



The Timken Company

2022 ANNUAL REPORT

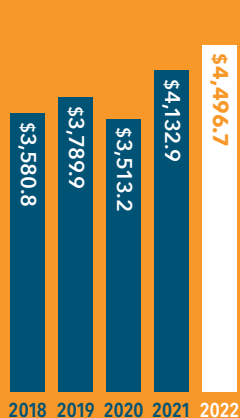


2022 Performance

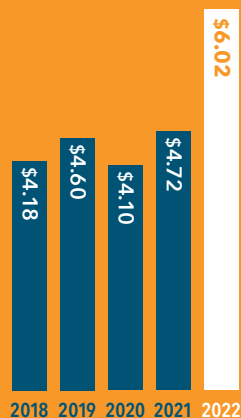
OPERATING DATA	2022	2021
Net Sales	\$ 4,496.7	\$ 4,132.9
Adjusted EBITDA ¹	855.9	718.0
Adjusted EBITDA Margin ¹	19.0%	17.4%
Adjusted Net Income ¹	447.8	363.4
Free Cash Flow ¹	285.4	239.0
SHAREHOLDER RETURNS		
Adjusted EPS ¹	\$ 6.02	\$ 4.72
Dividends	1.23	1.19
OTHER KEY RATIOS		
Net Debt to Capital ²	40.9%	33.7%
Ratio of Net Debt to Adjusted EBITDA ²	1.9	1.7
Adjusted Return on Invested Capital ¹	12.6%	11.0%

REVENUE

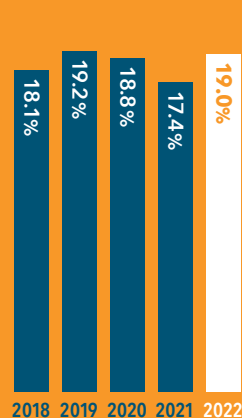
Dollars in Millions



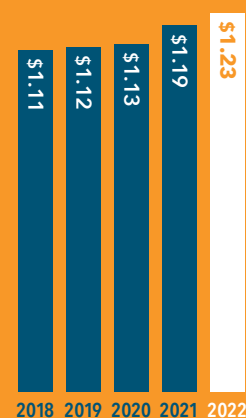
ADJUSTED EARNINGS PER SHARE¹



ADJUSTED EBITDA MARGIN¹



DIVIDENDS PER SHARE



10-YEAR TOTAL SHAREHOLDER RETURN³ 10.0%

¹ See pages 37 through 41 of the company's Annual Report on Form 10-K for reconciliations to the most directly comparable generally accepted accounting principles (GAAP) financial measures. Adjusted Return on Invested Capital is defined as adjusted net operating profit after taxes divided by average invested capital. Free Cash Flow is defined as net cash provided by operating activities minus capital expenditures.

² The Ratio of Net Debt to Adjusted EBITDA is defined as net debt at December 31 of the applicable year divided by adjusted EBITDA for the twelve months ended December 31 of the applicable year. See pages 29 and 40 for the reconciliations of net debt, capital, and adjusted EBITDA to the most directly comparable GAAP financial measures.

³ Total shareholder return for the company was calculated on an annualized basis and assumes quarterly reinvestment of dividends. See Item 5 in the company's Annual Report on Form 10-K for more details on total shareholder return.

Certain statements set forth in this Annual Report to Shareholders that are not historical in nature (including the company's forecasts, beliefs, expectations, and targets) are "forward-looking" statements within the meaning of the Private Securities Litigation Reform Act of 1995. You are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date of this report. See the discussion of forward-looking statements in Management's Discussion and Analysis of Financial Condition and Results of Operations in the company's Annual Report on Form 10-K.

To Our Valued Shareholders, Customers and Employees:

In 2022, we celebrated a significant milestone in The Timken Company’s storied history – 100 years listed on the New York Stock Exchange. Only 29 companies currently on the exchange have been listed longer than Timken, and even fewer have paid a dividend every quarter over that century as Timken has.

From the beginning, we have consistently won in the marketplace because of our commitment to serving customers with the highest quality products. While that commitment continues, today’s Timken is also winning – both strategically and financially – because of our diversification, technical sales model and best-in-class customer service, as we steadily invest for growth, operate with excellence and deploy capital to drive shareholder value.

Your company is performing at a high level, which is reflected in our 2022 performance – record results in a dynamic macroeconomic environment. We generated \$4.5 billion in sales – an 8.8 percent increase from 2021 – while delivering record adjusted earnings per share¹ of \$6.02. During the year, we returned \$303 million in cash to shareholders through dividends and share repurchases. We extended our consecutive dividend payment streak to 402 quarters,



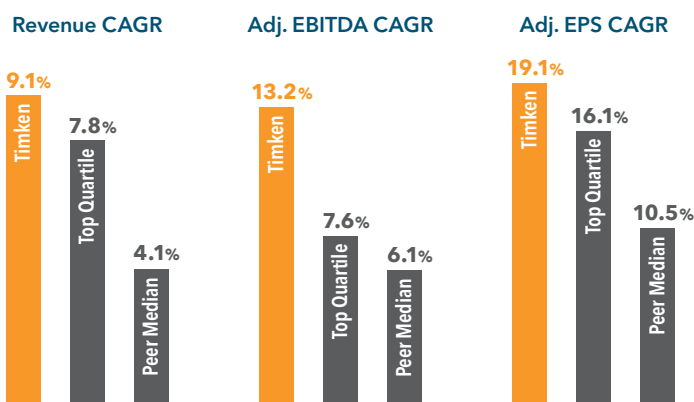
Richard G. Kyle, President and Chief Executive Officer

and we increased our annual dividends paid for the ninth consecutive year. We also repurchased 3.25 million shares of stock, or more than 4 percent of our outstanding shares. We generated net cash from operations of approximately \$463.8 million and free cash flow¹ of \$285.4 million, while investing approximately \$178 million or 4 percent of revenue in capital expenditures to grow and improve the competitiveness of our business.

Timken’s Top-Quartile Performance vs. Peers⁴

2017 – 2021⁵

As demonstrated at our recent Investor Day, Timken has been creating significant value for shareholders and delivering top-quartile financial performance over the last five years. The company consistently outperformed its peers – 18 mid- and large-cap U.S. industrial companies – across key financial metrics.



⁴ See page 44 of The Timken Company 2022 Proxy Statement for a list of the 18 companies in the 2022 peer group.

⁵ CAGRs calculated with 2016 as the base year. Timken adjusted EBITDA CAGR and adjusted EPS CAGR are calculated based on adjusted EBITDA and EPS as originally reported (including before adoption of mark-to-market accounting for pension/OPEB in 2016 and prior to adjusting for acquisition-related amortization). Carlisle’s 2021 adjusted EPS calculation includes acquisition-related amortization of \$1.80/share to make comparable to 2016. Gates’ 2016 adjusted EPS calculation utilizes the company’s diluted shares outstanding upon completion of the IPO in early 2018. Dover’s 2016 adjusted EPS as originally reported and excludes acquisition-related amortization of \$0.84/share. Fortive’s 2016 figures as originally reported (pre-Vontier separation and the combination of its A&S platform with Altra). Ingersoll Rand’s 2016 – 2019 figures utilize Gardner Denver’s standalone results. See pages 37 through 38 of the company’s Annual Report on Form 10-K and the appendix at the end of this report titled *Appendix: Reconciliation of GAAP to Non-GAAP Measures* for reconciliations of Adjusted EPS and Adjusted EBITDA to their most directly comparable GAAP financial measures for 2018 – 2022 and 2016 – 17, respectively.

In addition, we have been creating significant value for shareholders and top-quartile financial performance over the last five years. Compared to our peers – 18 mid- and large-cap U.S. industrial companies – our results further underscore our staying power and enduring relevance.

Through our performance, innovation and other strategic advancements, we continue to build on Timken's rich and long history. Our value proposition has never been stronger, and we are positioned to thrive for the next 100 years.

More Diverse Than Ever: Scaling as a Diversified Industrial Leader

Today Timken is performing as a diversified industrial leader. We are strongly positioned to win with a more diverse and attractive market mix and a broader product portfolio.

As a world leader in engineered bearings technology, we remain focused on the premium and most profitable parts of the market. At the same time, we have been leveraging our global leadership position in engineered bearings to expand and scale in industrial motion products and services for over a decade.

Our industrial motion product offering is now greater than 30 percent of our sales and includes linear motion products, automatic lubrication systems, drive systems and services, belts, chain, couplings, and industrial clutches and brakes. These engineered components are generally found in the same equipment that contains bearings. That means they often share the same customer channels, both original equipment manufacturers (OEMs) and distributors, and are often in the same end-market sectors as our bearings. We go to market directly to OEMs as their trusted design partner, and we serve our aftermarket and smaller OEM customers through our global network of distributors.

Diverse Market Mix

We are a broad-based global supplier with a diverse end-market sector mix that is one of the most attractive in the industry. We have been working to broaden our industry mix to include more attractive end-market sectors with strong growth macros, good profit pools and in many cases different cyclical profiles. Since 2014, we have tripled our annual revenue in these newer sectors, which include renewable energy, automation, marine, food and beverage (F&B) and passenger rail.

For example, automation is a growing end-market sector for Timken. We have built a diverse portfolio of products for high-growth automation industries, including robotics, logistics and conveyance. We added to our capabilities in this space with the 2022 acquisition of Spinea, which primarily serves high-precision automation and robotics applications. We also offer automatic lubrication systems that serve a variety of end-market sectors, including wind energy. Notably, our Groeneveld-BEKA business is among the world's largest producers of automatic lubrication systems.

