

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 10-K**

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

For the fiscal year ended December 31, 2021

OR

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

For the transition period from _____ to _____

Commission file number: 1-36313



TIMKENSTEEL CORPORATION

(Exact name of registrant as specified in its charter)

Ohio

46-4024951

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification No.)

1835 Dueber Avenue SW, Canton, OH
(Address of principal executive offices)

44706
(Zip Code)

330.471.7000

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Securities Exchange Act of 1934:

Title of each class	Trading symbol	Name of exchange in which registered
Common shares	TMST	New York Stock Exchange

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

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

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

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

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

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

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

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

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

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

As of June 30, 2021, the aggregate market value of the registrant's common stock held by non-affiliates was \$641,412,312 based on the closing sale price as reported on the New York Stock Exchange for that date.

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class	Outstanding at February 15, 2022
Common Shares, without par value	46,317,834

DOCUMENTS INCORPORATED BY REFERENCE

Document	Parts Into Which Incorporated
Proxy Statement for the 2022 Annual Meeting of Shareholders	Part III

TimkenSteel Corporation

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Part I.

Item 1. Business

Overview

TimkenSteel Corporation ("we", "us", "our", the "Company" or "TimkenSteel") was incorporated in Ohio on October 24, 2013, and became an independent, publicly traded company as the result of a spinoff from The Timken Company ("Timken") on June 30, 2014. In the spinoff, Timken transferred to us all of the assets and generally all of the liabilities related to Timken's steel business.

We manufacture alloy steel, as well as carbon and micro-alloy steel. Our portfolio includes special bar quality ("SBQ") bars, seamless mechanical tubing ("tubes"), manufactured components (formerly known as the "value-add" product type) such as precision steel components, and billets. In addition, we supply machining and thermal treatment services, and we manage raw material recycling programs, which are also used as a feeder system for our melt operations. Our products and services are used in a diverse range of demanding applications in the following market sectors: automotive; oil and gas; industrial equipment; mining; construction; rail; defense; heavy truck; agriculture; power generation; and oil country tubular goods ("OCTG").

SBQ steel is made to restrictive chemical compositions and high internal purity levels and is used in critical mechanical applications. We make these products from nearly 100% recycled steel, using our expertise in raw materials to create custom steel products. We focus on creating tailored products and services for our customers' most demanding applications. Our engineers are experts in both materials and applications, so we can work closely with each customer to deliver flexible solutions related to our products as well as to their applications and supply chains.

The SBQ bar, tube, and billet production processes take place at our Canton, Ohio manufacturing location. This location accounts for all of the SBQ bars, seamless mechanical tubes and billets we produce and includes three manufacturing facilities: the Faircrest, Harrison and Gambrinus facilities. Our production of manufactured components takes place at two downstream manufacturing facilities: Tryon Peak (Columbus, North Carolina) and St. Clair (Eaton, Ohio). Many of the production processes are integrated, and the manufacturing facilities produce products that are sold in all of our market sectors. As a result, investments in our facilities and resource allocation decisions affecting our operations are designed to benefit the overall business, not any specific aspect of the business.

On February 16, 2021, management announced a plan to indefinitely idle our Harrison melt and casting assets, which was completed in the first quarter of 2021. All of our melt and casting activities now take place at the Faircrest location. We worked collaboratively with employees, suppliers and a number of customers to ensure a well-organized and efficient transition. Our rolling and finishing operations at Harrison were not impacted by this action. For additional details regarding this matter please refer to "Note 6 – Disposition of Non-Core Assets."

Prior to indefinitely idling these assets, we had an annual melt capacity of approximately 2 million tons and shipment capacity of 1.5 million tons. After indefinitely idling these assets, our annual melt capacity is approximately 1.2 million tons and our shipment capacity is approximately 0.9 million tons.

Operating Segments

We conduct our business activities and report financial results as one business segment. The presentation of financial results as one reportable segment is consistent with the way we operate our business and is consistent with the manner in which the Chief Operating Decision Maker ("CODM") evaluates performance and makes resource and operating decisions for the business as described above. Furthermore, the Company notes that monitoring financial results as one reportable segment helps the CODM manage costs on a consolidated basis, consistent with the integrated nature of our operations.

Industry Segments and Geographical Financial Information

Information required by this Item is incorporated herein by reference to "Note 3 - Segment Information" in the Notes to the Consolidated Financial Statements.

Strengths and Strategy

Our customers depend on us to be the leader in solving their industries' constantly evolving challenges. Our team, including engineers and experienced manufacturing professionals in both materials and applications, works closely with customers to deliver flexible solutions related to our products as well as our customers' applications and supply chains.

The TimkenSteel business model delivers these tailored solutions based on the following foundation:

- Experienced management and technical team.
- Close and trusted working relationship with customers across diverse market sectors.
- Leadership position in niche markets with differentiated products.
- Track record of innovation rooted in a deep technical knowledge of steel materials, manufacturing processes and a focus on end-user applications.

Major Customers

We sell products and services that are used in a range of demanding applications around the world. We have over 350 diverse customers in the following market sectors: automotive; oil and gas; industrial equipment; mining; construction; rail; defense; heavy truck; agriculture; power generation; and OCTG.

Products

We believe we produce some of the cleanest, highest performing alloy air-melted steels in the world for our customers' most demanding applications. We leverage our technical knowledge, development expertise and production and engineering capabilities across all of our products and market sectors to deliver high-performance products to our customers.

SBQ Steel Bar, Seamless Mechanical Steel Tubes, and Billets. Our focus is on alloy steel, although in total we manufacture more than 400 grades of high-performance carbon, micro-alloy and alloy steel, sold as ingots, bars, tubes and billets. These products are custom-made in a variety of chemistries, lengths and finishes. Our metallurgical expertise and what we believe to be unique operational capabilities drive high-value solutions for industrial, energy and mobile customers. Our specialty steels are featured in a wide variety of end products including: gears; hubs; axles; crankshafts and connecting rods; oil country drill pipe; bits and collars; bearing races and rolling elements; bushings; fuel injectors; wind energy shafts; anti-friction bearings; and other demanding applications where mechanical power transmission is critical to the end customer.

Manufactured Components. In addition to our customized steels, we also custom-make precision components that provide us with the opportunity to further expand our market for bar and tube products and capture additional sales. These products provide customers, especially those in the mobile end-market sector, with ready-to-finish components that simplify vendor management, streamline supply chains and often cost less than other alternatives. We also customize products and services for the industrial and energy end-market sectors.

Sales and Distribution

Our sales force is made up largely of engineers that are backed by a team of metallurgists and other technical experts. While most of our products are sold directly to original equipment ("OE") manufacturers, a portion of our sales are made through authorized distributors and steel service centers, representing approximately 22% of net sales during 2021. The majority of our customers are served through individually negotiated price agreements.

Competition

The steel industry, both domestically and globally, is highly competitive and is expected to remain so. Maintaining high standards of product quality and reliability, while keeping production costs competitive, is essential to our ability to compete with domestic and foreign manufacturers of alloy steel and mechanical components. For bar products less than 6-inch in diameter, principal competitors include foreign-owned domestic producers Gerdau Special Steel North America (a unit of Brazilian steelmaker Gerdau, S.A) and Republic Steel (a unit of Mexican steel producer ICH). For bar products up to 9-inch in diameter, domestic producers Steel Dynamics, Inc. and Nucor Corporation (in some cases up to 10-inch) are our principal competitors. For very large bars from 10 to 16 inches in diameter, offshore producers as well as specialty forging companies in North America such as Scot Forge are the primary competitors. For seamless mechanical tubing, offshore producers such as Tenaris, S.A., Vallourec, S.A. and TMK Group are our primary competitors as well as the foreign-owned domestic producer ArcelorMittal Tubular Products (a unit of Luxembourg-based ArcelorMittal, S.A.). We also provide unique manufactured steel products and supply chain solutions to our customers in the mobile, industrial and energy end-market sectors. Manufactured component competitors include both integrated and non-integrated component producers.

Lead Time

The lead time for our products varies based on product type and specifications. As of the date of this filing, lead times for SBQ bars and tubes extend into the third quarter of 2022.

Raw Materials

The principal raw materials that we use to manufacture steel are recycled scrap metal, chrome, nickel, molybdenum oxide, vanadium and other alloy materials. Raw materials comprise a significant portion of the steelmaking cost structure and are subject to price and availability changes due to global demand fluctuations and local supply limitations. Proper selection and management of raw materials can have a significant impact on procurement cost, flexibility to supply changes, steelmaking energy costs and mill productivity. In addition to accessing scrap and alloys through the open market, we have established a scrap return supply chain with many of our customers. This part of our business leverages our knowledge of the raw material supply industry and an extensive network of relationships that result in steady, reliable supply from our raw material sources.

Research and Development

Our engineers analyze customer application challenges and develop solutions to address the customers' needs. With a century of experience in materials science and steelmaking, we leverage our technical know-how to improve the performance of our customers' products and supply chains.

This expertise extends to advanced process technology in which material conversion, finishing, gaging and assembly enables high quality production of our products. With resources dedicated to studying, developing and implementing new manufacturing processes and technologies, we are able to support our customers' requirements.

Our research and development expense for the years ended December 31, 2021, 2020 and 2019 were \$1.7 million, \$1.8 million and \$4.1 million, respectively.

Environmental Matters and Governmental Regulations

We consider compliance with environmental regulations and environmental sustainability a key strategic focus area and integral to our responsibility as a good corporate citizen. All our domestic steel making and processing operations, and our water treatment plant, have obtained and maintain ISO 14001 certification.

We believe we have established appropriate reserves to cover our environmental expenses. We have a well-established environmental compliance audit program that measures performance against applicable laws as well as against internal standards that have been established for all facilities. It is difficult to assess the possible effect of compliance with future requirements that differ from existing ones both domestically and internationally.

We have been identified as potentially responsible parties under the Clean Air Act ("CAA"), Clean Water Act ("CWA"), Toxic Substances Control Act ("TSCA"), the Resource Conservation and Recovery Act ("RCRA"), as well as other laws.

We continue to monitor regulations relevant to our Company to ensure we remain compliant. This includes, but is not limited to, regulations such as the CAA, CWA, TSCA, and the RCRA.

Additionally, we continue to monitor any future carbon regulation. On February 19, 2021, the U.S. rejoined the Paris Agreement, which includes pledging to reduce U.S. greenhouse gas ("GHG") emissions. To date, the U.S. Congress has not legislated carbon constraints on businesses.

From time to time, we may be a party to lawsuits, claims or other proceedings related to environmental matters and/or receive notices of potential violations of environmental laws and regulations from the EPA and similar state or local authorities. We recorded reserves for such environmental matters of \$0.2 million as of both December 31, 2021 and 2020. Accruals related to such environmental matters represent management's best estimate of the fees and costs associated with these matters. Although it is not possible to predict with certainty the outcome of such matters, management believes the ultimate disposition of these matters should not have a material adverse effect on our consolidated financial position, results of operations or cash flows.

Legal Proceedings

Information required by this section is incorporated herein by reference to "Item 3. Legal Proceedings."

Patents, Trademarks and Licenses

While we own a number of U.S. and foreign patents, trademarks, licenses and copyrights, none are material to our products and production processes.

Governance and Environmental Stewardship

TimkenSteel is committed to promoting the long-term interests of shareholders and building public trust through good governance practices. We are committed to operating in accordance with the highest standards of ethics and integrity, and maintaining robust programs focused on compliance. We regularly review, and update when necessary, the charters for our Board committees, director selection criteria and procedures, board composition criteria, and various policies and procedures designed to ensure effective and responsive governance.

The TimkenSteel Code of Conduct sets forth policies covering a broad range of subjects, including antitrust and competition, corruption and bribery, conflicts of interest, inside information, accurate financial records, and requires strict adherence to laws and regulations applicable to the Company's business. In accordance with our Supplier Code of Conduct, we seek to work with suppliers that share our core values.

Our commitment to environmental stewardship encompasses how we continuously seek to improve the efficiency and cleanliness of our electric arc furnace ("EAF") operations while delivering quality projects and services that help our customers compete. We employ proactive environmental practices that focus on maintaining clean air, water and land, and comply with environmental rules and regulations. Innovation, collaboration and stakeholder engagement are embedded within our environmental programs.

In October 2021, TimkenSteel announced environmental goals for 2030. The Company has established the following 2030 environmental goals, compared with a 2018 baseline:

- 40% absolute reduction in combined Scope 1 and Scope 2 greenhouse gas emissions
- 30% absolute reduction in total energy consumption (direct and indirect)
- 35% absolute reduction in fresh water withdrawn
- 10% reduction in waste-to-landfill intensity

The Company's 2030 targets for greenhouse gas emissions, energy consumption and fresh water withdrawn are based on an absolute or total reduction in the amount of greenhouse gas emissions, energy consumption and fresh water withdrawn. In contrast, the Company's waste-to-landfill target is based on an intensity or percentage reduction of waste-to-landfill per ton of steel shipped. All 2030 targets are based on the Company's operating assets as of 2018 and do not account for any future inorganic growth or other expansion of its facilities or operating assets, for which an adjustment to the absolute reduction may be required. The Company selected 2018 as the baseline year as it aligns with the baseline used in the Company's Sustainability Accounting Standards Board (SASB) disclosure.

During 2021, we did not have significant spend on capital expenditures related to environmental, social, and governance ("ESG") projects. Beginning in 2022, we have allocated approximately \$3 million of capital expenditures per year through 2030 to achieve our long-term ESG goals.

Learn more about our governance and environmental stewardship on the Corporate Responsibility section of our website at www.timkensteel.com.

Human Capital

Employment

At December 31, 2021, we had approximately 1,850 employees, with approximately 63% of our employees covered under a collective bargaining agreement.

On October 29, 2021, the United Steelworkers ("USW") Local 1123 voted to ratify a new four-year contract (the "Contract"). The Contract, which is in effect until September 27, 2025, offers TimkenSteel's Canton-based bargaining employees an increase to base wages every year, competitive healthcare and retirement benefits for all members, and has a continued focus on employee wellbeing as well as safe and sustainable operations. The Contract covers approximately 1,170 bargaining employees at the Company's Canton, Ohio operations.

Health and safety

At TimkenSteel, operating safely and responsibly remains a critical priority. We have rigorous safety policies and practices, which are supported by education, training, evaluation and enforcement, in an effort to ensure that our workspaces provide a secure environment for our employees. To reinforce the importance of operating safely and responsibly, a safety modifier is included in our annual incentive compensation plan for salaried employees. The safety modifier is applied to the total calculated payout, resulting in a five percent increase or decrease against the payout calculation depending on whether the target safety metrics are achieved. For the year ended December 31, 2021, the target safety metrics were not achieved, resulting in the application of a five percent decrease against the total payout calculation.

Diversity and inclusion

Our commitment to diverse perspectives fuels our success and has enabled us to deliver innovative solutions throughout the life of our business. We recognize that a diverse workforce and inclusive, engaging culture is key to our continued business success. Within our organization, we maintain employee resource groups which further promote diversity and inclusion. TimkenSteel is also proudly involved in several organizations that promote and foster diversity and inclusion in our community and industry.

Compensation and total rewards

We provide competitive compensation programs to help meet the needs of our employees. Our programs are designed to support the profitable growth of our business; attract, reward, and retain the talent we need to succeed; support the health and overall well-being of our employees; and reinforce a performance-based culture.

In addition to base compensation, we offer quarterly and annual incentive compensation, stock awards, and participation in various retirement plans. Furthermore, our Company also provides employer-sponsored health and wellness benefits to our employees.

Employee retention

We seek to retain the best people by providing them with opportunities to grow, build skills and be appreciated for their contributions as they work to serve our customers. Our employees are critical to our success and are the reason we are able to execute at a high level. We believe a continuous focus on employee engagement will help us provide high quality products to our customers.

We diligently track our employee retention and management regularly evaluates our employees' retention risk. For several years, the Company has aimed to maintain a voluntary turnover rate of 8% or less. For 2021, primarily as the result of a competitive labor market, we ended the year with a voluntary turnover rate of approximately 9%.

Employee training and development

We invest significant resources to develop talent with the right capabilities to deliver the growth and innovation needed to support our business strategy. We have designed curated training programs for employees at all levels in our SAP SuccessFactors learning software. For new managers, we have developed a rigorous training program to provide them with the resources needed to cultivate their skillset and aid them in becoming effective leaders in our business. TimkenSteel encourages our employees to constantly learn and grow and has aligned our performance management system to support this focus on continuous learning and development.

COVID-19 pandemic

At the onset of the COVID-19 pandemic, TimkenSteel was considered an "essential business" and therefore, we have continued to be fully operational and serving our customers while strictly following all public health directives to ensure the safety of our employees.

Our cross-functional pandemic response team continues to oversee and coordinate the Company's overall response. The Company is committed to timely communications with our employees and their families as well as customers, suppliers and other key stakeholders of TimkenSteel.

We continue to take several necessary actions to keep our workforce safe. While onsite, employees follow strict safe workplace practices including guidelines established by federal, state and local authorities for the areas in which we operate. We continue to use enhanced cleaning procedures in all plants and offices using the best practices provided by the Centers for Disease Control and Prevention ("CDC"). It is strongly encouraged that employees be vigilant with their personal hygiene and workplace hygiene and we regularly communicate the requirement for wearing of masks and that no one should come to work sick. To help reinforce these safety measures, we work closely with the USW. The Company also utilizes its onsite medical clinic - operated by a local health system - to provide additional support to its employees during the crisis. Since the onset of the COVID-19 pandemic, TimkenSteel has performed hundreds of audits in its plants to ensure its employees remain diligent in these efforts.

Available Information

We use our Investor Relations website at <http://investors.timkensteel.com>, as a channel for routine distribution of important information, including news releases, analyst presentations and financial information. We post filings (including our annual, quarterly and current reports on Forms 10-K, 10-Q and 8-K, respectively; our proxy statements; and any amendments to those reports or statements) as soon as reasonably practicable after they are electronically filed with, or furnished to, the Securities and Exchange Commission ("SEC"). All such postings and filings are available on our website free of charge. In addition, our website allows investors and other interested persons to sign up to automatically receive e-mail alerts when we post news releases and financial information on our website. The SEC also maintains a website, www.sec.gov, which contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. The content on any website referred to in this Annual Report on Form 10-K is not incorporated by reference into this Annual Report unless expressly noted.

Item 1A. Risk Factors

The following are certain risk factors that could affect our business, financial condition and results of operations. The risks that are highlighted below are not the only ones we face. You should carefully consider each of the following risks and all of the other information contained in this Annual Report on Form 10-K. Some of these risks relate principally to our business and the industry in which we operate, while others relate principally to our debt, the securities markets in general, and ownership of our common shares. If any of the following risks actually occur, our business, financial condition or results of operations could be negatively affected.

Risks Relating to Our Industry and Our Business

Competition in the steel industry, together with potential global overcapacity, could result in significant pricing pressure for our products.

Competition within the steel industry, both domestically and worldwide, is intense and is expected to remain so. The steel industry has historically been characterized by periods of excess global capacity and supply. Excess global capacity and supply has negatively affected and could continue to negatively affect domestic steel prices, which could adversely impact our results of operations and financial condition. High levels of steel imports into the U.S. could exacerbate a decrease in domestic steel prices.

In an effort to protect the domestic steel industry, the United States government continues to implement tariffs, duties and quotas for certain steel products imported from a number of countries into the United States. As these tariffs, duties and quotas continue to change, or are repealed, it could result in substantial imports of foreign steel and create pressure on United States steel prices and the overall industry. This could have a material adverse effect on our operations.

Weakness in global economic conditions or in any of the industries or geographic regions in which we or our customers operate, as well as the cyclical nature of our customers' businesses generally or sustained uncertainty in financial markets, could adversely impact our revenues and profitability by reducing demand and margins.

Our results of operations may be materially affected by conditions in the global economy generally and in global capital markets. There has been volatility in the capital markets and in the market sectors and geographic regions in which we or our customers operate, which has negatively affected our revenues. Many of the markets in which our customers participate are also cyclical in nature and experience significant fluctuations in demand for our steel products based on economic conditions, consumer demand, raw material and energy costs, and government actions, and many of these factors are beyond our control.

A decline in consumer and business confidence and spending, together with severe reductions in the availability and increased cost of credit, as well as volatility in the capital and credit markets, could adversely affect the business and economic environment in which we operate and the profitability of our business. We also are exposed to risks associated with the creditworthiness of our suppliers and customers. If the availability of credit to fund or support the continuation and expansion of our customers' business operations is curtailed or if the cost of that credit is increased, the resulting inability of our customers or of their customers to either access credit or absorb the increased cost of that credit could adversely affect our business by reducing our sales or by increasing our exposure to losses from uncollectible customer accounts. These conditions and a disruption of the credit markets could also result in financial instability of some of our suppliers and customers. The consequences of such adverse effects could include the interruption of production at the facilities of our customers, the reduction, delay or cancellation of customer orders, delays or interruptions of the supply of raw materials or other inputs we purchase, and bankruptcy of customers, suppliers or other creditors. Any of these events could adversely affect our profitability, cash flow and financial condition.

We are dependent on our key customers.

As a result of our dependence on our key customers, we could experience a material adverse effect on our business, financial condition and results of operations if any of the following, among other things, were to occur: (a) a loss of any key customer, or a material amount of business from such key customer; (b) the insolvency or bankruptcy of any key customer; (c) a declining market in which customers reduce orders; or (d) a strike or work stoppage at a key customer facility, which could affect both its suppliers and customers. For the year ended December 31, 2021, sales to our 10 largest customers accounted for approximately 44% of our net sales. Additionally, customers continue to demand stronger and lighter products, among other adaptations to traditional products. We may not be successful in meeting these technological challenges and there may be increased liability exposure connected with the supply of additional products and services.

Any change in the operation of our raw material surcharge mechanisms, a raw material market index or the availability or cost of raw materials could materially affect our revenues, earnings, and cash flows.

We require substantial amounts of raw materials, including scrap metal and alloys, to operate our business. The majority of our customer agreements contain surcharge pricing provisions that are designed to enable us to recover raw material cost increases. The surcharges are generally tied to a market index for that specific raw material. Historically, many raw material market indices have reflected significant fluctuations. Any change in a raw material market index could materially affect our revenues. Any change in the relationship between the

market indices and our underlying costs could materially affect our revenues, earnings, and cash flow. Additionally, fluctuation in the cost of certain alloys not covered by a raw material surcharge could materially affect our revenues, earnings, and cash flow.

We rely on third parties to supply certain raw materials that are critical to the manufacture of our products. Purchase prices and availability of these critical raw materials are subject to volatility. At any given time we may be unable to obtain an adequate supply of these critical raw materials on a timely basis, on acceptable price and other terms, or at all. If suppliers increase the price of critical raw materials, we may not have alternative sources of supply. In addition, to the extent we have quoted prices to customers and accepted customer orders or entered into agreements for products prior to purchasing necessary raw materials, we may be unable to raise the price of products to cover all or part of the increased cost of the raw materials.

Unexpected equipment failures or other disruptions of our operations may increase our costs and reduce our sales and earnings due to production curtailments or shutdowns.

Interruptions in production capabilities would likely increase our production costs and reduce sales and earnings for the affected period. In addition to equipment failures, our facilities and information technology systems are also subject to the risk of catastrophic loss due to unanticipated events such as fires, explosions or violent weather conditions. Our manufacturing processes are dependent upon critical pieces of equipment for which there may be only limited or no production alternatives, such as furnaces, continuous casters and rolling equipment, as well as electrical equipment, such as transformers, and this equipment may, on occasion, be out of service as a result of unanticipated failures. In the future, we may experience material plant shutdowns or periods of reduced production as a result of these types of equipment failures, which could cause us to lose or prevent us from taking advantage of various business opportunities or prevent us from responding to competitive pressures.

Our operating results depend in part on continued successful research, development and marketing of products and services.

The success of products and services depends on their initial and continued acceptance by our customers. Our business is affected, to varying degrees, by technological change and corresponding shifts in customer demand, which could result in unpredictable product transitions or shortened life cycles. We may experience difficulties or delays in the research, development, production, or marketing of products and services that may prevent us from recouping or realizing a return on the investments required to bring products and services to market.

New technologies in the steel industry may: (a) improve cost competitiveness; (b) increase production capabilities; or (c) improve operational efficiency compared to our current production methods. However, we may not have sufficient capital to invest in such technologies or to make certain capital improvements, and may, from time to time, incur cost over-runs and difficulties adapting and fully integrating these technologies or capital improvements into our existing operations. We may also encounter control or production restrictions, or not realize the cost benefit from such capital-intensive technology adaptations or capital improvements to our current production processes.

Product liability, warranty and product quality claims could adversely affect our operating results.

We produce high-performance carbon and alloy steel, sold as ingots, bars, tubes and billets in a variety of chemistries, lengths and finishes designed for our customers' demanding applications. Failure of the materials that are included in our customers' applications could give rise to product liability or warranty claims. There can be no assurance that our insurance coverage will be adequate or continue to be available on terms acceptable to us. If we fail to meet a customer's specifications for its products, we may be subject to product quality costs and claims. A successful warranty or product liability claim against us could have a material adverse effect on our earnings.

We are subject to extensive environmental, health and safety laws and regulations, which impose substantial costs and limitations on our operations. Future environmental, health and safety compliance may include additional requirements related to sustainability, climate change, and greenhouse gas emissions, and be more costly than we expect.

We are subject to extensive federal, state, and local environmental, health and safety laws and regulations concerning matters such as worker health and safety, air emissions, wastewater discharges, hazardous material and solid and hazardous waste use, generation, handling, treatment and disposal and the investigation and remediation of contamination. We are subject to the risk of substantial liability and limitations on our operations due to such laws and regulations. The risks of substantial costs and liabilities related to compliance with these laws and regulations, which tend to become more stringent over time, are an inherent part of our business, and future conditions may develop, arise or be discovered that create substantial environmental compliance or remediation or other liabilities and costs.

Compliance with environmental, health and safety legislation and regulatory requirements may prove to be more limiting and costly than we anticipate. To date, we have committed significant expenditures in our efforts to achieve and maintain compliance with these requirements, and we expect that we will continue to make significant expenditures related to such compliance in the future. From time to time, we may be subject to legal proceedings brought by private parties or governmental authorities with respect to environmental matters, including matters involving alleged contamination, property damage or personal injury. New laws and regulations, including those that may relate to emissions of greenhouse gases, stricter enforcement of existing laws and regulations, the discovery of previously unknown contamination or the imposition

of new clean-up requirements, could require us to incur costs or become the basis for new or increased liabilities that could have a material adverse effect on our business, financial condition or results of operations.

We may also see an increase in costs relating to our steelmaking assets that emit relatively significant amounts of greenhouse gases as a result of new and existing legal and regulatory initiatives related to climate change. The United States government and various government agencies have introduced or are considering regulatory changes in response to climate change, including regulations aimed at reducing greenhouse gases through emissions standards, renewable energy targets, carbon emission pricing, and similar initiatives, and requiring heightened environmental monitoring and disclosures. These initiatives aimed at reducing greenhouse gas emissions may impact our operations directly or through our suppliers or customers, including increased environmental reporting, emissions control, capital equipment, energy, and other costs to comply. Any future climate change and greenhouse gas regulations could negatively impact our ability (and that of our customers and suppliers) to compete with companies situated in areas not subject to such regulations. Until the timing, scope and extent of any future legal and regulatory initiatives become known, we cannot predict the effect on our business, financial condition or results of operations.

While we are taking steps to significantly reduce our greenhouse gas emissions, there is no guarantee that we will be able to achieve our goals. Additionally, any costs related to the reduction of greenhouse gas emissions may be higher than we anticipated.

Our business is capital-intensive, and if there are downturns in the industries we serve, we may be forced to significantly curtail or suspend operations with respect to those industries, which could result in our recording asset impairment charges or taking other measures that may adversely affect our results of operations and profitability.

Our business operations are capital-intensive. If there are downturns in the industries we serve, we may be forced to significantly curtail or suspend our operations with respect to those industries, including laying-off employees, recording asset impairment charges and other measures. In addition, we may not realize the benefits or expected returns from announced plans, programs, initiatives and capital investments. Any of these events could adversely affect our results of operations and profitability.

The cost and availability of electricity and natural gas are also subject to volatile market conditions.

Steel producers like us consume large amounts of energy. We rely on third parties for the supply of energy resources we consume in our steelmaking activities. The prices for and availability of electricity, natural gas, oil and other energy resources are also subject to volatile market conditions, often affected by weather conditions as well as political and economic factors beyond our control. Any increase in the prices for electricity, natural gas, oil and other energy resources could materially affect our costs and therefore our earnings and cash flows.

