \$1.9 million and \$0.2 million of compensation expense associated with performance share units during the years ended December 31, 2022, 2021 and 2020, respectively.

The performance goals for the performance share units granted in 2022 are weighted 60% on the 3-year average of the Company's adjusted EBITDA percentage from 2022 to 2024 and 40% on non-new machine sales for the year ending December 31, 2024. The Company defines non-new machine sales as parts sales, used crane sales, rental revenue, service revenue and other revenue. The 2022 performance share units include a +/-20% modifier weighted on total shareholder return relative to a defined peer group of companies during the three-year performance period, not to exceed 200% of target shares granted.

The performance goals for the performance share units granted in 2021 are weighted 60% on the 3-year average of the Company's adjusted EBITDA percentage from 2021 to 2023 and 40% on non-new machines sales as of the year ended December 31, 2023. The 2021 performance share units include a +/-20% modifier weighted on total shareholder return relative to a defined peer group of companies during the three-year performance period, not to exceed 200% of target shares granted.

The performance goals for the performance share units granted in 2020 are based on the 3-year average of the Company's adjusted EBITDA percentage from 2020 to 2022 with a +/-20% modifier based on total shareholder return relative to a defined peer group of companies during the three-year performance period, not to exceed 200% of target shares granted.

The activity for performance share units is summarized as follows:

			eighted
		Gran	verage t Date Fair Value
	Shares		r Share
Unvested as of December 31, 2021	500,684	\$	17.45
Granted	122,280		19.36
Vested	(45,432)		21.98
Forfeited	(117,758)		16.58
Unvested as of December 31, 2022	459,774	\$	17.30

As of December 31, 2022, the Company has \$4.1 million of unrecognized compensation expense before income tax related to performance share units is expected to be recognized over a weighted average period of 1.7 years.

The Company uses the Monte Carlo valuation model to determine fair value of the performance share unit grants. The Company used an average of historical stock prices of selected peers for its volatility assumption. The assumed risk-free rates were based on three-year U.S. Treasury rates in effect at the time of grant. The fair value of each total shareholder return performance share unit was estimated at the date of grant using the following assumptions:

	2022	2021	2020
Correlation	25.9%	27.9%	32.2%
Risk-free interest rate	1.7%	0.2%	1.1%
Expected volatility	59.5%	59.0%	47.5%
Expected dividend yield	<u>%</u>	<u> </u>	%

18. Segments

The Company reports segment information based on the "management" approach. The management approach designates the internal reporting used by the CEO, who is also the Company's Chief Operating Decision Maker ("CODM"), for making decisions about the allocation of resources and assessing performance as the source of the Company's reportable operating segments.

The Company has three reportable segments: Americas, Europe and Africa ("EURAF") and MEAP. The Americas reporting segment includes the North America and South America continents. The EURAF reporting segment includes the Europe and Africa continents, excluding the Middle East region. The MEAP reporting segment includes the Asia and Australia continents and the Middle East region. The results of the acquired businesses are included in the Americas segment.

The CODM evaluates the performance of its reportable segments based on net sales and operating income. Segment net sales are recognized in the geographic region the product is sold. Operating income for each segment includes net sales to third parties, cost of sales directly attributable to the segment, and operating expenses directly attributable to the segment. Manufacturing variances generated by the manufacturing locations within each operating segment are maintained in each segment's operating income. Operating income for each segment excludes other income and expense and certain expenses managed outside the operating segments. Costs excluded from segment operating income include various corporate expenses such as stock-based compensation expenses, income taxes and other separately managed general and administrative costs. The Company does not include intercompany sales between segments for management reporting purposes. The CODM does not evaluate performance of the reportable segments based on total assets.

The following table shows information by reportable segment for the years ended December 31, 2022, 2021 and 2020:

	 2022	 2021		2020
Net Sales				
Americas	\$ 1,013.0	\$ 757.6	\$	626.1
EURAF	761.5	677.0		598.7
MEAP	 258.0	 285.6		218.6
Total	\$ 2,032.5	\$ 1,720.2	\$	1,443.4
Segment Operating Income (Loss)	 			
Americas	\$ (88.8)	\$ 57.3	\$	32.1
EURAF	(3.2)	8.9		12.0
MEAP	40.2	30.9		30.4
Total	\$ (51.8)	\$ 97.1	\$	74.5
Depreciation	 		<u></u>	
Americas	\$ 35.4	\$ 20.7	\$	15.7
EURAF	20.1	19.8		16.5
MEAP	2.2	2.1		2.1
Corporate	2.9	2.9		2.9
Total	\$ 60.6	\$ 45.5	\$	37.2
Capital Expenditures				
Americas	\$ 32.0	\$ 11.3	\$	6.0
EURAF	27.7	27.5		19.0
MEAP	2.1	1.5		1.2
Corporate	<u> </u>	0.1		0.1
Total	\$ 61.8	\$ 40.4	\$	26.3

A reconciliation of the Company's segment operating income (loss) to operating income (loss) in the Consolidated Statement of Operations for the years ended December 31, 2022, 2021 and 2020 are summarized as follows:

	2022	2021	2020
Segment operating income (loss)	\$ (51.8)	\$ 97.1	\$ 74.5
Unallocated corporate expenses	(41.3)	(51.1)	(32.2)
Unallocated restructuring income (expense)	0.1	0.5	(3.7)
Total operating income (loss)	\$ (93.0)	\$ 46.5	\$ 38.6

Net sales by geographic area for the years ended December 31, 2022, 2021 and 2020 and property, plant and equipment as of December 31, 2022 and 2021 are summarized as follows:

							Property,	Plai	it and		
		Net Sales					Equipment				
	2022		2021	2020		2022		2021			
United States	\$ 906	4 \$	664.5	\$ 564	.9	\$	146.7	\$	163.3		
Europe	740	1	653.7	585	5.4		166.6		168.0		
Other	386	0	402.0	293	<u>.1</u>		22.0		27.5		
Total	\$ 2,032	5 \$	1,720.2	\$ 1,443	.4	\$	335.3	\$	358.8		

New machine and non-new machine sales for the years ended December 31, 2022, 2021 and 2020 are summarized as follows:

	2022	2021	 2020
New machine sales	\$ 1,487.2	\$ 1,271.6	\$ 1,067.1
Non-new machine sales	545.3	448.6	376.3
Total net sales	\$ 2,032.5	\$ 1,720.2	\$ 1,443.4

19. Commitments and Contingencies

The Company is subject to various legal proceedings and claims that have arisen in the ordinary course of business which have not been fully resolved. The outcome of any litigation is inherently uncertain. When a loss related to a legal proceeding or claim is probable and reasonably estimable, the Company accrues its best estimate for the ultimate resolution of the matter.

As of December 31, 2022, various product-related lawsuits were pending. To the extent permitted under applicable law, all of these are insured with self-insurance retention levels. The Company's self-insurance retention levels have varied over the last 10 years. As of December 31, 2022, the largest self-insured retention level for new occurrences currently maintained by the Company is \$3.0 million per occurrence and applies to product liability claims arising in North America.

Product liability reserves are recorded as current liabilities in the Consolidated Balance Sheets as of December 31, 2022 and 2021 and were \$9.4 million and \$9.0 million, respectively. These reserves were estimated using a combination of actual case reserves and actuarial methods. Based on the Company's experience in defending product liability claims, management believes the current reserves are adequate for estimated case resolutions on aggregate self-insured claims and insured claims. Any recoveries from insurance carriers are dependent upon the legal sufficiency of claims and solvency of insurance carriers.

As of December 31, 2022 and 2021, the Company had reserved \$58.0 million and \$60.2 million, respectively, for warranty and other related claims and are included in product warranties and other non-current liabilities in the Consolidated Balance Sheets. Certain of these warranty and other related claims involve matters in dispute that ultimately are resolved by negotiation, arbitration, or litigation. Refer to Note 20, "Guarantees," for further information.