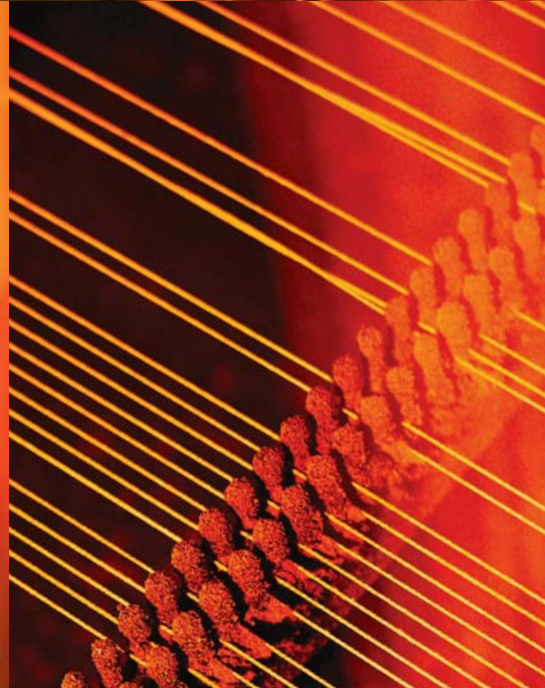
We are also scaling our offerings in F&B to serve the sector's challenging applications. F&B factory equipment has many rotating parts and is highly regulated. Its customers demand great technical and operating requirements, and they don't follow a traditional industrial capital goods cycle. To meet their needs, we have been building our F&B product offering both organically and inorganically. Our recent acquisition of GGB Bearings provides additional technical solutions for this target market and is expected to bring new customers to Timken.

Concurrently, we continue to maintain our leadership in our traditional core end-market sectors, including off-highway, heavy industries, general industrial, aerospace/defense and rail, all of which remain critical to our global growth. Our customer and geographic breadth, the magnitude of our installed base and our application development pipeline all contribute to the growth, resilience and diversity of our product portfolio. We are not dependent on any one market or customer. We serve a large installed base that creates recurring revenue and are positioned to win with our customer-driven innovations and next-generation applications.



"We have been working to broaden our industry mix to include more attractive end-market sectors with strong growth macros, good profit pools and in many cases different cyclicality profiles. Since 2014, we have tripled our annual revenue in these newer sectors, which include renewable energy, automation, marine, food and beverage and passenger rail."

Richard G. Kyle
President & CEO



A Focus on Sustainability

Sustainability presents another major opportunity for us – both as an industrial leader and a responsible corporate citizen.

Across a wide range of end-market sectors, customers worldwide value our technology and service. Timken is top of mind for customers as they develop more sustainable equipment solutions. Renewable energy remains our single largest individual end-market sector at around 10 percent of sales.

We continue to contribute significantly to the global shift to renewable-energy production and are proud to be a leading supplier to some of the world's most significant wind and solar projects. We manufacture engineered bearings and industrial motion products for wind turbines and provide critical drive systems for solar equipment. Across the board, Timken technology continues to make renewable energy more efficient, more reliable and more competitive.

But our sustainability focus goes well beyond renewable energy. Electrification is a growing trend, and we are winning in electrification and hybrid designs across our markets, because of our specialized expertise in power transmission, friction management and materials science.

More broadly, OEMs are actively working to improve the sustainability of their equipment, and many are turning to us for our expertise in light-weighting and fuel-efficient applications. This process requires engineering designs that help reduce weight, friction, emissions and size, while using different sources of energy and continuing to deliver rotational motion and transfer loads. Many of our recent acquisitions – Cone Drive, Groeneveld-BEKA, Rollon and Spinea – have created opportunities for us in this rapidly evolving space.

Corporate Social Responsibility (CSR)

Timken has a long history as an excellent corporate citizen. It begins with our founding mission to create sustainable solutions for our customers' most challenging problems. We apply the same approach to corporate social responsibility in the goals and initiatives we choose to advance. We prioritize our resources and investments where we believe we

can make the greatest impact, and we are driving sustainability in the products we make, through the industries we serve, and across our global operations.

We also continue to invest in the development of our people, the diversity of our workforce and safety across the enterprise. We give back and make our communities stronger while leading our global operations ethically based on our strong corporate governance practices. We are honored – for the third time in three years – to be named one of America's most responsible companies by *Newsweek*. We have also been honored by *Forbes* as one of America's best employers and have been consistently recognized as one of America's most ethical companies.

Sustainable and Disciplined Capital Allocation

Sustainability also applies to how we manage our global operations – we are successful because we are intentional and selective in what we pursue, both organically and inorganically.

We are disciplined in our capital allocation, which starts with a persistent focus on cash generation within our business and ends with deploying that cash to drive value-creation for our shareholders. We invest in our core business to drive organic growth and margin expansion. In addition, we look for opportunities to expand the portfolio through accretive acquisitions. We also consistently pay a quarterly dividend and deploy capital to buy back shares. We do all of this while focusing on maintaining a strong investment-grade balance sheet.

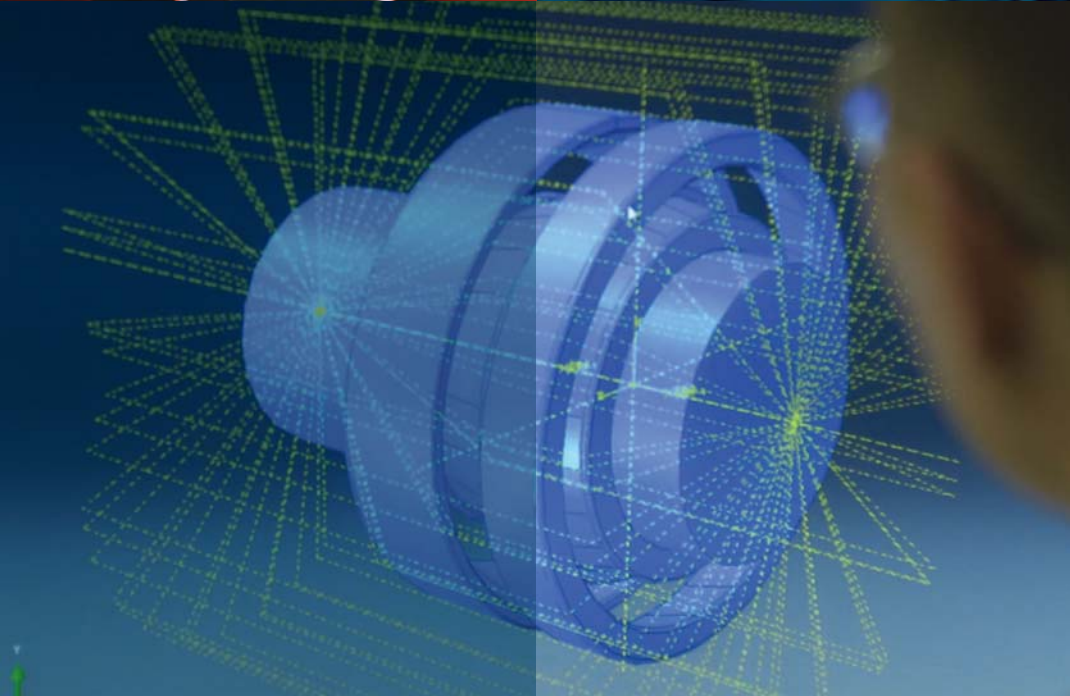
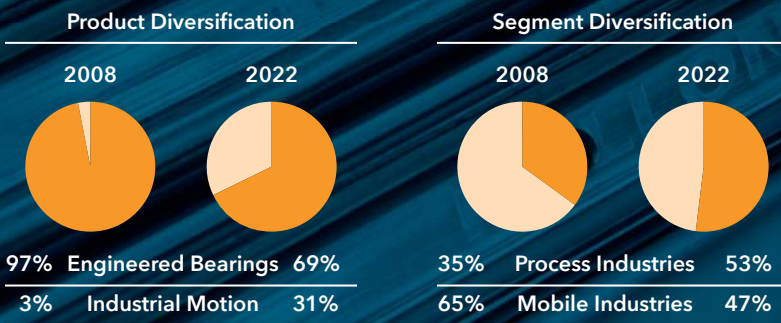
We have a strong track record of completing strategic acquisitions to accelerate growth. These acquisitions have driven higher profitability while reducing the capital intensity of the portfolio and enhancing the company's growth profile. We have strengthened the acquired companies and they, in turn, have brought value to Timken in the form of talent, strong market positions, synergies and new opportunities.

Since 2010, we have completed at least one acquisition every year. Mergers and acquisitions (M&A) have significantly expanded our industrial motion portfolio and enabled us to service new and fast-growing industries. That shift has been a key driver in the stronger performance and resiliency of our business.



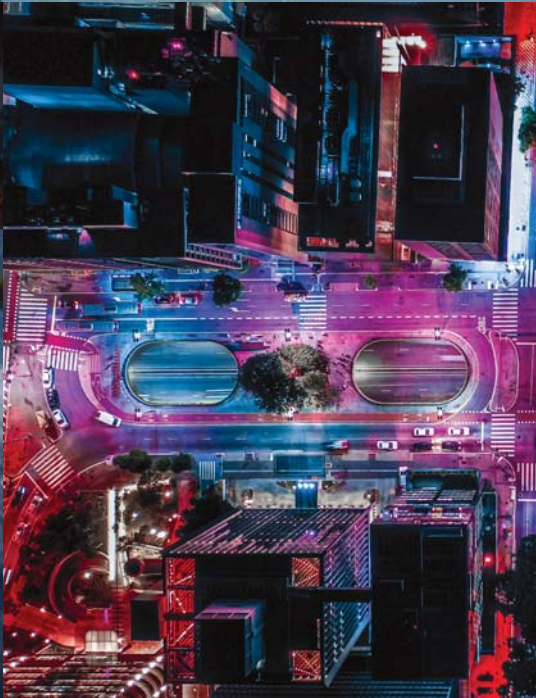
M&A Strategy: Creating a Diversified Industrial Leader

Timken has a strong track record of completing strategic acquisitions to accelerate growth. These acquisitions have added new products and access to new markets, driven increased scale in industrial motion and higher overall profitability while reducing the capital intensity of the portfolio and enhancing the company's growth profile.