As a large consumer of electricity and gas, we must have dependable delivery in order to operate. Accordingly, we are at risk in the event of an energy disruption. Prolonged black-outs or brown-outs or disruptions caused by natural disasters or governmental action would substantially disrupt our production.

Moreover, many of our finished steel products are delivered by truck. Unforeseen fluctuations in the price of fuel would also have a negative impact on our costs or on the costs of many of our customers.

In addition, changes in certain environmental laws and regulations, including those that may impose output limitations or higher costs associated with climate change or greenhouse gas emissions, could substantially increase the cost of manufacturing and raw materials, such as energy, to us and other U.S. steel producers.

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

A work stoppage at one or more of our facilities could have a material adverse effect on our business, financial condition and results of operations. As of December 31, 2021, approximately 63% of our employees were covered under a collective bargaining agreement that expires in September 2025. Any failure to negotiate and conclude a new collective bargaining agreement with the union when the existing agreement expires could cause work interruptions or stoppages. Also, if one or more of our customers were to experience a work stoppage, that customer may halt or limit purchases of our products, which could have a material adverse effect on our business, financial condition and results of operations.

A significant portion of our manufacturing facilities are located in Stark County, Ohio, which increases the risk of a significant disruption to our business as a result of unforeseeable developments in this geographic area.

It is possible that we could experience prolonged periods of reduced production due to unforeseen catastrophic events occurring in or around our manufacturing facilities in Stark County, Ohio. As a result, we may be unable to shift manufacturing capabilities to alternate locations, accept materials from suppliers, meet customer shipment deadlines or address other significant issues, any of which could have a material adverse effect on our business, financial condition or results of operations.

We have significant pension and retiree health care costs, as well as future cash contribution requirements, which may negatively affect our results of operations and cash flows.

We maintain retiree health care and defined benefit pension plans covering many of our domestic employees and former employees upon their retirement. These benefit plans have significant liabilities that are not fully funded, which will require additional cash funding in future years. Minimum contributions to domestic qualified pension plans are regulated under the Employee Retirement Income Security Act of 1974 ("ERISA") and the Pension Protection Act of 2006 ("PPA").

The level of cash funding for our defined benefit pension plans in future years depends upon various factors, including voluntary contributions that we may make, future pension plan asset performance, actual interest rates, union negotiated benefit changes, future government regulations, and other factors, many of which are not within our control. In addition, assets held by the trusts for our pension plan and our trust for retiree health care and life insurance benefits are subject to the risks, uncertainties and variability of the financial markets. See "Note 15 - Retirement and Postretirement Plans" in the Notes to the Consolidated Financial Statements for a discussion of assumptions and further information associated with these benefit plans.

We may incur restructuring and impairment charges that could materially affect our profitability.

Changes in business or economic conditions, or our business strategy, may result in actions that require us to incur restructuring and impairment charges in the future, which could have a material adverse effect on our earnings. For additional information on current restructuring and impairment charges, refer to "Note 5 - Restructuring Charges" and "Note 6 - Disposition of Non-Core Assets" in the Notes to Consolidated Financial Statements.

Our ability to use our net operating loss, interest, and credit carryforwards to offset future taxable income may be subject to certain limitations.

As of December 31, 2021, we have loss carryforwards totaling \$224.6 million (of which \$164.2 million relates to the U.S. and \$60.4 million relates to various non-U.S. jurisdictions), having various expiration dates, as well as certain credit carryforwards. The majority of the non-U.S. loss carryforwards represent local country net operating losses for entities treated as branches of TimkenSteel under U.S. tax law. Operating losses generated in the U.S. resulted in a decrease in the carrying value of our U.S. deferred tax liability to the point of a net U.S. deferred tax asset at December 31, 2016. At that time, we assessed, based upon operating performance in the U.S. and industry conditions that it was more likely than not we would not realize a portion of our U.S. deferred tax assets. The Company recorded a valuation allowance in 2016 and remained in a valuation allowance position in 2021. Going forward, the need to maintain valuation allowances against deferred tax assets in the U.S. and other affected countries will cause variability in our effective tax rate. We will maintain a valuation allowance against our deferred tax assets in the U.S. and applicable foreign countries until sufficient positive evidence exists to eliminate them. Our ability to utilize our net operating loss, interest, and credit carryforwards is dependent upon our ability to continue to generate taxable income in future periods and may be limited due to restrictions imposed on utilization of net operating loss, interest, and credit carryforwards under federal and state laws. We continue to monitor any changes within these tax laws for any additional limitations or impacts that they could have on our Company. Refer to "Note 8 - Income Tax Provision" in the Notes to the Consolidated Financial Statements for more information.

Section 382 and Section 383 of the Internal Revenue Code of 1986, as amended (the "Code"), provide an annual limitation on our ability to utilize our U.S. net operating loss and credit carryforwards against future U.S. taxable income in the event of a change in ownership, as defined in the Code, which could result from one or more transactions involving our shares, including transactions that are outside of our control, as well as the issuance of shares upon conversion of our 6.00% Convertible Senior Notes due 2025 ("Convertible Senior Notes due 2025"). Accordingly, such transactions could adversely impact our ability to offset future tax liabilities and, therefore, adversely affect our financial condition, net income and cash flow. Refer to "Note 14 - Financing Arrangements" in the Notes to the Consolidated Financial Statements for more information.

Risks Related to Our Debt

Deterioration in our asset borrowing base could adversely affect our financial health and restrict our ability to borrow necessary cash to support the needs of our business and fulfill our pension obligations.

As of December 31, 2021, we had outstanding debt of approximately \$46.0 million. Our debt may:

- make it more difficult for us to satisfy our financial obligations under our indebtedness and our contractual and commercial commitments and increase the risk that we may default on our debt obligations;
- require us to use a substantial portion of our cash flow from operations to pay interest and principal on our debt, which would reduce the funds available for working capital, capital expenditures and other general corporate purposes;

- limit our ability to obtain additional financing for working capital, capital expenditures, acquisitions and other investments, or general corporate purposes, which may limit the ability to execute our business strategy and affect the market price of our common shares;
- heighten our vulnerability to downturns in our business, our industry or in the general economy and restrict us from exploiting business opportunities or making acquisitions;
- place us at a competitive disadvantage compared to those of our competitors that may have less debt;
- limit management's discretion in operating our business;
- limit our flexibility in planning for, or reacting to, changes in our business, the industry in which we operate or the general economy; and
- result in higher interest expense if interest rates increase and we have outstanding floating rate borrowings.

If our cash flows and capital resources are insufficient to fund our debt service obligations, we may be forced to reduce or delay investments and capital expenditures, or to sell assets, seek additional capital or restructure or refinance our debt. These alternative measures may not be successful and may not permit us to meet our scheduled debt service obligations. If our operating results and available cash are insufficient to meet our debt service obligations, we could face substantial liquidity problems and might be required to dispose of material assets or operations to meet our debt service and other obligations. We may not be able to consummate those dispositions or to obtain the proceeds that we could realize from them, and these proceeds may not be adequate to meet any debt service obligations then due. Further, we may need to refinance all or a portion of our debt on or before maturity, and we cannot assure you that we will be able to refinance any of our debt on commercially reasonable terms or at all.

Restrictive covenants in the agreements governing our indebtedness may restrict our ability to operate our business, which may affect the market price of our common shares.

On October 15, 2019, the Company, as borrower, and certain domestic subsidiaries of the Company, as subsidiary guarantors, entered into a Third Amended and Restated Credit Agreement (the "Amended Credit Agreement"), with JP Morgan Chase Bank, N.A., as administrative agent (the "Administrative Agent"), Bank of America, N.A., as syndication agent, and the other lenders party thereto (collectively, the "Lenders"), which further amended and restated the Company's existing Credit Agreement dated as of January 26, 2018.

A breach of any of our covenants in the agreements governing our indebtedness could result in a default, which could allow the lenders to declare all amounts outstanding under the applicable debt immediately due and payable and which may affect the market price of our common shares. We may also be prevented from taking advantage of business opportunities that arise because of the limitations imposed on us by the restrictive covenants under our indebtedness. Refer to "Note 14 - Financing Arrangements" in the Notes to the Consolidated Financial Statements for more detail on the Amended Credit Agreement.

The conditional conversion feature of the Convertible Notes, if triggered, may adversely affect our financial condition and operating results.

In the event the conditional conversion feature of the Convertible Notes (refer to "Note 14 - Financing Arrangements" in the Notes to the Consolidated Financial Statements) is triggered, holders of Convertible Notes will be entitled to convert the Convertible Notes at any time during specified periods at their option. If one or more holders elect to convert their Convertible Notes, unless we elect to satisfy our conversion obligation by delivering solely our common shares (other than paying cash in lieu of delivering any fractional share), we would be required to settle a portion or all of our conversion obligation through the payment of cash, which could adversely affect our liquidity. In addition, under certain circumstances, we could be required under applicable accounting rules to reclassify all or a portion of the outstanding principal of the Convertible Notes as a current rather than long-term liability, which would result in a material reduction of our net working capital.

Our capital resources may not be adequate to provide for all of our cash requirements, and we are exposed to risks associated with financial, credit, capital and banking markets.

In the ordinary course of business, we will seek to access competitive financial, credit, capital and/or banking markets. Currently, we believe we have adequate capital available to meet our reasonably anticipated business needs based on our historic financial performance, as well as our expected financial position. However, if we need to obtain additional financing in the future, to the extent our access to competitive financial, credit, capital and/or banking markets was to be impaired, our operations, financial results and cash flows could be adversely impacted.

Risks Related to Our Common Shares

The price of our common shares may fluctuate significantly.

The market price of our common shares may fluctuate significantly in response to many factors, including:

- actual or anticipated changes in operating results or business prospects;
- changes in financial estimates by securities analysts;
- an inability to meet or exceed securities analysts' estimates or expectations;
- conditions or trends in our industry or sector;
- the performance of other companies in our industry or sector and related market valuations;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, divestitures, joint ventures or other strategic initiatives;
- general financial, economic or political instability;
- hedging or arbitrage trading activity in our common shares;
- changes in interest rates;
- capital commitments;
- additions or departures of key personnel; and
- future sales of our common shares or securities convertible into, or exchangeable or exercisable for, our common shares.

Many of the factors listed above are beyond our control. These factors may cause the market price of our common shares to decline, regardless of our financial condition, results of operations, business or prospects.

Conversion of the Convertible Notes may dilute ownership interest of our shareholders or may otherwise depress the market price of our common shares.

The conversion of some or all of the Convertible Notes may dilute the ownership interest of our shareholders. On conversion of the Convertible Notes, we have the option to pay or deliver, as the case may be, cash, common shares, or a combination of cash and common shares. If we elect to settle our conversion obligation in common shares or a combination of cash and common shares this could adversely affect prevailing market prices over our common shares.

We may issue preferred shares with terms that could dilute the voting power or reduce the value of our common shares.

Our articles of incorporation authorize us to issue, without the approval of our shareholders, one or more classes or series of preferred shares having such designation, powers, preferences and relative, participating, optional and other special rights, including preferences over our common shares respecting dividends and distributions, as our Board of Directors generally may determine. The terms of one or more classes or series of preferred shares could dilute the voting power or reduce the value of our common shares. For example, we could grant holders of preferred shares the right to elect some number of our directors in all events or on the happening of specified events or the right to veto specified transactions. Similarly, the repurchase or redemption rights or liquidation preferences we could assign to holders of preferred shares could affect the residual value of the common shares.

Provisions in our corporate documents and Ohio law could have the effect of delaying, deferring or preventing a change in control of us, even if that change may be considered beneficial by some of our shareholders, which could reduce the market price of our common shares.

The existence of some provisions of our articles of incorporation and regulations and Ohio law could have the effect of delaying, deferring or preventing a change in control of us that a shareholder may consider favorable. These provisions include:

- providing that our Board of Directors fixes the number of members of the board;
- providing for the division of our Board of Directors into three classes with staggered terms;

- establishing advance notice requirements for nominations of candidates for election to our Board of Directors or for proposing matters that can be acted on by shareholders at shareholder meetings; and
- authorizing the issuance of “blank check” preferred shares, which could be issued by our Board of Directors to increase the number of outstanding securities of ours with voting rights and thwart a takeover attempt.

As an Ohio corporation, we are subject to Chapter 1704 of the Ohio Revised Code. Chapter 1704 prohibits certain corporations from engaging in a “Chapter 1704 transaction” (described below) with an “interested shareholder” for a period of three years after the date of the transaction in which the person became an interested shareholder, unless, among other things, prior to the interested shareholder’s share acquisition date, the directors of the corporation have approved the transaction or the purchase of shares on the share acquisition date.

After the three-year moratorium period, the corporation may not consummate a Chapter 1704 transaction unless, among other things, it is approved by the affirmative vote of the holders of at least two-thirds of the voting power in the election of directors and the holders of a majority of the voting shares, excluding all shares beneficially owned by an interested shareholder or an affiliate or associate of an interested shareholder, or the shareholders receive certain minimum consideration for their shares. A Chapter 1704 transaction includes certain mergers, sales of assets, consolidations, combinations and majority share acquisitions involving an interested shareholder. An interested shareholder is defined to include, with limited exceptions, any person who, together with affiliates and associates, is the beneficial owner of a sufficient number of shares of the corporation to entitle the person, directly or indirectly, alone or with others, to exercise or direct the exercise of 10% or more of the voting power in the election of directors after taking into account all of the person’s beneficially owned shares that are not then outstanding.

We are also subject to Section 1701.831 of the Ohio Revised Code, which requires the prior authorization of the shareholders of certain corporations in order for any person to acquire, either directly or indirectly, shares of that corporation that would entitle the acquiring person to exercise or direct the exercise of 20% or more of the voting power of that corporation in the election of directors or to exceed specified other percentages of voting power. The acquiring person may complete the proposed acquisition only if the acquisition is approved by the affirmative vote of the holders of at least a majority of the voting power of all shares entitled to vote in the election of directors represented at the meeting, excluding the voting power of all “interested shares.” Interested shares include any shares held by the acquiring person and those held by officers and directors of the corporation.

We believe these provisions protect our shareholders from coercive or otherwise unfair takeover tactics by requiring potential acquirors to negotiate with our Board of Directors and by providing our Board of Directors with more time to assess any acquisition proposal, and are not intended to make our Company immune from takeovers. However, these provisions apply even if the offer may be considered beneficial by some shareholders and could delay, defer or prevent an acquisition that our Board of Directors determines is not in the best interests of our Company and our shareholders, which under certain circumstances could reduce the market price of our common shares.

Risks Related to COVID-19

The COVID-19 pandemic could have a material, adverse impact on our operations and financial results including cash flows and liquidity.

Although it is not possible to predict the ongoing impact of COVID-19, including on our business, results of operations, financial position or cash flows, such impacts that may be material include, but are not limited to: (i) reduced sales and profit levels; (ii) slower collection of accounts receivable and potential increases in uncollectible accounts receivable; (iii) increased operational risks as a result of manufacturing facility disruptions; (iv) delays and disruptions in the availability of and timely delivery of materials and components used in our operations, as well as increased costs for such material and components, and (v) increased cybersecurity risks including vulnerability to security breaches, information technology disruptions and other similar events as a result of a substantial number of employees utilizing remote work arrangements. We will continue to monitor the impact of the COVID-19 pandemic on our Company.

General Risk Factors

We may be subject to risks relating to our information technology systems and cybersecurity.

We rely on information technology systems to process, transmit and store electronic information and manage and operate our business. We face the challenge of supporting our older systems and implementing upgrades when necessary. Additionally, a breach in security could expose us and our customers and suppliers to risks of misuse of confidential information, manipulation and destruction of data, production downtimes and operations disruptions, which in turn could adversely affect our reputation, competitive position, business or results of operations. While we have taken reasonable steps to protect the Company from cybersecurity risks and security breaches (including enhancing our firewall, workstation, email security and network monitoring and alerting capabilities, and training employees around phishing, malware and other cybersecurity risks), and we have policies and procedures to prevent or limit the impact of systems failures, interruptions, and security breaches, there can be no assurance that such events will not occur or that they will be adequately addressed if they do. Although we rely on

commonly used security and processing systems to provide the security and authentication necessary to effect the secure transmission of data, these precautions may not protect our systems from all potential compromises or breaches of security.

We may not be able to execute successfully on our strategic imperatives or achieve the intended results.

Our strategic imperatives are centered around people, profitability, process improvement, business development, and ESG. These focus areas are intended to drive sustainable through-cycle profitability while maintaining a strong balance sheet and cash flow. If we are unsuccessful in executing on our strategic imperatives, it could negatively impact profitability and liquidity, requiring us to alter our strategy.

If we are unable to attract and retain key personnel, our business could be materially adversely affected.

Our business substantially depends on the continued service of key members of our management. The loss of the services of a significant number of members of our management could have a material adverse effect on our business. Modern steel-making uses specialized techniques and advanced equipment that requires experienced engineers and skilled laborers. Our future success will depend on our ability to attract and retain such highly skilled personnel, as well as finance, marketing and senior management professionals. Competition for these employees is intense, and we could experience difficulty from time to time in hiring and retaining the personnel necessary to support our business. Additionally, costs to attract and retain employees may be increased given the competitive labor market. If we do not succeed in retaining our current employees and attracting new high-quality employees, our business could be materially adversely affected.

We are subject to a wide variety of domestic and foreign laws and regulations that could adversely affect our results of operations, cash flow or financial condition.

We are subject to a wide variety of domestic and foreign laws and regulations, and legal compliance risks, including securities laws, tax laws, employment and pension-related laws, competition laws, U.S. and foreign export and trading laws, privacy laws and laws governing improper business practices. We are affected by new laws and regulations, and changes to existing laws and regulations, including interpretations by courts and regulators. With respect to tax laws, with the finalization of specific actions ("Actions") contained within the Organization for Economic Co-operation and Development's ("OECD") Base Erosion and Profit Shifting study, many OECD countries have acknowledged their intent to implement the Actions and update their local tax regulations. The extent, if any, to which countries in which we operate adopt and implement the Actions could affect our effective tax rate and our future results from non-U.S. operations.

Compliance with the laws and regulations described above or with other applicable foreign, federal, state, and local laws and regulations currently in effect or that may be adopted in the future could materially adversely affect our competitive position, operating results, financial condition and liquidity.

If our internal controls are found to be ineffective, our financial results or our stock price may be adversely affected.

Our most recent evaluation resulted in our conclusion that, as of December 31, 2021, our internal control over financial reporting was effective. We believe that we currently have adequate internal control procedures in place for future periods. However, if our internal control over financial reporting is found to be ineffective, investors may lose confidence in the reliability of our financial statements, which may adversely affect our stock price.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

We are headquartered in Canton, Ohio, at a facility we own in fee. We have facilities in two countries: U.S. and Mexico.

We have manufacturing facilities at multiple locations in the U.S. These manufacturing facilities are located in Canton and Eaton, Ohio and Columbus, North Carolina. In addition to these manufacturing facilities, we own or lease warehouses and distribution facilities in the U.S. and Mexico. The aggregate floor area of these facilities is 3.6 million square feet, of which approximately twelve thousand square feet is leased and the rest is owned in fee. The buildings occupied by us are principally made of brick, steel, reinforced concrete and concrete block construction.

Our facilities vary in age and condition, and each of them has an active maintenance program to ensure a safe operating environment and to keep the facilities in good condition. We believe our facilities are in satisfactory operating condition and are suitable and adequate to conduct our business and support future growth.

Please refer to Management's Discussion and Analysis of Financial Condition and Results of Operations for further discussion of our melt capacity utilization.

Item 3. Legal Proceedings

We are involved in various claims and legal actions arising in the ordinary course of business. In the opinion of our management, the ultimate disposition of these matters will not have a material adverse effect on our consolidated financial position, results of operations or cash flows.

Item 4A. Executive Officers of the Registrant

The executive officers of our Company as of February 24, 2022, are as follows:

Name	Age	Current Position
Michael S. Williams	61	Chief Executive Officer and President
Kristopher R. Westbrooks	43	Executive Vice President and Chief Financial Officer
Kristine C. Syrvalin	53	Executive Vice President, General Counsel and Secretary
Kevin A. Raketich	55	Executive Vice President, Sales, Marketing and Business Development

Michael S. Williams is the President and Chief Executive Officer of TimkenSteel Corporation, a position he has held since January 2021. Previously, Mr. Williams served as CEO of Bayou Steel Group, a U.S. producer of structural steel and merchant bar, from May 2019 to September 2019, and as President of Outokumpu Americas for Outokumpu Oyj, a global leader in the stainless steel industry, from 2015 to 2019. Before that, Mr. Williams held a number of leadership roles at US Steel Corporation, a Fortune 500 company and leading integrated steel producer, from 2006 to 2015, including Senior Vice President, North American Flat Rolled and, most recently, Senior Vice President, Strategic Planning and Business Development. Earlier in his career, Mr. Williams served as Vice President of Commercial Products at Special Metals Corporation (a leader in the invention, production and supply of high-nickel alloys) and, prior to that, as Chairman and Chief Executive Officer of Ormet Corporation (a manufacturer of foil, sheet, billet and other aluminum products). Mr. Williams earned his bachelor's of science degree in information science from the University of Pittsburgh.

Kristopher R. Westbrooks is Executive Vice President and Chief Financial Officer, a position he has held since September 2018. Previously, Mr. Westbrooks served from April 2015 until August 2018 as Vice President, Corporate Controller and Chief Accounting Officer at A. Schulman, Inc., a global supplier of high-performance plastic compounds, composites and powders. From 2011 until his appointment as Chief Accounting Officer in 2015, Mr. Westbrooks held various finance roles of increasing responsibility at A. Schulman, Inc. He earned his bachelor's of science degree in business and master's degree in accountancy from Miami University of Ohio and is a certified public accountant.

Kristine C. Syrvalin is Executive Vice President, General Counsel and Secretary of TimkenSteel Corporation, a position she has held since January 2021. Prior to assuming her current role, she had served as Assistant General Counsel and Vice President - Ethics and Compliance for TimkenSteel since October 2014. Previously, Ms. Syrvalin served as Vice President, Assistant General Counsel and Corporate Secretary for OMNOVA Solutions Inc., a global manufacturer of emulsion polymers, specialty chemicals, and functional and decorative surfaces, from September 2001 until October 2014. She earned her bachelor's degree from Miami University of Ohio and her juris doctor degree from Case Western Reserve University School of Law.

Kevin A. Raketich is Executive Vice President, Sales, Marketing and Business Development, a position he has held since May 2021. Prior to assuming his current role, Mr. Raketich served as Executive Vice President, Strategy and Corporate Development from January 2017 until May 2021. Previously, he held a number of leadership roles at TimkenSteel since the spinoff from The Timken Company in 2014, including Vice President, Industrial and Energy, Vice President, Business Development, and Director-International. Prior to the spinoff, Mr. Raketich held various roles of increasing responsibility at The Timken Company. He earned his bachelor's degree in material science engineering from Michigan State University and his master's degree in business administration from Duke University's Fuqua School of Business.

Part II.

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

Quarterly Common Stock Prices and Cash Dividends Per Share:

Our common shares are traded on the New York Stock Exchange ("NYSE") under the symbol "TMST." The estimated number of record holders of our common shares at December 31, 2021 was 3,287.

Our Amended Credit Agreement places certain limitations on the payment of cash dividends. Please refer to "Note 14 - Financing Arrangements" in the Notes to the Consolidated Financial Statements and the Results of Operations for additional discussion.

Issuer Purchases of Common Shares:

On December 20, 2021, TimkenSteel announced that its Board of Directors had authorized a share repurchase program under which the Company may repurchase up to \$50 million of its outstanding common shares. Any repurchase would be in accordance with our Amended Credit Agreement, which places certain limitations on our ability to purchase our common shares. Please refer to Management's Discussion and Analysis of Financial Condition and Results of Operations for additional discussion.

Securities Authorized for Issuance Under Equity Compensation Plans:

The following table sets forth certain information as of December 31, 2021, regarding the equity compensation plan maintained by us on that date, the TimkenSteel Corporation Amended and Restated 2020 Equity and Incentive Compensation Plan (the "Amended 2020 Plan"), which amended the previous TimkenSteel Corporation 2020 Equity and Incentive Compensation Plan (the "TimkenSteel 2020 Plan"). Refer to "Note 16 - Stock-Based Compensation" in the Notes to the Consolidated Financial Statements and the Results of Operations for additional details.

Plan category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights ⁽¹⁾	(b) Weighted-average exercise price of outstanding options, warrants and rights ⁽²⁾	(c) Number of securities remaining available for future issuance under equity compensation plans reflected in column (a) ⁽³⁾
Equity compensation plans approved by security holders ⁽⁴⁾	3,854,704	\$ 20.41	4,041,178
Equity compensation plans not approved by security holders ⁽⁵⁾	1,058,500	—	—
Total	4,913,204	\$ 20.41	4,041,178

⁽¹⁾ The amount shown in column (a) and covered under an equity compensation plan approved by security holders includes the following: nonqualified stock options - 2,054,088; deferred shares - 127,655; performance-based restricted stock units - 555,966; and time-based restricted stock units - 1,116,995 (which includes 914,860 cliff-vested restricted stock units).

⁽²⁾ The weighted average exercise price in column (b) includes nonqualified stock options only.

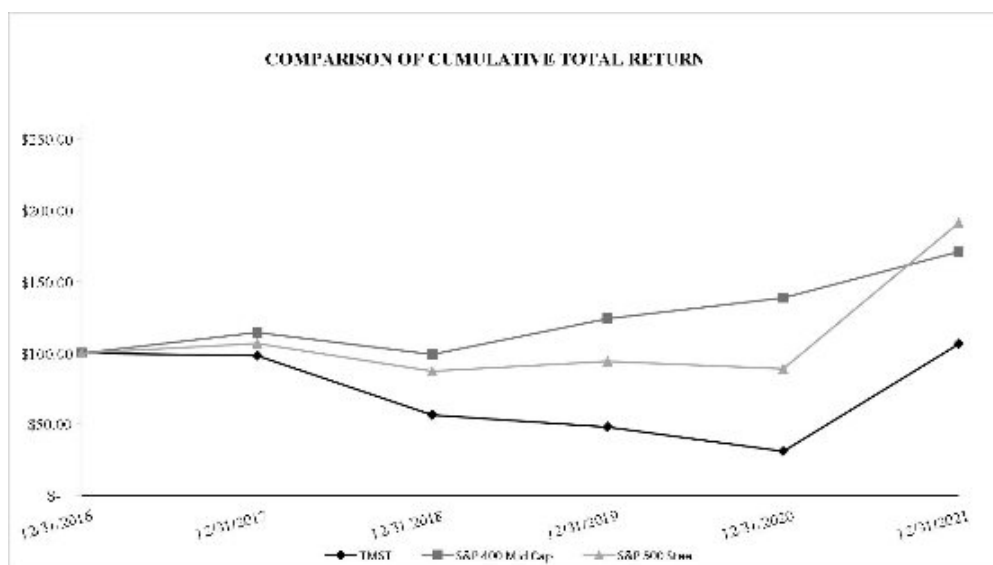
⁽³⁾ The amount shown in column (c) represents common shares remaining available under the Amended 2020 Plan, under which the Compensation Committee is authorized to make awards of option rights, appreciation rights, restricted shares, restricted stock units, deferred shares, performance shares, performance units and cash incentive awards. Awards may be credited with dividend equivalents payable in the form of common shares.

⁽⁴⁾ The Company also maintains the Director Deferred Compensation Plan pursuant to which non-employee Directors may defer receipt of common shares authorized for issuance under the Equity Plan. The table does not include separate information about this plan because it merely provides for the deferral, rather than the issuance, of common shares.

⁽⁵⁾ These securities were granted to Michael S. Williams on January 5, 2021 and were approved by the Compensation Committee of TimkenSteel's Board of Directors. These securities were granted outside of the Amended 2020 Plan as inducements material to Mr. Williams acceptance of employment with TimkenSteel. The securities awarded consist of time-based restricted share units covering 423,400 of TimkenSteel's common shares and performance-based restricted share units covering a target number of 423,400 of TimkenSteel's common shares (with a maximum payout opportunity of 635,100 common shares).

Performance Graph:

The following graph compares the cumulative total return of our common shares with the cumulative total return of the Standard & Poor's ("S&P") MidCap 400 Index and S&P Steel Group Index, assuming \$100 was invested and that cash dividends were reinvested for the period December 31, 2016 through December 31, 2021.