It is reasonably possible that the estimates for warranty costs, product liability, asbestos-related claims and other various legal matters may change based upon new information that may arise or matters that are beyond the scope of the Company's historical experience. Presently, there are no reliable methods to estimate the amount of any such potential changes. The ultimate resolution of these matters, individually and in the aggregate, is not expected to have a material adverse effect on the Company's financial condition, results of operations or cash flows.

In July 2017, the Company received an Information Request from the United States Environmental Protection Agency ("U.S. EPA") relating to the sales of cranes manufactured between January 1, 2014 and July 31, 2017 and the Company's related participation in the Transition Program for Equipment Manufacturers (the "TPEM" program). The TPEM program allowed equipment manufacturers to delay installing engines meeting Tier 4 final emission standards in their products, subject to certain percentage allowance restrictions. The Company has provided, and continues to provide, information to the U.S. EPA and the U.S. Department of Justice ("U.S. DOJ") on the approximately 1,420 engines included in the Company's cranes relating to the TPEM program and other certification matters. The Company is engaged in confidential discussions with the U.S. EPA and U.S. DOJ with respect to these matters.

The total recorded estimated liability in the Company's Consolidated Balance Sheets is \$14.9 million, as of December 31, 2022 and December 31, 2021. Other than the foregoing, the Company is unable to provide further meaningful quantification as to the final resolution of these matters. However, the Company calculated the statutory maximum penalties under the Clean Air Act to be approximately \$174.0 million. The Company believes it has strong legal and factual defenses and will vigorously defend any

allegations of noncompliance and the factors that could apply in the assessment of any civil penalty. Final resolution of these matters may have a material impact on the Company's financial condition, results of operations or cash flows.

20. Guarantees

The Company periodically enters into transactions with customers that provide for buyback commitments. The Company evaluates each agreement at inception to determine if the customer has a significant economic incentive to exercise the buyback option. If it is determined that the customer has a significant economic incentive to exercise that right, the revenue is deferred and the agreement is accounted for as a lease in accordance with Topic 842. If it is determined that the customer does not have a significant economic incentive to exercise that right, then revenue is recognized when control of the product is transferred to the customer. The revenue deferred related to buyback obligations accounted for under Topic 842 included in other current and non-current liabilities as of December 31, 2022 and 2021 was \$27.3 million and \$31.0 million, respectively. The total amount of buyback commitments given by the Company and outstanding as of December 31, 2022 and 2021 was \$42.5 million and \$36.4 million, respectively. These amounts are not reduced for amounts the Company would recover from repossession and subsequent resale of the units. The buyback commitments expire at various times through 2032. The Company also has various loss guarantees with maximum liabilities of \$15.0 million and \$15.8 million as of December 31, 2022 and 2021, respectively. These amounts are not reduced for amounts the Company would recover from repossession and subsequent resale of the cranes securing the related guarantees.

In the normal course of business, the Company provides its customers a warranty covering workmanship, and in some cases materials, on products manufactured by the Company. Such warranties generally provide that products will be free from defects for periods ranging from 12 months to 60 months. In addition, the Company may incur other warranty related costs outside of its standard warranty period. Costs for other warranty related work are recorded in the period a loss is probable and can be reasonably estimated. Below is a table summarizing the warranty and other warranty related work for the years ended December 31, 2022, 2021 and 2020:

	2022	2021	2020
Balance at beginning of period	\$ 60.2	\$ 63.2	\$ 60.6
Adjustments to accruals for warranties	27.3	30.4	33.9
Settlements made (in cash or in kind) during			
the period	(27.8)	(31.3)	(33.6)
Currency translation	(1.7)	(2.1)	2.3
Balance at end of period	\$ 58.0	\$ 60.2	\$ 63.2

Included in the warranty balance as of December 31, 2022 and 2021 is \$9.2 million and \$11.2 million, respectively, of long-term warranty which is recorded in other non-current liabilities in the Consolidated Balance Sheets.

The revenue deferred related to extended warranty periods included in other current and non-current liabilities as of December 31, 2022 and 2021 was \$6.6 million and \$7.0 million, respectively.

21. Restructuring

Restructuring expense for the year ended December 31, 2022 was immaterial. During the years ended December 31, 2021 and 2020, the Company incurred restructuring (income) expense of (\$1.1) million and \$7.0 million, respectively, in the Consolidated Statements of Operations. Restructuring income for 2021 primarily related to adjustments of previously recorded costs associated with a lease write-off in the Americas segment and headcount reductions in the EURAF segment. In addition, the Company recorded income on the sale of previously expensed Brazilian tax credits. Restructuring expense for 2020 primarily related to costs associated with headcount reductions in the Americas and EURAF segments, partially offset by \$2.5 million of income primarily related to the forfeiture of equity compensation awards associated with employee separation agreements. Restructuring expense for the year ended December 31, 2020 included \$2.2 million of expense related to executive severance.

The following is a summary of the Company's restructuring activities for the years ended December 31, 2021 and 2020:

	202	1	2020	
Balance at beginning of period	\$	5.3	\$	2.0
Restructuring (income) expense ⁽¹⁾		(1.1)		9.5
Use of reserve		(2.7)		(6.2)
Reserve reclassification				
Currency translation		0.1		
Balance at end of period	\$	1.6	\$	5.3

(1) Restructuring expense in 2020 excludes income related to the forfeiture of equity compensation awards associated with employee separation agreements which was recorded directly to restructuring expense in the Consolidated Statement of Operations and, therefore, did not impact the restructuring accrual.

22. Employee Benefit Plans

The Company provides defined benefit pension plans, defined contribution plans and/or other postretirement benefit plans to employees in many of the Company's locations throughout the world. The Company's defined benefit plans provide a benefit based on years of service and/or the employee's average earnings near retirement. The Company's defined contribution plans allow employees to contribute a portion of their salary to help save for retirement, and in most cases, the Company provides a matching contribution. The benefit obligation related to the Company's non-U.S. defined benefit pension plans are for employees located primarily in Europe. For postretirement medical and other benefit plans, all of the Company's benefit obligation is for employees located in the United States.

Defined contribution plans

The Company maintains two defined contribution retirement plans for its employees in the United States: (1) The Manitowoc Company, Inc. 401(k) Retirement Plan (the "Manitowoc 401(k) Plan") and (2) The Manitowoc Company, Inc. Deferred Compensation Plan (the "Manitowoc Deferred Compensation Plan"). Each plan results in individual participant balances that reflect a combination of amounts contributed by the Company or deferred by the participant, amounts invested at the direction of either the Company or the participant, and the continuing reinvestment of returns until the accounts are distributed.

The Company also has various other non-U.S. defined contribution plans that allow eligible employees to contribute a portion of their salary to the plans. In most cases, the Company provides a matching contribution to the funds. Company contributions to the plans are generally based upon formulas contained in the plans. Total costs incurred under the Non-U.S. defined contribution plans, and reported within the Consolidated Statement of Operations, were \$1.7 million, \$1.6 million and \$1.7 million for the years ended December 31, 2022, 2021 and 2020, respectively.

Manitowoc 401(k) Plan

The Manitowoc 401(k) Plan is a tax-qualified retirement plan that is available to substantially all U.S. employees of Manitowoc, its subsidiaries and related entities.

The Manitowoc 401(k) Plan allows employees to make both pre and after-tax elective deferrals, subject to certain limitations under the Internal Revenue Code of 1986, as amended (the "Tax Code"). The Company also has the right to make the following additional contributions: (1) a safe harbor matching contribution and (2) an additional contribution, which may or may not be made, at the full discretion of the Company and for which the value will be fully determined by the Company based on its performance. Each participant in the Manitowoc 401(k) Plan is allowed to direct the investment of that participant's account among a diverse mix of investment funds, including a Company stock alternative. To the extent that any funds are invested in

the Company's stock, that portion of the Manitowoc 401(k) Plan is an employee stock ownership plan, as defined under the Tax Code (an "ESOP").