2022 Strategic Acquisitions

Spinea is a European technology leader and manufacturer of highly engineered cycloidal reduction gears and actuators. The company's solutions primarily serve high-precision automation and robotics applications in the factory automation sector. Spinea further scales Timken's position in automation, which was the company's second-largest end-market sector after renewable energy in 2022.



GGB Bearings is a global technology and market leader of premium engineered metal-polymer plain bearings. Its tribology solutions in plain bearing coatings complement Timken's leading positions in roller and ball bearings. GGB Bearings' products are used mainly in industrial applications, including pumps and compressors, HVAC, off-highway, energy, material handling and aerospace.

Timken recently announced that it will acquire the Nadella Group to expand its linear motion capabilities and the American Roller Bearing Company to bolster its industry-leading portfolio of engineered bearings solutions.

“From the beginning, we have consistently won in the marketplace because of our commitment to serving customers with the highest quality products. While that commitment continues, today’s Timken is also winning – both strategically and financially – because of our diversification, technical sales model and best-in-class customer service, as we steadily invest for growth, operate with excellence and deploy capital to drive shareholder value.”

Looking Ahead: Even Greater Value

As we look to the future, we do so confidently. We have the right strategy, the right team and the right portfolio in place to deliver even greater value in the coming years. We have proven our ability to consistently create value through various industrial market conditions and through evolving technologies and customer needs. We have significantly improved our financial performance and we have further room to grow.

In short, Timken remains a strong investment.

Our portfolio is strategically positioned to deliver higher growth and margins, and we expect to continue diversifying our products and industries into attractive and complementary spaces. We are investing heavily in R&D and application engineering to advance the equipment designs of tomorrow. Our application pipeline is strong, and we are looking to the future confidently, clearly differentiating ourselves from competitors.

Going forward, we are focused on further scaling the enterprise, accelerating the execution of our profitable growth strategy and achieving continued top-quartile financial performance. Our objective is to outgrow the industries in which we participate today while

continuing to shift to higher-growth market sectors and technologies of tomorrow. To accomplish this, we established the following compelling long-term (5-year) targets at our 2022 Investor Day:

- Sales growth of 6 – 8 percent compounded annual growth rate (CAGR)
- Adjusted earnings per share CAGR of more than 10 percent
- Adjusted EBITDA margin expansion of 200 basis points over the next five years as compared to the last five
- Free cash flow conversion of over 100 percent of net income.

In closing, Timken is stronger than ever and we thank all our stakeholders – employees and management team, suppliers, investors, members of the board, and the communities we call home – for your continued investment in our company. We are well positioned to capitalize on new opportunities, achieve stronger performance and create significant value over the next five years while we build even greater momentum as the world focuses on sustainable solutions for the next generation of engineered applications.

Sincerely,



Richard G. Kyle
President and Chief Executive Officer

From the Chairman

Celebrating 100 years on the New York Stock Exchange – and declaring our milestone 400th consecutive quarterly dividend – was a proud moment in The Timken Company’s history. These achievements are clear proof of our sustainable performance, innovation and impact as a global industrial leader.

In the year, we also delivered consistent, record results and continued to create significant value for shareholders. This strong performance shows that our management team’s focused strategy is working. We continue to maintain our position as a leader in engineered bearing technology and are actively leveraging our position to expand and scale in industrial motion products and services to serve emerging and growing market sectors.

A fundamental pillar of our staying power and success has always been our unwavering commitment to our values of ethics and integrity, quality, teamwork and excellence. They have guided us since our company’s founding, and we will continue to conduct business in the future with honesty, fairness, respect and responsibility.



John M. Timken Jr., Chairman, Board of Directors

We recognize our most enduring resource is our people. Our accomplishments would not have been possible without the expertise and dedication of our global team of world-class problem solvers. The opportunities before us are great, but they require next-generation thinking, innovative applications and strong leadership.

Thank you to our employees, customers and shareholders – together we are creating the momentum that will propel Timken into another century of innovation and progress. As we explore new horizons, we have a wealth of experience and leadership to guide us.

John M. Timken Jr.
Chairman, Board of Directors

Board of Directors



Richard G. Kyle
President and
Chief Executive Officer
The Timken Company



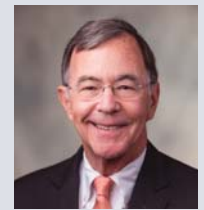
Maria A. Crowe
Retired President of
Manufacturing Operations
Eli Lilly and Company



Elizabeth A. Harrell
Retired Major General
USAF



Sarah C. Lauber
Executive Vice President,
CFO and Secretary
Douglas Dynamics, Inc.



John A. Luke, Jr.
Retired Chairman WestRock,
Retired President and
CEO MeadWestvaco



Christopher L. Mapes
Chairman, President and
Chief Executive Officer
Lincoln Electric Holdings, Inc.



James F. Palmer
Retired Corporate
Vice President and
Chief Financial Officer
Northrop Grumman
Corporation



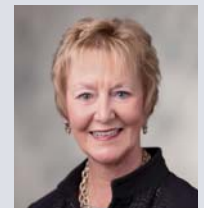
Ajita G. Rajendra
Retired Executive Chairman,
President and CEO
A.O. Smith Corporation



Frank C. Sullivan
Chairman and
Chief Executive Officer
RPM International Inc.



Ward J. Timken, Jr.
Co-founder,
Chief Executive Officer
McKinley Strategies, LLC



Jacqueline F. Woods
Retired President
AT&T Ohio



In November, members of the board of directors and executive team gathered to celebrate The Timken Company's century of trading on the NYSE.

Executive Leadership Team

Richard G. Kyle

President and
Chief Executive Officer

Christopher A. Coughlin

Executive Vice President,
President of Industrial Motion

Philip D. Fracassa

Executive Vice President,
Chief Financial Officer

Andreas Roellgen

Executive Vice President,
President of Engineered Bearings

Hansal N. Patel

Vice President, General Counsel
and Secretary

Natasha Pollock

Vice President, Human Resources

Michael J. Connors

Vice President, Global Marketing

Ajay K. Das

Vice President,
Strategy and Business Development

Michael A. Discenza

Vice President,
Finance and Group Controller

Timothy A. Graham

Vice President,
Operations, Engineered Bearings

Sanjay Koul

President, India and Southeast
Asia; Managing Director, India

Carl D. Rapp

Group Vice President and
Vice President, Power Systems

Douglas H. Smith

Vice President, Technology

Lan Yu

President, China

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

TIMKEN
FORM 10-K

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

For the fiscal year ended December 31, 2022

OR

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

For the transition period from _____ to _____

Commission file number: 1-1169

THE TIMKEN COMPANY

(Exact name of registrant as specified in its charter)

Ohio

(State or other jurisdiction of
incorporation or organization)

34-0577130

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

4500 Mount Pleasant Street NW

North Canton

Ohio

(Address of principal executive offices)

44720-5450

(Zip Code)

234.262.3000

(Registrant's telephone number, including area code)
Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Shares, without par value	TKR	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 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, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company Emerging growth company

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

Indicate by check mark whether the Registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 762(b)) by the registered public accounting firm that prepared or issued its audit report

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

As of June 30, 2022, the aggregate market value of the registrant's common shares held by non-affiliates of the registrant was \$3,382,800,199 based on the closing sale price as reported on the New York Stock Exchange.

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 January 31, 2023
Common Shares, without par value	72,393,668 shares

DOCUMENTS INCORPORATED BY REFERENCE

Document	Parts Into Which Incorporated
Proxy Statement for the Annual Meeting of Shareholders to be held on or about May 5, 2023 (Proxy Statement)	Part III

THE TIMKEN COMPANY
INDEX TO FORM 10-K REPORT

		<u>PAGE</u>
I.	PART I.	
	Item 1.	Business 1
	Item 1A.	Risk Factors 8
	Item 1B.	Unresolved Staff Comments 17
	Item 2.	Properties 17
	Item 3.	Legal Proceedings 17
	Item 4.	Mine Safety Disclosures 17
	Item 4A.	Information about our Executive Officers 18
II.	PART II.	
	Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities 19
	Item 6.	Selected Financial Data 21
	Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations 22
	Item 7A.	Quantitative and Qualitative Disclosures about Market Risk 44
	Item 8.	Financial Statements and Supplementary Data 45
	Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure 97
	Item 9A.	Controls and Procedures 97
	Item 9B.	Other Information 100
	Item 9C.	Disclosure Regarding Foreign Jurisdictions that Prevent Inspection 100
III.	PART III.	
	Item 10.	Directors, Executive Officers and Corporate Governance 100
	Item 11.	Executive Compensation 100
	Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters 100
	Item 13.	Certain Relationships and Related Transactions, and Director Independence 100
	Item 14.	Principal Accountant Fees and Services 100
IV.	PART IV.	
	Item 15.	Exhibits and Financial Statement Schedules 101
	Item 16.	Form 10-K Summary 105

PART I.

Item 1. Business

General:

As used herein, the term “Timken” or the “Company” refers to The Timken Company and its subsidiaries unless the context otherwise requires. Timken designs and manages a portfolio of engineered bearings and industrial motion products, and provides related services. The Company’s growing portfolio features many strong brands, including Timken®, Philadelphia Gear®, GGB®, Drives®, Cone Drive®, Rollon®, Lovejoy®, Diamond®, BEKA®, Groeneveld® and Spinea®.