Date	TimkenSteel Corporation	S&P MidCap 400 Index	S&P 500 Steel Index
December 31, 2016	\$ 100.00	\$ 100.00	\$ 100.00
December 31, 2017	\$ 98.13	\$ 114.45	\$ 106.82
December 31, 2018	\$ 56.40	\$ 99.15	\$ 87.20
December 31, 2019	\$ 48.06	\$ 124.10	\$ 94.22
December 31, 2020	\$ 30.94	\$ 138.68	\$ 88.94
December 31, 2021	\$ 106.33	\$ 170.98	\$ 191.28

This performance graph shall not be deemed to be "soliciting material" or to be "filed" with the SEC or subject to Regulation 14A or 14C, or to the liabilities of Section 18 of the Exchange Act.

Item 6. Selected Financial Data

Intentionally omitted.

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

(dollars in millions, except per share data)

Business Overview

We manufacture alloy steel, as well as carbon and micro-alloy steel. Our portfolio includes special bar quality ("SBQ") bars, seamless mechanical tubing ("tubes"), manufactured components (formerly known as the "value-add" product type) such as precision steel components, and billets. In addition, we supply machining and thermal treatment services, and we manage raw material recycling programs, which are also used as a feeder system for our melt operations. Our products and services are used in a diverse range of demanding applications in the following market sectors: automotive; oil and gas; industrial equipment; mining; construction; rail; defense; heavy truck; agriculture; power generation; and oil country tubular goods ("OCTG").

SBQ steel is made to restrictive chemical compositions and high internal purity levels and is used in critical mechanical applications. We make these products from nearly 100% recycled steel, using our expertise in raw materials to create custom steel products. We focus on creating tailored products and services for our customers' most demanding applications. Our engineers are experts in both materials and applications, so we can work closely with each customer to deliver flexible solutions related to our products as well as to their applications and supply chains.

The SBQ bar, tube, and billet production processes take place at our Canton, Ohio manufacturing location. This location accounts for all of the SBQ bars, seamless mechanical tubes and billets we produce and includes three manufacturing facilities: the Faircrest, Harrison, and Gambrinus facilities. Our production of manufactured components takes place at two downstream manufacturing facilities: Tryon Peak (Columbus, North Carolina) and St. Clair (Eaton, Ohio). Many of the production processes are integrated, and the manufacturing facilities produce products that are sold in all of our market sectors. As a result, investments in our facilities and resource allocation decisions affecting our operations are designed to benefit the overall business, not any specific aspect of the business.

On February 16, 2021, management announced a plan to indefinitely idle our Harrison melt and casting assets, which was completed in the first quarter of 2021. All of our melt and casting activities now take place at the Faircrest location. We worked collaboratively with employees, suppliers and a number of customers to ensure a well-organized and efficient transition. Our rolling and finishing operations at Harrison were not impacted by this action. For additional details regarding this matter please refer to "Note 6 – Disposition of Non-Core Assets."

Prior to indefinitely idling these assets, we had an annual melt capacity of approximately 2 million tons and shipment capacity of 1.5 million tons. After indefinitely idling these assets, our annual melt capacity is approximately 1.2 million tons and our shipment capacity is approximately 0.9 million tons.

On March 31, 2021, the Company entered into an agreement pursuant to which Daido Steel (Shanghai) Co., Ltd. agreed to acquire all of the Company's ownership interest in TimkenSteel (Shanghai) Corporation Limited in an all-cash transaction. The sale closed on July 30, 2021. TimkenSteel's consolidated financial statements include activity for TimkenSteel (Shanghai) Corporation Limited through July 30, 2021.

On October 29, 2021, the United Steelworkers ("USW") Local 1123 voted to ratify a new four-year contract (the "Contract"). The Contract, which is in effect until September 27, 2025, offers TimkenSteel's Canton-based bargaining employees an increase to base wages every year (3% beginning as of September 26, 2021 and thereafter 2.5% until 2024), competitive healthcare and retirement benefits for all members, and a continued focus on employee wellbeing as well as safe and sustainable operations. A contract ratification bonus was paid to bargaining employees during the fourth quarter of 2021 at a cost of approximately \$2 million. The Contract covers approximately 1,170 bargaining employees at the Company's Canton, Ohio operations.

We conduct our business activities and report financial results as one business segment. The presentation of financial results as one reportable segment is consistent with the way we operate our business and is consistent with the manner in which the CODM evaluates performance and makes resource and operating decisions for the business as described above. Furthermore, the Company notes that monitoring financial results as one reportable segment helps the CODM manage costs on a consolidated basis, consistent with the integrated nature of our operations.

Markets We Serve

We sell products and services that are used in a diverse range of demanding applications around the world. No one customer accounted for 10% or more of net sales in 2021.

Key indicators for our market include the U.S. light vehicle production Seasonally Adjusted Annual Rate, oil and gas rig count activity and U.S. footage drilled, and industrial production for agriculture and construction markets, distribution, and mining and oil field machinery products. In addition, we closely monitor the Purchasing Managers' Index, which is a leading indicator for our overall business.

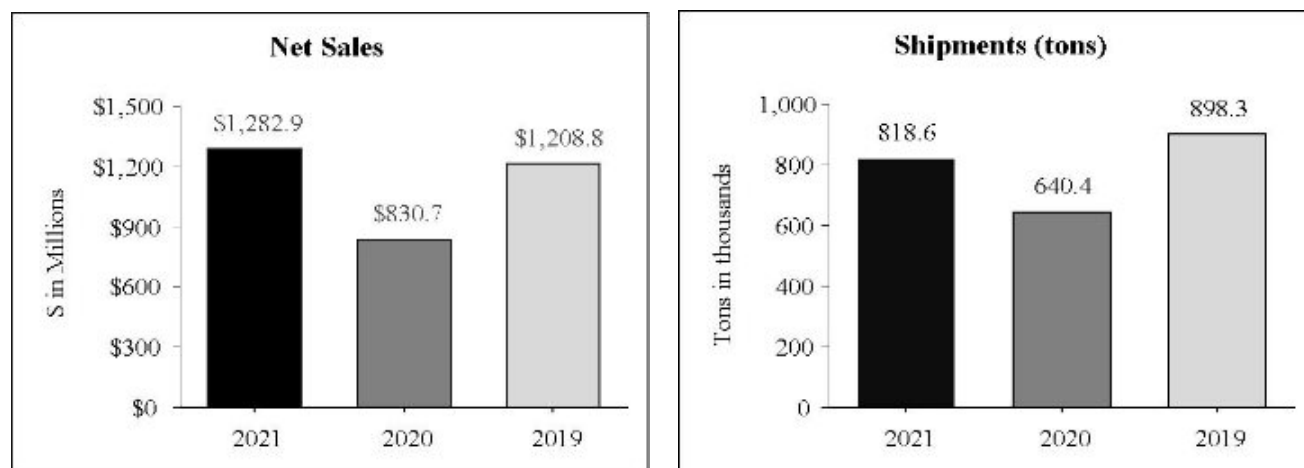
Impact of Raw Material Prices

In the ordinary course of business, we are exposed to the volatility of the costs of our raw materials. Whenever possible, we manage our exposure to commodity risks primarily through the use of supplier pricing agreements that enable us to establish the purchase prices for certain inputs that are used in our manufacturing process. We utilize a raw material surcharge mechanism when pricing products to our customers, which is designed to mitigate the impact of increases or decreases in raw material costs, although generally with a lag effect. This timing effect can result in raw material spread whereby costs can be over- or under-recovered in certain periods. While the surcharge generally protects gross profit, it has the effect of diluting gross margin as a percent of sales.

Results of Operations

Net Sales

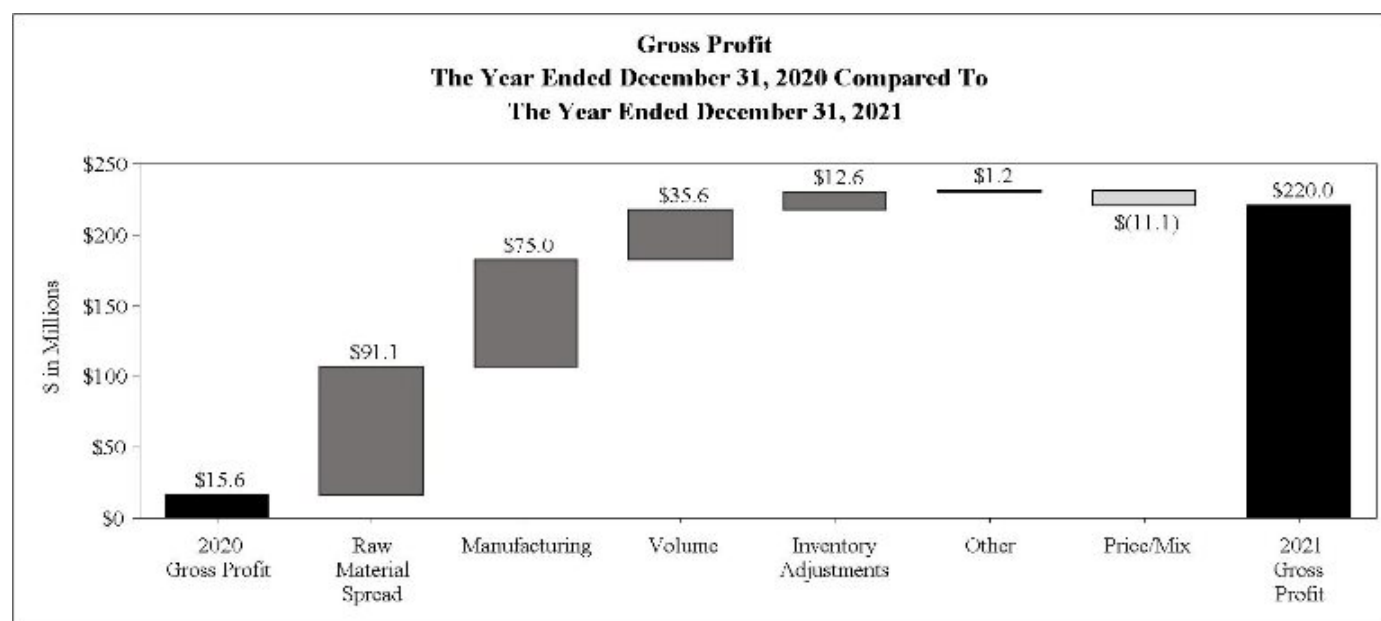
The charts below present net sales and shipments for the years ended December 31, 2021, 2020 and 2019.



Net sales for the year ended December 31, 2021 were \$1,282.9 million, an increase of \$452.2 million, or 54.4% compared with the year ended December 31, 2020. The increase in sales was driven by an increase in surcharges and higher volumes, partially offset by unfavorable price/mix. The increase in surcharges of \$272.1 million was due to higher market prices for scrap and alloy across all end-market sectors. Higher volumes of 178.2 thousand ship tons resulted in a net sales increase of \$220.5 million, primarily due to higher customer demand in the industrial, mobile and energy end-market sectors, despite an approximate 45 thousand ton decrease in expected ship tons for the year ended December 31, 2021 due to the semiconductor chip shortage in the mobile end-market sector. This increase in demand was partially offset by no OCTG billet shipments during the year ended December 31, 2021. Unfavorable price/mix of \$40.4 million was driven primarily by unfavorable mix within the industrial end-market sector. Excluding surcharges, net sales increased \$180.1 million or 25.9%.

Gross Profit

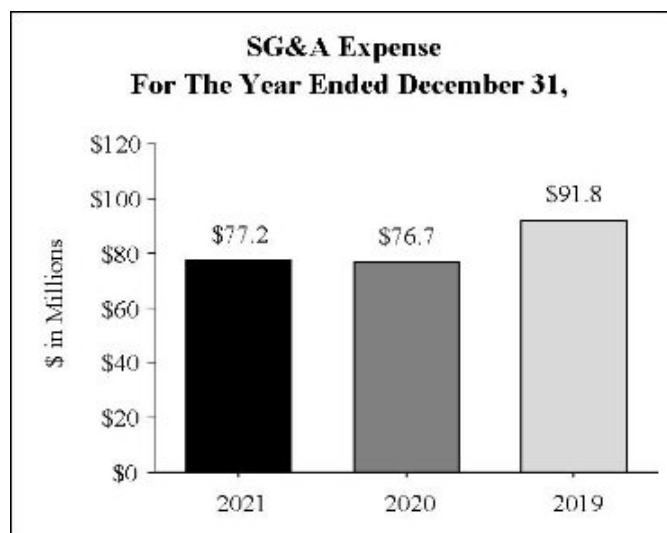
The chart below presents the drivers of the gross profit variance from the year ended December 31, 2020 to December 31, 2021.



Gross profit for the year ended December 31, 2021 increased \$204.4 million compared with the year ended December 31, 2020. The increase was driven by favorable raw material spread, lower manufacturing costs, increased volume, and favorable inventory adjustments, partially offset by unfavorable price/mix. Raw material spread was favorable due to higher scrap and alloy spreads. Lower manufacturing costs were primarily due to the Company's significant cost reduction actions and a favorable impact of higher production levels on fixed cost leverage, partially offset by higher variable compensation costs. The increase in volume was due to higher customer demand in the industrial, mobile, and energy end-market sectors for the year ended December 31, 2021. Inventory adjustments were also favorable as additional reserves were recorded during the year ended December 31, 2020 due to market conditions at the time, specifically in the energy end-market sector, which were reversed throughout 2021 as the related inventory was sold or scrapped. These increases were partially offset by unfavorable price/mix, driven by unfavorable mix within the industrial end-market sector.

Selling, General and Administrative Expenses

The charts below present selling, general and administrative ("SG&A") expense for the years ended December 31, 2021, 2020 and 2019.



SG&A expense for the year ended December 31, 2021 increased by \$0.5 million, or 0.7%, compared with the year ended December 31, 2020. This increase is primarily due to higher 2021 variable compensation expense given the Company's improved financial performance, partially offset by lower wages and benefits expense as a result of a reduction in employee headcount following the Company's restructuring actions.

Restructuring Charges

Over the past several years, TimkenSteel has made numerous organizational changes to enhance profitable and sustainable growth. These company-wide actions included the restructuring of its business support functions, the reduction of management layers throughout the organization and other domestic and international actions to further improve the Company's overall cost structure. Restructuring charges for the year ended December 31, 2021 totaled \$6.7 million. Approximately 75 salaried positions were eliminated through restructuring actions in 2021. Over half of these positions and approximately \$4 million of the aforementioned 2021 restructuring charges were due to a voluntary exit incentive offered by the Company in the fourth quarter of 2021 to certain U.S.-based salaried non-operative employees who would have been eligible for retirement by December 31, 2023.

During this overall period of organizational changes, the Company has eliminated approximately 290 salaried positions through restructuring actions and recognized restructuring charges of \$18.4 million. The Company expects to realize ongoing annual savings of approximately \$39 million as a result of these actions.

Refer to "Note 5 - Restructuring Charges" in the Notes to the Consolidated Financial Statements for additional information.

Impairment Charges & Loss (Gain) on Sale or Disposal of Assets, net

TimkenSteel recorded approximately \$10.6 million of impairment charges for the year ended December 31, 2021. This was driven by \$7.9 million of impairment charges related to the indefinite idling of our Harrison melt and casting assets. Other impairment charges included \$2.4 million related to the impairment of certain assets at our St. Clair facility due to the early termination of a customer program and \$0.3 million related to the disposition of assets at our former TMS facility. No impairment charge was recorded for the year ended December 31, 2020.

Additionally, the Company recorded a net loss on sale of assets for the year ended December 31, 2021 of \$1.3 million related to the disposition of excess assets. For the year ended December 31, 2020, TimkenSteel recorded a net gain on the sale and disposal of assets of \$2.6 million, primarily related to the sale of certain assets related to our closed TMS facility.

Refer to "Note 6 - Disposition of Non-Core Assets" and "Note 11 - Property, Plant and Equipment" in the Notes to the Consolidated Financial Statements for additional information.

Interest Expense

Interest expense for the year ended December 31, 2021 was \$5.9 million, a decrease of \$6.3 million, compared with the year ended December 31, 2020. The decrease in interest expense was primarily due to the adoption of the Accounting Standard Update 2020-06 on January 1, 2021, which caused the Convertible Notes to no longer have a debt discount that is amortized. The remaining decrease is driven by a reduction in outstanding borrowings. Refer to “Note 14 - Financing Arrangements” in the Notes to the Consolidated Financial Statements for additional information.

Other (Income) Expense, net

	Year Ended December 31,		
	2021	2020	\$ Change
Pension and postretirement non-service benefit (income) loss	\$ (37.2)	\$ (26.6)	\$ (10.6)
Loss (gain) from remeasurement of benefit plans	(20.1)	14.7	(34.8)
Foreign currency exchange loss (gain)	0.1	0.2	(0.1)
Sales and use tax refund	(2.5)	—	(2.5)
Employee retention credit	—	(2.3)	2.3
Miscellaneous (income) expense	0.2	(0.2)	0.4
Total other (income) expense, net	\$ (59.5)	\$ (14.2)	\$ (45.3)

	Year Ended December 31,		
	2020	2019	\$ Change
Pension and postretirement non-service benefit (income) loss	\$ (26.6)	\$ (17.5)	\$ (9.1)
Loss (gain) from remeasurement of benefit plans	14.7	40.6	(25.9)
Foreign currency exchange loss (gain)	0.2	—	0.2
Employee retention credit	(2.3)	—	(2.3)
Miscellaneous (income) expense	(0.2)	0.2	(0.4)
Total other (income) expense, net	\$ (14.2)	\$ 23.3	\$ (37.5)

Non-service related pension and other postretirement benefit income, for all years, consists primarily of the interest cost, expected return on plan assets and amortization components of net periodic cost. The loss from remeasurement of benefit plans is due to the Company performing mark-to-market accounting on its pension and postretirement assets at year-end and upon the occurrence of certain triggering events. For more details on the remeasurement refer to “Note 15 - Retirement and Postretirement Plans.”

During the second quarter of 2021, TimkenSteel received a refund from the State of Ohio related to an overpayment of sales and use taxes for the period of October 1, 2016 through September 30, 2019. This resulted in a gain recognized of \$2.5 million, net of related professional fees, for the year ended December 31, 2021.

During the year ended December 31, 2020, the Company recognized a \$2.3 million benefit related to the Employee Retention Credit in other (income) expense, net. For more details on this credit refer to “Note 2 - Significant Accounting Policies.”

Provision for Income Taxes

	Year Ended December 31,		
	2021	2020	\$ Change
Provision (benefit) for income taxes	\$ 5.7	\$ 1.2	\$ 4.5
Effective tax rate	3.2 %	(2.0) %	NM ⁽¹⁾

	Year Ended December 31,		
	2020	2019	\$ Change
Provision (benefit) for income taxes	\$ 1.2	\$ (16.1)	\$ 17.3
Effective tax rate	(2.0) %	12.8 %	NM ⁽¹⁾

⁽¹⁾ “NM” is data that is not meaningful.

The majority of the Company's income tax expense is derived from domestic state and local taxes. The Company remains in a full valuation for the U.S. jurisdiction for the years ended December 31, 2021 and 2020.

Non-GAAP Financial Measures

Net Sales Adjusted to Exclude Surcharges

The table below presents net sales by end-market sector, adjusted to exclude surcharges, which represents a financial measure that has not been determined in accordance with accounting principles generally accepted in the United States ("U.S. GAAP"). We believe presenting net sales by end-market sector adjusted to exclude raw material and natural gas surcharges provides additional insight into key drivers of net sales such as base price and product mix.

(dollars in millions, tons in thousands)

	Mobile	Industrial	2021 Energy	Other	Total
Tons	370.4	408.9	39.3	—	818.6
Net Sales	\$ 527.9	\$ 661.2	\$ 62.9	\$ 30.9	\$ 1,282.9
Less: Surcharges	167.7	218.3	22.1	—	408.1
Base Sales	\$ 360.2	\$ 442.9	\$ 40.8	\$ 30.9	\$ 874.8
Net Sales / Ton	\$ 1,425	\$ 1,617	\$ 1,601	\$ —	\$ 1,567
Surcharges / Ton	\$ 453	\$ 534	\$ 563	\$ —	\$ 498
Base Sales / Ton	\$ 972	\$ 1,083	\$ 1,038	\$ —	\$ 1,069

	Mobile	Industrial	2020 Energy	Other	Total
Tons	308.1	267.0	36.3	29.0	640.4
Net Sales	\$ 346.0	\$ 391.7	\$ 53.2	\$ 39.8	\$ 830.7
Less: Surcharges	59.3	61.1	8.4	7.2	136.0
Base Sales	\$ 286.7	\$ 330.6	\$ 44.8	\$ 32.6	\$ 694.7
Net Sales / Ton	\$ 1,123	\$ 1,467	\$ 1,466	\$ 1,372	\$ 1,297
Surcharges / Ton	\$ 192	\$ 229	\$ 232	\$ 248	\$ 212
Base Sales / Ton	\$ 931	\$ 1,238	\$ 1,234	\$ 1,124	\$ 1,085

	Mobile	Industrial	2019 Energy	Other	Total
Tons	397.6	348.2	90.6	61.9	898.3
Net Sales	\$ 479.3	\$ 486.3	\$ 166.4	\$ 76.8	\$ 1,208.8
Less: Surcharges	104.1	99.9	32.8	16.7	253.5
Base Sales	\$ 375.2	\$ 386.4	\$ 133.6	\$ 60.1	\$ 955.3
Net Sales / Ton	\$ 1,205	\$ 1,397	\$ 1,837	\$ 1,241	\$ 1,346
Surcharges / Ton	\$ 261	\$ 287	\$ 362	\$ 270	\$ 283
Base Sales / Ton	\$ 944	\$ 1,110	\$ 1,475	\$ 971	\$ 1,063

Liquidity and Capital Resources

Amended Credit Agreement

On October 15, 2019, the Company entered into the Amended Credit Agreement with JP Morgan Chase Bank, N.A., as administrative agent, Bank of America, N.A., as syndication agent, and the other lenders party thereto, which further amended and restated the Company's Second Amended and Restated Credit Agreement dated as of January 26, 2018.

The Amended Credit Agreement increased capacity to \$400 million compared to \$300 million in the previous facility and extended the maturity date to October 15, 2024. Furthermore, the Amended Credit Agreement provided for an enhanced asset base with reappraised fixed assets and investment grade foreign accounts receivable collateral in the borrowing base (up to \$30 million), improved interest rate spread pricing by 50 basis points, and reduced the unused commitment fee to a fixed 25 basis points from the previous 37.5 to 50 basis point range.

Convertible Notes

In May 2016, the Company issued \$75.0 million aggregate principal amount of Convertible Senior Notes due 2021, plus an additional \$11.3 million principal amount to cover over-allotments.

In December 2020, the Company entered into separate, privately negotiated exchange agreements with a limited number of holders of the Company's then outstanding Convertible Senior Notes due 2021. Pursuant to the exchange agreements, the Company exchanged \$46.0 million aggregate principal amount of Convertible Senior Notes due 2021 for \$46.0 million aggregate principal amount of its new Convertible Senior Notes due 2025. The Company did not receive any cash proceeds from the issuance of the Convertible Senior Notes due 2025.

The remaining Convertible Senior Notes due 2021 matured on June 1, 2021 and were settled with a combination of cash of \$38.9 million and 0.1 million shares, as most noteholders exercised their conversion option prior to maturity. The final cash payment for interest was also made to noteholders on June 1, 2021 in the amount of \$1.2 million.

The Convertible Senior Notes due 2025 bear cash interest at a rate of 6.0% per year, payable semiannually on June 1 and December 1, beginning on June 1, 2021. The Convertible Senior Notes due 2025 will mature on December 1, 2025, unless earlier repurchased or converted. The net amount of this exchange was \$44.5 million, after deducting the initial underwriters' fees and paying other transaction costs.

The Convertible Senior Notes due 2025 are convertible at the option of holders in certain circumstances and during certain periods into the Company's common shares, cash, or a combination thereof, at the Company's election. The Indenture for the Convertible Senior Notes due 2025 provides that notes will become convertible during a quarter when the share price for 20 trading days during the final 30 trading days of the immediately preceding quarter was greater than 130% of the conversion price. This criterion was met during the fourth quarter of 2021 and as such the notes can be converted at the option of the holders beginning January 1 through March 31, 2022. Whether the notes will be convertible following such period will depend on if this criterion, or another conversion condition, is met in the future. To date, no holders have elected to convert their notes at any time during any optional conversion periods in the second half of 2021 or the first quarter of 2022.

In January 2022, TimkenSteel repurchased \$5.0 million of outstanding principal related to the Convertible Senior Notes Due 2025. Total cash paid to noteholders was \$12.4 million. A loss on extinguishment of debt will be recognized in the first quarter of 2022 in the amount of \$7.5 million, which includes a charge of \$0.1 million for unamortized debt issuance costs related to the portion of debt extinguished, as well as the related transaction costs.

For additional details regarding the Amended Credit Agreement and the Convertible Notes, please refer to "Note 14 - Financing Arrangements" in the Notes to the Consolidated Financial Statements, and for our discussion regarding risk factors related to our business and our debt, see Risk Factors in this Annual Report on Form 10-K.

Additional Liquidity Considerations

The following represents a summary of key liquidity measures under the credit agreement in effect as of December 31, 2021 and December 31, 2020:

		2021	December 31,	2020
Cash and cash equivalents	\$	259.6	\$	102.8
Credit Agreement:				
Maximum availability	\$	400.0	\$	400.0
Suppressed availability ⁽¹⁾		(143.5)		(183.2)
Availability		256.5		216.8
Credit facility amount borrowed		—		—
Letter of credit obligations		(5.4)		(5.5)
Availability not borrowed		251.1		211.3
Total liquidity	\$	510.7	\$	314.1

⁽¹⁾ As of December 31, 2021 and 2020, TimkenSteel had less than \$400 million in collateral assets to borrow against.

Our principal sources of liquidity are cash and cash equivalents, cash flows from operations and available borrowing capacity under our credit agreement. As of December 31, 2021, taking into account our view of mobile, industrial, and energy market demand for our products, and our 2022 operating and long-range plan, we believe that our cash balance as of December 31, 2021, projected cash generated from operations, and borrowings available under the Amended Credit Agreement, will be sufficient to satisfy our working capital needs, capital expenditures and other liquidity requirements associated with our operations, including servicing our debt and pension and postretirement benefit obligations, for at least the next twelve months.

To the extent our liquidity needs prove to be greater than expected or cash generated from operations is less than anticipated, and cash on hand or credit availability is insufficient, we would seek additional financing to provide additional liquidity. We regularly evaluate our potential access to the equity and debt capital markets as sources of liquidity and we believe additional financing would likely be available if necessary, although we can make no assurance as to the form or terms of any such financing.

We continue to evaluate the best use of our liquidity which would allow us to invest in profitable growth, maintain a strong balance sheet, and return capital to shareholders. Currently, we are anticipating capital expenditures to be approximately \$40 million in 2022, with over half of this budget allocated to profitability improvement projects.

We also privately negotiated the early repurchase of \$5 million of our Convertible Senior Notes Due 2025 in the first quarter of 2022. In addition to reducing outstanding debt and generating \$0.3 million of annual interest savings, the convertible notes repurchase will have the effect of reducing diluted shares outstanding by approximately 0.6 million shares beginning in the first quarter of 2022.

On December 20, 2021, TimkenSteel announced that its Board of Directors had authorized a share repurchase program under which the Company may repurchase up to \$50 million of its outstanding common shares. Our share repurchase program is intended to return capital to shareholders while also offsetting dilution from annual equity compensation awards. The Company may utilize various methods to repurchase shares, which could include open market repurchases, including repurchases through Rule 10b5-1 plans, privately-negotiated transactions or by other means. The actual timing, number and value of shares repurchased under the program, if any, will depend on a number of factors, including the price of the Company's shares, general market and economic conditions, capital needs and other factors. The share repurchase program does not require the Company to acquire any dollar amount or number of shares and may be modified, suspended, extended or terminated by the Company at any time without prior notice.

Coronavirus Aid, Relief, and Economic Security Act

On March 27, 2020, the President of the United States signed the Coronavirus Aid, Relief, and Economic Security ("CARES") Act, an economic stimulus package intended to provide support, principally in the form of tax benefits, to companies and individuals negatively impacted by the COVID-19 pandemic. Although the majority of the provisions included in the CARES Act did not immediately benefit the Company from a cash tax perspective due to its significant net operating losses, the Company took advantage of the deferral of the employer share (6.2% of employee wages) of Social Security payroll taxes that would otherwise have been owed from the date of enactment of the legislation through December 31, 2020, as afforded by the Act. During the year ended December 31, 2020, the Company had deferred \$6.4 million in cash payments and recorded reserves for such deferred payroll taxes in salaries, wages and benefits on the Consolidated Balance Sheets, to be paid in two equal installments. The first installment in the amount of \$3.2 million was paid during the fourth quarter of 2021. The second installment is due on December 31, 2022.