The terms governing the retirement benefits under the Manitowoc 401(k) Plan are the same for the Company's executive officers as they are for other eligible employees in the U.S.

Total costs incurred under this plan, and reported within the Consolidated Statement of Operations, were \$11.9 million, \$5.8 million and \$5.9 million for the years ended December 31, 2022, 2021 and 2020, respectively.

Manitowoc Deferred Compensation Plan

The Manitowoc Deferred Compensation Plan is a non-qualified supplemental deferred compensation plan for highly compensated and key management employees and for non-employee directors of the Company. The Company maintains the Manitowoc Deferred Compensation Plan to allow eligible individuals to save for retirement in a tax-efficient manner despite Tax Code restrictions that would otherwise impair their ability to do so under the Manitowoc 401(k) Plan. The Manitowoc Deferred Compensation Plan also assists the Company in retaining those key employees and directors.

The Manitowoc Deferred Compensation Plan accounts are credited with: (1) elective deferrals made at the request of the individual participant; (2) a matching contribution for eligible wages above IRS employee compensation limits for 401(k) retirement plans and/or (3) an additional contribution from the Company for each individual participant, which may or may not be made, at the full discretion of the Company based on its performance. Although unfunded within the meaning of the Tax Code, the Manitowoc Deferred Compensation Plan utilizes a rabbi trust to hold assets intended to satisfy the Company's corresponding future benefit obligations. Each participant in the Manitowoc Deferred Compensation Plan is credited with earnings based upon individual elections from a diverse mix of investment funds that are intended to reflect investment funds similar to those offered under the Manitowoc 401(k) Plan, including the Company's stock. Participants do not receive preferential or above-market rates of return under the Manitowoc Deferred Compensation Plan.

The Company has two separate investment programs: Program A and B, which allows participants to direct deferrals and Company contributions and restricts the Company's use and access to the funds but are subject to the claims of the Company's general creditors in rabbi trusts. Program A invests solely in the Company's stock; dividends paid, if any, on the Company's stock are automatically reinvested; and all distributions must be made in Company stock. Program B offers a variety of investment options but does not include Company stock as an investment option. All distributions from Program B must be made in cash. Participants cannot transfer assets between programs.

Program A is accounted for as a plan that does not permit diversification. As a result, the Company stock held by Program A is classified in equity in a manner similar to accounting for treasury stock. The deferred compensation obligation is classified as an equity instrument. Changes in the fair value of the Company's stock and the compensation obligation are not recognized. The asset and obligation for Program A were \$0.6 million and \$0.2 million as of December 31, 2022 and 2021, respectively.

Program B is accounted for as a plan that permits diversification. As a result, the assets held by Program B are classified as an asset in the Consolidated Balance Sheets and changes in the fair value of the assets are recognized in earnings. The deferred compensation obligation is classified as a liability in the Consolidated Balance Sheets and adjusted, with a charge or credit to compensation cost, to reflect changes in the fair value of the obligation. The assets, which are included in other non-current assets, and obligations, which are included in other non-current liabilities, were \$7.1 million and \$8.9 million as of December 31, 2022 and 2021, respectively. Total costs incurred under this plan, and reported within the Consolidated Statement of Operations, for the years ended December 31, 2022, 2021 and 2020 were \$0.4 million, \$0.1 million and \$0.4 million, respectively.

Pension, Postretirement Medical and Other Benefit Plans

The Company provides certain pension, postretirement medical and other benefits (death benefits) for eligible retirees and their dependents in the U.S. under various frozen plans. Pension benefits are provided under the Manitowoc U.S. Pension Plan ("U.S. Pension Plan"). Certain pension benefits are funded, the postretirement medical benefits are not funded but are paid as incurred, and the death benefits are fully insured. Eligibility for coverage is based on meeting certain years of service and retirement qualifications. The healthcare benefits may be subject to deductibles, co-payment provisions, and other limitations. The Company has reserved the right to modify these benefits which have been frozen.

In addition to the U.S. Pension Plan, the Company also maintains defined benefit pension plans for various Non-US subsidiaries which are sponsored directly by the Company or its subsidiaries and offered only to employees or retirees of those

subsidiaries ("Non-U.S. Pension Plans"). Certain Non-U.S. Pension Plans have frozen benefit accruals. During 2021, the unvested portion of Portugal's pension plan was transferred to a defined contribution plan. As a result, the Company recognized a settlement gain of \$0.9 million.

The components of periodic benefit costs for the years ended December 31, 2022, 2021 and 2020 are summarized as follows:

													Postre		ment Me	dical	l
				nsion Pla			 		Pension I						Other		
	2	2022	2	2021	2	2020	 2022		2021	2	2020	2	2022	2	2021	2	2020
Service cost - benefits earned																	
during the year	\$	—	\$	_	\$	_	\$ 1.6	\$	2.3	\$	2.1	\$	0.1	\$	0.1	\$	0.2
Interest cost of projected																	
benefit obligation		3.2		2.8		4.0	1.7		1.5		1.8		0.2		0.2		0.4
Expected return on assets		(5.2)		(4.9)		(5.2)	(1.2)		(1.0)		(1.1)		_		_		
Amortization of prior service																	
cost		_		_		_	0.1		0.1		0.1		(1.4)		(2.7)		(2.7)
Amortization of actuarial net																	
loss (gain)		1.9		3.2		2.8	1.5		1.8		1.7		(0.5)		(0.3)		
Pension settlement gain							(0.1)		(0.9)								
Net periodic benefit cost	\$	(0.1)	\$	1.1	\$	1.6	\$ 3.6	\$	3.8	\$	4.6	\$	(1.6)	\$	(2.7)	\$	(2.1)
Weighted average assumptions:																	
Effective discount rate for																	
benefit obligations		2.8%		2.4%)	3.3%	1.4%)	1.2%		1.6%		2.5%)	2.0%		2.9%
Effective interest rate on																	
benefit obligation		1.0%		2.0%)	2.9%	1.6%)	1.2%		1.6%		1.9%)	1.3%		2.6%
Expected return on																	
plan assets		4.7%		4.3%)	5.2%	2.9%)	1.6%		2.3%		N/A		N/A		N/A
Rate of compensation		NT/A		NT/A		NT/A	4 10/		4 10/		2 10/		NT/A		NT/A		NT/A
increase		N/A		N/A		N/A	4.1%)	4.1%		3.1%		N/A		N/A		N/A

The prior service costs are amortized on a straight-line basis over the average remaining service period of active participants. Gains and losses in excess of 10% of the greater of the benefit obligation and the market-related value of assets are amortized over the average remaining service period of active participants.

To develop the expected long-term rate of return on assets assumptions, the Company considered the historical returns and future expectations for returns in each asset class net of fees, as well as targeted asset allocation percentages within the pension portfolio.