The Company was founded in 1899 by Henry Timken, who received two patents on the design of a tapered roller bearing. Timken remains the world’s leading authority in tapered roller bearings and has leveraged that expertise to develop a full portfolio of industry-leading engineered bearings and industrial motion products. Timken built its reputation as a global leader by applying its knowledge of metallurgy, friction management and industrial motion to increase the reliability and efficiency of its customers’ equipment across a diverse range of industries. Today, the Company’s global footprint consists of 126 manufacturing facilities/service centers, 28 technology and engineering centers, and 70 distribution centers and warehouses, supported by a team comprised of more than 19,000 employees. Timken operates in 46 countries around the globe.

Major Customers:

The Company sells products and services to a diverse customer base globally, including customers in the following market sectors: industrial distribution, renewable energy, automation, automotive original equipment (“OE”), agriculture/turf, rail, aerospace, auto/truck aftermarket, construction, services, metals and mining, heavy truck (OE), and marine. No single customer accounts for 5% or more of total net sales.

Products:

Timken manufactures and manages global supply chains for multiple product lines including engineered bearings and industrial motion products designed to operate in demanding environments. The Company leverages its technical knowledge, research expertise, and production and engineering capabilities across all of its products and end markets to deliver high-performance products and services to its customers. Differentiation within these product lines is generally based on application engineering, product performance, product quality or customer service.

Engineered Bearings:

The Timken® bearing portfolio features a broad range of engineered bearing products, including tapered, spherical and cylindrical roller bearings; plain bearings and rod end bearings; thrust and specialty ball bearings; and housed bearings. Timken is a leading authority on tapered roller bearings and leverages its position by applying engineering know-how and technology across its entire bearing portfolio.

A bearing is a mechanical device that reduces friction between moving parts. The purpose of a bearing is to carry a load while allowing a machine shaft to rotate freely. The basic elements of the bearing generally include two rings, called races; a set of rolling elements that rotate around the bearing raceway; and a cage to separate and guide the rolling elements. Bearings come in a number of designs, featuring tapered, spherical, cylindrical or ball rolling elements. The various bearing designs accommodate radial and/or thrust loads differently, making certain bearing types better suited for specific applications.

Selection and development of bearings for customer applications and demand for high reliability require sophisticated engineering and analytical techniques. High precision tolerances, proprietary internal geometries and quality materials provide Timken bearings with high load-carrying capacity, excellent friction-reducing qualities and long service lives. The uses for bearings are diverse and can be found in transportation applications that include premium passenger cars and trucks, heavy trucks, helicopters, airplanes and trains. Ranging in size from precision bearings the size of a pencil eraser to more than roughly three meters in diameter, Timken components are also used in a wide variety of industrial applications, including: paper and steel mills, mining, oil and gas extraction and production, agriculture, construction, machine tools, gear drives, health and positioning control, wind turbines and food and beverage processing.

Tapered Roller Bearings. Timken tapered roller bearings can increase power density and can include customized geometries, engineered surfaces and specialized sealing solutions. The Company's tapered roller bearing line comes in thousands of combinations in single-, double- and four-row configurations. Tapered roller designs permit ready absorption of both radial and axial load combinations, which makes them particularly well-adapted to reducing friction where shafts, gears or wheels are used.

Spherical and Cylindrical Roller Bearings. Timken also produces spherical and cylindrical roller bearings that are used in gear drives, rolling mills and other industrial and infrastructure development applications. These products are sold worldwide to OE manufacturers ("OEMs") and industrial distributors serving major end-market sectors, including construction and mining, natural resources, wind energy, defense, pulp and paper production, rolling mills and general industrial goods.

Ball Bearings. Timken radial, angular and precision ball bearings are used by customers in a variety of market sectors, including aerospace, agriculture, construction, health, machine tool, the automotive aftermarket and general industries. Radial ball bearings are designed to tolerate relatively high-speed operation under a range of load conditions. These bearing types consist of an inner and outer ring with a cage containing a complement of precision balls. Angular contact ball bearings are designed for a combination of radial and axial loading. Precision ball bearings are manufactured to tight tolerances and come in miniature and instrument, thin section and ball screw support designs.

Housed Bearings. Timken markets among the broadest range of housed or mounted bearings in the industry. These products deliver durable, heavy-duty components designed to protect spherical, tapered and ball bearings in debris-filled, contaminated or high-moisture environments. Common housed unit applications include material handling and processing equipment.

Plain Bearings. Timken produces a range of plain bearings including rod-ends, spherical plain bearings, metal-polymer bearings and journal bearings. These bearings are used to support misalignment and oscillating movements in a variety of applications and end-markets including aircraft controls, packaging equipment, off-highway equipment, heavy truck, performance auto racing, robotics and many more. Various combinations of material pairs and engineered coatings improve friction management for application specific conditions.

Industrial Motion Products:

Linear Motion Products. The Company designs and manufactures a global portfolio of Rollon® engineered linear motion products, including linear guides, telescopic rails, linear actuators, seventh-axis robotic transfer units and gantry systems. These engineered products are highly customized to control movements with different variability and complexity based on the application. Rollon products serve a wide range of industries, including passenger rail, aerospace, packaging and logistics, medical and automation.

Industrial Drives. The Company's Philadelphia Gear® line of low- and high-speed gear drive designs are used in large-scale industrial applications such as crushing and pulverizing equipment, conveyors and pumps, power generation and military marine. These gear drive designs are custom made to meet user specifications, offering a wide-array of size, footprint and gear arrangements. Timken also offers Cone Drive® high-torque worm gears, harmonic solutions and precision slew drives. Cone Drive products can be found in a variety of industrial end-market sectors, including solar, oil and gas, aerial platforms, automation and food and beverage. The Company's Spinea® line features highly engineered cycloidal reduction gears and actuators. Spinea's solutions primarily serve high precision automation and robotics applications in the factory automation sector.

Lubrication Systems. The Company's Groeneveld® and BEKA® lubrication systems include a wide variety of automatic lubrication delivery devices, oil management systems and safety support systems designed to reduce operational costs for customers while increasing equipment uptime, productivity and safety. These systems support many industries, including renewable energy, transportation, construction, mining, port, forestry and agriculture. Timken also offers over two dozen different formulations of grease, leveraging its knowledge of tribology and anti-friction bearings to enable smooth equipment operation.

Belts. The Company makes and markets a full line of Timken® belts used in industrial, commercial and consumer applications. The portfolio features more than 20,000 parts designed for demanding applications, which are sold to original equipment and aftermarket customers. These belts are engineered for maximum performance and durability, with products available in wrap molded, raw edge, v-ribbed and synchronous belt designs. Common applications include agriculture, construction, industrial machinery, outdoor power equipment and powersports.

Chain. Timken manufactures precision Diamond® and Drives® roller chain, pintle chain, agricultural conveyor chain, engineering class chain and oil field roller chain. These engineered products are used in a wide range of mobile and industrial machinery applications, including agriculture, oil and gas, aggregate and mining, primary metals, forest products and other heavy industries. They are also used in the food and beverage and packaged goods sectors, which often require high-end, specialty products, including stainless-steel and corrosion-resistant roller chain.

Couplings. The Company offers a full range of industrial couplings within its industrial motion products portfolio. The Lovejoy brand is widely known for its flexible coupling design and as the creator of the jaw-style coupling. Lovejoy® couplings are available in curved jaw, jaw in-shear, s-flex, gear-torsional and disc style configurations. These components are used in a wide range of industries such as steel, pulp and paper, power generation, food processing, mining and construction. The Company also offers an extensive line of torsional couplings offered under the Torsion Control Products brand.

Industrial Clutches and Brakes. Timken offers a selection of engineered clutches, brakes, hydraulic power take-off units and other torque management devices marketed under the PT Tech® brand. These products are custom engineered for OEMs and used in marine, mining, aggregate, wood recycling and metals industries.

Other Products. The Company also offers a full line of seals, augers and other industrial motion components. Timken industrial sealing solutions come in a variety of types and material options that are used in manufacturing, food processing, mining, power generation, chemical processing, primary metals, pulp and paper, and oil and gas industry applications. The Company also designs and manufactures Drives® helicoid and sectional augers for agricultural applications, like conveying, digging and combines.

Services:

Power Systems. Timken services components in the industrial customer's drive train, including switch gears, electric motors and generators, gearboxes, bearings, couplings and control panels. The Company's Philadelphia Gear services for gear drive applications include onsite technical services; inspection, repair and upgrade capabilities; and manufacturing of parts to specifications. In addition, the Company's Wazee, Smith Services, Schulz, Standard Machine and H&N service centers provide customers with services that include motor and generator rewind and repair and uptower wind turbine maintenance and repair. Timken Power Systems commonly serves customers in the power, wind energy, hydro and fossil fuel, water management, paper, mining and general manufacturing sectors.

Bearing Repair. Timken bearing repair services return worn bearings to like-new specifications, which increases bearing service life and often can restore bearings in less time than required to manufacture new. Bearing remanufacturing is available for any bearing type or brand - including competitor products - and is well-suited to heavy industrial applications such as paper, metals, mining, power generation and cement; railroad locomotives, passenger cars and freight cars; and aerospace engines and gearboxes.

Services accounted for approximately 4% of the Company's net sales for the year ended December 31, 2022.

Sales and Distribution:

Timken products are sold principally by its internal sales organizations. A portion of each segment's sales are made through authorized distributors.

Customer collaboration is central to the Company's sales strategy. Therefore, Timken goes where our customers need us, with sales engineers primarily working in close proximity to customers rather than at production sites. The Company's sales force continuously updates the team's training and knowledge regarding engineered bearings and industrial motion products and related market sector trends, and they assist customers during product development and implementation phases and provide ongoing service and support.

The Company has a joint venture in North America focused on joint logistics and e-business services. This joint venture, CoLinx, LLC, includes five equity members: Timken, SKF Group, Schaeffler Group, RBC Bearings and Gates Industrial Corp. The e-business service focuses on information and business services for authorized distributors in the Process Industries segment.