The CARES Act also provided for an employee retention credit ("Employee Retention Credit"), which is a refundable tax credit against certain employment taxes of up to five thousand dollars per employee for eligible employers. The tax credit is equal to 50% of qualified wages paid to employees during a quarter, capped at ten thousand dollars of qualified wages per employee throughout the year. The Company qualified for the tax credit in the second and third quarters of 2020 and accrued a benefit of \$2.3 million in the fourth quarter of 2020 related to the Employee Retention Credit in other (income) expense, net on the Company's Consolidated Statements of Operations. The Company filed for this credit in the second quarter of 2021 and received a portion of the proceeds from the Internal Revenue Service ("IRS") in the amount of \$0.5 million during the fourth quarter of 2021. The Company received the remaining \$1.8 million of cash proceeds in the first quarter of 2022, which was recorded as a receivable in other current assets on the Consolidated Balance Sheets as of December 31, 2021.

Consolidated Appropriations Act, 2021

On December 27, 2020, the President of the United States signed the Consolidated Appropriation Act, 2021 ("CAA"). The CAA includes additional COVID-19 relief that expands upon the relief provided in the CARES Act, including, but not limited to, the extension of tax deductions, credits, and incentives. The Company has evaluated the CAA for any potential impact. While it was determined that the CAA revised and extended the Employee Retention Credit into 2021, the CAA is not expected to have an impact on the Company as employee furloughs related to the COVID-19 pandemic ceased in 2020. Furthermore, the Company does not expect any of the other provisions within the CAA to provide a benefit.

American Rescue Plan Act of 2021

On March 11, 2021, the President of the United States signed the American Rescue Plan Act of 2021 ("ARPA"). The ARPA strengthens and extends certain programs enacted through the CARES Act and establishes new relief programs aimed at mitigating the financial impact of the COVID-19 pandemic. The provisions within the ARPA have been evaluated and at this time one provision, which offers funding relief for single-employer defined benefit pension plans, is expected to materially impact the Company.

Specifically, the ARPA provides enhanced interest rate stabilization, as well as extended amortization of funding shortfalls. The Company has evaluated and made final the elections permitted by the ARPA related to the required contributions for our TimkenSteel Corporation Bargaining Unit Pension Plan ("Bargaining Plan"). At this time based on current assumptions, the elections made under ARPA and expected asset returns, we believe that required Company contributions to the Bargaining Plan have been delayed until after 2031. However, these estimates are subject to significant uncertainty. Prior to the ARPA, we had expected to make required pension contributions for the Bargaining Plan beginning in 2022.

Cash Flows

The following table reflects the major categories of cash flows for the years ended December 31, 2021, 2020, and 2019. For additional details, please refer to the Consolidated Statements of Cash Flows included in Item 8, "Financial Statements and Supplemental Data" of this Annual Report on Form 10-K.

	Year Ended December 31,		
	2021	2020	2019
Net cash provided (used) by operating activities	\$ 196.9	\$ 173.5	\$ 70.3
Net cash provided (used) by investing activities	(4.8)	(6.0)	(38.0)
Net cash provided (used) by financing activities	(35.3)	(91.8)	(26.8)
Increase (Decrease) in Cash and Cash Equivalents	\$ 156.8	\$ 75.7	\$ 5.5

Operating activities

Net cash provided by operating activities for the year ended December 31, 2021 was \$196.9 million compared to net cash provided of \$173.5 million for the year ended December 31, 2020. The change was primarily due to improved profitability, partially offset by an increase in working capital, principally inventory, during the year ended December 31, 2021 to support increasing customer demand and production levels, as compared to a drawdown of working capital based on economic conditions during the year ended December 31, 2020. Refer to the Consolidated Statements of Cash Flows for additional information.

Investing activities

Net cash used by investing activities for the year ended December 31, 2021 was \$4.8 million compared to net cash used of \$6.0 million for the year ended December 31, 2020. The change was primarily due to lower capital expenditures, as well as proceeds from the sale of TimkenSteel (Shanghai) Corporation Limited. This was partially offset by lower proceeds on disposals of property, plant, and equipment, during the year ended December 31, 2021 compared to the same period of 2020 in which assets were sold primarily related to our closed TMS facility.

Financing activities

Net cash used by financing activities for the year ended December 31, 2021 was \$35.3 million compared to net cash used of \$91.8 million for the year ended December 31, 2020. The change was primarily due to lower repayments on outstanding borrowings and increased proceeds from the exercise of stock options during the year ended December 31, 2021 compared to the same period of 2020.

Contractual Obligations and Commitments

Our material cash commitments from known contractual and other obligations primarily consist of obligations for long-term debt and related interest, purchase commitments as part of normal operations, retirement benefits, and operating leases for property and equipment.

Refer to “Note 14 - Financing Arrangements” in the Notes to the Consolidated Financial Statements for more information regarding scheduled maturities of our long-term debt. Interest payments include interest on the Convertible Notes, as well as the unused commitment fee of 25 basis points related to the Amended Credit Agreement. Interest payable associated with our debt will be approximately \$3.5 million due in the next twelve months and \$9.0 million due in total starting in 2023 through 2025, the latest maturity date of our outstanding debt.

Purchase commitments are defined as agreements to purchase goods or services that are enforceable and legally binding. As of December 31, 2021, our undiscounted purchase commitments will be approximately \$46.0 million due in the next twelve months and \$81.6 million due thereafter. Included in purchase commitments are certain obligations related to capital asset commitments, service agreements and energy consumed in our production processes. These purchase commitments do not represent our entire anticipated purchases in the future but represent only those items for which we are contractually obligated as of December 31, 2021. The majority of our products and services are purchased as needed, with no advance commitment. We do not have any off-balance sheet arrangements with unconsolidated entities or other persons.

Retirement benefits are paid from plan assets and our operating cash flow. These include payments to meet minimum funding requirements of our defined benefit pension plans, estimated benefit payments for our unfunded supplemental executive retirement pension, and estimated benefit payments for our postretirement plans. The retirement benefit funding requirements are estimated required contributions and are significantly affected by asset returns and several other variables. These amounts are subject to change year to year. These amounts are based on Company estimates and current funding laws; actual future payments may be different. Refer to “Note 15 - Retirement and Postretirement Plans” in the Notes to the Consolidated Financial Statements for further information related to the total pension and other postretirement benefit plans and expected benefit payments.

Refer to “Note 13 – Leases” in the Notes to the Consolidated Financial Statement for additional information on leases.

Critical Accounting Policies and Estimates

Our financial statements are prepared in accordance with U.S. GAAP. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the periods presented. We review our critical accounting policies throughout the year.

New Accounting Guidance

See “Note 2 - Significant Accounting Policies” in the Notes to the Consolidated Financial Statements.

Revenue Recognition

We recognize revenue from contracts at a point in time when we have satisfied our performance obligation and the customer obtains control of the goods, at the amount that reflects the consideration we expect to receive for those goods. We receive and acknowledge purchase orders from our customers, which define the quantity, pricing, payment and other applicable terms and conditions. In some cases, we receive a blanket purchase order from our customer, which includes pricing, payment and other terms and conditions, with quantities defined at the time the customer issues periodic releases from the blanket purchase order. Certain contracts contain variable consideration, which primarily consists of rebates that are accounted for in net sales and accrued based on the estimated probability of the requirements being met.

Inventory

Inventories are stated at lower of cost or net realizable value. All inventories, including raw materials, manufacturing supplies inventory as well as international (outside the U.S.) inventories, have been valued using the FIFO or average cost method.

Long-lived Assets

Long-lived assets (including tangible assets and intangible assets subject to amortization) are reviewed for impairment when events or changes in circumstances have occurred indicating the carrying value of the assets may not be recoverable.

We test recoverability of long-lived assets at the lowest level for which there are identifiable cash flows that are independent from the cash flows of other assets. Assets and asset groups held and used are measured for recoverability by comparing the carrying amount of the asset or asset group to the sum of future undiscounted net cash flows expected to be generated by the asset or asset group.

Assumptions and estimates about future values and remaining useful lives of our long-lived assets are complex and subjective. They can be affected by a variety of factors, including external factors such as industry and economic trends and internal factors such as changes in our business strategy and our internal forecasts.

If an asset or asset group is considered to be impaired, the impairment loss that would be recognized is the amount by which the carrying amount of the assets exceeds the fair value of the assets. To determine fair value, we use internal cash flow estimates discounted at an appropriate interest rate, third party appraisals as appropriate, and/or market prices of similar assets, when available.

As a result of the discontinued use of certain assets, we recorded an impairment charge of \$10.6 million in 2021. No impairment charge was recorded in 2020. Refer to “Note 6 – Disposition of Non-Core Assets” in the Notes to the Consolidated Financial Statements for further information.

Income Taxes

We are subject to income taxes in the U.S. and non-U.S. jurisdictions, and we account for income taxes in accordance with applicable accounting guidance. Deferred tax assets and liabilities are recorded for the future tax consequences attributable to differences between financial statement carrying amounts of existing assets and liabilities and their respective tax bases, as well as net 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 temporary differences are expected to be recovered or settled. We record valuation allowances against deferred tax assets by tax jurisdiction when it is more likely than not that such assets will not be realized. In determining the need for a valuation allowance, the historical and projected financial performance of the entity recording the net deferred tax asset is considered along with any other pertinent information. Net deferred tax assets relate primarily to net operating losses and pension and other postretirement benefit obligations in the U.S., which we believe are more likely than not to result in future tax benefits. As of December 31, 2021, we have recorded a valuation allowance on our net deferred tax assets in the U.S., as we do not believe it is more likely than not that a portion of our U.S. deferred tax assets will be realized.

In the ordinary course of our business, there are many transactions and calculations regarding which the ultimate income tax determination is uncertain. We are regularly under audit by tax authorities. Accruals for uncertain tax positions are provided for in accordance with the requirements of applicable accounting guidance. We record interest and penalties related to uncertain tax positions as a component of income tax expense.

Benefit Plans

We recognize an overfunded status or underfunded status (i.e. the difference between the fair value of plan assets and the benefit obligations) as either an asset or a liability for our defined benefit pension and other postretirement benefit plans on the Consolidated Balance Sheets. We recognize actuarial gains and losses immediately through net periodic benefit cost in the Consolidated Statements of Operations upon the annual remeasurement at December 31, or on an interim basis as triggering events warrant remeasurement. In addition, we use fair value to account for the value of plan assets.

As of December 31, 2021, our projected benefit obligations related to our pension and other postretirement benefit plans were \$1,319.2 million and \$117.8 million, respectively, and the underfunded status of our pension and other postretirement benefit obligations were \$143.2 million and \$41.0 million, respectively. These benefit obligations were valued using a weighted average discount rate of 2.96% for pension benefit plans and 3.00% for other postretirement benefit plans. The determination of the discount rate is generally based on an index created from a hypothetical bond portfolio consisting of high-quality fixed income securities with durations that match the timing of expected benefit payments. Changes in the selected discount rate could have a material impact on our projected benefit obligations and the unfunded status of our pension and other postretirement benefit plans.

For the year ended December 31, 2021, net periodic pension and postretirement benefit income was \$28.8 million and \$9.9 million, respectively. In 2021, net periodic pension and other postretirement benefit income was calculated using a variety of assumptions, including a weighted average discount rate of 2.68% and 2.65%, respectively, and a weighted average expected return on plan assets of 5.76% and 4.50%, respectively. The expected return on plan assets is determined based on forward-looking current market pricing. The forward-looking analysis

is performed using a building block approach incorporating inputs such as current yields, valuations, economic data and broad macroeconomic themes.

The net periodic benefit income and benefit obligation are affected by applicable year-end assumptions. Sensitivities to these assumptions may be asymmetric and are specific to the time periods noted. The impact of changing multiple factors simultaneously cannot be calculated by combining the individual sensitivities. The sensitivity to changes in discount rate assumptions may not be linear. A sensitivity analysis of the projected incremental effect of a 0.25% increase (decrease), holding all other assumptions constant, is as follows:

	Hypothetical Rate Increase (decrease)	
	0.25%	(0.25)%
Discount Rate		
Net periodic benefit income, prior to annual remeasurement gains or losses	\$ 1.9	\$ (2.0)
Benefit obligation	\$ (36.3)	\$ 38.0
Return on plan assets		
Net periodic benefit income, prior to annual remeasurement gains or losses	\$ (3.0)	\$ 3.0

Aggregate net periodic pension and other postretirement benefit income for 2022 is forecasted to be \$11.5 million and \$5.0 million, respectively. This estimate is based on a weighted average discount rate of 2.96% for the pension benefit plans and 3.00% for other postretirement benefit plans, as well as a weighted average expected return on assets of 5.96% for the pension benefit plans and 4.75% for the other postretirement benefit plans. Actual cost also is dependent on various other factors related to the employees covered by these plans. Adjustments to our actuarial assumptions could have a material adverse impact on our operating results.

Please refer to “Note 15 - Retirement and Postretirement Plans” in the Notes to the Consolidated Financial Statements for further information related to our pension and other postretirement benefit plans.

Other Loss Reserves

We have a number of loss exposures that are incurred in the ordinary course of business, such as environmental claims, product liability claims, product warranty claims, litigation and accounts receivable reserves. Establishing loss reserves for these matters requires management’s estimate and judgment with regard to risk exposure and ultimate liability or realization. These loss reserves are reviewed periodically and adjustments are made to reflect the most recent facts and circumstances. These other loss reserves have an immaterial impact on the Consolidated Financial Statements.

Forward-Looking Statements

Certain statements set forth in this Annual Report on Form 10-K (including our forecasts, beliefs and expectations) that are not historical in nature are “forward-looking” statements within the meaning of the Private Securities Litigation Reform Act of 1995. In particular, Management’s Discussion and Analysis of Financial Condition and Results of Operations contains numerous forward-looking statements. Forward-looking statements generally will be accompanied by words such as “anticipate,” “aspire,” “believe,” “could,” “estimate,” “expect,” “forecast,” “outlook,” “intend,” “may,” “plan,” “possible,” “potential,” “predict,” “project,” “seek,” “should,” “strategic direction,” “strategy,” “target,” “will,” “would,” or other similar words, phrases or expressions that convey the uncertainty of future events or outcomes. You are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date of this Form 10-K. We caution readers that actual results may differ materially from those expressed or implied in forward-looking statements made by or on behalf of us due to a variety of factors, such as:

- deterioration in world economic conditions, or in economic conditions in any of the geographic regions in which we conduct business, including additional adverse effects from global economic slowdown, terrorism or hostilities. This includes: political risks associated with the potential instability of governments and legal systems in countries in which we or our customers conduct business, and changes in currency valuations;
- climate-related risks, including environmental and severe weather caused by climate changes, and legislative and regulatory initiatives addressing global climate change or other environmental concerns;
- the effects of fluctuations in customer demand on sales, product mix and prices in the industries in which we operate. This includes: our ability to respond to rapid changes in customer demand including but not limited to changes in customer operating schedules due to supply chain constraints; the effects of customer bankruptcies or liquidations; the impact of changes in industrial business cycles; and whether conditions of fair trade exist in the U.S. markets;
- the potential impact of the COVID-19 pandemic on our operations and financial results, including cash flows and liquidity;

- whether we are able to successfully implement actions designed to improve profitability on anticipated terms and timetables and whether we are able to fully realize the expected benefits of such actions;
- competitive factors, including changes in market penetration; increasing price competition by existing or new foreign and domestic competitors; the introduction of new products by existing and new competitors; and new technology that may impact the way our products are sold or distributed;
- changes in operating costs, including the effect of changes in our manufacturing processes; changes in costs associated with varying levels of operations and manufacturing capacity; availability of raw materials and energy; our ability to mitigate the impact of fluctuations in raw materials and energy costs and the effectiveness of our surcharge mechanism; changes in the expected costs associated with product warranty claims; changes resulting from inventory management, cost reduction initiatives and different levels of customer demands; the effects of unplanned work stoppages; and changes in the cost of labor and benefits;
- the success of our operating plans, announced programs, initiatives and capital investments; and our ability to maintain appropriate relations with the union that represents our associates in certain locations in order to avoid disruptions of business;
- unanticipated litigation, claims or assessments, including claims or problems related to intellectual property, product liability or warranty, and environmental issues and taxes, among other matters;
- the Company's ability to achieve its ESG goals, including its 2030 ESG goals;
- the availability of financing and interest rates, which affect our cost of funds and/or ability to raise capital, including our ability to refinance and/or repay prior to or at maturity the Convertible Notes due December 1, 2025; our pension obligations and investment performance; and/or customer demand and the ability of customers to obtain financing to purchase our products or equipment that contain our products;
- the overall impact of the pension and postretirement mark-to-market accounting;
- the effects of the conditional conversion feature of the Convertible Senior Notes due 2025, which, if triggered, entitles holders to convert the notes at any time during specified periods at their option and therefore could result in potential dilution if the holder elects to convert and the Company elects to satisfy a portion or all of the conversion obligation by delivering common shares instead of cash;
- the impacts from any repurchases of our common shares, including the timing and amount of any repurchases; and
- those items identified under the caption Risk Factors in this Annual Report on Form 10-K.

You are cautioned that it is not possible to predict or identify all of the risks, uncertainties and other factors that may affect future results, and that the above list should not be considered to be a complete list. Except as required by the federal securities laws, we undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise. Further, this report includes our current policy and intent and is not intended to create legal rights or obligations. Certain standards of measurement and performance contained in this report are developing and based on assumptions, and no assurance can be given that any plan, objective, initiative, projection, goal, mission, commitment, expectation, or prospect set forth in this report can or will be achieved. Inclusion of information in this report is not an indication that the subject or information is material to our business or operating results.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Risk

Our borrowings include both fixed and variable-rate debt. The variable debt consists principally of borrowings under our Credit Agreement. We are exposed to the risk of rising interest rates to the extent we fund our operations with these variable-rate borrowings. As of December 31, 2021, we have \$46.0 million of aggregate debt outstanding. None of our outstanding debt as of December 31, 2021 has variable interest rates, thus a rise in interest rates would not impact our interest expense at this point in time.

Foreign Currency Exchange Rate Risk

Fluctuations in the value of the U.S. dollar compared to foreign currencies may impact our earnings. Geographically, our sales are primarily made to customers in the United States. Currency fluctuations could impact us to the extent they impact the currency or the price of raw materials in foreign countries in which our competitors operate or have significant sales.

Commodity Price Risk

In the ordinary course of business, we are exposed to market risk with respect to commodity price fluctuations, primarily related to our purchases of raw materials and energy, principally scrap steel, other ferrous and non-ferrous metals, alloys, natural gas and electricity. Whenever possible, we manage our exposure to commodity risks primarily through the use of supplier pricing agreements that enable us to establish the purchase prices for certain inputs that are used in our manufacturing business. We utilize a raw material surcharge as a component of pricing steel to pass through the cost increases of scrap, alloys and other raw materials, as well as natural gas. From time to time, we may use financial instruments to hedge a portion of our exposure to price risk related to commodities. In periods of stable demand for our products, the surcharge mechanism has worked effectively to reduce the normal time lag in passing through higher raw material costs so that we can maintain our gross margins. When demand and cost of raw materials are lower, the surcharge impacts sales prices to a lesser extent.

Item 8. Financial Statements and Supplementary Data

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Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of TimkenSteel Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of TimkenSteel Corporation (the Company) as of December 31, 2021 and 2020, and the related consolidated statements of operations, comprehensive income (loss), shareholders' equity and cash flows for each of the three years in the period ended December 31, 2021, and the related notes and the financial statement schedule included at Item 15a (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company at December 31, 2021 and 2020, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated February 24, 2022, expressed an unqualified opinion thereon.

Basis for Opinion

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

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

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter 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.

Accounting for pension and other postretirement benefit obligations

Description of the Matter

At December 31, 2021, the Company's aggregate defined benefit pension and other postretirement benefit obligation was \$1,437.0 million and exceeded the fair value of defined benefit pension and other postretirement plan assets of \$1,252.8 million, resulting in an unfunded defined benefit pension and other postretirement benefit obligation of \$184.2 million. As explained in Note 2 and Note 15 to the consolidated financial statements, the Company recognizes actuarial gains and losses immediately through net periodic benefit cost upon the annual remeasurement in the fourth quarter, or on an interim basis if specific events trigger a remeasurement, through updating the estimates used to measure the defined benefit pension and other postretirement benefit obligations and plan assets to reflect the actual return on plan assets and updated actuarial assumptions.

Auditing the defined benefit pension and other postretirement benefit obligations was complex due to the highly judgmental nature of the actuarial assumptions (e.g., discount rate, mortality rate, and health care cost trend rates) used in the measurement process. These assumptions had a significant effect on the benefit obligations.

How we Addressed the Matter in our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's accounting for the measurement of defined benefit pension and other postretirement benefit obligations. For example, we tested controls over management's review of the defined benefit pension and other postretirement benefit obligation calculations, the relevant data inputs and the significant actuarial assumptions, discussed above, used in the calculations.

To test the defined benefit pension and other postretirement benefit obligations, our audit procedures included, among others, evaluating the methodology used, the significant actuarial assumptions discussed above, and the underlying data used by the Company. We compared the actuarial assumptions used by management to historical trends and evaluated the change in the defined benefit pension and other postretirement benefit obligations from prior year due to the change in service cost, interest cost, actuarial gains and losses, benefit payments, contributions and other activities. In addition, we involved an actuarial specialist to assist with our procedures. For example, we evaluated management's methodology for determining the discount rate that reflects the maturity and duration of the benefit payments and is used to measure the defined benefit pension and other postretirement benefit obligations. In certain instances, as part of this assessment, we compared the projected cash flows to prior year and compared the current year benefits paid to the prior year projected cash flows. To evaluate the mortality rate and health care cost trend rates, we assessed whether the information is consistent with publicly available information, and whether any market data adjusted for entity-specific adjustments were applied. We also tested the completeness and accuracy of the underlying data, including the participant data used in the determination of the pension and other postretirement benefit obligations.

/s/ Ernst & Young LLP

We have served as the Company's auditors since 2012.

Cleveland, Ohio
February 24, 2022

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of TimkenSteel Corporation

Opinion on Internal Control over Financial Reporting

We have audited TimkenSteel Corporation's internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, TimkenSteel Corporation (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2021 and 2020, and the related consolidated statements of operations, comprehensive income (loss), shareholders' equity and cash flows for each of the three years in the period ended December 31, 2021, and the related notes and the financial statement schedule included at Item 15a and our report dated February 24, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

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

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

/s/ Ernst & Young LLP

Cleveland, Ohio
February 24, 2022

TimkenSteel Corporation
Consolidated Statements of Operations

	Year Ended December 31,			
	2021	2020	2019	
<i>(Dollars in millions, except per share data)</i>				
Net sales	\$ 1,282.9	\$ 830.7	\$ 1,208.8	
Cost of products sold	1,062.9	815.1	1,186.2	
Gross Profit	220.0	15.6	22.6	
Selling, general and administrative expenses	77.2	76.7	91.8	
Restructuring charges	6.7	3.1	8.6	
Loss on sale of consolidated subsidiary	1.1	—	—	
Loss (gain) on sale or disposal of assets, net	1.3	(2.4)	2.0	
Impairment charges	10.6	—	7.3	
Interest expense	5.9	12.2	15.7	
Loss on extinguishment of debt	—	0.9	—	
Other (income) expense, net	(59.5)	(14.2)	23.3	
Income (Loss) Before Income Taxes	176.7	(60.7)	(126.1)	
Provision (benefit) for income taxes	5.7	1.2	(16.1)	
Net Income (Loss)	\$ 171.0	\$ (61.9)	\$ (110.0)	
Per Share Data:				
Basic earnings (loss) per share	\$ 3.73	\$ (1.38)	\$ (2.46)	
Diluted earnings (loss) per share	\$ 3.18	\$ (1.38)	\$ (2.46)	

See accompanying Notes to the Consolidated Financial Statements.

TimkenSteel Corporation
Consolidated Statements of Comprehensive Income (Loss)

	Year Ended December 31,		
	2021	2020	2019
<i>(Dollars in millions)</i>			
Net income (loss)	\$ 171.0	\$ (61.9)	\$ (110.0)
Other comprehensive income (loss), net of tax of \$0.1 million in 2020 and \$16.7 million in 2019:			
Foreign currency translation adjustments	0.3	1.4	0.5
Pension and postretirement liability adjustments	(20.0)	(5.7)	53.1
Other comprehensive income (loss), net of tax	(19.7)	(4.3)	53.6
Comprehensive Income (Loss), net of tax	\$ 151.3	\$ (66.2)	\$ (56.4)

See accompanying Notes to the Consolidated Financial Statements.

TimkenSteel Corporation
Consolidated Balance Sheets

	2021	December 31,	2020
<i>(Dollars in millions)</i>			
ASSETS			
Current Assets			
Cash and cash equivalents	\$ 259.6	\$	102.8
Accounts receivable, net of allowances (2021 - \$1.9 million; 2020 - \$1.3 million)	100.5		63.3
Inventories, net	210.9		178.4
Deferred charges and prepaid expenses	3.9		4.0
Assets held for sale	4.3		0.3
Other current assets	3.1		8.8
Total Current Assets	582.3		357.6
Property, plant and equipment, net	510.2		569.8
Operating lease right-of-use assets	14.5		21.0
Pension assets	43.1		33.5
Intangible assets, net	6.7		9.3
Other non-current assets	2.1		2.8
Total Assets	\$ 1,158.9	\$	994.0
LIABILITIES AND SHAREHOLDERS' EQUITY			
Current Liabilities			
Accounts payable	\$ 141.9	\$	89.5
Salaries, wages and benefits	37.9		29.4
Accrued pension and postretirement costs	4.3		2.3
Current operating lease liabilities	5.7		7.5
Current convertible notes, net	44.9		38.9
Other current liabilities	16.1		13.4
Total Current Liabilities	250.8		181.0
Non-current convertible notes, net	—		39.3
Credit Agreement	—		—
Non-current operating lease liabilities	8.8		13.5
Accrued pension and postretirement costs	223.0		240.7
Deferred income taxes	2.2		1.0
Other non-current liabilities	9.5		11.0
Total Liabilities	494.3		486.5
Shareholders' Equity			
Preferred shares, without par value; authorized 10.0 million shares, none issued	—		—
Common shares, without par value; authorized 200.0 million shares; issued 2021 - 46.3 million shares; issued 2020 - 45.7 million shares	—		—
Additional paid-in capital	832.1		843.4
Retained deficit	(188.2)		(363.4)
Treasury shares - 2021 - None; 2020 - 0.6 million	—		(12.9)
Accumulated other comprehensive income (loss)	20.7		40.4
Total Shareholders' Equity	664.6		507.5
Total Liabilities and Shareholders' Equity	\$ 1,158.9	\$	994.0

See accompanying Notes to the Consolidated Financial Statements.

TimkenSteel Corporation
Consolidated Statements of Shareholders' Equity

	Common Shares Outstanding	Additional Paid-in Capital	Retained Deficit	Treasury Shares	Accumulated Other Comprehensive Income (Loss)	Total
Balance as of December 31, 2018	44,584,668	\$ 846.3	\$ (191.5)	\$ (33.0)	\$ (8.9)	\$ 612.9
Net income (loss)	—	—	(110.0)	—	—	(110.0)
Other comprehensive income (loss)	—	—	—	—	53.6	53.6
Stock-based compensation expense	—	7.4	—	—	—	7.4
Stock option activity	—	0.2	—	—	—	0.2
Issuance of treasury shares	321,739	(9.1)	—	9.1	—	—
Shares surrendered for taxes	(86,254)	—	—	(1.0)	—	(1.0)
Balance at December 31, 2019	44,820,153	\$ 844.8	\$ (301.5)	\$ (24.9)	\$ 44.7	\$ 563.1
Net income (loss)	—	—	(61.9)	—	—	(61.9)
Other comprehensive income (loss)	—	—	—	—	(4.3)	(4.3)
Stock-based compensation expense	—	6.6	—	—	—	6.6
Issuance of treasury shares	486,260	(12.6)	—	12.6	—	—
Shares surrendered for taxes	(142,105)	—	—	(0.6)	—	(0.6)
Equity component of convertible notes, net	—	4.6	—	—	—	4.6
Balance at December 31, 2020	45,164,308	\$ 843.4	\$ (363.4)	\$ (12.9)	\$ 40.4	\$ 507.5
Net income (loss)	—	—	171.0	—	—	171.0
Other comprehensive income (loss)	—	—	—	—	(19.7)	(19.7)
Adoption of new accounting standard	—	(10.6)	4.2	—	—	(6.4)
Stock-based compensation expense	272,462	7.3	—	—	—	7.3
Stock option activity	152,940	4.1	—	—	—	4.1
Issuance of treasury shares	638,093	(13.4)	—	13.4	—	—
Shares surrendered for taxes	(72,174)	—	—	(0.5)	—	(0.5)
Convertible notes settlement	113,226	1.3	—	—	—	1.3
Balance at December 31, 2021	46,268,855	\$ 832.1	\$ (188.2)	\$ —	\$ 20.7	\$ 664.6

See accompanying Notes to the Consolidated Financial Statements.