The following is a reconciliation of the changes in benefit obligation, plan assets, and funded status as of December 31, 2022 and 2021:

	U.S. Pension Plan			Non-U.S. Pension Plans					Postreti Medical a			
	 2022		2021		2022		2021		2022		2021	
Change in Benefit Obligation												
Benefit obligation, beginning of year	\$ 141.2	\$	151.9	\$	94.5	\$	104.9	\$	13.7	\$	15.8	
Service cost	_		_		1.6		2.3		0.1		0.1	
Interest cost	3.2		2.8		1.7		1.5		0.2		0.2	
Participant contributions	_		_		_		_		0.1		0.3	
Plan curtailment	_		_		_		(0.3)		_		_	
Actuarial (gain) loss	(30.1)		(5.4)		(27.1)		(3.7)		(3.4)		(1.0)	
Currency translation adjustment	_		_		(8.0)		(4.2)				_	
Pension settlement	_		_		(0.3)		(1.9)		_			
Benefits paid	(7.9)		(8.1)		(3.4)		(4.1)		(1.2)		(1.7)	
Benefit obligation, end of year	\$ 106.4	\$	141.2	\$	59.0	\$	94.5	\$	9.5	\$	13.7	
Change in Plan Assets	 											
Fair value of plan assets, beginning of year	\$ 114.6	\$	113.7	\$	50.2	\$	52.3	\$	_	\$	_	
Actual return on plan assets	(24.9)		8.5		(15.0)		0.6		_		_	
Employer contributions	0.5		0.5		3.4		3.9		1.1		1.4	
Participant contributions	_		_		_		_		0.1		0.3	
Currency translation adjustment	_		_		(5.2)		(0.6)		_		_	
Pension settlement	_		_		(0.3)		(1.9)		_		_	
Benefits paid	 (7.9)		(8.1)		(3.4)		(4.1)		(1.2)		(1.7)	
Fair value of plan assets, end of year	82.3		114.6		29.7		50.2		_		_	
Funded status	\$ (24.1)	\$	(26.6)	\$	(29.3)	\$	(44.3)	\$	(9.5)	\$	(13.7)	
Amounts recognized in the Consolidated	 	_										
Balance Sheets as of December 31												
Short-term pension obligation	\$ (0.5)	\$	(0.5)	\$	(1.2)	\$	(1.0)	\$	_	\$	_	
Long-term pension obligation	(23.6)		(26.1)		(28.1)		(43.3)				_	
Short-term postretirement medical and other												
benefit obligations	_		_		_		_		(1.3)		(1.6)	
Long-term postretirement medical and other												
benefit obligations	_		_		_		_		(8.2)		(12.1)	
Net amount recognized	\$ (24.1)	\$	(26.6)	\$	(29.3)	\$	(44.3)	\$	(9.5)	\$	(13.7)	
Weighted-Average Assumptions	 											
Discount rate	2.8%)	2.8%	1	4.2%		1.4%))	5.4%)	2.5%	
Rate of compensation increase	N/A		N/A		2.7%		4.1%)	N/A		N/A	

The Company prepares its discount rates with advice from an independent third party. The Company uses different discount rates for each plan depending on the plan jurisdiction, the demographics of participants and the expected timing of benefit payments. For the qualified U.S. pension plan and postretirement medical plans, the Company uses a discount rate calculated based on an appropriate mix of high-quality corporate bonds. For the non-U.S. pension and postretirement plans, the Company consistently uses the relevant country specific benchmark indices for determining the various discount rates.

Amounts recognized in accumulated other comprehensive loss as of December 31, 2022 and 2021, are summarized as follows:

	 Pensi	ions		Postreti Medical a	
	2022		2021	2022	2021
Net actuarial gain (loss)	\$ (35.0)	\$	(51.3)	\$ 7.0	\$ 4.0
Prior service credit (cost)	(0.3)		(0.4)	_	1.4
Total amount recognized	\$ (35.3)	\$	(51.7)	\$ 7.0	\$ 5.4

For measurement purposes, a 5.59% annual rate of increase in the per capita cost of covered health care benefits was assumed for the postretirement medical and other plan for 2022. The rate was assumed to decrease gradually to 4.00% in 2046 and remain at that level thereafter. Assumed health care cost trend rates have a significant effect on the amounts reported for the postretirement medical and other plan.

The following table summarizes the sensitivity of our December 31, 2022 retirement obligations and 2023 retirement benefit costs of the Company's plans to changes in the key assumptions used to determine those results:

Change in assumption:	inc (decr 2023	mated crease ease) in pension	Estimated increase (decrease) in Projected Benefit Obligation for the year ended December 31, 2022	Estimated increase (decrease) in 2023 Other Postretirement Benefit costs	Estimated increase (decrease) in Other Postretirement Benefit Obligation for the year ended December 31, 2022
0.50% increase in discount rate	\$	(0.6)		N/A	\$ (0.2)
0.50% decrease in discount rate	•	0.6	8.2	N/A	0.3
0.50% increase in long-term return on assets		(0.5)	N/A	N/A	N/A
0.50% decrease in long-term return on assets		0.5	N/A	N/A	N/A
1.0% increase in medical trend rates		N/A	N/A	0.1	0.2
1.0% decrease in medical trend rates		N/A	N/A	(0.1)	(0.2)

It is reasonably possible that the estimate for future retirement and medical costs may change in the near future due to changes in interest rates. Presently, there is no reliable means to estimate the amount of any such potential changes.

The weighted-average asset allocations of the U.S. pension plan as of December 31, 2022 and 2021, by asset category are summarized as follows:

	2022	2021
Equity	52.8%	52.7%
Fixed income	36.9%	38.2%
Other	10.3%	9.1%
Total	100.0%	100.0%

The weighted-average asset allocations of the Non-U.S. pension plans as of December 31, 2022 and 2021, by asset category are summarized as follows:

	2022	2021
Equity	<u> </u>	<u> </u>
Fixed income	45.2%	41.3%
Other ⁽¹⁾	54.8%	58.7%
Total	100.0%	100.0%

(1) Includes diversified investments that have equity and fixed income holdings.

The Board of Directors has established the Retirement Plan Committee (the "Committee") to manage the operations and administration of all benefit plans and related trusts. On a quarterly basis, the Committee reviews progress toward achieving the pension plans' and individual investment managers' performance objectives.

Investment Strategy The overall objective of the Company's pension assets is to earn a rate of return over time to satisfy the benefit obligations of the pension plans and to maintain sufficient liquidity to pay benefits and address other cash requirements of the pension funds. Specific investment objectives for the Company's long-term investment strategy include reducing the volatility of pension assets relative to pension liabilities, achieving a competitive, total investment return, achieving diversification between and within asset classes and managing other risks. Investment objectives for each asset class are determined based on specific risks and investment opportunities identified.

The Company reviews its long-term, strategic asset allocations annually. The Company uses various analytics to determine the optimal asset mix and considers plan liability characteristics, liquidity characteristics, funding requirements, expected rates of return and the distribution of returns. The Company identifies investment benchmarks for the asset classes in the strategic asset allocation that are market-based.

Actual allocations to each asset class vary from target allocations due to periodic investment strategy changes, market value fluctuations, the length of time it takes to fully implement investment allocation positions and the timing of benefit payments and contributions. The asset allocation is monitored and rebalanced monthly.

The actual and target allocations for the pension assets as of December 31, 2022, by asset class, are summarized as follows:

	Target Allo	cations	Weighted Ave Allocati	U
		Non-U.S.		Non-U.S.
	U.S. Plan	Plans	U.S. Plans	Plans
Equity Securities	50%	%	52.8%	%
Debt Securities	40%	48%	36.9%	45.2%
Other	10%	52%	10.3%	54.8%

Risk Management In managing the plan assets, the Company reviews and manages risk associated with funded status risk, interest rate risk, market risk, counterparty risk, liquidity risk and operational risk. Liability management and asset class diversification are central to the Company's risk management approach and are integral to the overall investment strategy. Further, asset classes are constructed to achieve diversification by investment strategy, by industry or sector and by holding. Asset performance is monitored against benchmarked indices.

Fair Value Measurements The following table presents the Company's plan assets using the fair value hierarchy as of December 31, 2022 and 2021. The fair value hierarchy has three levels based on the reliability of the inputs used to determine fair value. Refer to Note 5, "Fair Value of Financial Instruments," for definitions of each fair value level.