Timken has entered into individually negotiated contracts with some of its customers. These contracts may extend for one or more years and, if a price is fixed for any period extending beyond current shipments, customarily include a commitment by the customer to purchase a designated percentage of its requirements from Timken. Timken does not believe that there is any significant loss of earnings risk associated with any given contract.

Competition:

The bearing industry and the industries into which Timken sells its industrial motion products are highly competitive. Timken primarily competes based on total value, including price, quality, timeliness of delivery, product design and the ability to provide engineering support and service on a global basis. The Company competes with many domestic and foreign manufacturers of anti-friction bearings, including SKF Group, Schaeffler Group, NTN Corporation, JTEKT Corporation and NSK Ltd., and with a diverse group of domestic and foreign manufacturers of industrial motion products.

Joint Ventures:

Investments in affiliated companies accounted for under the equity method were \$1.8 million and \$2.0 million, respectively, at December 31, 2022 and 2021. The investment balance at December 31, 2022 was reported in other non-current assets on the Consolidated Balance Sheets.

Backlog:

The following table provides the backlog of orders for the Company's domestic and overseas operations at December 31, 2022 and 2021:

(Dollars in millions)	December 31,	
	2022	2021
Segment:		
Mobile Industries	\$ 1,297.1	\$ 1,354.9
Process Industries	1,193.7	1,095.0
Total Company	\$ 2,490.8	\$ 2,449.9

Approximately 93% of the Company's backlog at December 31, 2022 is scheduled for delivery in the succeeding 12 months. Actual shipments depend upon customers' ever-changing production schedules. Accordingly, Timken does not believe that its backlog data and comparisons thereof, as of different dates, reliably indicate future sales or shipments.

Sources and Availability of Raw Materials:

The principal raw materials used by the Company to make engineered bearings are special bar quality ("SBQ") steel and steel components. SBQ steel and steel components are produced around the world by various suppliers. SBQ steel is purchased in bar, tube and wire forms, while steel components are commonly purchased as forgings, semi-finished or finished components. The availability and price of SBQ steel are subject to changes in supply and demand, commodity prices for ferrous scrap, ore, alloy, electricity, natural gas, transportation fuel, and labor costs. The Company manages price variability of commodities by using surcharge mechanisms on some of its contracts with its customers that provides for partial recovery of these cost increases in the price of bearing products.

The availability of bearing-quality tubing is relatively limited, and the Company has taken steps to limit its exposure to this particular form of SBQ steel. Overall, the Company believes that the number of suppliers of SBQ steel is adequate to support the needs of global bearing production, and, in general, the Company is not dependent on any single source of supply.

The Company also purchases a variety of materials and components to produce industrial motion products, such as non-SBQ steel, synthetic rubber, fabrics, castings and plastics. The Company sources these components from various suppliers in the world market. The Company believes its supply base is adequate to support its manufacturing requirements.

Research:

Timken operates a network of technology and engineering centers to support its global customers with sites in North America, Europe and Asia. This network develops and delivers innovative engineered bearings and industrial motion solutions and technical services. Timken's largest technical center is located at the Company's world headquarters in North Canton, Ohio. Other smaller sites in the United States ("U.S.") include Los Alamitos, California; Downer's Grove, Fulton and Montgomery, Illinois; Indianapolis, Indiana; Norton Shores, Rochester Hills and Traverse City, Michigan; Springfield, Missouri; Keene and Lebanon, New Hampshire; Thorofare, New Jersey; and King of Prussia, Pennsylvania. Within Europe, the Company has technology facilities in Plymouth, England; Annecy and Colmar, France; Heilbronn, Pegnitz and Werdohl, Germany; Valmadrera, Italy; Gorinchem, Netherlands; Porto, Portugal; and Ploiesti, Romania. In Asia, Timken operates technology and engineering facilities in Bangalore, India and Shanghai, China.

Compliance with Governmental Regulations:

Environmental Matters

The Company continues its efforts to protect the environment and comply with environmental protection laws. Additionally, it has invested in pollution control equipment and updated plant operational practices. The Company's manufacturing plants are expected to have an effective environmental management system which follows the ISO 14001 principles and internal audits are performed against this standard. Where appropriate to meet or exceed customer requirements, we are certified under the formal ISO 14001 certification process. As of the end of 2022, 28 of the Company's plants had obtained ISO 14001 certification, including the majority of the Company's bearing manufacturing plants.

The Company establishes appropriate levels of reserves to cover its environmental expenses and has a well-established environmental compliance audit program for its domestic and international units. This program measures performance against applicable laws, as well as against internal standards that have been established for all units worldwide. It is difficult to assess the possible effect of compliance with future requirements that differ from existing requirements.

The Company and certain of its U.S. subsidiaries previously have been and could in the future be identified as potentially responsible parties for investigation and remediation at off-site disposal or recycling facilities under the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), known as the Superfund, or state laws similar to CERCLA. In general, such claims for investigation and remediation also have been asserted against numerous other entities.

Management believes any ultimate liability with respect to pending actions will not materially affect the Company's annual results of operations, cash flows or consolidated financial position. The Company also is conducting environmental investigation and/or remediation activities at certain current or former operating sites. The costs of such investigation and remediation activities, in the aggregate, are not expected to be material to the operations or financial position of the Company.

New laws and regulations, stricter enforcement of existing laws and regulations, the discovery of previously unknown contamination or the imposition of new clean-up requirements may require Timken to incur costs or become the basis for new or increased liabilities that could have a materially adverse effect on the Company's business, financial condition or results of operations.

Other Regulations

Because of its global operations, the Company is subject to a wide variety of domestic and foreign laws and regulations, including securities laws, tax laws, data privacy, employment and pension-related laws, competition laws, U.S. and foreign export and trade laws, the Foreign Corrupt Practices Act ("FCPA") and similar worldwide anti-bribery laws, government procurement regulations and laws governing improper business practices. The Company has policies and procedures in place to promote compliance with these laws and regulations and management believes any ultimate liability with respect to pending actions will not materially affect the Company's annual results of operations, cash flows or consolidated financial position. In the future, the Company may be subject to both new laws and regulations, and changes to existing laws and regulations which may continue to evolve through interpretations by courts and regulators. Accordingly, it is difficult to assess the possible effect of compliance with future requirements that differ from existing requirements. Such changes may require the Company to incur costs and such changes could form the basis for new or increased liabilities that could have a materially adverse effect on the Company's business, financial condition or results of operations. Refer to *Item 1.A Risk Factors – Risks Related to Legal, Compliance and Regulatory Matters* for further discussion.

Patents, Trademarks and Licenses:

Timken owns numerous U.S. and foreign patents, trademarks and licenses relating to certain products. While Timken regards these as important, it does not deem its business as a whole, or any industry segment, to be materially dependent upon any one item or group of items.

Employment:

At December 31, 2022, Timken had more than 19,000 employees worldwide. Approximately 9% of Timken's U.S. employees are covered under collective bargaining agreements.

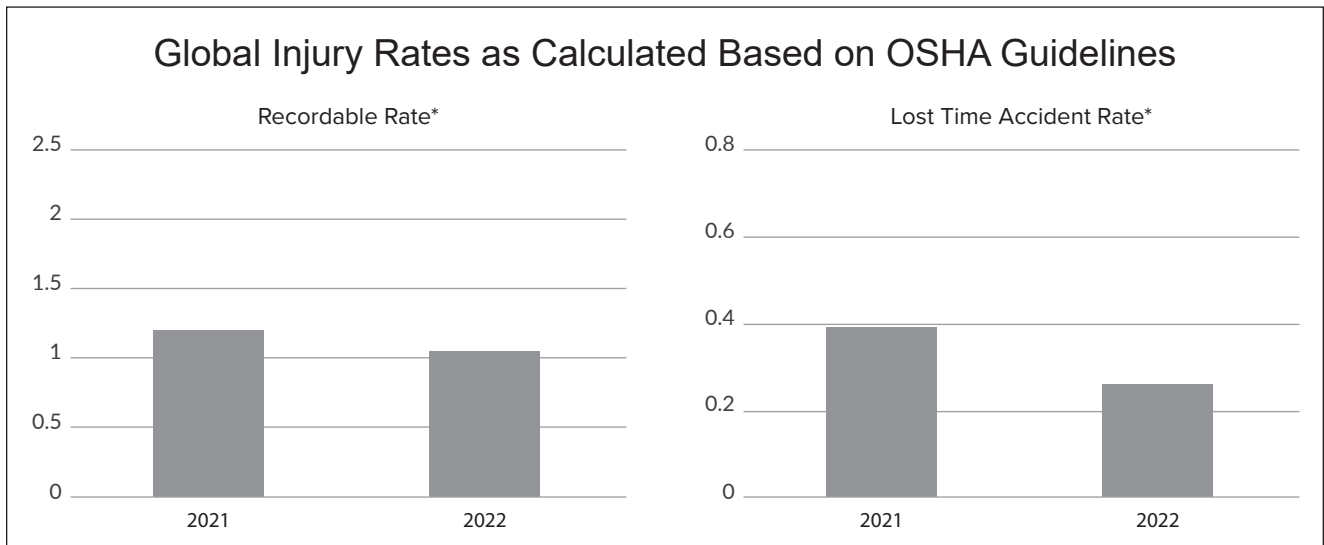
Human Capital:

The Company believes that its associates and their collective knowledge and experience are its most valuable resource. As a result, the Company is committed to providing a safe work environment, attracting, motivating and retaining the best talent in the industry and providing opportunities for its associates to learn and advance their career with the Company.

Associate Health and Safety

Associate health and safety remains a top priority for the Company and its commitment to safety starts at the top of the organization. Chief Executive Officer, Richard Kyle, was the first-ever chair of the Company's Environmental Health and Safety Steering Committee, which was created in 2009 and continues to drive accountability and responsibility for safety throughout the organization.