TimkenSteel Corporation
Consolidated Statements of Cash Flows

	Year Ended December 31,		
	2021	2020	2019
<i>(Dollars in millions)</i>			
CASH PROVIDED (USED)			
Operating Activities			
Net income (loss)	\$ 171.0	\$ (61.9)	\$ (110.0)
Adjustments to reconcile net income (loss) to net cash provided (used) by operating activities:			
Depreciation and amortization	63.1	70.0	73.5
Amortization of deferred financing fees and debt discount	1.0	5.3	5.1
Loss on extinguishment of debt	—	0.9	—
Loss on sale of consolidated subsidiary	1.1	—	—
Loss (gain) on sale or disposal of assets	1.3	(2.4)	2.0
Impairment charges	10.6	—	7.3
Deferred income taxes	1.2	—	(16.6)
Stock-based compensation expense	7.3	6.6	7.4
Pension and postretirement expense (benefit), net	(38.7)	8.6	41.6
Changes in operating assets and liabilities:			
Accounts receivable, net	(37.2)	14.2	85.9
Inventories, net	(41.6)	103.5	92.6
Accounts payable	53.5	23.1	(87.7)
Other accrued expenses	9.7	9.4	(26.0)
Deferred charges and prepaid expenses	0.1	(0.7)	0.2
Pension and postretirement contributions and payments	(6.9)	(4.1)	(3.8)
Other, net	1.4	1.0	(1.2)
Net Cash Provided (Used) by Operating Activities	196.9	173.5	70.3
Investing Activities			
Capital expenditures	(12.2)	(16.9)	(38.0)
Proceeds from sale of consolidated subsidiary, net	6.2	—	—
Proceeds from disposals of property, plant and equipment	1.2	10.9	—
Net Cash Provided (Used) by Investing Activities	(4.8)	(6.0)	(38.0)
Financing Activities			
Proceeds from exercise of stock options	4.1	—	0.2
Shares surrendered for employee taxes on stock compensation	(0.5)	(0.6)	(1.0)
Repayments on convertible notes	(38.9)	—	—
Repayments on credit agreements	—	(90.0)	(65.0)
Borrowings on credit agreements	—	—	40.0
Debt issuance costs	—	(1.2)	(1.0)
Net Cash Provided (Used) by Financing Activities	(35.3)	(91.8)	(26.8)
Increase (Decrease) in Cash and Cash Equivalents	156.8	75.7	5.5
Cash and cash equivalents at beginning of period	102.8	27.1	21.6
Cash and Cash Equivalents at End of Period	\$ 259.6	\$ 102.8	\$ 27.1

See accompanying Notes to the Consolidated Financial Statements.

TimkenSteel Corporation
Notes to Consolidated Financial Statements
(dollars in millions, except per share data)

Note 1 - Basis of Presentation

TimkenSteel Corporation (the "Company" or "TimkenSteel") manufactures alloy steel, as well as carbon and micro-alloy steel. TimkenSteel's portfolio includes special bar quality ("SBQ") bars, seamless mechanical tubing ("tubes"), manufactured components (formerly known as the "value-add" product type) such as precision steel components, and billets. In addition, TimkenSteel supplies machining and thermal treatment services and manages raw material recycling programs, which are also used as a feeder system for the Company's melt operations. The Company's products and services are used in a diverse range of demanding applications in the following market sectors: automotive; oil and gas; industrial equipment; mining; construction; rail; defense; heavy truck; agriculture; power generation; and oil country tubular goods ("OCTG").

The SBQ bar, tube, and billet production processes take place at the Company's Canton, Ohio manufacturing location. This location accounts for all of the SBQ bars, seamless mechanical tubes and billets the Company produces and includes three manufacturing facilities: the Faircrest, Harrison, and Gambrinus facilities. TimkenSteel's production of manufactured components takes place at two downstream manufacturing facilities: Tryon Peak (Columbus, North Carolina) and St. Clair (Eaton, Ohio). Many of the production processes are integrated, and the manufacturing facilities produce products that are sold in all of the Company's market sectors. As a result, investments in the Company's facilities and resource allocation decisions affecting the Company's operations are designed to benefit the overall business, not any specific aspect of the business.

Prior to indefinitely idling our Harrison melt and casting assets in the first quarter of 2021, we had an annual melt capacity of approximately 2 million tons and shipment capacity of 1.5 million tons. After indefinitely idling these assets, our annual melt capacity is approximately 1.2 million tons and our shipment capacity is approximately 0.9 million tons.

Basis of Consolidation:

The Consolidated Financial Statements include the consolidated assets, liabilities, revenues and expenses related to TimkenSteel as of December 31, 2021, 2020 and 2019. All significant intercompany accounts and transactions within TimkenSteel have been eliminated in the preparation of the Consolidated Financial Statements.

Use of Estimates:

The preparation of these Consolidated Financial Statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in the Consolidated Financial Statements and accompanying notes. These estimates and assumptions are reviewed and updated regularly to reflect recent experience.

Presentation:

Certain items previously reported in specific financial statement captions have been reclassified to conform to the fiscal 2021 presentation.

Note 2 - Significant Accounting Policies***Revenue Recognition:***

TimkenSteel recognizes revenue from contracts at a point in time when it has satisfied its performance obligation and the customer obtains control of the goods, at the amount that reflects the consideration the Company expects to receive for those goods. The Company receives and acknowledges purchase orders from its customers, which define the quantity, pricing, payment and other applicable terms and conditions. In some cases, the Company receives a blanket purchase order from its customer, which includes pricing, payment and other terms and conditions, with quantities defined at the time the customer issues periodic releases from the blanket purchase order. Certain contracts contain variable consideration, which primarily consists of rebates that are accounted for in net sales and accrued based on the estimated probability of the requirements being met.

Cash Equivalents:

TimkenSteel considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents.

Accounts Receivables, Net:

The Company's accounts receivables arise from sales to customers across the mobile, industrial, energy, and other end-market sectors. The allowance for doubtful account reserve has been established using qualitative and quantitative methods. In general, account balances greater than one year of age or sent to third party collection are fully reserved. Account balances for customers that are viewed as higher risk are also analyzed for a reserve. In addition to these methods, the allowance for doubtful accounts is adjusted for forward looking estimates of uncollectible balances based on end-market sector outlook and dynamics. Historically, TimkenSteel's allowance for doubtful accounts write-offs have been immaterial.

Inventories, Net:

Inventories are stated at lower of cost or net realizable value. All inventories, including raw materials, manufacturing supplies inventory, as well as international (outside the U.S.) inventories, have been valued using the FIFO or average cost method.

Property, Plant and Equipment, Net:

Property, plant and equipment, net are valued at cost less accumulated depreciation. Maintenance and repairs are charged to expense as incurred. The provision for depreciation is computed principally by the straight-line method based upon the estimated useful lives of the assets. The useful lives are approximately 30 years for buildings and 3 to 20 years for machinery and equipment.

Intangible Assets, Net:

Intangible assets subject to amortization are amortized on a straight-line method over their legal or estimated useful lives, with useful lives ranging from 3 to 15 years.

In accordance with applicable accounting guidance, TimkenSteel capitalizes certain costs incurred for computer software developed or obtained for internal use. TimkenSteel capitalizes substantially all external costs and qualifying internal costs related to the purchase and implementation of software projects used for business operations. Capitalized software costs primarily include purchased software and external consulting fees. Capitalized software projects are amortized over the estimated useful lives of the software.

Long-lived Assets:

Long-lived assets (including tangible assets and intangible assets subject to amortization) are reviewed for impairment when events or changes in circumstances have occurred indicating that the carrying value of the assets may not be recoverable.

TimkenSteel tests recoverability of long-lived assets at the lowest level for which there are identifiable cash flows that are independent from the cash flows of other assets. Assets and asset groups held and used are measured for recoverability by comparing the carrying amount of the asset or asset group to the sum of future undiscounted net cash flows expected to be generated by the asset or asset group.

Assumptions and estimates about future values and remaining useful lives of TimkenSteel's long-lived assets are complex and subjective. They can be affected by a variety of factors, including external factors such as industry and economic trends and internal factors such as changes in TimkenSteel's business strategy and internal forecasts.

If an asset or asset group is considered to be impaired, the impairment loss that would be recognized is the amount by which the carrying amount of the assets exceeds the fair value of the assets. To determine fair value, TimkenSteel uses internal cash flow estimates discounted at an appropriate interest rate, third party appraisals, as appropriate, and/or market prices of similar assets, when available.

Refer to "Note 6 - Disposition of Non-Core Assets" and "Note 11 - Property, Plant and Equipment" for additional information.

Product Warranties:

TimkenSteel accrues liabilities for warranties based upon specific claim incidents in accordance with accounting rules relating to contingent liabilities. Should TimkenSteel become aware of a specific potential warranty claim for which liability is probable and reasonably estimable, a specific charge is recorded and accounted for accordingly. TimkenSteel had warranty claims in the amount of \$1.4 million that were resolved and paid primarily during the fourth quarter of 2021, which is included in cost of products sold on the Consolidated Statements of Operations. TimkenSteel had no significant warranty claims for the years ended December 31, 2020 or 2019.

Income Taxes:

Deferred tax assets and liabilities are recorded for the future tax consequences attributable to differences between financial statement carrying amounts of existing assets and liabilities and their respective tax bases, as well as net operating loss and tax credit carryforwards. TimkenSteel accounts for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities are determined on the basis of the differences between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date. TimkenSteel recognizes deferred tax assets to the extent TimkenSteel believes these assets are more likely than not to be realized. In making such a determination, TimkenSteel considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax-planning strategies, and results of recent operations. If TimkenSteel determines that it would be able to realize deferred tax assets in the future in excess of their net recorded amount, TimkenSteel would make an adjustment to the deferred tax asset valuation allowance, which would reduce the provision for income taxes.

TimkenSteel records uncertain tax positions in accordance with applicable accounting guidance, on the basis of a two-step process whereby (1) TimkenSteel determines whether it is more likely than not that the tax positions will be sustained on the basis of the technical merits of the position, and (2) for those tax positions that meet the more-likely-than-not recognition threshold, TimkenSteel recognizes the largest amount of tax benefit that is more than 50 percent likely to be realized upon ultimate settlement with the related tax authority.

TimkenSteel recognizes interest and penalties related to unrecognized tax benefits within the provision (benefit) for income taxes line in the accompanying Consolidated Statements of Operations. Accrued interest and penalties are included within the related tax liability line in the Consolidated Balance Sheets.

Foreign Currency:

Assets and liabilities of subsidiaries are translated at the rate of exchange in effect on the balance sheet date. Income and expenses are translated at the average rates of exchange prevailing during the year. The related translation adjustments are reflected as a separate component of accumulated other comprehensive loss. Gains and losses resulting from foreign currency transactions are included in other (income) expense, net in the Consolidated Statements of Operations. TimkenSteel realized a foreign currency exchange loss of \$0.1 million and \$0.2 million for the years ended December 31, 2021 and 2020, respectively. There were no foreign currency exchange gains or losses in 2019.

Pension and Other Postretirement Benefits:

TimkenSteel recognizes an overfunded status or underfunded status (e.g., the difference between the fair value of plan assets and the benefit obligations) as either an asset or a liability for its defined benefit pension and other postretirement benefit plans on the Consolidated Balance Sheets. The Company recognizes actuarial gains and losses immediately through net periodic benefit cost in the Consolidated Statements of Operations upon the annual remeasurement at December 31, or on an interim basis as triggering events warrant remeasurement. In addition, the Company uses fair value to account for the value of plan assets.

Stock-Based Compensation:

TimkenSteel recognizes stock-based compensation expense based on the grant date fair value of the stock-based awards over their required vesting period on a straight-line basis, whether the awards were granted with graded or cliff vesting. Stock options are issued with an exercise price equal to the closing market price of TimkenSteel common shares on the date of grant. The fair value of stock options is determined using a Black-Scholes option pricing model, which incorporates assumptions regarding the expected volatility, the expected option life, the risk-free interest rate and the expected dividend yield.

Performance-based restricted stock units issued in 2021 and 2020 vest based on achievement of a total shareholder return ("TSR") metric. The TSR metric is considered a market condition, which requires TimkenSteel to reflect it in the fair value on grant date using an advanced option-pricing model. The fair value of each performance share was therefore determined using a Monte Carlo valuation model, a generally accepted lattice pricing model. The Monte Carlo valuation model, among other factors, uses commonly-accepted economic theory underlying all valuation models, estimates fair value using simulations of future share prices based on stock price behavior and considers the correlation of peer company returns in determining fair value.

The fair value of stock-based awards that will settle in TimkenSteel common shares, other than stock options and performance-based restricted stock units, is based on the closing market price of TimkenSteel common shares on the grant date.

TimkenSteel recognizes all excess tax benefits and tax deficiencies as income tax expense or benefit in the Consolidated Statements of Operations. The excess tax benefits and tax deficiencies are considered discrete items in the reporting period they occur and are not included in the estimate of an entity's annual effective tax rate.

Research and Development:

Expenditures for research and development at TimkenSteel amounted to \$1.7 million, \$1.8 million and \$4.1 million for the years ended December 31, 2021, 2020, and 2019, respectively, and were recorded as a component of selling, general and administrative expenses in the Consolidated Statements of Operations. These expenditures may fluctuate from year to year depending on special projects and the needs of TimkenSteel and its customers.

Adoption of New Accounting Standards

The Company adopted the following Accounting Standard Updates ("ASU") during the year ended December 31, 2021.

Standard Adopted	Description	Date of Adoption	Impact
ASU 2019-12, Income Taxes (Topic 740)	The standard simplifies the accounting for income taxes by removing various exceptions.	January 1, 2021	The adoption of this standard had an immaterial impact on the Company's tax provision.
ASU 2020-06, Debt - Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging - Contracts in Entity's Own Equity (Subtopic 815-40)	The standard simplifies the accounting for convertible instruments, as well as the diluted net income per share calculation. The standard also removes certain settlement conditions that are required for equity contracts to qualify for the derivative scope exception.	January 1, 2021	The Company early adopted this standard as of January 1, 2021 using the modified retrospective method of transition. The standard had a material impact on the Consolidated Financial Statements. See below for additional information.

Upon adoption of ASU 2020-06 prospectively as of January 1, 2021, all outstanding Convertible Notes were fully classified as a liability, there was no longer a separate equity component and the Convertible Notes no longer have a debt discount that is amortized. This resulted in a decrease of \$10.6 million to additional paid-in capital and an increase of \$1.1 million and \$5.3 million to current convertible notes, net and non-current convertible notes, net, respectively, on the Consolidated Balance Sheets as of January 1, 2021. Additionally, retained deficit was reduced by \$4.2 million in the Consolidated Balance Sheets as of January 1, 2021 to remove amortization expense recognized in prior periods. The adoption of this standard did not have an effect on the Company's cash flows, liquidity, or the methodology used for the earnings per share calculation. Refer to "Note 14 – Financing Arrangements" for additional information on the Company's Convertible Notes.

Accounting Standards Issued But Not Yet Adopted

There are no current ASUs issued, but not adopted, that are expected to have an impact on the Company.

Legislation related to the COVID-19 Pandemic

Coronavirus Aid, Relief, and Economic Security Act

On March 27, 2020, the President of the United States signed the Coronavirus Aid, Relief, and Economic Security ("CARES") Act, an economic stimulus package intended to provide support, principally in the form of tax benefits, to companies and individuals negatively impacted by the COVID-19 pandemic. Although the majority of the provisions included in the CARES Act did not immediately benefit the Company from a cash tax perspective due to its significant net operating losses, the Company took advantage of the deferral of the employer share (6.2% of employee wages) of Social Security payroll taxes that would otherwise have been owed from the date of enactment of the legislation through December 31, 2020, as afforded by the Act. During the year ended December 31, 2020, the Company had deferred \$6.4 million in cash payments and recorded reserves for such deferred payroll taxes in salaries, wages and benefits on the Consolidated Balance Sheets, to be paid in two equal installments. The first installment in the amount of \$3.2 million was paid during the fourth quarter of 2021. The second installment is due on December 31, 2022.

The CARES Act also provided for an employee retention credit ("Employee Retention Credit"), which is a refundable tax credit against certain employment taxes of up to five thousand dollars per employee for eligible employers. The tax credit is equal to 50% of qualified wages paid to employees during a quarter, capped at ten thousand dollars of qualified wages per employee throughout the year. The Company qualified for the tax credit in the second and third quarters of 2020 and accrued a benefit of \$2.3 million in the fourth quarter of 2020 related to the Employee Retention Credit in other (income) expense, net on the Company's Consolidated Statements of Operations. The Company filed for

this credit in the second quarter of 2021 and received a portion of the proceeds from the Internal Revenue Service ("IRS") in the amount of \$0.5 million during the fourth quarter of 2021. The Company received the remaining \$1.8 million of cash proceeds in the first quarter of 2022, which was recorded as a receivable in other current assets on the Consolidated Balance Sheets as of December 31, 2021.

Consolidated Appropriations Act, 2021

On December 27, 2020, the President of the United States signed the Consolidated Appropriation Act, 2021 ("CAA"). The CAA includes additional COVID-19 relief that expands upon the relief provided in the CARES Act, including, but not limited to, the extension of tax deductions, credits, and incentives. The Company has evaluated the CAA for any potential impact. While it was determined that the CAA revised and extended the Employee Retention Credit into 2021, the CAA is not expected to have an impact on the Company as employee furloughs related to the COVID-19 pandemic ceased in 2020. Furthermore, the Company does not expect any of the other provisions within the CAA to provide a benefit.

American Rescue Plan Act of 2021

On March 11, 2021, the President of the United States signed the American Rescue Plan Act of 2021 ("ARPA"). The ARPA strengthens and extends certain programs enacted through the CARES Act and establishes new relief programs aimed at mitigating the financial impact of the COVID-19 pandemic. The provisions within the ARPA have been evaluated and at this time one provision, which offers funding relief for single-employer defined benefit pension plans, is expected to materially impact the Company.

Specifically, the ARPA provides enhanced interest rate stabilization, as well as extended amortization of funding shortfalls. The Company has evaluated and made final the elections permitted by the ARPA related to the required contributions for our TimkenSteel Corporation Bargaining Unit Pension Plan ("Bargaining Plan"). At this time based on current assumptions, the elections made under ARPA and expected asset returns, we believe that required Company contributions to the Bargaining Plan have been delayed until after 2031. However, these estimates are subject to significant uncertainty.

Note 3 - Segment Information

We conduct our business activities and report financial results as one business segment. The presentation of financial results as one reportable segment is consistent with the way the Company operates its business and is consistent with the manner in which the Chief Operating Decision Maker ("CODM") evaluates performance and makes resource and operating decisions for the business as described above. Furthermore, the Company notes that monitoring financial results as one reportable segment helps the CODM manage costs on a consolidated basis, consistent with the integrated nature of the operations.

Geographic Information

Net sales by geographic area are reported by the country in which the customer is domiciled. Long-lived assets include property, plant and equipment and intangible assets subject to amortization. Long-lived assets by geographic area are reported by the location of the TimkenSteel operations to which the asset is attributed.

	Year Ended December 31,		
	2021	2020	2019
Net Sales:			
United States	\$ 1,166.1	\$ 746.8	\$ 1,096.8
Foreign	116.8	83.9	112.0
	\$ 1,282.9	\$ 830.7	\$ 1,208.8

	December 31,	
	2021	2020
Long-lived Assets, net:		
United States	\$ 530.7	\$ 599.1
Foreign	0.7	1.0
	\$ 531.4	\$ 600.1

Note 4 - Revenue Recognition

The following table provides the major sources of revenue by end-market sector for the years ended December 31, 2021, 2020 and 2019:

	Year Ended December 31,		
	2021	2020	2019
Mobile	\$ 527.9	\$ 346.0	\$ 479.3
Industrial	661.2	391.7	486.3
Energy	62.9	53.2	166.4
Other ⁽¹⁾	30.9	39.8	76.8
Total Net Sales	\$ 1,282.9	\$ 830.7	\$ 1,208.8

⁽¹⁾“Other” sales by end-market sector includes the Company’s scrap and oil country tubular goods (“OCTG”) billet sales.

The following table provides the major sources of revenue by product type for the years ended December 31, 2021, 2020 and 2019:

	Year Ended December 31,		
	2021	2020	2019
Bar	\$ 863.6	\$ 502.5	\$ 783.0
Tube	164.4	101.4	151.8
Manufactured components ⁽³⁾	224.0	208.1	240.6
Other ⁽²⁾	30.9	18.7	33.4
Total Net Sales	\$ 1,282.9	\$ 830.7	\$ 1,208.8

⁽²⁾“Other” for sales by product type relates to the Company’s scrap sales.

⁽³⁾ Formerly known as the “Value-add” product type.

Note 5 - Restructuring Charges

Over the past several years, TimkenSteel has made numerous organizational changes to enhance profitable and sustainable growth. These company-wide actions included the restructuring of its business support functions, the reduction of management layers throughout the organization and other domestic and international actions to further improve the Company’s overall cost structure. Restructuring charges for the years ended December 31, 2021, 2020, and 2019 totaled \$6.7 million, \$3.1 million, and \$8.6 million, respectively.

During 2021, \$6.4 million of restructuring charges related to severance and employee-related benefits as a result of continued organizational changes. The remaining \$0.3 million of charges related to the transition of customers to other TimkenSteel manufacturing equipment due to the discontinuation of specific small-diameter seamless mechanical tube manufacturing and the indefinite idling of our Harrison melt and casting activities (refer to “Note 6 – Disposition of Non-Core Assets” for additional information). Restructuring charges for 2020 and 2019 primarily consisted of severance and employee related benefits. During this period of organizational changes, the Company has eliminated approximately 290 salaried positions through restructuring actions, with approximately 75 of these eliminations occurring in 2021.

TimkenSteel recorded reserves for such restructuring charges as other current liabilities on the Consolidated Balance Sheets. The reserve balance at December 31, 2021 is expected to be substantially used in the next twelve months.

The following is a summary of the restructuring reserve for the twelve months ended December 31, 2021 and 2020:

Balance at December 31, 2020	\$ 1.5
Expenses	6.7
Payments	(3.5)
Balance at December 31, 2021	\$ 4.7
Balance at December 31, 2019	\$ 6.0
Expenses	3.1
Payments	(7.6)
Balance at December 31, 2020	\$ 1.5

Note 6 - Disposition of Non-Core Assets

Scrap Processing Facility

During the fourth quarter of 2019, management signed a letter of intent to dispose of the Company's scrap processing facility in Akron, Ohio for cash consideration of approximately \$4.0 million. This letter of intent and cash consideration were for the land, buildings, machinery and equipment associated with this facility.

As a result of the agreement to sell the scrap processing facility, the Company ceased depreciation of the assets and recorded them as assets held for sale. This disposal did not represent a discontinued operation. Additionally, the Company recorded an impairment charge of \$7.3 million in the fourth quarter of 2019 which represents the cash consideration to be received less cost to sell the assets compared with the \$11.3 million carrying value of the assets being sold, including supplies inventory. An additional loss on disposal of \$0.1 million was recognized in the first quarter of 2020 as the sale was completed.

TimkenSteel Material Services Facility

During the first quarter of 2020, management completed its previously announced plan to close the Company's TimkenSteel Material Services ("TMS") facility in Houston and began selling the assets at the facility. Accelerated depreciation and amortization on TMS assets of \$2.8 million was recorded in the fourth quarter of 2019, with an additional \$1.6 million of accelerated depreciation and amortization recorded in the first quarter of 2020, to reduce the net book value of the machinery and equipment to its estimated fair value. Subsequent to the closure, certain assets were sold and a gain on sale of \$3.6 million was recognized for the year ended December 31, 2020.

Inventory write-downs of \$4.8 million were recorded as of December 31, 2019, which represented the difference between the expected selling price and carrying value of the related inventory. The expected selling price was based upon the Company's most recently published price lists related to this inventory. While the Company began selling the inventory associated with TMS in the first quarter of 2020 at prices that were in line with the net realizable value of the inventory established in the fourth quarter of 2019, excess inventory related to the energy end-market sector resulted in an additional reserve of approximately \$3.1 million being recorded in the second quarter of 2020. The excess inventory was the result of continued weakness in this end-market sector, as well as the closures of several distributors that were holding considerable amounts of similar inventory. There was no inventory at December 31, 2021 associated with TMS, as the remaining inventory was sold throughout 2021. Furthermore, inventory reserves were reversed throughout 2021 as the related TMS inventory was sold or scrapped.

During 2021, the remaining associated machinery and equipment that was classified as held for sale was fully impaired as there was no longer an expected market value for these assets. This resulted in impairment charges of \$0.3 million.

A small parcel of land associated with TMS was sold during the fourth quarter of 2021 for \$0.3 million resulting in a gain on sale of \$0.1 million. The remaining \$4.3 million of land and buildings associated with TMS are classified as assets held for sale on the Consolidated Balance Sheets as of December 31, 2021, as it is probable that these assets will be sold within the next 12 months.

Small-Diameter Seamless Mechanical Tubing Machinery and Equipment

In the third quarter of 2020, TimkenSteel informed customers that as of December 31, 2020 the Company would discontinue the commercial offering of specific small-diameter seamless mechanical tubing products. As a result, the Company recognized accelerated depreciation of \$1.8 million for the year ended December 31, 2020 on the machinery and equipment used in the manufacturing of these specific products. Additional accelerated depreciation of \$1.5 million was recognized in the first quarter of 2021 in alignment with the ramp down of this machinery and equipment. Spare parts related to this machinery and equipment of \$0.5 million were also written down in the first quarter of 2021, as management determined there was no alternative use.

Property and Asset Sales

In the fourth quarter of 2020, TimkenSteel sold portions of non-core property at the Canton, Ohio manufacturing location, resulting in a gain on sale of assets of \$0.5 million for the year ended December 31, 2020.

During the fourth quarter of 2021, TimkenSteel disposed of older non-core assets through an auction process, resulting in a loss on sale of assets of \$0.9 million for the year ended December 31, 2021.

Harrison Melt and Casting Assets

On February 16, 2021, management announced a plan to indefinitely idle its Harrison melt and casting assets, which was completed in the first quarter of 2021. Going forward, all of the Company's melt and casting activities will take place at the Faircrest location. The Company worked

collaboratively with employees, suppliers and a number of customers to ensure a well-organized and efficient transition. The Company's rolling and finishing operations at Harrison were not impacted by this action.

The Company recognized non-cash charges of \$9.5 million related to the write-down of the associated Harrison melt and casting assets in the first quarter of 2021. These charges include \$7.9 million related to the impairment of the associated machinery and equipment, which is classified as impairment charges on the Consolidated Statements of Operations, as well as a write-down of spare parts of \$1.6 million, which is included in cost of products sold in the Consolidated Statements of Operations, as management determined there was no alternative use. The Company did not incur any cash expenditures related to these charges.

TimkenSteel (Shanghai) Corporation Limited

On March 31, 2021, the Company entered into an agreement pursuant to which Daido Steel (Shanghai) Co., Ltd. agreed to acquire all of the Company's ownership interest in TimkenSteel (Shanghai) Corporation Limited in an all-cash transaction. The sale closed on July 30, 2021 and net cash proceeds of \$6.2 million were received in the third quarter of 2021. As a result of this transaction, a loss on sale of consolidated subsidiary of \$1.1 million was recognized on the Consolidated Statements of Operations during 2021. TimkenSteel's consolidated financial statements include activity for TimkenSteel (Shanghai) Corporation Limited through July 30, 2021.

Customer Program Early Termination

During the fourth quarter of 2021, TimkenSteel received communication from a customer that two specific programs would end earlier than originally forecasted. There is machinery at the St. Clair facility designed for these programs, which has no alternative use. As such, the Company recognized impairment charges of \$2.4 million for the year ended December 31, 2021. Related supplies inventory of \$0.2 million was also written down, which is included in cost of products sold in the Consolidated Statements of Operations, as management determined there was no alternative use.