	December 31, 2022										
Assets	Pri Ao Marl Ide As	oted ces in ctive kets for ntical ssets vel 1)	Significant Other Observable Inputs (Level 2)		Unobservable Inputs (Level 3)		Value			Total	
Equity:											
U.S. equity	\$	_	\$	_	\$	_	\$	16.9	\$	16.9	
International equity						_		27.8		27.8	
Fixed income:											
Corporate bonds and notes				_		_		18.5		18.5	
Government and agency bonds				_				25.4		25.4	
Commingled funds				_				8.6		8.6	
International fixed income				_		_		1.9		1.9	
Other:											
Cash and cash equivalents		0.9		_		_				0.9	
Money market funds		_		0.7		_		_		0.7	
Annuity contracts		_		_	8	3.5		_		8.5	
Other		_		_		_		2.8		2.8	
Total	\$	0.9	\$	0.7	\$ 8	3.5	\$	101.9	\$	112.0	

^{*}Certain assets that are measured at fair value using the NAV per share practical expedient have not been classified in the fair value hierarchy.

	December 31, 2021										
Assets	Pric Ac Mark Iden As	oted es in tive ets for itical sets	Significant Other Observable Inputs (Level 2)		Unobservable Inputs (Level 3)		Net Asset Value ("NAV")*		Total		
Equity:											
U.S. equity	\$	_	\$	_	\$ -	- \$	32.7	\$	32.7		
International equity		_			_	_	31.9		31.9		
Fixed income:											
Corporate bonds and notes		_		_	_	-	27.1		27.1		
Government and agency bonds		_			_	_	34.7		34.7		
Commingled funds		_		_	_	_	18.9		18.9		
International fixed income		_		_	_	_	2.2		2.2		
Other:											
Cash and cash equivalents		0.7			_	_	_		0.7		
Money market funds		_		0.7	_	_	_		0.7		
Annuity contracts					12.	6	_		12.6		
Other		_		_			3.3		3.3		
Total	\$	0.7	\$	0.7	\$ 12.	<u>§</u>	150.8	\$	164.8		

^{*}Certain assets that are measured at fair value using the NAV per share practical expedient have not been classified in the fair value hierarchy.

Cash and cash equivalents, which are used to pay benefits, are primarily held in registered money market funds which are valued using a market approach based on the quoted market prices of identical instruments. Other cash and cash equivalents are valued daily by the fund using a market approach with inputs that include quoted market prices for similar instruments.

Insurance group annuity contracts are valued at the present value of the future benefit payments owed by the insurance Company to the Non-U.S. Pension Plan's participants.

The valuation methodologies described above may generate a fair value calculation that may not be indicative of net realizable value or future fair values. While the Company believes the valuation methodologies used are appropriate, the use of different methodologies or assumptions in calculating fair value could result in different amounts.

A reconciliation of the fair value measurements of plan assets using significant unobservable inputs (Level 3) from the beginning of the year to the end of the year is as follows:

	 Insurance Year Ended	
	2022	2021
Beginning Balance	\$ 12.6	\$ 12.9
Actual return on assets	(1.9)	0.7
Benefit payments	(0.8)	(0.9)
Foreign currency impact	(1.4)	(0.1)
Ending Balance	\$ 8.5	\$ 12.6

The expected 2023 minimum contributions for the U.S. pension plan are \$0.5 million and there are no planned discretionary or non-cash contributions. The expected 2023 minimum contributions for the non-U.S. pension plans are \$3.2 million and there are no planned discretionary or non-cash contributions. Expected Company paid claims for the postretirement medical and

other plans are \$1.3 million for 2023. Projected future benefit payments from the plans as of December 31, 2022 are estimated as follows:

	U.S. Po		Non-U.S. Pension Plans	Me	retirement dical and Other
2023	\$	8.7	\$ 2.9	\$	1.3
2024		8.8	2.8		1.3
2025		8.8	3.3		1.2
2026		8.7	3.5		1.1
2027		8.7	4.0		1.0
Thereafter		41.8	21.0		3.9
Total	\$	85.5	\$ 37.5	\$	9.8

The fair value of plan assets for which the accumulated benefit obligation is in excess of the plan assets as of December 31, 2022 and 2021 is summarized as follows:

	 U.S. Pension Plan					Non U.S. Pension Plan			
	 2022		2021		2022		2021		
Projected benefit obligation	\$ 106.4	\$	141.2	\$	59.0	\$	93.5		
Accumulated benefit obligation	106.4		141.2		56.1		89.1		
Fair value of plan assets	82.3		114.6		29.7		50.2		

The measurement date for all plans is December 31, 2022.

23. Leases

The Company has operating leases for offices, warehouses, land for storage of cranes, vehicles, information technology equipment and manufacturing equipment. The remaining lease terms are up to 21 years, some of which include options to extend the lease term for up to 10 years, and some which include options to terminate the lease within one year. Certain leases include one or more options to renew; the exercise of lease renewal options is at the Company's discretion. The Company includes renewal option periods in the lease term when it is determined that the options are reasonably certain to be exercised. The Company's financing leases have an immaterial impact on the consolidated financial statements.

The components of lease expense for the years ended December 31, 2022, 2021 and 2020 are summarized as follows:

	 2022	2021	2020
Operating lease cost	\$ 14.0	\$ 13.2	\$ 13.2
Variable lease cost*	1.4	1.5	1.5
Total lease cost	\$ 15.4	\$ 14.7	\$ 14.7

^{*}Includes short-term leases, which are immaterial.

Supplemental Consolidated Balance Sheet information related to leases as of December 31, 2022 and 2021 are summarized as follows:

	2022		2021	
Operating lease right-of-use assets	\$	45.2	\$	40.6
Other liabilities	\$	11.6	\$	12.3
Operating lease liabilities		34.3		29.2
Total operating lease liabilities	\$	45.9	\$	41.5

Cash paid for operating leases included in operating cash flows was \$26.8 million, \$25.1 million and \$24.5 million for the years ended December 31, 2022, 2021 and 2020 respectively.

As of December 31, 2022, the Company's operating leases have a weighted-average remaining lease term of 6.3 years and a weighted average discount rate of 4.9%. As of December 31, 2021, the Company's leases had a weighted-average remaining lease term of 6.3 years and a weighted average discount rate of 3.8%. Topic 842 requires a lessee to discount its unpaid lease obligations using the interest rate implicit in the lease, or if not readily determinable, the incremental borrowing rate at the time of lease commencement. Generally, the Company uses its incremental borrowing rate as the implicit rate cannot be determined.

The Company's incremental borrowing rate for a lease is the rate of interest the Company would have to pay on a collateralized basis to borrow an amount equal to the lease payments under similar terms in a similar region.

Maturities of operating lease liabilities as of December 31, 2022 are summarized as follows:

Year	
2023	\$ 13.5
2024	12.5
2025	9.3
2026	7.7
2027	5.9
Thereafter	15.7
Total lease payments	64.6
Less: imputed interest	(18.7)
Present value of lease liabilities	\$ 45.9

Lessor Accounting

The Company rents cranes to its customers and actively manages the size, quality, age and composition of the rental fleet to meet customer demands and trends. The rental fleet is serviced through the Company's on-site parts and service team. The rental activities create cross-selling opportunities in crane sales including rent-to-own purchase options whereby customers are given a period of time to exercise an option to purchase the related equipment at an established price with any rental payments paid applied to reduce the purchase price.

All of the Company's leasing arrangements are classified as operating leases. Rental revenue is recognized on a straight-line basis over the rental period.

In most cases, the Company's rental arrangements include non-lease components, including delivery and pick-up services. The Company accounts for these non-lease components separate from the rental arrangement and recognizes the revenue associated with these components when the service is performed. The Company has elected to exclude from rental revenue all taxes collected from customers related to rental activities. The Company manages the residual value risk of its rented assets by (i) monitoring the quality, aging and anticipated retail market value of the rental fleet assets to determine the optimal period to remove an asset from the rental fleet, (ii) maintaining the quality of assets through on-site parts and service support and (iii) requiring physical damage insurance of customers. The Company primarily disposes of the rental assets through its rent to own program or sale of the asset.

Refer to Note 9, "Property, Plant and Equipment," for the balance of rental cranes included in property, plant and equipment in the Consolidated Balance Sheets.