The Company's commitment to the health and safety of its associates is evidenced by its strong safety results in 2021 and 2022 shown in the charts below:



**Rates calculated as (number of injuries and illnesses x 200,000) / employee hours worked per 100 full-time workers. 2022 rates represent the Company's best estimate as of the date of this report*

The Company aims to maintain a recordable rate within the top quartile of U.S. metal manufacturers (North American Industry Classification System code 332) based on information provided by the U.S. Bureau of Labor Statistics. While quartile industry data was not available at the time of this report for either 2021 or 2022, the Company's 2022 recordable rate of 1.06 and lost time accident rate of 0.27 showed strong improvement over the corresponding 2021 rates of 1.20 and 0.38, respectively.

Attracting, Retaining, and Motivating Highly Qualified Associates

Successful execution of the Company's strategy continues to depend on attracting, retaining, and motivating highly qualified talent. As such, the Company believes it is important to reward associates with competitive wages and comprehensive benefits to recognize professional excellence and career progression. The Company also believes it is important to provide pay and benefits that are competitive and equitable based on the local markets in which it operates.

In addition, the Company also believes that having open, honest dialogue with its associates is key to evolving its culture and keeping the Company strong. In line with that approach, the Company conducts comprehensive surveys on a periodic basis and individual stay interviews to measure employee engagement. Additionally, exit interviews are conducted with employees who voluntarily terminated their employment, which helps improve management processes. The Company also deploys regular pulse surveys to gain insights from associates' recent experiences and to better understand how effectively it is engaging, energizing and enabling its workforce.

The Company also provides several professional development and training opportunities to advance our associates' skills and expertise. Some of these opportunities include online-learning platforms, job-specific training, our operations development program and our educational reimbursement programs. The Company has recruited and trained many of its associates through its engineering co-op program, where engineering students have the opportunity to work up to five semesters alongside the Company's experienced engineers while they complete their bachelor's degrees. Comprehensive leadership, skill and competency assessments are offered to company employees to best identify and address individual and team development needs and activities. To better inform its hiring and associate development efforts, the Company has partnered with third-party vendors to provide required training for its managers focused on diversity and inclusion.

To further our Company's diverse and inclusive culture and work environment, Timken associate resource groups ("ARGs") around the world help us understand and address the challenges faced by our diverse workforce and the opportunities diversity offers in advancing our collective knowledge. Our associates continue to drive new programming and chapter expansion across our five primary ARGs: Women's International Network (WIN), Multicultural Association of Professionals (MAP), Young Professionals Network (YPN), Veteran Engagement at Timken (VET), and Timken PRIDE Network (TPN). Additionally, we partner with an online platform, GlobeSmart®, to help our associates further their global competency.

Available Information:

The Company uses its Investor Relations website at <http://investors.timken.com>, as a channel for routine distribution of important information, including news releases, analyst presentations and financial information. The Company posts filings as soon as reasonably practicable after they are electronically filed with, or furnished to, the Securities and Exchange Commission (the "SEC"), including its annual, quarterly and current reports on Forms 10-K, 10-Q and 8-K; its proxy statements; and any amendments to those reports or statements. All such postings and filings are available on the Company's website free of charge. In addition, this website allows investors and other interested persons to sign up to automatically receive e-mail alerts when the Company posts news releases and financial information on the Company's website. 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 described below are not the only ones that we face. These risk factors should be considered in connection with evaluating forward-looking statements contained in this Annual Report on Form 10-K because these factors could cause our actual results and financial condition to differ materially from those projected in forward-looking statements. Although the risks are organized by headings, and each risk is discussed separately, many are interrelated. If any of the following risks actually occur, our business, financial condition or results of operations could be negatively affected. Readers should not interpret the disclosure of any risk factor to imply that the risk has not already materialized.

Risk Relating to our Business

The bearing industry and the industries into which we sell our various industrial motion products are highly competitive, and this competition results in significant pricing pressure for our products that could affect our revenues and profitability.

The global bearing industry is highly competitive and consolidated. We compete with many domestic and foreign manufacturers of anti-friction bearings. In addition, the industries into which we sell our industrial motion products are also highly competitive and consolidating. Due to competitiveness within these industries, we may not be able to increase prices for our products to cover increases in our costs or to achieve desired profitability. In addition, we face pressure from our customers to reduce prices, and the contractual nature of business with OEM customers, could adversely affect our revenues and profitability. In addition, our customers may choose to purchase products from one of our competitors rather than pay the prices we seek for our products, which could adversely affect our revenues and profitability.

Our business is capital intensive, and if there are downturns in the industries that 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, restructuring charges or taking other measures that may adversely affect our results of operations and profitability.

Our business operations are capital intensive, and we devote a significant amount of capital to certain industries. Our profitability is dependent on factors such as labor compensation and productivity and inventory and supply chain management, which are subject to risks that we may not be able to control. If there are downturns in the industries that we serve, including as a result of high inflation or a recession, we may be forced to significantly curtail or suspend our operations with respect to those industries, including laying-off employees, reducing production, recording asset impairment charges and other measures, which may adversely affect our results of operations and profitability. We have taken approximately \$86 million in impairment and restructuring charges in the aggregate during the last five years. Changes in business or economic conditions, or our business strategy, may result in additional restructuring actions and may require us to take additional charges in the future, which could have a material adverse effect on our earnings.

Changes in customer preferences and inventory reductions by customers or distributors could adversely affect the Company's business.

The Company has previously experienced distributor inventory corrections reflecting de-stocking of the supply chain associated with softer demand in certain markets. The Company's results in a period may be adversely impacted by similar customer inventory adjustments in the future, as well as changes in customer buying preferences.

Any change in raw material prices, the availability or cost of raw materials or logistics expenses could adversely affect our results of operations and profit margins.

We require substantial amounts of raw materials, including steel, to operate our business. Our supply of raw materials could be and has in the past been interrupted for a variety of reasons, including availability and pricing. Prices for raw materials necessary for production have fluctuated significantly in the past, have risen substantially over the past few years, and could continue to do so in the future. We generally attempt to manage these fluctuations by passing along increased raw material prices to our customers in the form of price increases or surcharges; however, we may be unable to increase the price of our products, or may experience a lag in doing so, due to pricing pressure, contract terms or other factors, which could adversely impact our revenue and profit margins.

Moreover, future disruptions in the supply of our raw materials could impair our ability to manufacture our products for our customers, impact our ability to manufacture and deliver our products on a timely basis, require us to pay higher prices in order to obtain these raw materials from other sources or necessitate the use of expedited or more costly freight options. Any significant increase in the prices for such raw materials or logistics expenses could adversely affect our results of operations and profit margins.

The COVID-19 pandemic has, and could continue to, adversely and materially impact our business.

The global outbreak of COVID-19 and associated variants has negatively impacted our business operations in a number of ways, including: volatility in economic demand; higher levels of absenteeism, turnover and reduced labor availability; shipping and logistics delays; supply chain and manufacturing disruptions; and higher levels of inflation for raw material, purchased components, freight and other costs. We could continue to experience these and other impacts from the pandemic, and collectively or individually, these factors could adversely and materially impact our short-term and long-term operations, cost structure, and related results of operations, including revenue, gross margins, operating margins and cash flows.

We may not realize the improved operating results that we anticipate from past and future acquisitions, may experience difficulties in integrating acquired businesses, and may incur unanticipated liabilities and costs associated with such acquired businesses.

We seek to grow, in part, through strategic acquisitions, joint ventures and other alliances, which are intended to complement or expand our businesses, and expect to continue to do so in the future. These acquisitions involve challenges and risks. In the event that we do not successfully integrate these acquisitions into our existing operations so as to realize the expected return on our investment, issues identified in our due diligence review are not addressed or the costs associated with such issues are higher than expected, or we uncover material issues (including historical environmental, trade, sanctions, or tax compliance violations) that were not identified during our due diligence review, our results of operations, cash flow or financial condition could be adversely affected.

Our operating results depend in part on continued successful research, development and marketing of new and/or improved products and services, and there can be no assurance that we will continue to successfully introduce new products and services.

The success of new and improved products and services depends on their initial and continued acceptance by our customers. Our businesses are affected, to varying degrees, by technological change and corresponding shifts in customer demand, which could result in unpredictable product transitions or shortened life cycles, especially as it relates to market and technological changes driven by electrification, environmental requirements, automation, the continued rising importance of e-commerce and increased digitization. We may experience difficulties or delays in the research, development, production, or marketing of new products and services that may prevent us from recouping or realizing a return on the investments required to bring new products and services to market. The end result could have a negative impact on our operating results.

Loss of our rights to exclusive use of our intellectual property whether through patent infringement, counterfeiting, theft of trade secrets, or otherwise could have a material adverse effect on the Company. Third-party claims alleging our infringement of intellectual property rights could also have a material adverse effect on the Company.

We rely on a combination of patents, trademarks, trade secret laws, invention assignment agreements, confidentiality agreements, and other arrangements to protect our intellectual property rights. These rights are important to our business, and their loss, whether through patent infringement, counterfeiting, theft of trade secrets, or otherwise, could have a material adverse effect on the Company.

Additionally, third parties may bring claims to challenge the validity of our patents or other intellectual property rights or allege that we infringe their patents or other intellectual property rights. We may incur substantial costs if our competitors or other third parties allege such claims. If the outcomes of any such disputes are unfavorable to us, we could be subject to damages and reputational harm and our business could be otherwise adversely affected.

Risks Related to our Capital Structure, the Global Financial Markets, and Currency Exchange Rates

An increase in our levels of debt and the corresponding impact to our financial covenants or a failure to maintain our credit ratings could limit our ability to invest in our business.

An increase in our levels of debt might lead us to have less cash flow available for our business operations, capital expenditures, and strategic transactions and our ability to service our debt obligations or to obtain future financing could be negatively impacted by general adverse economic and industry conditions and interest rate trends. In addition, a failure to maintain our credit ratings could adversely affect our cost of borrowing, liquidity and access to capital markets.