Additionally, cash previously received from the customer as reimbursement for capital investment for these early terminated programs was amortized as an expense reduction over the term of the related programs. With the early end to these programs, the remaining amount of capital recovery to be recognized of \$1.1 million was accelerated and recognized within cost of products sold on the Consolidated Statements of Operations during the fourth quarter of 2021.

Note 7 - Other (Income) Expense, net

The following table provides the components of other (income) expense, net for the years ended December 31, 2021, 2020 and 2019:

		Year Ended December 31,		
		2021	2020	2019
Pension and postretirement non-service benefit (income) loss	\$	(37.2)	\$ (26.6)	\$ (17.5)
Loss (gain) from remeasurement of benefit plans		(20.1)	14.7	40.6
Foreign currency exchange loss (gain)		0.1	0.2	—
Sales and use tax refund		(2.5)	—	—
Employee retention credit		—	(2.3)	—
Miscellaneous (income) expense		0.2	(0.2)	0.2
Total other (income) expense, net	\$	(59.5)	\$ (14.2)	\$ 23.3

Non-service related pension and other postretirement benefit income, for all years, consists primarily of the interest cost, expected return on plan assets and amortization components of net periodic cost. The loss from remeasurement of benefit plans is due to the Company performing mark-to-market accounting on its pension and postretirement assets at year-end and upon the occurrence of certain triggering events. For more details on the remeasurement refer to "Note 15 - Retirement and Postretirement Plans."

During the second quarter of 2021, TimkenSteel received a refund from the State of Ohio related to an overpayment of sales and use taxes for the period of October 1, 2016 through September 30, 2019. This resulted in a gain recognized of \$2.5 million, net of related professional fees, for the year ended December 31, 2021.

During the year ended December 31, 2020, the Company recognized a \$2.3 million benefit related to the Employee Retention Credit in other (income) expense, net. For more details on this credit refer to "Note 2 - Significant Accounting Policies."

Note 8 - Income Tax Provision

Income (loss) from operations before income taxes, based on geographic location of the operations to which such earnings are attributable, is provided below.

	Years Ended December 31,		
	2021	2020	2019
United States	\$ 171.2	\$ (64.1)	\$ (130.8)
Non-United States	5.5	3.4	4.7
Income (loss) from operations before income taxes	\$ 176.7	\$ (60.7)	\$ (126.1)

The provision (benefit) for income taxes consisted of the following:

	Years Ended December 31,		
	2021	2020	2019
Current:			
Federal	\$ 0.2	\$ 0.6	\$ —
State and local	3.7	—	0.1
Foreign	0.6	0.5	0.4
Total current tax expense (benefit)	\$ 4.5	\$ 1.1	\$ 0.5
Deferred:			
Federal	\$ 0.8	\$ (0.4)	\$ (14.4)
State and local	0.3	0.5	(2.0)
Foreign	0.1	—	(0.2)
Total deferred tax expense (benefit)	1.2	0.1	(16.6)
Provision (benefit) for incomes taxes	\$ 5.7	\$ 1.2	\$ (16.1)

For the year ended December 31, 2021, TimkenSteel made \$0.9 million in foreign tax payments, \$4.6 million in state and local tax payments, no U.S. federal payments, and had no refundable overpayments of state income taxes. For the year ended December 31, 2020, TimkenSteel made \$0.4 million in foreign tax payments, \$0.1 million in state tax payments, no U.S. federal payments, and had no refundable overpayments of state income taxes.

The reconciliation between TimkenSteel's effective tax rate on income (loss) from continuing operations and the statutory tax rate is as follows:

	Years Ended December 31,		
	2021	2020	2019
U.S. federal income tax provision (benefit) at statutory rate	\$ 37.1	\$ (12.7)	\$ (26.5)
Adjustments:			
State and local income taxes, net of federal tax benefit	4.1	2.3	(1.3)
Permanent differences	(0.2)	1.3	1.3
Foreign earnings taxed at different rates	(0.5)	0.1	—
Valuation allowance	(34.8)	10.3	10.2
U.S. research tax credit	—	—	0.2
Global intangible low-taxed income	—	—	0.2
Other items, net	—	(0.1)	(0.2)
Provision (benefit) for income taxes	\$ 5.7	\$ 1.2	\$ (16.1)
Effective tax rate	3.2 %	(2.0) %	12.8 %

Income tax expense includes U.S. and international income taxes. Except as required under U.S. tax law, U.S. income and foreign withholding taxes have not been recognized on the excess of the amount for financial reporting over the tax basis of investments in foreign subsidiaries that is indefinitely reinvested outside the U.S. This amount becomes taxable upon a repatriation of assets from the subsidiary or a sale or liquidation of the subsidiary.

During the second and third quarters of 2021, TimkenSteel (Shanghai) Corporation Limited declared and paid dividends of \$0.8 million and \$0.4 million, respectively, net of withholding taxes, to TimkenSteel. During the third quarter of 2020, TimkenSteel (Shanghai) Corporation Limited declared a dividend of \$5.1 million, net of withholding taxes, to TimkenSteel.

As of December 31, 2021, there was no deferred tax liability related to undistributed earnings. The Company had recognized a deferred tax liability in the amount of \$0.3 million at December 31, 2020, for undistributed earnings at its TimkenSteel (Shanghai) Corporation Limited and TimkenSteel de Mexico S. de R.C. de C.V. subsidiaries.

The effect of temporary differences giving rise to deferred tax assets and liabilities at December 31, 2021 and 2020 was as follows:

	Years Ended December 31,	
	2021	2020
Deferred tax liabilities:		
Depreciation	\$ (89.0)	\$ (97.5)
Inventory	(8.0)	(16.2)
Convertible notes	—	(1.6)
Leases - right-of-use asset	(3.5)	(5.0)
Other, net	—	(0.3)
Deferred tax liabilities	\$ (100.5)	\$ (120.6)
Deferred tax assets:		
Tax loss carryforwards	\$ 52.6	\$ 94.4
Pension and postretirement benefits	44.3	50.3
Other employee benefit accruals	8.2	8.7
Lease liability	3.5	5.0
State decoupling	1.3	2.8
Accrued restructuring	1.1	—
Capital loss carryforward	0.8	—
Intangible assets	0.6	1.0
Inventory	0.6	4.5
Allowance for doubtful accounts	0.5	0.3
Other, net	0.3	0.3
Deferred tax assets subtotal	\$ 113.8	\$ 167.3
Valuation allowances	(15.5)	(47.7)
Deferred tax assets	98.3	119.6
Net deferred tax assets (liabilities)	\$ (2.2)	\$ (1.0)

As of December 31, 2021 and 2020, the Company had a deferred tax liability of \$2.2 million and \$1.0 million, respectively, on the Consolidated Balance Sheets.

As of December 31, 2021, TimkenSteel had loss carryforwards in the U.S. and various non-U.S. jurisdictions totaling \$224.6 million (of which \$164.2 million relates to the U.S. and \$60.4 million relates to the UK jurisdiction), having various expiration dates. TimkenSteel has provided valuation allowances of \$15.5 million against these carryforwards. The majority of the non-U.S. loss carryforwards represent local country net operating losses for branches of TimkenSteel or entities treated as branches of TimkenSteel under U.S. tax law. Tax benefits have previously been recorded for these losses in the U.S. The related local country net operating loss carryforwards are offset fully by valuation allowances.

During 2016, operating losses generated in the U.S. resulted in a decrease in the carrying value of the Company's U.S. deferred tax liability to the point that would result in a net U.S. deferred tax asset at December 31, 2016. In light of TimkenSteel's operating performance in the U.S. and current industry conditions, the Company assessed, based upon all available evidence, and concluded that it was more likely than not that it would not realize a portion of its U.S. deferred tax assets. The Company recorded a valuation allowance in 2016 and as a result of current year activity, the Company remained in a full valuation allowance position through 2021. Going forward, the need to maintain valuation allowances against deferred tax assets in the U.S. and other affected countries will cause variability in the Company's effective tax rate. The Company will maintain a valuation allowance against its deferred tax assets in the U.S. and applicable foreign countries until sufficient positive evidence exists to eliminate them.

As of December 31, 2021, 2020 and 2019, TimkenSteel had no total gross unrecognized tax benefits, and no amounts which represented unrecognized tax benefits that would favorably impact TimkenSteel's effective income tax rate in any future periods if such benefits were recognized. As of December 31, 2021, TimkenSteel does not anticipate a change in its unrecognized tax positions during the next 12 months. TimkenSteel had no accrued interest and penalties related to uncertain tax positions as of December 31, 2021, 2020 and 2019.

As of December 31, 2021, the tax years 2018 to the present remain open to examination by the IRS.

Note 9 - Earnings (Loss) Per Share

Basic earnings (loss) per share is computed based upon the weighted average number of common shares outstanding. Diluted earnings (loss) per share is computed based upon the weighted average number of common shares outstanding plus the dilutive effect of common share equivalents calculated using the treasury stock method or if-converted method. For the Convertible Notes, the Company utilizes the if-converted method to calculate diluted earnings (loss) per share. Under the if-converted method, the Company adjusts net earnings to add back interest expense (including amortization of debt issuance costs) recognized on the Convertible Notes and includes the number of shares potentially issuable related to the Convertible Notes in the weighted average shares outstanding. Treasury stock, if any, is excluded from the denominator in calculating both basic and diluted earnings (loss) per share.

Equity-based Awards

Common share equivalents for shares issuable for equity-based awards amounted to 4.8 million shares for the year ended December 31, 2021. For the year ended December 31, 2021, 1.8 million shares were excluded from the computation of diluted earnings (loss) per share, primarily related to options with exercise prices above the average market price of our common shares (i.e., “underwater” options), because the effect of their inclusion would have been anti-dilutive. The difference between the remaining 3.0 million shares and 1.3 million shares assumed purchased with potential proceeds for the year ended December 31, 2021, were included in the denominator of the diluted earnings (loss) per share calculation.

Common share equivalents for shares issuable for equity-based awards amounted to 4.6 million shares and 3.7 million shares for the years ended December 31, 2020 and December 31, 2019, respectively. All common share equivalents for shares issuable for equity-based awards were excluded from the computation of diluted earnings (loss) per share for the years ended December 31, 2020 and December 31, 2019, because the effect of their inclusion would have been anti-dilutive.

Convertible Notes

Common share equivalents for shares issuable upon the conversion of outstanding convertible notes of 7.4 million for the year ended December 31, 2021, were included in the computation of diluted earnings (loss) per share, as these shares would be dilutive.

In January 2022, TimkenSteel repurchased \$5.0 million of outstanding principal related to the Convertible Senior Notes Due 2025. The convertible notes repurchase will have the effect of reducing diluted shares outstanding by approximately 0.6 million shares beginning in the first quarter of 2022.

Common share equivalents for shares issuable upon the conversion of outstanding convertible notes of 9.1 million and 6.9 million for the years ended December 31, 2020 and December 31, 2019, respectively, were excluded from the computation of diluted earnings (loss) per share because the effect of their inclusion would have been anti-dilutive.

The following table sets forth the reconciliation of the numerator and the denominator of basic and diluted earnings (loss) per share for the years ended December 31, 2021, 2020 and 2019:

	Year Ended December 31,		
	2021	2020	2019
Numerator:			
Net income (loss), basic	\$ 171.0	\$ (61.9)	\$ (110.0)
Add convertible notes interest	4.1	—	—
Net income (loss), diluted	\$ 175.1	\$ (61.9)	\$ (110.0)
Denominator:			
Weighted average shares outstanding, basic	45.9	45.0	44.8
Dilutive effect of equity-based awards	1.7	—	—
Dilutive effect of convertible notes	7.4	—	—
Weighted average shares outstanding, diluted	55.0	45.0	44.8
Basic earnings (loss) per share	\$ 3.73	\$ (1.38)	\$ (2.46)
Diluted earnings (loss) per share	\$ 3.18	\$ (1.38)	\$ (2.46)

Note 10 – Inventories

The components of inventories as of December 31, 2021 and 2020 were as follows:

		December 31,	
	2021	2020	
Manufacturing supplies	\$ 29.3	\$ 37.6	
Raw materials	37.3	20.0	
Work in process	89.3	79.1	
Finished products	55.8	55.6	
Gross inventory	211.7	192.3	
Allowance for inventory reserves	(0.8)	(13.9)	
Total inventories, net	\$ 210.9	\$ 178.4	

The allowance for inventory reserves decreased in 2021 due to sales of TMS inventory, along with the selling and scrapping of aged inventory.

Note 11 - Property, Plant and Equipment

The components of property, plant and equipment, net as of December 31, 2021 and 2020 were as follows:

	December 31,	
	2021	2020
Land	\$ 11.2	\$ 13.3
Buildings and improvements	415.0	422.5
Machinery and equipment	1,391.9	1,398.7
Construction in progress	9.6	11.0
Subtotal	1,827.7	1,845.5
Less allowances for depreciation	(1,317.5)	(1,275.7)
Property, plant and equipment, net	\$ 510.2	\$ 569.8

Total depreciation expense was \$59.8 million, \$65.0 million, and \$67.4 million for the years ended December 31, 2021, 2020, and 2019, respectively. Depreciation expense for the years ended December 31, 2021, 2020 and 2019 includes \$1.5 million, \$2.4 million and \$1.9 million, respectively, of accelerated depreciation related to the closure of TMS which was announced in the fourth quarter of 2019 and the discontinuation of specific small-diameter seamless mechanical tube manufacturing announced in the third quarter of 2020.

For the year ended December 31, 2021, TimkenSteel recorded approximately \$10.6 million of impairment charges related to the indefinite idling of the Harrison melt and casting assets, the impairment of certain assets at our St. Clair facility due to the early termination of a customer program, and the disposition of assets at our former TMS facility. Additionally, the Company recorded a net loss on sale of assets for the year ended December 31, 2021 of \$1.3 million related to the disposition of excess assets. For the year ended December 31, 2020, TimkenSteel recorded a net gain on the sale and disposal of assets of \$2.6 million, primarily related to the sale of certain TMS assets. For the year ended December 31, 2019, TimkenSteel recorded impairments and loss on disposal of assets of \$9.0 million primarily related to the abandonment of certain equipment and the impairment of assets held for sale. See “Note 6 - Disposition of Non-Core Assets” for additional information.

Supplemental cash flow information related to non-cash investing activity was as follows:

	Year Ended December 31,	
	2021	2020
Accrued property, plant and equipment purchases	\$ 3.6	\$ 2.0
		\$ 5.3

Note 12 - Intangible Assets

The components of intangible assets, net as of December 31, 2021 and 2020 were as follows:

	December 31, 2021			December 31, 2020		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Customer relationships	\$ 6.3	\$ 5.8	\$ 0.5	\$ 6.3	\$ 5.4	\$ 0.9
Technology use	9.0	9.0	—	9.0	9.0	—
Capitalized software	57.4	51.2	6.2	58.0	49.6	8.4
Total intangible assets	\$ 72.7	\$ 66.0	\$ 6.7	\$ 73.3	\$ 64.0	\$ 9.3

Intangible assets subject to amortization are amortized using a straight-line method over their legal or estimated useful lives. The weighted average useful lives of the customer relationships, technology use and capitalized software intangible assets are 15 years, 15 years and 6 years, respectively. The weighted average useful life of total intangible assets is 8 years as of December 31, 2021. Amortization expense for intangible assets for the years ended December 31, 2021, 2020, and 2019 was \$3.3 million, \$5.0 million and \$6.1 million, respectively. Amortization expense in 2020 and 2019 associated with capitalized software includes accelerated amortization of \$1.0 million and \$0.9 million, respectively, related to the closure of TMS. See “Note 6 - Disposition of Non-Core Assets” for additional information. During the years ended December 31, 2020 and 2019, TimkenSteel recorded a loss on disposal of \$0.2 million and \$0.1 million, respectively, related to capitalized software. There was no loss on disposal of intangible assets for the year ended December 31, 2021.

Based upon the intangible assets subject to amortization as of December 31, 2021, TimkenSteel’s estimated annual amortization for the five succeeding years is shown below (in millions):

Year	Amortization Expense
2022	\$ 2.6
2023	2.1
2024	1.1
2025	0.1
2026	0.1

Note 13 - Leases

The Company has operating leases for office space, warehouses, land, machinery and equipment, vehicles and information technology equipment. These leases have remaining lease terms of less than one year to approximately five years, some of which may include options to extend the lease for one or more years. Certain leases also include options to purchase the leased asset. As of December 31, 2021, the Company has no financing leases. The weighted average remaining lease term for our operating leases as of December 31, 2021 was 2.8 years.

Leases with an initial term of 12 months or less ("short-term leases") are not recorded on the balance sheet. Rather, the Company recognizes lease expense for these leases on a straight-line basis over the lease term in accordance with the applicable accounting guidance. For lease agreements entered into after the adoption of lease accounting guidance on January 1, 2019, the Company combines lease and non-lease components. The Company’s lease agreements do not contain material residual value guarantees or material restrictive covenants.

The Company recorded lease cost for the years ended December 31, 2021, 2020 and 2019 as follows:

	Year Ended December 31,		
	2021	2020	2019
Operating lease cost	\$ 8.2	\$ 8.8	\$ 7.4
Short-term lease cost	0.7	0.7	1.9
Total lease cost	\$ 8.9	\$ 9.5	\$ 9.3

When available, the rate implicit in the lease is used to discount lease payments to present value; however, the Company’s leases generally do not provide a readily determinable implicit rate. Therefore, the incremental borrowing rate to discount the lease payments is estimated using market-based information available at lease commencement. The weighted average discount rate used to measure our operating lease liabilities as of December 31, 2021 and 2020 was 2.7% and 3.2%, respectively.

Supplemental cash flow information related to leases was as follows:

	Year Ended December 31,		
	2021	2020	2019
Cash paid for amounts included in the measurement of operating lease liabilities	\$ 8.2	\$ 8.8	\$ 7.5
Right-of-use assets obtained in exchange for operating lease obligations	\$ 3.1	\$ 12.5	\$ 4.3

Future minimum lease payments under non-cancellable leases as of December 31, 2021 were as follows:

2022	\$ 6.0
2023	5.0
2024	2.8
2025	1.1
After 2025	0.2
Total future minimum lease payments	15.1
Less amount of lease payment representing interest	(0.6)
Total present value of lease payments	\$ 14.5

As of December 31, 2021, we have additional operating leases that have not yet commenced for which the present value of the lease payments over the respective lease terms totals approximately \$0.9 million. These leases are primarily related to equipment that will support our plant operations. Most of these operating leases will commence in the first half of 2022 with lease terms of approximately 1 year to 5 years. Accordingly, these leases are not recorded on the Consolidated Balance Sheets at December 31, 2021.

Note 14 - Financing Arrangements

The following table summarizes the current and non-current debt as of December 31, 2021 and 2020:

		December 31,	
	2021	2020	
Credit Agreement	\$	—	\$ —
Convertible Senior Notes due 2021		—	38.9
Convertible Senior Notes due 2025		44.9	39.3
Total debt	\$	44.9	\$ 78.2
Less current portion of debt		44.9	38.9
Total non-current portion of debt	\$	—	\$ 39.3

Amended Credit Agreement

On October 15, 2019, the Company, as borrower, and certain domestic subsidiaries of the Company, as subsidiary guarantors, entered into a Third Amended and Restated Credit Agreement (the "Amended Credit Agreement"), with JP Morgan Chase Bank, N.A., as administrative agent (the "Administrative Agent"), Bank of America, N.A., as syndication agent, and the other lenders party thereto (collectively, the "Lenders"), which further amended and restated the Company's existing Credit Agreement dated as of January 26, 2018.

The Amended Credit Agreement provides for a \$400.0 million asset-based revolving credit facility (the "Credit Facility"), including a \$15.0 million sublimit for the issuance of commercial and standby letters of credit and a \$40.0 million sublimit for swingline loans. Pursuant to the terms of the Amended Credit Agreement, the Company is entitled, on up to two occasions and subject to the satisfaction of certain conditions, to request increases in the commitments under the Amended Credit Agreement in the aggregate principal amount of up to \$100.0 million, to the extent that existing or new lenders agree to provide such additional commitments. In addition to, and independent of any increase described in the preceding sentence, the Company is entitled, subject to the satisfaction of certain conditions, to request a separate first-in, last-out ("FILO") tranche in an aggregate principal amount of up to \$30.0 million with a separate borrowing base and interest rate margins, in each case, to be agreed upon among the Company, the Administrative Agent and the Lenders providing the incremental FILO tranche.

The availability of borrowings under the Credit Facility is subject to a borrowing base calculation based upon a valuation of the eligible accounts receivable, inventory and machinery and equipment of the Company and the subsidiary guarantors, each multiplied by an applicable advance rate. The availability of borrowings may be further modified by reserves established from time to time by the Administrative Agent in its permitted discretion.

The interest rate per annum applicable to loans under the Credit Facility will be, at the Company's option, equal to either (i) the alternate base rate plus the applicable margin or (ii) the relevant adjusted LIBO rate for an interest period of one, two, three or six months (as selected by the Company) plus the applicable margin. The base rate will be a fluctuating rate per annum equal to the greatest of (i) the prime rate as quoted in The Wall Street Journal, (ii) the effective Federal Reserve Bank of New York rate plus 0.50% and (iii) the adjusted LIBO rate for a one-month interest period on the applicable date, plus 1.00%. The adjusted LIBO rate will be equal to the applicable London interbank offered rate for the selected interest period, as adjusted for statutory reserve requirements for eurocurrency liabilities. The applicable margin will be determined by a pricing grid based on the Company's average quarterly availability. In addition, the Company will pay a 0.25% per annum commitment fee on the average daily unused amount of the Credit Facility. As of December 31, 2021, the amount available under the Amended Credit Agreement was \$251.1 million, reflective of the Company's asset borrowing base with no outstanding borrowings.

All of the indebtedness under the Credit Facility is guaranteed by the Company's material domestic subsidiaries, as well as any other domestic subsidiary that the Company elects to make a party to the Amended Credit Agreement, and is secured by substantially all of the personal property of the Company and the subsidiary guarantors.

The Credit Facility matures on October 15, 2024. Prior to the maturity date, amounts outstanding are required to be repaid (without reduction of the commitments thereunder) from mandatory prepayment events from the proceeds of certain asset sales, equity or debt issuances or casualty events.

The Amended Credit Agreement contains certain customary covenants, including covenants that limit the ability of the Company and its subsidiaries to, among other things, (i) incur or suffer to exist certain liens, (ii) make investments, (iii) incur or guaranty additional

indebtedness, (iv) enter into consolidations, mergers, acquisitions, sale-leaseback transactions and sales of assets, (v) make distributions and other restricted payments, (vi) change the nature of its business, (vii) engage in transactions with affiliates and (viii) enter into restrictive agreements, including agreements that restrict the ability to incur liens or make distributions.

In addition, the Amended Credit Agreement requires the Company to maintain a minimum specified fixed charge coverage ratio on a springing basis if minimum availability requirements as specified in the Amended Credit Agreement are not maintained. During 2021, the Amended Credit Agreement also required the Company to maintain certain minimum liquidity as specified in the Amended Credit Agreement from March 1 through June 1, 2021.

The Amended Credit Agreement contains certain customary events of default. If any event of default occurs and is continuing, the Lenders would be entitled to take various actions, including the acceleration of amounts due under the Amended Credit Agreement, and exercise other rights and remedies. As of the year ended December 31, 2021, the Company is in compliance with all covenants outlined in the Amended Credit Agreement.

Convertible Senior Notes due 2021

In May 2016, the Company issued \$75.0 million aggregate principal amount of Convertible Senior Notes, and an additional \$11.3 million principal amount to cover over-allotments ("Convertible Senior Notes due 2021"). The Indenture for the Convertible Senior Notes due 2021 dated May 31, 2016, which was filed with the Securities and Exchange Commission as an exhibit to a Form 8-K filed on May 31, 2016, contained a complete description of the terms of the Convertible Senior Notes due 2021. The key terms were as follows:

Maturity Date:	June 1, 2021 unless repurchased or converted earlier
Interest Rate:	6.0% cash interest per year
Interest Payments Dates:	June 1 and December 1 of each year, beginning on December 1, 2016
Initial Conversion Price:	\$12.58 per common share of the Company
Initial Conversion Rate:	79.5165 common shares per \$1,000 principal amount of Notes

The net proceeds to the Company from the offering were \$83.2 million, after deducting the initial underwriters' discount and fees and the offering expenses payable by the Company. The Company used the net proceeds to repay a portion of the amounts outstanding under its revolving credit agreement.

The initial value of the principal amount recorded as a liability at the date of issuance was \$66.9 million, using an effective interest rate of 12.0%. The remaining \$19.4 million of principal amount was allocated to the conversion feature and recorded as a component of shareholders' equity at the date of issuance. This amount represented a discount to the debt to be amortized through interest expense using the effective interest method through the maturity of the Convertible Senior Notes due 2021.

Transaction costs were allocated to the liability and equity components based on their relative values. Transaction costs attributable to the liability component of \$2.4 million were amortized to interest expense over the term of the Convertible Senior Notes due 2021, and transaction costs attributable to the equity component of \$0.7 million were included in shareholders' equity.

Convertible Notes Exchange

In December 2020, TimkenSteel entered into separate, privately negotiated exchange agreements with a limited number of holders of the Company's then outstanding Convertible Senior Notes due 2021. Pursuant to the exchange agreements, the Company exchanged \$46.0 million aggregate principal amount of Convertible Senior Notes due 2021 for \$46.0 million aggregate principal amount of its new 6.0% Convertible Senior Notes due 2025 ("Convertible Senior Notes due 2025" and, together with the Convertible Senior Notes due 2021, the "Convertible Notes"). The Company did not receive any cash proceeds from the issuance of the Convertible Senior Notes due 2025.

The Company evaluated this exchange and determined that \$46.0 million of the Convertible Senior Notes due 2021 were deemed to be extinguished, as the present value of the cash flows under the terms of the Convertible Senior Notes due 2025 were at least 10 percent different from the present value of the remaining cash flows under the terms of the Convertible Senior Notes due 2021, as defined by the relevant accounting standards.

Pursuant to applicable accounting guidance, the fair value of the extinguished portion of Convertible Senior Notes due 2021 was calculated using a market rate of 9.0%, based on comparable debt instruments, and a remaining term of five and a half months. The difference between the

fair value and the net carrying amount of the liability component, calculated below, was recognized on the Consolidated Statements of Operations as a loss on extinguishment of debt for the year ended December 31, 2020.

Net carrying amount of extinguished Convertible Senior Notes due 2021 as of December 15, 2020		
Principal	\$	46.0
Less: Debt issuance costs, net of amortization		(0.1)
Less: Debt discount, net of amortization		(1.5)
Fair value of extinguished Convertible Senior Notes due 2021 as of December 15, 2020		45.3
Loss on extinguishment of debt	\$	(0.9)

The amount allocated to the reacquisition of the equity component, included as a reduction to additional paid-in capital on the Consolidated Balance Sheets, was calculated as follows:

Fair value of extinguished Convertible Senior Notes due 2021 as of December 15, 2020	\$	45.3
Principal of extinguished Convertible Senior Notes due 2021		46.0
Reduction of additional paid-in capital in 2020	\$	(0.7)

The remaining accrued and unpaid interest on the \$46.0 million of the extinguished Convertible Senior Notes due 2021 was paid in the amount of \$0.1 million to the holders on December 15, 2020.

The components of the Convertible Senior Notes due 2021 as of December 31, 2021 and December 31, 2020 were as follows:

		Year Ended December 31,	
		2021	2020
Principal	\$	—	\$ 40.2
Less: Debt issuance costs, net of amortization		—	(0.1)
Less: Debt discount, net of amortization		—	(1.2)
Convertible Senior Notes due 2021, net	\$	—	\$ 38.9

There was no outstanding principal amount for the Convertible Senior Notes due 2021 as of December 31, 2021, as the notes matured on June 1, 2021. The Convertible Senior Notes due 2021 were settled with a cash payment of \$38.9 million and the issuance of shares of 0.1 million, as most noteholders exercised the conversion option prior to the date of maturity. For details regarding method of settlement for noteholders who exercised their conversion option prior to maturity, refer to the Indenture for the Convertible Senior Notes due 2021 filed as an exhibit to a Form 8-K on May 31, 2016. The final cash payment for interest in the amount of \$1.2 million was also made to noteholders on June 1, 2021.