24. Subsequent Event

On November 30, 2022, the Company entered into an agreement to sell the shares of Manitowoc Brasil Guindastes Ltda, a wholly-owned subsidiary of the Company in Brazil, for \$1.9 million, which was completed on January 12, 2023. As discussed in Note 9, "Property, Plant and Equipment," the Company transferred \$4.1 million of assets to current assets held for sale, recorded in other current assets, and \$2.2 million of liabilities to current liabilities held for sale, recorded in other liabilities, in the Consolidated Balance Sheets as of December 31, 2022. During the year ended December 31, 2021, the Company recorded a \$1.9 million impairment charge to write down the net assets of Manitowoc Brasil Guindastes Ltda to its expected sale price. No gain or loss was recorded in the Consolidated Statements of Operations for the year ended December 31, 2022 related to this transaction.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

Item 9A. CONTROLS AND PROCEDURES

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

The Company's management, with the participation of the Company's Chief Executive Officer and Chief Financial Officer, have evaluated the effectiveness of the Company's disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of the end of the period covered by this report. Based on such evaluation, the Company's Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of such period, the Company's disclosure controls and procedures are effective in recording, processing, summarizing, and reporting, on a timely basis, information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act, and that such information is accumulated and communicated to the Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely discussions regarding required disclosure.

Management's Report on Internal Control Over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). The Company's management, with the participation of the Company's Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the Company's internal control over financial reporting based on the framework in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, the Company's management has concluded that, as of December 31, 2022, the Company's internal control over financial reporting was effective.

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 the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2022, has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears herein.

Changes in Internal Control Over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). During the fourth quarter ended December 31, 2022 covered by this report, the Company made no changes to internal control over financial reporting that materially affected, or are reasonably likely to materially affect, its 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 is incorporated by reference from the sections in the Company's definitive Proxy Statement for its 2023 Annual Meeting of Shareholders (the "2023 Proxy Statement") captioned "Corporate Governance – Governance of the Company," "Corporate Governance – Audit Committee," "Election of Directors" and "Miscellaneous – Delinquent Section16(a) Reports." See also "Information About Our Executive Officers" in Part I hereof, which is incorporated herein by reference.

The Company has a Global Ethics Policy and other policies relating to business conduct, that pertain to all employees, which can be viewed at the Company's website (www.manitowoc.com). The Company has adopted a code of ethics that applies to the Company's principal executive officer, principal financial officer, and controller, which is part of the Company's Global Ethics Policy and other policies related to business conduct. Any amendments to the Global Ethics Policy, or information about any waivers granted to directors or executive officers with respect to the Global Ethics Policy, will be posted on the Company's website (www.manitowoc.com).

Item 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated by reference from the sections of the 2023 Proxy Statement captioned "Non-Employee Director Compensation," "Compensation Discussion and Analysis," "Corporate Governance – Transactions with Related Persons," "Summary Compensation Tables," "Potential Payments upon Termination or Change in Control," "CEO Pay Ratio" and "Pay vs. Performance."

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The information required by this item with respect to security ownership of certain beneficial owners and management is incorporated by reference from the section of the 2023 Proxy Statement captioned "Ownership of Securities."

The following table sets forth information with respect to compensation plans under which equity securities of the Company are authorized for issuance as of December 31, 2022.

	A	В	С
Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants, and rights	Weighted-average exercise price of outstanding options, warrants, and rights	
Equity compensation plans not approved by security holders ⁽¹⁾	0 (5)	\$0 (2)	0 (2)
Equity compensation plans approved by security	1,641,630 (3(a))(4)	\$21.35 (3(a))(4)	
holders ⁽²⁾⁽³⁾	18,279 (3(b))(4)	\$14.81 (3(c))(4)	
Total	1,659,909		3,965,516

- (1) Reflects the Company's Deferred Compensation Plan, which is discussed within the 2023 Proxy Statement under Compensation Discussion and Analysis and Compensation Committee Report under the subsection captioned "Retirement Benefits and Deferred Compensation" and under Non-Employee Director Compensation.
- (2) Column (A) does not include 65,100 common stock units issued under the Deferred Compensation Plan as of December 31, 2022. Each common stock unit under the Deferred Compensation Plan represents the right to receive one share of Company common stock following the participant's death, disability, termination of service as a director or employee, a date specified by the participant, or the earlier of any such events to occur. Since the common stock units are acquired by participants through a deferral of fees or compensation, there is no "exercise price" associated with the common stock units. Thus, the weighted-average exercise price in column (B) is calculated solely on the basis of outstanding options issued under the 2003 Incentive Stock and Awards Plan (the "2003 Stock Plan") and the 2013 Omnibus Incentive Plan and does not take into account the common stock units issued under the Deferred Compensation Plan. The operation of the Deferred Compensation Plan requires the plan

trustees to make available, as and when needed, a sufficient number of shares of Company common stock to meet the needs of the plan. Accordingly, since there is no specific number of shares reserved for issuance under the Deferred Compensation Plan, column (C) includes only those shares remaining available for issuance under the 2003 Stock Plan and the 2013 Omnibus Incentive Plan.

- (3) Consists of the Company's: (a) 2013 Omnibus Incentive Plan and (b) 2003 Stock Plan. No new awards may be issued under the 2003 Stock Plan; however, the plan continues to govern awards outstanding as of the date it was terminated, and the outstanding awards under this plan continue in force and effect until vested, exercised or forfeited pursuant to the terms.
- (4) Includes stock options, performance share units issued at target and restricted stock units. The weighted-average price does not factor in performance share units or restricted stock units.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item is incorporated by reference from the section of the 2023 Proxy Statement captioned "Corporate Governance – Governance of the Company" and "Corporate Governance – Transactions with Related Persons."

Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this item is incorporated by reference from the section of the 2023 Proxy Statement captioned "Audit Committee Report."

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) Documents filed as part of this Report.

(1) Financial Statements:

The following Consolidated Financial Statements are filed as part of this report under Item 8, "Financial Statements and Supplementary Data."

Report of Independent Registered Public Accounting Firm

Consolidated Statements of Operations

Consolidated Statements of Comprehensive Income (Loss)

Consolidated Balance Sheets

Consolidated Statements of Cash Flows

Consolidated Statements of Equity

Notes to Consolidated Financial Statements

(2) Financial Statement Schedule:

Schedule II – Valuation and Qualifying Accounts

Schedule		Description	Filed Herewith
	II	Valuation and Qualifying Accounts	X

All other financial statement schedules not listed have been omitted since the required information is included in the Consolidated Financial Statements or the Notes thereto, or is not applicable or required under rules of Regulation S-X.

(b) Exhibits:

The exhibits listed in the Exhibit Index below are filed or furnished as part of this Annual Report on Form 10-K.

EXHIBIT INDEX

Exhibit No.	Description	Filed/Furnished Herewith
2	Master Separation and Distribution Agreement, dated March 4, 2016, between The Manitowoc Company, Inc. and Manitowoc Foodservice, Inc. (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K, dated March 3, 2016.	
3.1	Amended and Restated Articles of Incorporation, as amended through May 10, 2019 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K dated May 7, 2019).	
3.2	Restated By-laws, as amended through April 3, 2020 (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K dated April 6, 2020).	
4.1	Indenture, dated March 25, 2019, between The Manitowoc Company, Inc., the subsidiary guarantors party thereto and U.S. Bank National Association, as trustee and as collateral agent (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K, dated March 28, 2019).	
4.2	Form of 9.000% Senior Secured Second Lien Note due 2026 (included as Exhibit 1 to Annex I of Exhibit 4.1).	
4.3	Description of The Manitowoc Company, Inc.'s Securities (filed as Exhibit 4.3 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2019 and incorporated herein by reference).	
10.1	Amendment No. 2 to Credit Agreement, dated as of May 19, 2022, among The Manitowoc Company, Inc., the guarantors party thereto, the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent and collateral agent (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed May 20, 2022).	
10.2**	The Manitowoc Company, Inc. Deferred Compensation Plan, as amended and restated through December 31, 2008 (filed as exhibit 10.1 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2008 and incorporated herein by reference).	
10.3**	Form of Employment Agreement for Executive Officers (filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 12, 2021 and incorporated herein by reference).	
10.4**	Form of Indemnity Agreement between the Company and each of the directors, executive officers and certain other employees of the Company (filed as Exhibit 10.4 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2017 and incorporated herein by reference).	
10.5**	Supplemental Retirement Plan, as amended and restated through December 31, 2008 (filed as Exhibit 10.6(c) to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2008 and incorporated herein by reference).	
10.6**	The Manitowoc Company, Inc. Non-Qualified Stock Option Agreement with Vesting Provisions, applicable to the Company's 2003 Incentive Stock and Awards Plan (filed as Exhibit 10.2 to the Company's Current Report on Form 8-K dated as of February 25, 2005 and incorporated herein by reference).	
10.7**	The Manitowoc Company, Inc. 2013 Omnibus Incentive Plan, as amended and restated (filed as Exhibit 10.11 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2019 and incorporated herein by reference).	