Some of our debt has variable interest rates, which could increase the cost of servicing such debt.

Interest rates have risen significantly over the past year and may rise in the future due to inflation or other causes. As a result, the costs of servicing our variable interest rate debt could further increase even if the amount borrowed under such facilities remains the same. Increased servicing costs could in turn negatively impact our profitability and cash flow.

The global nature of our business exposes us to foreign currency fluctuations that may affect our asset values, results of operations and competitiveness.

We are exposed to the risks of currency exchange rate fluctuations because a significant portion of our net sales, costs, assets and liabilities, are denominated in currencies other than the U.S. dollar. These risks include a reduction in our net asset values, net sales, operating income and competitiveness.

For those countries outside the U.S. where we have significant sales, a strengthening in the U.S. dollar as we have seen over the past few years or devaluation in the local currency would reduce the value of our local inventory as presented in our Consolidated Financial Statements. In addition, a stronger U.S. dollar or a weaker local currency would result in reduced revenue, operating profit and shareholders' equity due to the impact of foreign exchange translation on our Consolidated Financial Statements. Fluctuations in foreign currency exchange rates may make our products more expensive for others to purchase or increase our operating costs, affecting our competitiveness and our profitability.

Changes in exchange rates between the U.S. dollar and other currencies and volatile economic, political and market conditions in emerging market countries have in the past adversely affected our financial performance and may in the future adversely affect the value of our assets located outside the United States, our gross profit and our results of operations.

Our results of operations may be materially affected by conditions in global financial markets or in any of the geographic regions in which we, our customers or our suppliers operate. If an end user cannot obtain financing to purchase our products, either directly or indirectly contained in machinery or equipment, demand for our products will be reduced, which could have a material adverse effect on our financial condition and earnings.

Global financial markets have experienced volatility in the past, including volatility in securities prices and diminished liquidity and credit availability. Our access to the financial markets cannot be assured and is dependent on, among other things, market conditions and company performance. Accordingly, we may be forced to delay raising capital, issue shorter tenors than we prefer or pay unattractive interest rates, which could increase our interest expense, decrease our profitability and significantly reduce our financial flexibility.

If a customer becomes insolvent or files for bankruptcy, our ability to recover accounts receivable from that customer would be affected adversely and any payment we received during the preference period prior to a bankruptcy filing potentially may be recoverable by the bankruptcy estate. Furthermore, if certain of our customers liquidate in bankruptcy, we may incur impairment charges relating to obsolete inventory and machinery and equipment.

In addition, financial instability of certain companies in the supply chain could disrupt production in any particular industry. A disruption of production in any of the industries where we participate could have a material adverse effect on our financial condition and earnings. If any of our suppliers are unable or unwilling to provide the products or services that we require or materially increase their costs, our ability to offer and deliver our products on a timely and profitable basis could be impaired. We cannot assure you that any or all of our relationships will not be terminated or that such relationships will continue as presently in effect. Furthermore, if any of our suppliers were to become subject to bankruptcy, receivership or similar proceedings, we may be unable to arrange for alternate or replacement relationships on favorable terms, which could harm our sales and operating results.

Risks Related to the Global Nature of our Operations

Global political instability and other risks of international operations may adversely affect our operating costs, revenues and the price of our products.

Our international operations expose us to risks not present in a purely domestic business, including primarily:

- changes in international treaties or trade unions, which may make our products or our customers' products more costly to export or import;
- changes in tariff regulations, which may make our products more costly to export or import;
- threatened or actual state seizure of foreign-owned manufacturing assets;
- hostilities between countries in which we operate which could limit our ability to manufacture in, sell into, or export out of such jurisdictions;
- political protests or unrest which could negatively impact our operations;
- difficulties establishing and maintaining relationships with local OEMs, distributors and dealers;
- import and export licensing requirements;
- compliance with a variety of foreign laws and regulations, including unexpected changes in taxation and environmental or other regulatory requirements, which could increase our operating and other expenses and limit our operations;
- additional costs, taxes and restrictions related to repatriation of cash in international jurisdictions;
- disadvantages of competing against companies from countries that are not subject to U.S. laws and regulations, including the FCPA;
- difficulty in staffing and managing geographically diverse operations;
- disruptions to our global supply chain and logistical issues associated with port closures or congestion, delays or increased costs;
- tax exposures related to cross-border intercompany transfer pricing and other tax risks unique to international operations; and
- compliance with data protection regulations.

These and other risks also may increase the relative price of our products compared to those manufactured in other countries, reducing the demand for our products in the markets in which we operate, which could have a material adverse effect on our revenues and earnings.

We have global operations, and changes to government trade policies including the imposition of tariffs and other trade barriers, as well as the resulting consequences, could adversely impact our revenue and profit margins.

The U.S. government has imposed tariffs on certain foreign goods, including steel and other raw materials as well as certain products made from such materials. Changes in U.S. trade policy have resulted in, and could further result in, U.S. trading partners adopting responsive trade policies that make it more difficult or costly for us to export our products to those countries. In addition, the governments of other countries in which we have substantial operations could impose tariffs on, or restrict trade in, the materials and components necessary for the production of our products. These measures could result in an increase in our production costs. If we are unable to increase the price of our products or otherwise mitigate these increased costs, it could adversely impact our revenue and profit margins.

Risks Related to Human Capital Management and Employee Benefits

If we are unable to attract, retain and develop key personnel and develop and successfully execute succession plans, our business could be materially adversely affected.

Our business substantially depends on the continued service of key members of our management and other key employees. The loss of the services of a significant number of members of our management or other key employees could have a material adverse effect on our business. Our future success also will depend on our ability to attract, retain and develop highly skilled personnel, such as engineering, finance, marketing and senior management professionals, as well as skilled labor. Competition for these types of employees is intense and has increased recently, and we could experience difficulty from time to time in hiring, developing and retaining the personnel necessary to support our business. If we do not succeed in retaining and developing our current employees, attracting new high-quality employees, and developing and successfully executing succession plans, our business could be materially adversely affected.

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, whether caused by fire, flooding, epidemics, pandemics (including the COVID-19 outbreak), military hostilities, government-imposed shutdowns, severe weather, including that caused by climate change, other natural disaster or otherwise, could have a material adverse effect on our business, financial condition and results of operations. In addition, some of our employees are represented by labor unions or works councils under collective bargaining agreements with varying durations and terms. We have experienced work stoppages at certain of our facilities historically at times, and while these stoppages have been short-term in nature, no assurances can be made that we will not experience additional work stoppages due to government directives, employee health concerns, and other types of conflicts with labor unions, works councils, and other similar groups in the future.

A work stoppage at one of our suppliers could also materially and adversely affect our operations if an alternative source of supply were not readily available. In addition, if one or more of our customers were to experience a work stoppage, that customer could halt or limit purchases of our products, which could have a material adverse effect on our business, financial condition and results of operations. In addition, the credit and default risk or bankruptcy of customers or suppliers as a result of work stoppages could also materially and adversely affect our operations and results.

Expenses and contributions related to our defined benefit plans are affected by factors outside our control, including the performance of plan assets, interest rates, actuarial data and experience, and changes in laws and regulations, all of which could impact our funded status.

Our future expense and funding obligations for defined benefit pension plans depend upon a number of factors, including the level of benefits provided for by the plans, the future performance of assets with specific country economic performance risks set aside in trust for these plans, the level of interest rates used to determine the discount rate to calculate the amount of liabilities, actuarial data and experience, and any changes in government laws and regulations. In addition, if the various investments held by our pension trusts do not perform as expected or the liabilities increase as a result of discount rate changes and other actuarial changes, our pension expense and required contributions would increase and, as a result, could materially adversely affect our business or require us to record charges that could be significant and would cause a reduction in our shareholders' equity. We may be required legally to make contributions to the pension plans in the future in excess of our current expectations, and those contributions could be material.

Future actions involving our defined benefit and other postretirement plans, such as annuity purchases, lump-sum payouts, and/or plan terminations could cause us to incur significant pension and postretirement settlement and curtailment charges, and require cash contributions.

We have purchased annuities and offered lump-sum payouts to defined benefit plan and other postretirement plan participants and retirees in the past. If we were to take similar actions in the future, we could incur significant pension settlement and curtailment charges related to the reduction in pension and postretirement obligations from annuity purchases, lump-sum payouts of benefits to plan participants, and/or plan terminations. Pursuing these types of actions could require us to make additional contributions to the defined benefit plans to maintain a legally required funded status.

Risks Related to Legal, Compliance and Regulatory Matters

If government-imposed restrictions continue, are re-imposed, or are expanded, our business could be further adversely impacted.

The global outbreaks of COVID-19 and new variants of the virus continue to create uncertainty with respect to economic demand and operations. The COVID-19 outbreak has resulted in significant governmental measures being implemented to control the spread of COVID-19, including, among others, restrictions on travel and manufacturing operations in certain regions of the world. To the extent that governments reimpose restrictions that have now lapsed, or to the extent that the COVID-19 outbreak intensifies or new dangerous variants develop and new restrictions are implemented, we could experience additional material impacts to our short-term and long-term operations, access to skilled labor or raw materials, and related results of operations, including revenue, gross margins, operating margins and cash flows.

Current and future environmental health and safety laws, regulations, and customer requirements impose substantial costs and limitations on our operations and compliance may be more costly than we expect.

We are subject to the risk of substantial environmental liability and limitations on our operations due to current environmental laws and regulations and future environmental laws and regulations could impose additional risks and limitations. We are or may become subject to extensive federal, state, local and foreign environmental, health and safety laws and regulations concerning matters such as air emissions, wastewater discharges, the use of per- and polyfluoroalkyl substances or other chemicals of concern, waste management (e.g. storage, disposal) and the investigation and remediation of contamination. The risks of substantial costs and liabilities related to compliance with these laws and regulations are an inherent part of our business, and future conditions may develop, arise or be discovered that create substantial environmental compliance or remediation liabilities and costs.