Convertible Senior Notes due 2025

The Convertible Senior Notes due 2025 were issued pursuant to the provisions of the indenture dated May 31, 2016, as supplemented by a supplemental indenture dated December 15, 2020, which was filed with the Securities and Exchange Commission as an exhibit to a Form 8-K on December 15, 2020. The indentures contain a complete description of the terms of the Convertible Senior Notes due 2025. The key terms are as follows:

Maturity Date:	December 1, 2025 unless repurchased or converted earlier
Interest Rate:	6.0% cash interest per year
Interest Payments Dates:	June 1 and December 1 of each year, beginning on December 1, 2021
Initial Conversion Price:	\$7.82 per common share of the Company
Initial Conversion Rate:	127.8119 common shares per \$1,000 principal amount of Notes

The principal amount of the Convertible Senior Notes due 2025 as of December 31, 2021 is \$46.0 million. Transaction costs related to the Convertible Senior Notes due 2025 incurred upon issuance were \$1.5 million. These costs are amortized to interest expense over the term of the notes. The Convertible Senior Notes due 2025 are convertible at the option of the holders in certain circumstances and during certain periods into the Company's common shares, cash, or a combination thereof, at the Company's election.

The Indenture for the Convertible Senior Notes due 2025 provides that notes will become convertible during a quarter when the share price for 20 trading days during the final 30 trading days of the immediately preceding quarter was greater than 130% of the conversion price. This

criterion was met during the fourth quarter of 2021 and as such the notes can be converted at the option of the holders beginning January 1 through March 31, 2022. Whether the notes will be convertible following such period will depend on if this criterion, or another conversion condition, is met in the future. As such, the Convertible Senior Notes due 2025 are classified as a current liability in the Consolidated Balance Sheets as of December 31, 2021.

For details regarding all conversion mechanics and methods of settlement, refer to the Indenture for the Convertible Senior Notes due 2025 filed as an exhibit to a Form 8-K on December 15, 2020.

The components of the Convertible Senior Notes due 2025 as of December 31, 2021 and December 31, 2020 were as follows:

		December 31,	
		2021	2020
Principal	\$	46.0	\$ 46.0
Less: Debt issuance costs, net of amortization		(1.1)	(1.3)
Less: Debt discount, net of amortization ⁽¹⁾		—	(5.4)
Convertible Senior Notes due 2025, net	\$	44.9	\$ 39.3

⁽¹⁾ There was no longer a debt discount associated with the Convertible Notes beginning in 2021, as the Company early adopted ASU 2020-06. For more details refer to "Note 2 - Significant Accounting Policies."

In January 2022, TimkenSteel repurchased \$5.0 million of outstanding principal related to the Convertible Senior Notes Due 2025. Total cash paid to noteholders was \$12.4 million. A loss on extinguishment of debt will be recognized in the first quarter of 2022 in the amount of \$7.5 million, which includes a charge of \$0.1 million for unamortized debt issuance costs related to the portion of debt extinguished, as well as the related transaction costs.

Fair Value Measurement

The fair value of the Convertible Senior Notes due 2025 was approximately \$107.0 million as of December 31, 2021. The fair value of the Convertible Senior Notes due 2025, which falls within Level 2 of the fair value hierarchy as defined by applicable accounting guidance, is based on a valuation model primarily using observable market inputs and requires a recurring fair value measurement on a quarterly basis.

TimkenSteel's Credit Facility is variable-rate debt. As such, any outstanding carrying value is a reasonable estimate of fair value as interest rates on these borrowings approximate current market rates. This valuation falls within Level 2 of the fair value hierarchy and is based on quoted prices for similar assets and liabilities in active markets that are observable either directly or indirectly. There were no outstanding borrowings on the Credit Facility as of December 31, 2021.

Convertible Notes Interest Expense

The following table sets forth total interest expense recognized related to the Convertible Notes:

		Year Ended December 31,	
		2021	2020
Contractual interest expense	\$	3.7	\$ 5.2
Amortization of debt issuance costs		0.4	0.5
Amortization of debt discount		—	4.4
Total	\$	4.1	\$ 10.1

Cash Interest Paid

The total cash interest paid for the year ended December 31, 2021, 2020, and 2019 was \$5.1 million, \$7.6 million and \$11.5 million, respectively.

Note 15 - Retirement and Postretirement Plans

Eligible TimkenSteel employees, including certain employees in foreign countries, participate in the following TimkenSteel-sponsored plans: TimkenSteel Corporation Retirement Plan ("Salaried Plan"); TimkenSteel Corporation Bargaining Unit Pension Plan ("Bargaining Plan"), Supplemental Pension Plan of TimkenSteel Corporation ("Supplemental Plan"), TimkenSteel U.K. Pension Scheme ("Pension Scheme"), Mexico Pension Plan, and Postretirement Plans made up of TimkenSteel Corporation Bargaining Unit Welfare Benefit Plan for Retirees and TimkenSteel Corporation Welfare Benefit Plan for Retirees.

Plan Amendments

Bargaining Plan

On October 29, 2021, the United Steelworkers ("USW") Local 1123 voted to ratify a new four-year contract (the "Contract"). The Contract is in effect until September 27, 2025 and resulted in several changes to the Bargaining Plan which increased the pension liability by \$14.2 million in 2021. These plan amendments were recognized in other comprehensive income (loss) in 2021 and will be amortized as part of the pension net periodic benefit cost in future periods. The main change that drove the increase in the pension liability was the addition of a full lump sum form of payment for participants commencing benefits on or after January 1, 2022. In addition, the plan is now closed to new entrants effective January 1, 2022.

Salaried Plan

During the fourth quarter of 2019, the Company amended the Salaried Plan, which provides payments of tax-qualified pension benefits to certain salaried employees of the Company and its subsidiaries, to cease benefit accruals under the Salaried Plan for all remaining active participants, effective as of December 31, 2020. This plan amendment reduced the pension liability, resulting in a curtailment gain of \$8.1 million for the year ended December 31, 2019. This curtailment gain was recognized in other (income) expense, net in the Consolidated Statements of Operations. During the fourth quarter of 2021, termination of the Salaried Plan was approved by the TimkenSteel Board of Directors. Participants were notified in January 2022 and the plan will be terminated effective March 31, 2022. The purchase of an annuity from an insurance company is expected to occur in 2023.

Supplemental Plan

During the fourth quarter of 2019, the Company amended the Supplemental Plan, which provides for the payment of nonqualified supplemental pension benefits to certain salaried participants in the Salaried Plan. The amendment provides for the cessation of benefit accruals under the Supplemental Plan, effective as of December 31, 2020. Effective January 1, 2021, there were no new accruals of benefits, including with respect to service accruals and the final average compensation determination. Certain of the Company's current and prior named executive officers are participants in the plan. Existing benefits under the plan, as of December 31, 2020, will otherwise continue in accordance with the terms of the plan. This amendment reduced the pension liability, resulting in a curtailment gain of \$0.8 million for the year ended December 31, 2019. This curtailment gain was recognized in other (income) expense, net in the Consolidated Statements of Operations.

Postretirement Plans

During the second quarter of 2019, the Company amended the TimkenSteel Corporation Bargaining Unit Welfare Plan for Retirees related to moving Medicare-eligible retirees to an individual plan on a Medicare healthcare exchange. The amendment reduced the postretirement liability by \$70.2 million and required the Company to perform a full remeasurement of its obligation and plan assets as of April 30, 2019. The \$70.2 million reduction in the APBO was recognized in other comprehensive income (loss) in 2019 and is being amortized as an offset to postretirement benefit cost over a period of 12 years (average remaining service period). In addition to the reduction of the APBO, the Company recognized a net remeasurement loss of \$4.4 million for the year ended December 31, 2019.

During the fourth quarter of 2019, the Company also amended the TimkenSteel Corporation Welfare Benefit Plan for Retirees, under which certain retired salaried employees of the Company and its subsidiaries are eligible to receive a Company contribution for their medical and prescription drug benefits under the retiree welfare plan. The amendment eliminated the retiree medical subsidy, effective as of December 31, 2019, for all remaining active salaried participants who retire after December 31, 2019 (provided, however, that participants who were laid off on or before March 31, 2020 and who otherwise qualified for the retiree medical subsidy under the terms of the retiree welfare plan remained entitled to receive the retiree medical subsidy). This plan amendment reduced the postretirement liability by \$2.3 million in 2019, was recognized in other comprehensive income (loss) in 2019 and is being amortized as an offset to postretirement benefit cost in future periods.

Pension benefits earned are generally based on years of service and compensation during active employment. TimkenSteel's funding policy is consistent with the funding requirements of applicable laws and regulations. Asset allocations are established in a manner consistent with projected plan liabilities, benefit payments and expected rates of return for the various asset classes. The expected rate of return for the investment portfolio is based on expected rates of return for various asset classes, as well as historical asset class and fund performance.

The following table sets forth the change in benefit obligation for the defined benefit pension plans as of December 31, 2021:

Change in benefit obligation:	Pension							Postretirement Plans
	Bargaining Plan	United States of America Salaried Plan	Supplemental Plan	United Kingdom Pension Scheme	Mexico Pension Plan	Total Pension		
Benefit obligation at the beginning of year	\$ 1,053.9	\$ 228.7	\$ 27.3	\$ 84.8	\$ 0.4	\$ 1,395.1	\$ 128.3	
Service cost	17.0	0.4	—	—	—	17.4	1.2	
Interest cost	28.4	5.9	0.8	1.1	—	36.2	3.2	
Actuarial (gains) losses	(31.6)	(5.1)	(1.5)	0.3	—	(37.9)	(6.0)	
Benefits paid	(56.5)	(11.4)	(3.0)	(3.0)	—	(73.9)	(8.9)	
Plan amendment	14.2	—	—	—	—	14.2	—	
Settlements	—	(31.1)	—	—	—	(31.1)	—	
Foreign currency translation adjustment	—	—	—	(0.8)	—	(0.8)	—	
Benefit obligation at the end of year	\$ 1,025.4	\$ 187.4	\$ 23.6	\$ 82.4	\$ 0.4	\$ 1,319.2	\$ 117.8	

The following table sets forth the change in benefit obligation for the defined benefit pension plans as of December 31, 2020:

Change in benefit obligation:	Pension							Postretirement Plans
	Bargaining Plan	United States of America Salaried Plan	Supplemental Plan	United Kingdom Pension Scheme	Mexico Pension Plan	Total Pension		
Benefit obligation at the beginning of year	\$ 973.3	\$ 234.1	\$ 25.2	\$ 78.4	\$ 0.4	\$ 1,311.4	\$ 126.2	
Service cost	16.9	2.5	—	—	—	19.4	1.0	
Interest cost	33.3	7.0	0.9	1.5	—	42.7	4.2	
Actuarial (gains) losses	86.3	21.6	1.8	5.0	0.1	114.8	6.1	
Benefits paid	(55.9)	(11.9)	(0.6)	(2.8)	—	(71.2)	(9.2)	
Plan amendment	—	—	—	—	—	—	—	
Settlements	—	(24.6)	—	—	(0.1)	(24.7)	—	
Foreign currency translation adjustment	—	—	—	2.7	—	2.7	—	
Benefit obligation at the end of year	\$ 1,053.9	\$ 228.7	\$ 27.3	\$ 84.8	\$ 0.4	\$ 1,395.1	\$ 128.3	

Significant actuarial gains related to changes in benefit obligations for 2021 primarily resulted from an increase in discount rates. Significant actuarial losses related to changes in benefit obligations for 2020 primarily resulted from a decrease in discount rates.

The following table sets forth the change in plan assets and funded status for the defined benefit pension plans as of December 31, 2021:

	Pension							
	Bargaining Plan	United States of America Salaried Plan	Supplemental Plan	United Kingdom Pension Scheme	Mexico Pension Plan	Total Pension	Postretirement Plans	
Change in plan assets:								
Fair value of plan assets at the beginning of year	\$ 884.3	\$ 243.3	\$ —	\$ 103.8	\$ 0.3	\$ 1,231.7	\$ 82.2	
Actual return on plan assets	35.0	4.9	—	4.7	—	44.6	2.4	
Company contributions / payments	—	—	3.0	2.8	—	5.8	1.1	
Benefits paid	(56.5)	(11.4)	(3.0)	(3.0)	—	(73.9)	(8.9)	
Settlements	—	(31.1)	—	—	—	(31.1)	—	
Foreign currency translation adjustment	—	—	—	(1.1)	—	(1.1)	—	
Fair value of plan assets at end of year	\$ 862.8	\$ 205.7	\$ —	\$ 107.2	\$ 0.3	\$ 1,176.0	\$ 76.8	
Funded status at end of year	\$ (162.6)	\$ 18.3	\$ (23.6)	\$ 24.8	\$ (0.1)	\$ (143.2)	\$ (41.0)	

The following table sets forth the change in plan assets and funded status for the defined benefit pension plans as of December 31, 2020:

	Pension							
	Bargaining Plan	United States of America Salaried Plan	Supplemental Plan	United Kingdom Pension Scheme	Mexico Pension Plan	Total Pension	Postretirement Plans	
Change in plan assets:								
Fair value of plan assets at the beginning of year	\$ 817.3	\$ 243.6	\$ —	\$ 94.1	\$ 0.4	\$ 1,155.4	\$ 82.3	
Actual return on plan assets	122.9	36.2	—	7.9	—	167.0	7.0	
Company contributions / payments	—	—	0.6	1.3	—	1.9	—	
Benefits paid	(55.9)	(11.9)	(0.6)	(2.8)	—	(71.2)	(7.1)	
Settlements	—	(24.6)	—	—	(0.1)	(24.7)	—	
Foreign currency translation adjustment	—	—	—	3.3	—	3.3	—	
Fair value of plan assets at end of year	\$ 884.3	\$ 243.3	\$ —	\$ 103.8	\$ 0.3	\$ 1,231.7	\$ 82.2	
Funded status at end of year	\$ (169.5)	\$ 14.5	\$ (27.3)	\$ 19.0	\$ (0.1)	\$ (163.4)	\$ (46.1)	

The Salaried Plan has a provision that permits employees to elect to receive their pension benefits in a lump sum. In the first quarter of 2021, the cumulative cost of all lump sum payments was projected to exceed the sum of the service cost and interest cost components of net periodic pension cost for the Salaried Plan. As a result, the Company completed a full remeasurement of its pension obligations and plan assets associated with the Salaried Plan during each quarter of 2021. A full remeasurement of the pension obligations and plan assets associated with the Salaried Plan was also required throughout each quarter of 2020. For the years ended December 31, 2021 and December 31, 2020, total settlements were \$31.1 million and \$24.7 million, respectively. These settlements are included in the tables above and in the net remeasurement losses (gains) as a component of net periodic benefit cost.

For the years ended December 31, 2021 and 2020, all pension plans had administrative expenses of \$3.0 million and \$3.8 million, respectively. These expenses are included in benefits paid in the tables above.

The accumulated benefit obligation at December 31, 2021 exceeded the fair value of plan assets for the Bargaining Plan and the unfunded Supplemental Plan. For the Bargaining Plan and Supplemental Plan, the accumulated benefit obligation was \$1,009.6 million and \$23.6 million, respectively, as of December 31, 2021.

The total pension accumulated benefit obligation for all plans was \$1,303.2 million and \$1,377.6 million as of December 31, 2021 and 2020, respectively.

Amounts recognized on the balance sheet at December 31, 2021 for TimkenSteel's pension and postretirement benefit plans include:

Pension									
	United States of America				United Kingdom				
	Bargaining Plan	Salaried Plan	Supplemental Plan		Pension Scheme	Pension Plan	Total Pension		Postretirement Plans
Non-current assets	\$ —	\$ 18.3	\$ —	\$	24.8	\$ —	\$ 43.1	\$	—
Current liabilities	—	—	(2.6)		—	—	(2.6)		(1.7)
Non-current liabilities	(162.6)	—	(21.0)		—	(0.1)	(183.7)		(39.3)
Total	\$ (162.6)	\$ 18.3	\$ (23.6)	\$	24.8	\$ (0.1)	\$ (143.2)	\$	(41.0)

Amounts recognized on the balance sheet at December 31, 2020 for TimkenSteel's pension and postretirement benefit plans include:

Pension									
	United States of America				United Kingdom				
	Bargaining Plan	Salaried Plan	Supplemental Plan		Pension Scheme	Pension Plan	Total Pension		Postretirement Plans
Non-current assets	\$ —	\$ 14.5	\$ —	\$	19.0	\$ —	\$ 33.5	\$	—
Current liabilities	—	—	(0.6)		—	—	(0.6)		(1.7)
Non-current liabilities	(169.5)	—	(26.7)		—	(0.1)	(196.3)		(44.4)
Total	\$ (169.5)	\$ 14.5	\$ (27.3)	\$	19.0	\$ (0.1)	\$ (163.4)	\$	(46.1)

Included in accumulated other comprehensive income (loss) at December 31, 2021 were the following before-tax amounts that had not been recognized in net periodic benefit cost:

Pension									
	United States of America				United Kingdom				
	Bargaining Plan	Salaried Plan	Supplemental Plan		Pension Scheme	Pension Plan	Total Pension		Postretirement Plans
Unrecognized prior service (benefit) cost	\$ 13.6	\$ —	\$ —	\$	0.6	\$ —	\$ 14.2	\$	(55.9)

Included in accumulated other comprehensive income (loss) at December 31, 2020 were the following before-tax amounts that had not been recognized in net periodic benefit cost:

	Pension											
	Bargaining Plan	United States of America			United Kingdom Pension Scheme	Mexico Pension Plan	Total Pension	Postretirement Plans				
		Salaried Plan		Supplemental Plan								
Unrecognized prior service (benefit) cost	\$	(0.4)	\$	—	\$	0.6	\$	—	\$	0.2	\$	(61.9)

The weighted average assumptions used in determining benefit obligation as of December 31, 2021 and 2020 were as follows:

Assumptions:	Pension		Postretirement	
	2021	2020	2021	2020
Discount rate	2.96 %	2.68 %	3.00 %	2.65 %
Future compensation assumption	3.00 %	2.29 %	n/a	n/a

The weighted average assumptions used in determining benefit cost for the years ended December 31, 2021 and 2020 were as follows:

Assumptions:	Pension		Postretirement	
	2021	2020	2021	2020
Discount rate	2.68 %	3.42 %	2.65 %	3.42 %
Future compensation assumption	2.29 %	2.32 %	n/a	n/a
Expected long-term return on plan assets	5.76 %	5.80 %	4.50 %	4.50 %

The discount rate assumption is based on current rates of high-quality long-term corporate bonds over the same period that benefit payments will be required to be made. The expected rate of return on plan assets assumption is based on the weighted-average expected return on the various asset classes in the plans' portfolios. The asset class return is developed using historical asset return performance as well as current market conditions such as inflation, interest rates and equity market performance.

For measurement purposes, TimkenSteel assumed a weighted-average annual rate of increase in the per capita cost ("health care cost trend rate") of 10.00% and 5.50% for 2021 and 2020, respectively.

The components of net periodic benefit cost (income) for the year ended December 31, 2021 were as follows:

Components of net periodic benefit cost (income):	Pension						
	United States of America			United Kingdom	Mexico	Total Pension	Postretirement Plans
	Bargaining Plan	Salaried Plan	Supplemental Plan	Pension Scheme	Pension Plan		
Service cost	\$ 17.0	\$ 0.4	\$ —	\$ —	\$ —	\$ 17.4	\$ 1.2
Interest cost	28.4	5.9	0.8	1.1	—	36.2	3.2
Expected return on plan assets	(51.5)	(12.6)	—	(3.3)	—	(67.4)	(3.4)
Amortization of prior service cost	0.2	—	—	—	—	0.2	(6.0)
Curtailment	—	—	—	—	—	—	—
Net remeasurement losses (gains)	(15.1)	2.5	(1.5)	(1.1)	—	(15.2)	(4.9)
Net Periodic Benefit Cost (Income)	\$ (21.0)	\$ (3.8)	\$ (0.7)	\$ (3.3)	\$ —	\$ (28.8)	\$ (9.9)

The components of net periodic benefit cost (income) for the year ended December 31, 2020 were as follows:

Components of net periodic benefit cost (income):	Pension						Total Pension	Postretirement Plans
	Bargaining Plan	United States of America Salaried Plan	Supplemental Plan	United Kingdom Pension Scheme	Mexico Pension Plan			
Service cost	\$ 16.9	\$ 2.5	\$ —	\$ —	\$ —	\$ 19.4	\$ 1.0	
Interest cost	33.3	7.0	0.9	1.5	—	42.7	4.2	
Expected return on plan assets	(47.5)	(13.5)	—	(3.3)	—	(64.3)	(3.5)	
Amortization of prior service cost	0.3	—	—	—	—	0.3	(6.0)	
Curtailment	—	—	—	—	—	—	—	
Net remeasurement losses (gains)	10.8	(1.0)	1.8	0.4	0.1	12.1	2.6	
Net Periodic Benefit Cost (Income)	\$ 13.8	\$ (5.0)	\$ 2.7	\$ (1.4)	\$ 0.1	\$ 10.2	\$ (1.7)	

The components of net periodic benefit cost (income) for the year ended December 31, 2019 were as follows:

Components of net periodic benefit cost (income):	Pension						Total Pension	Postretirement Plans
	United States of America			United Kingdom	Mexico			
	Bargaining Plan	Salaried Plan	Supplemental Plan	Pension Scheme	Pension Plan			
Service cost	\$ 14.9	\$ 2.4	\$ —	\$ 0.1	\$ —	\$ 17.4	\$ 1.1	
Interest cost	36.8	9.4	0.8	1.9	—	48.9	5.9	
Expected return on plan assets	(47.0)	(13.6)	—	(4.4)	—	(65.0)	(3.9)	
Amortization of prior service cost	0.4	—	—	—	—	0.4	(3.8)	
Curtailment	—	(8.1)	(0.8)	—	—	(8.9)	—	
Net remeasurement losses (gains)	41.7	(2.0)	4.2	(0.9)	0.1	43.1	6.4	
Net Periodic Benefit Cost (Income)	\$ 46.8	\$ (11.9)	\$ 4.2	\$ (3.3)	\$ 0.1	\$ 35.9	\$ 5.7	

TimkenSteel recognizes its overall responsibility to ensure that the assets of its various defined benefit pension plans are managed effectively and prudently and in compliance with its policy guidelines and all applicable laws. Preservation of capital is important; however, TimkenSteel also recognizes that appropriate levels of risk are necessary to allow its investment managers to achieve satisfactory long-term results consistent with the objectives and the fiduciary character of the pension funds. Asset allocations are established in a manner consistent with projected plan liabilities, benefit payments and expected rates of return for various asset classes. The expected rate of return for the investment portfolios is based on expected rates of return for various asset classes, as well as historical asset class and fund performance.

The target allocations for each plan's assets are as follows:

Target Allocations:	Pension						Weighted Average Pension	Weighted Average Postretirement Plans
	United States of America			United Kingdom	Mexico			
	Bargaining Plan	Salaried Plan	Supplemental Plan	Pension Scheme	Pension Plan			
Equity securities	35.0 %	—	n/a	16.7 %	—	27.2 %	20.0 %	
Debt securities	49.0 %	80.0 %	n/a	33.3 %	100.0 %	53.0 %	77.5 %	
Other investments	16.0 %	20.0 %	n/a	50.0 %	—	19.8 %	2.5 %	

As of December 31, 2021, we were in the process of transitioning to these target investment allocations, which have been updated to reflect the respective risk profiles of each plan at the end of the year.

Fair value is defined 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 ("exit price"). The inputs used to measure fair value are classified 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 table presents the fair value hierarchy for those investments of TimkenSteel's pension assets measured at fair value on a recurring basis as of December 31, 2021:

	Total	Level 1	Level 2	Level 3
Assets:				
Cash and cash equivalents	\$ 87.6	\$ 1.2	\$ 86.4	\$ —
U.S government and agency securities	173.9	166.7	7.2	—
Corporate bonds	244.7	—	244.7	—
Equity securities	25.3	25.3	—	—
Other	0.3	—	0.3	—
Total Assets in the fair value hierarchy	\$ 531.8	\$ 193.2	\$ 338.6	\$ —
Assets measured at net asset value ⁽¹⁾	644.2	—	—	—
Total Assets	\$ 1,176.0	\$ 193.2	\$ 338.6	\$ —

⁽¹⁾ Certain assets that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. Such assets include common collective trusts that invest in equity securities and fixed income securities, limited partnerships, real estate partnerships, hedge funds, and risk parity investments. As of December 31, 2021, these assets are redeemable at net asset value within 90 days.

The following table presents the fair value hierarchy for those investments of TimkenSteel's pension assets measured at fair value on a recurring basis as of December 31, 2020:

	Total	Level 1	Level 2	Level 3
Assets:				
Cash and cash equivalents	\$ 9.2	\$ 0.9	\$ 8.3	\$ —
U.S government and agency securities	345.7	337.4	8.3	—
Corporate bonds	276.9	—	276.9	—
Equity securities	68.5	68.5	—	—
Mutual fund - fixed income	0.1	0.1	—	—
Mutual fund - equities	22.0	22.0	—	—
Other	0.2	—	0.2	—
Total Assets in the fair value hierarchy	\$ 722.6	\$ 428.9	\$ 293.7	\$ —
Assets measured at net asset value ⁽¹⁾	509.1	—	—	—
Total Assets	\$ 1,231.7	\$ 428.9	\$ 293.7	\$ —

⁽¹⁾ Certain assets that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. Such assets include common collective trusts that invest in equity securities and fixed income securities, limited partnerships, real estate partnerships, and risk parity investments. As of December 31, 2020, these assets were redeemable at net asset value within 90 days.

The following table presents the fair value hierarchy for those investments of TimkenSteel's postretirement assets measured at fair value on a recurring basis as of December 31, 2021:

	Total	Level 1	Level 2	Level 3
Assets:				
Cash and cash equivalents	\$ 3.8	\$ 3.8	\$ —	\$ —
Mutual fund - fixed income	5.8	5.8	—	—
Total Assets in the fair value hierarchy	\$ 9.6	\$ 9.6	\$ —	\$ —
Assets measured at net asset value ⁽¹⁾	67.2	—	—	—
Total Assets	\$ 76.8	\$ 9.6	\$ —	\$ —

(1) Certain assets that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. Such assets include common collective trusts that invest in equity securities and fixed income securities, limited partnerships, real estate partnerships, hedge funds, and risk parity investments. As of December 31, 2021, these assets are redeemable at net asset value within 90 days.

The following table presents the fair value hierarchy for those investments of TimkenSteel's postretirement assets measured at fair value on a recurring basis as of December 31, 2020:

	Total	Level 1	Level 2	Level 3
Assets:				
Cash and cash equivalents	\$ 3.0	\$ 3.0	\$ —	\$ —
Mutual fund - fixed income	11.7	11.7	—	—
Mutual fund - equities	5.0	5.0	—	—
Total Assets in the fair value hierarchy	\$ 19.7	\$ 19.7	\$ —	\$ —
Assets measured at net asset value ⁽¹⁾	62.5	—	—	—
Total Assets	\$ 82.2	\$ 19.7	\$ —	\$ —

(1) Certain assets that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. Such assets include common collective trusts that invest in equity securities and fixed income securities, limited partnerships, real estate partnerships, and risk parity investments. As of December 31, 2020, these assets were redeemable at net asset value within 90 days.

Future benefit payments are expected to be as follows:

Benefit Payments:	Pension													
	Bargaining Plan	United States of America		Supplemental Plan	United Kingdom Pension Scheme	Mexico Pension Plan	Total Pension	Postretirement Plans						
		Salaried Plan												
2022	\$	76.2	\$	15.4	\$	2.3	\$	2.2	\$	—	\$	96.1	\$	10.5
2023		71.1		15.8		0.5		2.3		—		89.7		9.7
2024		70.1		14.2		0.6		2.4		—		87.3		8.9
2025		71.7		12.9		0.6		2.5		—		87.7		8.4
2026		72.8		12.5		0.5		2.4		—		88.2		8.0
2027-2031		356.7		57.0		17.8		13.0		0.5		445.0		36.4

The Company expects to make required contributions and payments to its pension and postretirement plans of \$5.3 million in the next 12 months and \$33.0 million from 2023 through 2031.

Due to the provisions of the ARPA, required Company contributions related to the Bargaining Plan are not projected to begin until after 2031 based on current forecasts. As such, all Bargaining Plan benefit payments noted above are anticipated to be made from plan assets. Refer to "Note 2 - Significant Accounting Policies" for additional details.