- 10.8(a)** Current Form of Performance Share Award Agreement under The Manitowoc Company, Inc. 2013 Omnibus Incentive Plan (filed as Exhibit 10.11(a) to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2019 and incorporated herein by reference).
- 10.8(b)** Form of Restricted Stock Award Agreement for Directors under The Manitowoc Company, Inc. 2013 Omnibus Incentive Plan (filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on August 2, 2013 and incorporated herein by reference).
- 10.8(c)**

 Form of Restricted Stock Award Agreement for Employees under The Manitowoc Company, Inc. 2013 Omnibus Incentive Plan (filed as Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q filed on August 2, 2013 and incorporated herein by reference).
- 10.8(d)**

 Current Form of Restricted Stock Unit Award Agreement for Directors under The Manitowoc Company, Inc. 2013 Omnibus Incentive Plan (filed as Exhibit 10.11(d) to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2019 and incorporated herein by reference).
- 10.8(e)** Current Form of Restricted Stock Unit Award Agreement for Employees under The Manitowoc Company, Inc. 2013 Omnibus Incentive Plan (filed as Exhibit 10.11(e) to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2019 and incorporated herein by reference).
- 10.8(f)**

 Current Form of Non-Qualified Stock Option Award Agreement under The Manitowoc Company, Inc. 2013 Omnibus Incentive Plan (filed as Exhibit 10.11(f) to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2019 and incorporated herein by reference).
- 10.8(g)**
 Form of Incentive Award Agreement under The Manitowoc Company, Inc. 2013
 Omnibus Incentive Plan (filed as Exhibit 10.7 to the Company's Quarterly Report on
 Form 10-Q filed on August 2, 2013 and incorporated herein by reference).
- 10.8(h)**

 Prior Form of Performance Share Award Agreement under The Manitowoc Company, Inc. 2013 Omnibus Incentive Plan (filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on August 2, 2013 and incorporated herein by reference).
- 10.8(i)** Prior Form of Restricted Stock Unit Award Agreement for Directors under The Manitowoc Company, Inc. 2013 Omnibus Incentive Plan (filed as Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q filed on August 2, 2013 and incorporated herein by reference).
- 10.8(j)** Prior Form of Restricted Stock Unit Award Agreement for Employees under The Manitowoc Company, Inc. 2013 Omnibus Incentive Plan (filed as Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q filed on August 2, 2013 and incorporated herein by reference).
- 10.8(k)**

 Prior Form of Non-Qualified Stock Option Award Agreement under The Manitowoc Company, Inc. 2013 Omnibus Incentive Plan (filed as Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q filed on August 2, 2013 and incorporated herein by reference).
- 10.9** The Manitowoc Company, Inc. Severance Pay Plan adopted by the Board of Directors as of May 4, 2009 (filed as Exhibit 10.13 to the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2009, and incorporated herein by reference.)
- 10.10** Offer Letter, accepted as of April 27, 2016, by and between David J. Antoniuk and The Manitowoc Company, Inc. (filed as Exhibit 10.1 to the Company's Current Report on Form 8-K dated April 27, 2016 and incorporated herein by reference).

10.11	Tax Matters Agreement, dated March 4, 2016, between The Manitowoc Company, Inc. and Manitowoc Foodservice, Inc. (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K, dated March 3, 2016).	
10.12(a)	Employee Matters Agreement, dated March 4, 2016, between The Manitowoc Company, Inc. and Manitowoc Foodservice, Inc. (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K, dated March 3, 2016).	
10.12(b)	Amendment, dated March 28, 2016, to the Employee Matters Agreement, effective as of March 4, 2016, by and between The Manitowoc Company, Inc. and Manitowoc Foodservice, Inc. (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, dated March 28, 2016).	
10.13	Intellectual Property Matters Agreement, dated March 4, 2016, between The Manitowoc Company, Inc. and Manitowoc Foodservice, Inc. (incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K, dated March 3, 2016).	
10.14**	Addendum to the Manitowoc Company, Inc. Omnibus Incentive Plan and Restricted Stock Unit Award Agreement for Restricted Stock Units and Performance Shares Awards made to Participants in France (incorporated by reference to Exhibit 10.21 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2020).	
21	Subsidiaries of The Manitowoc Company, Inc.	X(1)
23	Consent of PricewaterhouseCoopers LLP, the Company's Independent Registered Public Accounting Firm.	X(1)
31	Rule 13a - 14(a)/15d - 14(a) Certifications	X(1)
32.1	Certification of CEO pursuant to 18 U.S.C. Section 1350	X(2)
32.2	Certification of CFO pursuant to 18 U.S.C. Section 1350	X(2)
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because XBRL tags are embedded within the Inline XBRL document.	X(1)
101.SCH	Inline XBRL Taxonomy Extension Schema Document	X(1)
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document	X(1)
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	X(1)
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	X(1)
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	X(1)
104 Filed Herewi	Cover Page Interactive Data File (embedded within the Inline XBRL document)	X(1)

- (1) (2) **
- Furnished Herewith
 Management contracts and executive compensation plans and arrangements.

(c) Financial Statement Schedule

THE MANITOWOC COMPANY, INC AND SUBSIDIARIES

Schedule II: Valuation and Qualifying Accounts For the Years Ended December 31, 2022, 2021 and 2020 (dollars in millions)

	Be	lance at ginning f Year	C	harge to osts and xpenses	-	tilization Reserve	P Ii I	Other, rimarily mpact of Foreign xchange Rates	Balance at end of Year
Year End December 31, 2020									
Allowance for doubtful accounts	\$	7.9	\$	3.6	\$	(2.7)	\$	(0.3)	\$ 8.5
Deferred tax valuation allowance	\$	157.1	\$	23.3	\$	(1.1)	\$	(7.9)	\$ 171.4
Year End December 31, 2021									
Allowance for doubtful accounts	\$	8.5	\$	_	\$	(1.3)	\$	0.1	\$ 7.3
Deferred tax valuation allowance	\$	171.4	\$	9.1	\$	(4.9)	\$	(5.1)	\$ 170.5
Year End December 31, 2022						` '		` ,	
Allowance for doubtful accounts	\$	7.3	\$	0.1	\$	(1.8)	\$	(0.3)	\$ 5.3
Deferred tax valuation allowance	\$	170.5	\$	10.6	\$	(4.9)	\$	(2.1)	\$ 174.1

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:

Date: February 24, 2023

The Manitowoc Company, Inc.