Defined Contribution Plans

The Company recorded expense primarily related to employer matching and non-discretionary contributions to these defined contribution plans of \$2.8 million in 2021, \$3.2 million in 2020, and \$7.1 million in 2019. Effective June 1, 2020, the Company suspended employer matching contributions for all salaried employees. The Company reinstated employer matching contributions effective March 1, 2021. Additionally, the Company discontinued non-discretionary contributions as of January 1, 2021.

Note 16 - Stock-Based Compensation

Description of the Plan

On May 6, 2020, shareholders of TimkenSteel approved the TimkenSteel Corporation 2020 Equity and Incentive Compensation Plan ("TimkenSteel 2020 Plan"), which replaced the previously approved TimkenSteel Corporation Amended and Restated 2014 Equity and Incentive Compensation Plan ("TimkenSteel 2014 Plan"). The TimkenSteel 2020 Plan authorizes the Compensation Committee to provide cash awards and equity-based compensation in the form of stock options, stock appreciation rights, restricted shares, restricted share units, performance shares, performance units, dividend equivalents, and certain other awards for the primary purpose of providing our employees, officers and directors incentives and rewards for service and/or performance. Subject to adjustment as described in the TimkenSteel 2020 Plan, and subject to the TimkenSteel 2020 Plan share counting rules, a total of 2.0 million common shares of the Company are available for awards granted under the TimkenSteel 2020 Plan (plus shares subject to awards granted under the TimkenSteel 2020 Plan or the TimkenSteel 2014 Plan that are canceled or forfeited, expire, are settled for cash, or are unearned to the extent of such cancellation, forfeiture, expiration, cash settlement or unearned amount, as further described in the TimkenSteel 2020 Plan). These shares may be shares of original issuance or treasury shares, or a combination of both. The aggregate number of shares available under the TimkenSteel 2020 Plan will generally be reduced by one common share for every one share subject to an award granted under the TimkenSteel 2020 Plan. The TimkenSteel 2020 Plan also provides that, subject to adjustment as described in the TimkenSteel 2020 Plan: (1) the aggregate number of common shares actually issued or transferred upon the exercise of incentive stock options will not exceed 2.0 million common shares; and (2) no non-employee director of the Company will be granted, in any period of one calendar year, compensation for such service having an aggregate maximum value (measured at the grant date as applicable, and calculating the value of any awards based on the grant date fair value for financial reporting purposes) in excess of \$0.5 million.

On May 5, 2021, shareholders approved the TimkenSteel Corporation Amended and Restated 2020 Equity and Incentive Compensation Plan (the "Amended 2020 Plan"), which amended and restated the TimkenSteel 2020 plan. In general, the Amended 2020 Plan modified the TimkenSteel 2020 Plan to (1) increase the number of common shares, without par value, of the Company available for awards by 2,000,000 shares, (2) correspondingly increase the limit on shares that may be issued or transferred upon the exercise of incentive stock options by 2,000,000 shares, (3) remove the TimkenSteel 2020 Plan's full value award limit of 1.8 million shares and (4) extend the plan term until May 5, 2031. In addition, the Amended 2020 Plan made certain other conforming, clarifying or non-substantive changes to the terms of the TimkenSteel 2020 Plan to implement the Amended 2020 Plan but did not make other material changes to the TimkenSteel 2020 Plan.

As of December 31, 2021, approximately 4.0 million shares of TimkenSteel common stock remained available for grants under the Amended 2020 Plan.

Stock Options

The following table provides the significant assumptions used to calculate the grant date fair values of stock options granted using a Black-Scholes option pricing method:

	2020		2019	
Weighted-average fair value per option	\$	2.23	\$	5.54
Risk-free interest rate		0.96 %		2.63 %
Dividend yield		— %		— %
Expected stock volatility		42.67 %		41.36 %
Expected life - years		6		6

There were no stock options granted during 2021.

The risk-free rate for periods within the expected life of the option is based on the U.S. Treasury yield curve in effect at the time of the grant. Expected annual dividend yield is estimated using the most recent dividend payment per share as of the grant date, of which no dividends were paid in these grant periods. Because of the absence of adequate stock price history of TimkenSteel common stock, expected volatility related to stock option awards granted subsequent to the spinoff is based on the historical volatility of a selected group of peer companies' stock. The expected life of stock option awards granted is based on historical data and represents the period of time that options granted are expected to be held prior to exercise.

The following summarizes TimkenSteel stock option activity from January 1, 2021 to December 31, 2021:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value (millions)
Outstanding as of December 31, 2020	2,931,065	\$ 18.61		
Granted	—	—		
Exercised	(527,870)	7.74		
Canceled, forfeited or expired	(349,107)	24.42		
Outstanding as of December 31, 2021	2,054,088	\$ 20.41	4.4	\$ 5.6
Options expected to vest	314,180	7.53	7.8	2.8
Options exercisable	1,739,908	\$ 22.74	3.8	\$ 2.8

Stock options presented in the table above represent TimkenSteel awards only, including those held by The Timken Company employees.

Time-Based Restricted Stock Units

Time-based restricted stock units are issued with the fair value equal to the closing market price of TimkenSteel common shares on the date of grant. These restricted stock units do not have any performance conditions for vesting. Expense is recognized over the service period, adjusted for any forfeitures that occur during the vesting period.

The following summarizes TimkenSteel stock-settled, time-based restricted stock unit activity from January 1, 2021 to December 31, 2021:

	Number of Shares	Weighted Average Grant Date Fair Value
Outstanding as of December 31, 2020	1,372,326	\$ 7.62
Granted	938,995	7.70
Vested	(545,453)	7.02
Canceled, forfeited or expired	(97,818)	7.53
Outstanding as of December 31, 2021	1,668,050	\$ 7.92

Performance-Based Restricted Stock Units

Performance-based restricted stock units issued in 2020 and 2021 are earned based on the average payout (determined under a Compensation Committee approved matrix) for the Company's relative total shareholder return as compared to an identified peer group of steel companies. The overall vesting period is generally three years, with relative total shareholder return measured for the one, two and three-year periods creating effectively a "nested" 1-year, 2-year, and 3-year plan to support rapid and sustained shareholder value creation. Relative total shareholder return is calculated for each nested performance period by taking the beginning and ending price points based off a 20-trading day average closing stock price as of December 31.

The following summarizes TimkenSteel stock-settled performance-based restricted stock unit activity from January 1, 2021 to December 31, 2021:

	Number of Shares	Weighted Average Grant Date Fair Value
Outstanding as of December 31, 2020	175,964	\$ 4.98
Granted	651,240	7.57
Canceled, forfeited or expired	(33,160)	10.12
Outstanding as of December 31, 2021	794,044	\$ 6.91

Other Information

TimkenSteel recognized stock-based compensation expense of \$7.3 million, \$6.6 million and \$7.4 million for the years ended December 31, 2021, 2020 and 2019, respectively.

As of December 31, 2021, future stock-based compensation expense related to the unvested portion of all awards is approximately \$9.7 million, which is expected to be recognized over a weighted average period of 1.6 years.

Note 17 - Accumulated Other Comprehensive Income (Loss)

Changes in accumulated other comprehensive income (loss) for the years ended December 31, 2021 and 2020 by component were as follows:

	Foreign Currency Translation Adjustments	Pension and Postretirement Liability Adjustments	Total
Balance as of December 31, 2020	\$ (5.4)	\$ 45.8	\$ 40.4
Other comprehensive income before reclassifications, before income tax	0.3	—	0.3
Amounts reclassified from accumulated other comprehensive income (loss), before income tax	—	(5.8)	(5.8)
Amounts deferred to accumulated other comprehensive income (loss), before income tax	—	(14.2)	(14.2)
Tax effect	—	—	—
Net current period other comprehensive income (loss), net of income taxes	0.3	(20.0)	(19.7)
Balance as of December 31, 2021	\$ (5.1)	\$ 25.8	\$ 20.7

	Foreign Currency Translation Adjustments	Pension and Postretirement Liability Adjustments	Total
Balance as of December 31, 2019	\$ (6.8)	\$ 51.5	\$ 44.7
Other comprehensive income before reclassifications, before income tax	1.4	—	1.4
Amounts reclassified from accumulated other comprehensive income (loss), before income tax	—	(5.6)	(5.6)
Tax effect	—	(0.1)	(0.1)
Net current period other comprehensive income (loss), net of income taxes	1.4	(5.7)	(4.3)
Balance as of December 31, 2020	\$ (5.4)	\$ 45.8	\$ 40.4

The amount reclassified from accumulated other comprehensive income (loss) for the years ended December 31, 2021 and December 31, 2020 for the pension and postretirement liability adjustment was included in other (income) expense, net in the Consolidated Statements of Operations. The amount deferred to accumulated other comprehensive income (loss) for the year ended December 31, 2021 was a result of a plan amendment to the Company's Bargaining Plan. For more details refer to "Note 15 - Retirement and Postretirement Plans."

Note 18 – Contingencies

TimkenSteel has a number of loss exposures incurred in the ordinary course of business, such as environmental claims, product warranty claims, employee-related matters, and other litigation. Establishing loss reserves for these matters requires management's estimate and judgment regarding risk exposure and ultimate liability or realization. These loss reserves are reviewed periodically and adjustments are made to reflect the most recent facts and circumstances. Accruals related to environmental claims represent management's best estimate of the fees and costs associated with these claims. Although it is not possible to predict with certainty the outcome of such claims, management believes that their ultimate dispositions should not have a material adverse effect on our financial position, cash flows or results of operations. As of December 31, 2021 and 2020, TimkenSteel had a \$0.3 million and \$1.0 million contingency reserve, respectively, related to loss exposures incurred in the ordinary course of business.

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

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

As of the end of the period covered by this Annual Report on Form 10-K, our management carried out an evaluation, under the supervision and with the participation of the Company's principal executive officer and principal financial officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures as defined in Exchange Act Rule 13a-15(e). Based upon that evaluation, the principal executive officer and principal financial officer concluded that the Company's disclosure controls and procedures were effective as of the end of the period covered by this Annual Report on Form 10-K.

Report of Management on Internal Control Over Financial Reporting

The management of TimkenSteel is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. TimkenSteel's internal control system is designed to provide reasonable assurance regarding the preparation and fair presentation of published 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.

TimkenSteel management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2021. In making this assessment, it used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on this assessment under COSO's "Internal Control-Integrated Framework (2013 framework)," management believes that, as of December 31, 2021, TimkenSteel's internal control over financial reporting is effective.

Ernst & Young LLP (PCAOB ID: 42), an independent registered public accounting firm, has issued an audit report on our assessment of TimkenSteel's internal control over financial reporting as of December 31, 2021. Please refer to Item 8, "Reports of Independent Registered Public Accounting Firm."

Changes in Internal Controls

There have been no changes during the Company's fourth quarter of 2021 in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

Part III.

Item 10. Directors, Executive Officers and Corporate Governance

Required information will be set forth under the captions “Proposal 1: Election of directors” in the proxy statement to be filed within 120 days of December 31, 2021 in connection with the annual meeting of shareholders to be held on May 4, 2022, and is incorporated herein by reference. Information regarding the executive officers of the registrant is included in Part I hereof. Information regarding the Company’s Audit Committee and its Audit Committee Financial Expert is set forth under the caption “Board of directors information - Audit committee” in the proxy statement to be filed within 120 days of December 31, 2021 in connection with the annual meeting of shareholders to be held on May 4, 2022, and is incorporated herein by reference. Information regarding compliance with Section 16(a) by the Company’s section 16 reporting persons is set forth under the caption “Delinquent Section 16(a) reports” in the proxy statement to be filed within 120 days of December 31, 2021 in connection with the annual meeting of shareholders to be held on May 4, 2022 and is incorporated herein by reference.

The Company’s Corporate Governance Guidelines and the charters of its Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee are available on the Company’s website at www.timkensteel.com. The information on the Company’s website is not incorporated by reference into this Annual Report on Form 10-K.

The Company has adopted a code of ethics that applies to all of its employees, including its principal executive officer, principal financial officer and principal accounting officer or controller, as well as to its directors. The Company’s code of ethics, the TimkenSteel Code of Conduct, is available on its website at www.timkensteel.com. The Company intends to disclose any amendment to its code of ethics or waiver from its code of ethics that applies to its principal executive officer, principal financial officer, principal accounting officer or controller, or any director, by posting such amendment or waiver, as applicable, on its website at www.timkensteel.com.

Item 11. Executive Compensation

Required information will be set forth under the captions “Compensation discussion and analysis”; “2021 Summary compensation table”; “2021 Grants of plan-based awards table”; “Outstanding equity awards at 2021 year-end table”; “2021 Option exercises and stock vested table”; “Pension benefits”; “2021 Nonqualified deferred compensation table”; “Potential payments upon termination or change in control”; “Director compensation”; “CEO pay ratio”; “Board of directors information - Compensation committee”; “Board of directors information - Compensation committee interlocks and insider participation”; and “Board of directors information - Compensation committee report” in the proxy statement to be filed within 120 days of December 31, 2021 in connection with the annual meeting of shareholders to be held on May 4, 2022, and is incorporated herein by reference.

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

Required information, including with respect to institutional investors owning more than 5% of the Company’s common shares, will be set forth under the caption “Beneficial ownership of common stock” in the proxy statement to be filed within 120 days of December 31, 2021 in connection with the annual meeting of shareholders to be held on May 4, 2022, and is incorporated herein by reference. Required information regarding securities authorized for issuance under the Company’s equity compensation plans is included in Item 5 of this Annual Report on Form 10-K and is incorporated herein by reference.

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

Required information will be set forth under the captions “Corporate governance - Director independence” and “Corporate governance - Related-party transactions approval policy” in the proxy statement to be filed within 120 days of December 31, 2021 in connection with the annual meeting of shareholders to be held on May 4, 2022, and is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services

Required information regarding fees paid to and services provided by the Company’s independent auditor during the years ended December 31, 2021 and 2020 and the pre-approval policies and procedures of the Audit Committee of the Company’s Board of Directors will be set forth under the captions “Proposal 2: Ratification of appointment of independent auditors - Services of independent auditor for 2021” and “Proposal 2: Ratification of appointment of independent auditors - Audit committee pre-approval policies and procedures” in the proxy statement to be filed within 120 days of December 31, 2021 in connection with the annual meeting of shareholders to be held on May 4, 2022, and is incorporated herein by reference.

Part IV.
Item 15. Exhibits, Financial Statement Schedules

(a)(1) - Financial Statements are included in Part II, Item 8 of the Annual Report on Form 10-K.

(a)(2) - Schedule II - Valuation and Qualifying Accounts is submitted as a separate section of this report. Schedules I, III, IV and V are not applicable to the Company and, therefore, have been omitted.

(a)(3) Listing of Exhibits

Exhibit Number	Exhibit Description
2.1†	Separation and Distribution Agreement, dated as of June 30, 2014, by and between TimkenSteel Corporation and The Timken Company.
3.1	Amended and Restated Articles of Incorporation of TimkenSteel Corporation (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on June 13, 2014, File No. 001-36313).
3.2	Code of Regulations of TimkenSteel Corporation (incorporated by reference to Exhibit 3.2 of Amendment No. 3 to the Company's Registration Statement on Form 10 filed on May 15, 2014, File No. 001-36313).
4.1	Indenture, dated May 31, 2016, by and between the Company and U.S. Bank National Association, as Trustee (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on May 31, 2016, File No. 001-36313).
4.2	First Supplemental Indenture, dated May 31, 2016, by and between the Company and U.S. Bank National Association, as Trustee (including Form of Note) (incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on May 31, 2016, File No. 001-36313).
4.3	Description of Common Stock (incorporated by reference to Exhibit 4.3 to the Company's Annual Report on Form 10-K filed on February 25, 2020, File No. 001-36313).
4.4	Second Supplemental Indenture, dated December 15, 2020, by and between the Company and U.S. Bank National Association, as Trustee (including Form of New Convertible Note) (incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on December 15, 2020, File No. 001-36313).
10.1†	Tax Sharing Agreement, dated as of June 30, 2014, by and between TimkenSteel Corporation and The Timken Company.
10.2†	Employee Matters Agreement, dated as of June 30, 2014, by and between TimkenSteel Corporation and The Timken Company.
10.3	Form of Amended and Restated Employee Excess Benefits Agreement with TimkenSteel Corporation (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on June 13, 2014, File No. 001-36313).
10.4†	Trademark License Agreement, dated as of June 30, 2014, by and between TimkenSteel Corporation and The Timken Company.
10.5	TimkenSteel Corporation Amended and Restated 2014 Equity and Incentive Compensation Plan (incorporated by reference to Exhibit 4.3 to the Company's Registration Statement on Form S-8 filed on October 28, 2016, Registration No. 333-214297).
10.6	TimkenSteel Corporation Amended and Restated Annual Performance Award Plan, effective January 1, 2018 (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed April 26, 2018, File No. 001-36313).
10.7	Supplemental Pension Plan of TimkenSteel Corporation (Effective June 30, 2014) (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on June 13, 2014, File No. 001-36313).
10.8	Form of Severance Agreement with TimkenSteel Corporation (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on June 13, 2014, File No. 001-36313).
10.9††	Form of Director Indemnification Agreement.
10.10††	Form of Officer Indemnification Agreement.
10.11††	Form of Director and Officer Indemnification Agreement.
10.12	Form of Severance Agreement between TimkenSteel and Certain Executive Officers (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on October 26, 2017, File No. 001-36313).
10.13	Amended and Restated TimkenSteel Corporation 2014 Deferred Compensation Plan (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on May 11, 2015, File No. 001-36313).
10.14	Amended and Restated TimkenSteel Corporation Director Deferred Compensation Plan (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on May 11, 2015, File No. 001-36313).
10.15	Form of Nonqualified Stock Option Agreement (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on April 27, 2017, File No. 001-36313).
10.16	Form of Nonqualified Stock Option Agreement (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on May 2, 2019, File No. 001-36313).
10.17	Form of Time-Based Restricted Stock Unit Agreement (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on May 2, 2019, File No. 001-36313).

10.18	Form of Time-Based Ratable Restricted Stock Unit Agreement (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q filed on May 2, 2019, File No. 001-36313).
10.19	Form of Deferred Shares Agreement (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on August 4, 2016, File No. 001-36313).
10.20	Third Amended and Restated Credit Agreement dated as of October 15, 2019, by and among TimkenSteel Corporation, the other loan parties and lenders party thereto, JPMorgan Chase Bank, N.A., as administrative agent, Bank of America, N.A., as syndication agent, and BMO Harris Bank N.A. and U.S. Bank National Association, as co-documentation agents (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on October 17, 2019, File No. 001-36313).
10.21	Form of Performance-Based Restricted Stock Unit Agreement (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on May 7, 2020, File No. 001-36313).
10.22	Form of Director Restricted Share Unit Agreement (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on August 6, 2020, File No. 001-36313).
10.23	Form of Performance-Based Restricted Share Unit Agreement (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on October 29, 2020, File No. 001-36313).
10.24	Restricted Share Unit Inducement Award Agreement dated as of January 5, 2021 by and between TimkenSteel Corporation and Michael S. Williams.
10.25	Performance-Based Restricted Share Unit Inducement Award Agreement dated as of January 5, 2021 by and between TimkenSteel Corporation and Michael S. Williams.
10.26	Severance Agreement dated as of January 1, 2021 between TimkenSteel Corporation and Michael S. Williams.
10.27	Form of Severance Agreement between TimkenSteel and Certain Executive Officers.
10.28	TimkenSteel Corporation 2020 Equity and Incentive Compensation Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on May 7, 2020, File No. 001-36313).
10.29	TimkenSteel Corporation Amended and Restated 2020 Equity and Incentive Compensation Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on May 6, 2021, File No. 001-36313).
10.30	Form of Performance-Based Restricted Share Unit Agreement (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on May 6, 2021, File No. 001-36313).
10.31	Form of Time-Based Restricted Share Unit Agreement (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on May 6, 2021, File No. 001-36313).
21.1*	A list of subsidiaries of the Registrant.
23.1*	Consent of Independent Registered Public Accounting Firm.
24.1*	Power of Attorney.
31.1*	Certification of the Chief Executive Officer pursuant to Rule 13a-14 of the Exchange Act, as adopted, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of the Chief Financial Officer pursuant to Rule 13a-14 of the Exchange Act, as adopted, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certifications of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	Inline XBRL Instance Document.
101.SCH*	Inline XBRL Taxonomy Extension Schema Document.
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).
†	Incorporated by reference to the exhibit filed under the corresponding Exhibit Number of the Company's Current Report on Form 8-K filed on July 3, 2014, File No. 001-36313.
††	Incorporated by reference to the exhibit filed under the corresponding Exhibit Number of Amendment No. 3 to the Company's Registration Statement on Form 10 filed on May 15, 2014, File No. 001-36313.
*	Filed herewith.
**	Furnished herewith.

Schedule II-Valuation and Qualifying Accounts

	2021		2020		2019
Allowance for uncollectible accounts:					
Balance at Beginning of Period	\$ 1.3	\$	1.5	\$	1.7
Additions:					
Charged to Costs and Expenses ⁽¹⁾	0.6		—		—
Deductions ⁽²⁾	—		(0.2)		(0.2)
Balance at End of Period	\$ 1.9	\$	1.3	\$	1.5
Allowance for inventory reserves:					
Balance at Beginning of Period	\$ 13.9	\$	10.7	\$	6.1
Additions:					
Charged to Costs and Expenses ⁽³⁾	2.8		4.1		9.0
Deductions ⁽⁴⁾	(15.9)		(0.9)		(4.4)
Balance at End of Period	\$ 0.8	\$	13.9	\$	10.7
Valuation allowance on deferred tax assets:					
Balance at Beginning of Period	\$ 47.7	\$	34.9	\$	43.7
Additions:					
Charged to Costs and Expenses ⁽⁵⁾	—		12.4		—
Charged to Other Accounts ⁽⁶⁾	4.8		1.4		16.7
Deductions ⁽⁷⁾	(37.0)		(1.0)		(25.5)
Balance at End of Period	\$ 15.5	\$	47.7	\$	34.9

⁽¹⁾ Provision for uncollectible accounts included in expenses.

⁽²⁾ Actual accounts written off against the allowance, net of recoveries.

⁽³⁾ Provisions for surplus and obsolete inventory and lower cost or net realizable value included in expenses.

⁽⁴⁾ Inventory items released against the allowance, either via write-off or a recovery. The allowance for inventory reserves decreased in 2021 due to sales of TMS inventory, along with the selling and scrapping of aged inventory.

⁽⁵⁾ Increase in valuation allowance is recorded as a component of the provision for income taxes.

⁽⁶⁾ Amount relates to valuation allowances recorded against other comprehensive income (loss).

⁽⁷⁾ For the year ended December 31, 2021, this amount relates to the release of the valuation allowance against tax loss carryforwards used during 2021. For the year ended December 31, 2020, this amount relates to an additional paid-in capital adjustment associated with the Convertible Notes. For the year ended December 31, 2019, this amount relates to the change in accounting principle from LIFO to FIFO.

Signatures

Pursuant to the requirements 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.

TIMKENSTEEL CORPORATION

Date: February 24, 2022

/s/ Kristopher R. Westbrooks

Kristopher R. Westbrooks
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

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

Signature	Title	Date
/s/ Michael S. Williams Michael S. Williams	Chief Executive Officer and President (Principal Executive Officer)	February 24, 2022
/s/ Kristopher R. Westbrooks Kristopher R. Westbrooks	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 24, 2022
/s/ Nicholas A. Yacobozzi Nicholas A. Yacobozzi	Corporate Controller (Principal Accounting Officer)	February 24, 2022
* Diane C. Creel	Director	February 24, 2022
* Randall H. Edwards	Director	February 24, 2022
* Ken V. Garcia	Director	February 24, 2022
* Ellis A. Jones	Director	February 24, 2022
* Donald T. Misheff	Director	February 24, 2022
* Ronald A. Rice	Director	February 24, 2022
* Leila L. Vespoli	Director	February 24, 2022
* Randall A. Wotring	Director	February 24, 2022
*Signed by the undersigned as attorney-in-fact and agent for the directors indicated.		
/s/ Kristopher R. Westbrooks Kristopher R. Westbrooks	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 24, 2022

Subsidiaries of the Registrant

The active subsidiaries of the Company (all of which are included in the consolidated financial statements of the Company and its subsidiaries) are as follows:

Name	State or sovereign power under laws of which organized	Percentage of voting securities owned directly or indirectly by the Company
United States		
EDC, Inc.	Ohio	100.0%
TimkenSteel Material Services, LLC	Delaware	100.0%
TSB Metal Recycling LLC	Ohio	100.0%
International		
TimkenSteel UK Limited	England	100.0%
TimkenSteel de Mexico S. de R.L. de C.V.	Mexico	100.0%

*TimkenSteel (Shanghai) Corporation Limited was sold on July 30, 2021. TimkenSteel's consolidated financial statements include activity for TimkenSteel (Shanghai) Corporation Limited through July 30, 2021.

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

- (1)Registration Statement (Form S-8 No. 333-214297) pertaining to the TimkenSteel Corporation Amended and Restated 2014 Equity and Incentive Compensation Plan;
- (2)Registration Statement (Form S-8 No. 333-197078) pertaining to the TimkenSteel Corporation 2014 Equity and Incentive Compensation Plan;
- (3)Registration Statement (Form S-3 No. 333-216781) pertaining to the TimkenSteel Corporation Amended and Restated 2014 Equity and Incentive Compensation Plan;
- (4)Registration Statement (Form S-8 No. 333-238034) pertaining to the TimkenSteel Corporation 2020 Equity and Incentive Compensation Plan; and
- (5)Registration Statement (Form S-8 No. 333-251892) pertaining to the TimkenSteel Corporation Time-Based Restricted Share Unit Inducement Award Agreement and Performance-Based Restricted Share Unit Inducement Award Agreement; and
- (6)Registration Statement (Form S-8 No. 333-258523) pertaining to the TimkenSteel Corporation Amended and Restated 2020 Equity and Incentive Compensation Plan

of our reports dated February 24, 2022, with respect to the consolidated financial statements and schedule of TimkenSteel Corporation and the effectiveness of internal control over financial reporting of TimkenSteel Corporation, included in this Annual Report (Form 10-K) of TimkenSteel Corporation for the year ended December 31, 2021.

/s/ Ernst & Young LLP

Cleveland, Ohio
February 24, 2022

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each of the undersigned Directors of TimkenSteel Corporation hereby constitutes and appoints Kristine C. Syrvalin and Kristopher R. Westbrook, and each of them (each with full power to act alone), his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign the Annual Report on Form 10-K of TimkenSteel Corporation for the fiscal year ended December 31, 2021, including any amendments thereto, on his or her behalf, and to file the same with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact or agents, or any of them, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

This Power of Attorney may be executed in multiple counterparts, each of which shall be deemed an original with respect to the person executing it.

IN WITNESS WHEREOF, the undersigned have hereunto set their hands as of the 24th day of February 2022:

/s/ Diane C. Creel
Diane C. Creel
Director

/s/ Randall H. Edwards
Randall H. Edwards
Director

/s/ Ken V. Garcia
Ken V. Garcia
Director

/s/ Ellis A. Jones
Ellis A. Jones
Director

/s/ Donald T. Misheff
Donald T. Misheff
Director

/s/ Ronald A. Rice
Ronald A. Rice
Director

/s/ Leila L. Vespoli
Leila L. Vespoli
Director

/s/ Randall A. Wotring
Randall A. Wotring
Director

CERTIFICATION

I, Michael S. Williams, certify that:

I have reviewed this annual report on Form 10-K of TimkenSteel Corporation;

1. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

2. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

3. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)), for the registrant and have:

a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

4. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 24, 2022

/s/ Michael S. Williams

Michael S. Williams
President and Chief Executive Officer
(Principal Executive Officer)

CERTIFICATION

I, Kristopher R. Westbrooks, certify that:

I have reviewed this annual report on Form 10-K of TimkenSteel Corporation;

1. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

2. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

3. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)), for the registrant and have:

a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

4. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 24, 2022

/s/ Kristopher R. Westbrooks

Kristopher R. Westbrooks
Executive Vice President and Chief Financial
Officer (Principal Financial Officer)

CERTIFICATION

**Pursuant to 18 U.S.C. Section 1350,
As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Annual Report of TimkenSteel Corporation (the “Company”) on Form 10-K for the period ended December 31, 2021, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), each of the undersigned officers of the Company certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to such officer’s knowledge:

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

Date: February 24, 2022

/s/ Michael S. Williams

Michael S. Williams
President and Chief Executive Officer
(Principal Executive Officer)

Date: February 24, 2022

/s/ Kristopher R. Westbrook

Kristopher R. Westbrook
Executive Vice President and Chief Financial
Officer (Principal Financial Officer)