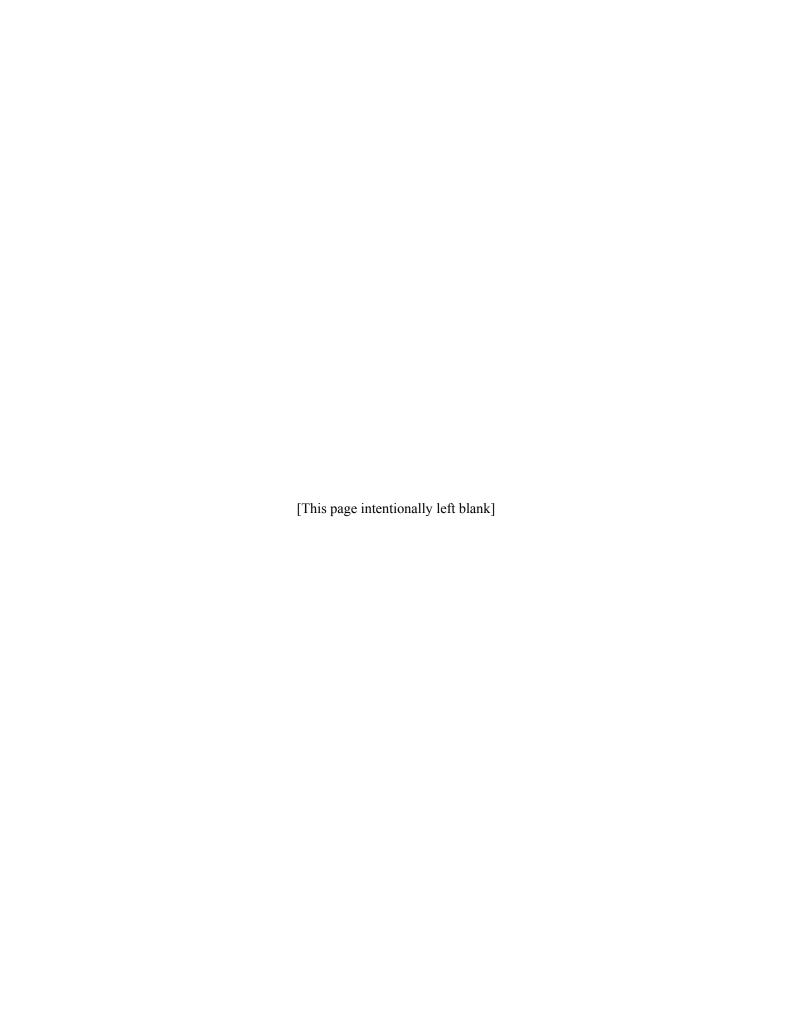
(Registrant)

/s/ Brian P. Regan Brian P. Regan

Executive Vice President and Chief Financial Officer

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

Aaron H. Ravenscroft, President and Chief Executive Officer (Principal Executive Officer and Director) /s/ Brian P. Regan Brian P. Regan, Executive Vice President and Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer) /s/ Anne E. Bélec Anne E. Bélec, Director /s/ Robert G. Bohn Robert G. Bohn, Director Anne M. Cooney Anne M. Cooney Anne M. Cooney, Director /s/ Amy R. Davis Amy R. Davis, Director Kenneth W. Krueger Kenneth W. Krueger, Chairman of the Board /s/ Robert W. Malone
/s/ Brian P. Regan Brian P. Regan, Executive Vice President and Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer) /s/ Anne E. Bélec Anne E. Bélec, Director February 24, 2023 /s/ Robert G. Bohn Robert G. Bohn, Director February 24, 2023 /s/ Anne M. Cooney Anne M. Cooney Anne M. Cooney, Director February 24, 2023 /s/ Amy R. Davis Amy R. Davis, Director February 24, 2023 /s/ Kenneth W. Krueger Kenneth W. Krueger, Chairman of the Board /s/ Robert W. Malone
Brian P. Regan, Executive Vice President and Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer) /s/ Anne E. Bélec Anne E. Bélec, Director Anne E. Bélec, Director Robert G. Bohn Robert G. Bohn, Director February 24, 2023 /s/ Anne M. Cooney Anne M. Cooney Anne M. Cooney, Director February 24, 2023 /s/ Amy R. Davis Amy R. Davis, Director February 24, 2023 /s/ Kenneth W. Krueger Kenneth W. Krueger, Chairman of the Board /s/ Robert W. Malone
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(Principal Financial Officer and Principal Accounting Officer) /s/ Anne E. Bélec Anne E. Bélec Anne E. Bélec, Director February 24, 2023 /s/ Robert G. Bohn Robert G. Bohn, Director February 24, 2023 /s/ Anne M. Cooney Anne M. Cooney Anne M. Cooney, Director February 24, 2023 /s/ Amy R. Davis Amy R. Davis Amy R. Davis, Director February 24, 2023 /s/ Kenneth W. Krueger Kenneth W. Krueger, Chairman of the Board February 24, 2023
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Amy R. Davis, Director /s/ Kenneth W. Krueger Kenneth W. Krueger, Chairman of the Board /s/ Robert W. Malone February 24, 2023
/s/ Kenneth W. Krueger Kenneth W. Krueger, Chairman of the Board /s/ Robert W. Malone February 24, 2023
Kenneth W. Krueger, Chairman of the Board /s/ Robert W. Malone February 24, 2023
Kenneth W. Krueger, Chairman of the Board /s/ Robert W. Malone February 24, 2023
/s/ Robert W. Malone
/s/ Robert W. Malone
Robert W. Malone, Director February 24, 2023
/s/ C. David Myers
C. David Myers, Director February 24, 2023
/s/ John C. Pfeifer
John C. Pfeifer, Director February 24, 2023



Corporate Governance

Executive Management



Aaron H. RavenscroftPresident and
Chief Executive Officer



Brian P. Regan Executive Vice President and Chief Financial Officer



Leslie L. MiddletonExecutive Vice President,
Americas and EU Mobile Cranes



Jennifer L. PetersonExecutive Vice President,
General Counsel and Secretary



James S. Cook Senior Vice President, Human Resources

Board of Directors

Kenneth W. Krueger

Chairman of the Board Retired Chief Operating Officer Bucyrus International, Inc.

Aaron H. Ravenscroft

President and Chief Executive Officer The Manitowoc Company, Inc.

Anne E. Bélec

Co-founder and Chief Executive Officer Mosaic Group, LLC

Robert G. Bohn

Retired Chairman and Chief Executive Officer Oshkosh Corporation

Anne M. Cooney

Retired President, Process Industries and Drives Division Siemens Industry, Inc. Amy R. Davis

Vice President & President -New Power Business Cummins, Inc.

Robert W. Malone

Vice President & President -Filtration Group Parker-Hannifin Corp.

C. David Myers

Retired President, Building Efficiency Group Johnson Controls, Inc.

John C. Pfeifer

President and Chief Executive Officer Oshkosh Corporation

Corporate Headquarters

One Park Plaza 11270 West Park Place, Suite 1000 Milwaukee, WI 53224

Independent Registered Public Accounting Firm

PricewaterhouseCoopers LLP 833 East Michigan Street, Suite 1200 Milwaukee, WI 53202

Stock Transfer Agent

Computershare Trust Company N.A. www.computershare.com/investor

First Class, Certified or Certified Mail

Computershare P.O. Box 43078 Providence, RI 02940-3078

Overnight or Other Delivery

Computershare 150 Royall St., Suite 101 Canton, MA 02021

Telephone

1.877.498.8861 Hearing impaired (in U.S.) 1.800.952.9245 Hearing impaired (outside U.S.) 1.781.575.4592

Annual Meeting

The annual meeting of Manitowoc shareholders will be held at 9:00 am CDT, Tuesday, May 2, 2023. The meeting will be held virtually, via live audio webcast only. You will not be able to attend the meeting physically. You or your proxyholder may participate, vote, and examine our shareholder list at the 2023 Annual Meeting by visiting www.virtualshareholdermeeting.com/MTW2023 and using your control number found on your proxy card.

2022 Annual Report



Corporate Headquarters

One Park Plaza 11270 West Park Place, Suite 1000 Milwaukee, WI 53224 www.manitowoc.com

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