Compliance with environmental, health and safety legislation and regulatory requirements may prove to be more limiting and costly than we anticipate. To date, we have committed significant expenditures in our efforts to manage remediation activities and maintain compliance with these requirements at our facilities, and we expect that we will continue to make significant expenditures related to such compliance in the future. From time to time, we may be subject to legal proceedings brought by private parties or governmental authorities with respect to environmental matters, including matters involving alleged noncompliance with or liability arising from environmental, health and safety laws, property damage or personal injury. Actual or alleged violations of environmental, health and safety laws or environmental permit requirements could result in restrictions or prohibitions on operations and substantial civil or criminal fines, as well as, under some environmental, health, and safety laws, the assessment of strict liability and/or joint and several liability. New laws and regulations, including those that may relate to emissions of greenhouse gases or the use, discharge or disposal of chemicals of concern utilized in our manufacturing processes, stricter enforcement of existing laws and regulations, new and more stringent customer requirements, the discovery of previously unknown contamination or the imposition of new clean-up requirements or standards 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 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, data privacy laws, employment and pension-related laws, competition laws, U.S. and foreign export and trade laws, government procurement regulations, and laws governing improper business practices. We are affected by both new laws and regulations, and changes to existing laws and regulations which may continue to evolve through interpretations by courts and regulators. Furthermore, the laws and regulations to which we are subject may differ from jurisdiction to jurisdiction, further increasing the cost of compliance and the risk of noncompliance.

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

Also, our sales to public-sector customers are subject to complex regulations. Noncompliance with government procurement regulations, information security requirements, or other applicable laws or regulations could result in civil, criminal and administrative liability, termination of government contracts or other public-sector customer contracts, and suspension, debarment or ineligibility from doing business with governmental entities or other customers in the public sector.

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.

New or more stringent government regulations or standards associated with climate change could increase our operational costs and severe weather associated with a changing climate could negatively impact our operations and those of our customers and suppliers.

We are subject to domestic and foreign regulations and standards governing emission limits which are, in part, designed to address climate change. Due to increasing global concern over the effects of climate change, new or more stringent regulations and standards may be mandated. Tighter emissions controls as a result of these actions could increase our operational costs and could lead to disruptions in our operations as compliance is attained. In addition, environmental activism and initiatives aimed at limiting climate change and reducing global greenhouse gas emissions could interfere with our business strategy and operations as well as require material investment in energy efficiency projects and renewable energy sourcing. Severe weather associated with a changing climate could also negatively impact the operation of our facilities, as well as those of our customers and suppliers.

Responses to corporate social responsibility (“CSR”) topics, including those related to climate change, could adversely affect our business and performance.

Investors, customers, suppliers, employees, regulators and other stakeholders are increasingly focused on CSR practices and disclosures, and expectations in this area are rapidly evolving and growing. We have announced goals covering certain CSR topics, such as those related to reductions in greenhouse gas emissions and maintaining employee health and safety. Over time, stakeholder expectations for, and regulatory requirements related to, our CSR program and initiatives may change, and our investors, customers, suppliers, employees or regulators may demand that we implement additional, or stricter, goals and initiatives related to CSR topics. Greater expectations or legal requirements may cause us to undertake costly initiatives to satisfy such new criteria. If we are unable to respond effectively, stakeholders may conclude that our CSR program and initiatives are inadequate. If we do not meet, or are perceived to have not met, announced CSR goals or do not accurately disclose our progress on such goals, our reputation, competitive position, financial condition and operating results could be adversely impacted.

Risks Related to Data Privacy and Information Security

The Company may be subject to risks relating to its information technology systems, including the risk of security breaches.

The Company relies on information technology systems to manage and operate its business and to process, transmit and store sensitive and confidential data, including its intellectual property and other proprietary business information and that of its customers and suppliers. Despite security measures taken by the Company, the Company’s information technology systems (both on-premises and third-party managed) may be vulnerable to attacks by hackers or breached due to employee error, technological error, supplier error, malfeasance or other disruptions. While we have utilized and continue to utilize various controls and systems to mitigate such risks, we cannot assure that the actions we have implemented and are implementing, or that we cause or have caused third-party service providers to implement, will be sufficient to protect our systems or sensitive and confidential data. We have been and may in the future be subject to attempts to gain unauthorized access to our information technology systems. To date, the impacts of prior events have not had a material adverse effect on us. Any such breach in security could expose the Company and its employees, customers and suppliers to risks of misuse of confidential information, manipulation and destruction of data, production downtimes, litigation and operational disruptions, which in turn could adversely affect the Company’s reputation, competitive position, business or results of operations.

Data privacy and security concerns, as well as evolving government regulation, could adversely affect our results of operations and profitability.

We collect, store, access and otherwise process certain confidential or sensitive data, including proprietary business information, personal data or other information that is subject to privacy and security laws, regulations and/or government or customer-imposed controls. We operate in a global environment in which the data privacy regulatory and legal framework is evolving quickly. Moreover, the data privacy laws of the specific jurisdictions in which we operate may vary and potentially conflict. As such, we cannot predict the cost of compliance with future data privacy laws, regulations and standards, future interpretations of current laws, regulations and standards, or the potential effects on our business.

Government enforcement actions can be costly and interrupt the regular operation of our business, and a violation of data privacy laws or a security breach involving personal or customer data can result in fines, reputational damage, loss of business, and civil lawsuits, any of which may adversely affect our results of operations and profitability.

General Risk Factors

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.

There has been significant volatility in the capital markets and in the end markets and geographic regions in which we and our customers operate, which has negatively affected our revenues. Our revenues also may be negatively affected by changes in customer demand, changes in the product mix and negative pricing pressure in the industries in which we operate. Margins in those industries are highly sensitive to demand cycles, and our customers in those industries historically have tended to delay large capital projects, including expensive maintenance and upgrades during economic downturns. As a result, our revenues and earnings are impacted by overall levels of industrial production.

Rising inflationary pressure has resulted in and could further result in increased employee expenses, shipping costs, raw material costs, energy and fuel costs and other costs of production. If we cannot continue to absorb or pass these increases in our costs of production to our customers, our results of operations, profit margins and cash flows could be adversely affected.

Increases in compensation, wage pressure, and other expenses for our employees have adversely affected our profitability and could continue to do so. These cost increases may result from inflationary pressures that could further reduce our sales or profitability. Inflation has led to and could continue to lead to further increases in other operating costs, such as shipping costs, costs of raw materials, and energy and fuel prices. If we are unable to increase the price of our products to offset further cost increases, or experience a lag in doing so, due to pricing pressure, contract terms or other factors, our financial condition, results of operations and cash flows may be adversely affected.

Warranty, recall, quality or product liability claims could materially adversely affect our earnings.

Warranty, recall, quality or product liability claims could materially adversely affect our earnings and brand reputation. In our business, we are exposed to warranty and product liability claims. In addition, we may be required to participate in the recall of a product. If we fail to meet customer specifications for their products, we may be subject to product quality costs and claims, as well as adverse brand reputational impacts. A successful warranty or product liability claim against us, or a requirement that we participate in a product recall, could have a material adverse effect on our earnings and brand reputation.

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, 2022, our internal control over financial reporting was effective. We believe that we currently have adequate internal control procedures in place for future periods, including processes related to newly acquired businesses; however, increased risk of internal control breakdowns generally exists in a business environment that is decentralized. In addition, 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.

Changes in accounting standards could have an adverse effect on our results of operations, as reported in our financial statements.

Our consolidated financial statements are prepared in accordance with U.S. Generally Accepted Accounting Principles (“U.S. GAAP”), which is periodically revised and/or expanded. Accordingly, from time to time we are required to adopt new or revised accounting standards and related interpretations issued by recognized authoritative bodies, including the Financial Accounting Standards Board (“FASB”) and the SEC. The impact of accounting pronouncements that have been issued but not yet implemented is disclosed in this Annual Report on Form 10-K and our Quarterly Reports on Form 10-Q. It is possible that future accounting guidance we are required to adopt, or future changes in accounting principles, could change the current accounting treatment that we apply to our consolidated financial statements and that such changes could have an adverse effect on our results of operations, as reported in our consolidated financial statements.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

The Company’s corporate headquarters is located in North Canton, Ohio, and, at December 31, 2022, the Company maintained 77 manufacturing plants. The Company also maintains various sales and administrative offices and distribution centers throughout the world. None of these manufacturing plants, administrative offices or distribution centers are individually material to the Company’s operations. The facilities are situated in the United States, as well as 45 other countries, including China, India, and Romania. The Company owns the majority of its manufacturing plants, and its leased properties primarily consist of sales and administrative offices and distribution centers.

The buildings occupied by Timken are principally made of brick, steel, reinforced concrete and concrete block construction. The Company believes all buildings are in satisfactory operating condition to conduct business. The extent to which the Company utilizes its properties varies by property and from time to time. The Company believes that its capacity levels are adequate for its present and anticipated future needs. Most of the Company’s manufacturing facilities remain capable of handling additional volume increases.

Item 3. Legal Proceedings

The Company is involved in various claims and legal actions arising in the ordinary course of business. SEC regulations require us to disclose certain information about environmental proceedings when a governmental authority is a party to the proceedings if we reasonably believe that such proceedings may result in monetary sanctions above a stated threshold. Pursuant to such regulations, the Company uses a threshold of \$1 million or more for purposes of determining whether disclosure of any such proceedings is required as we believe matters under this threshold are not material to the Company. In the opinion of management, the ultimate disposition of these matters will not have a material adverse effect on the Company’s consolidated financial position or annual results of operations.

Item 4. Mine Safety Disclosures

Not applicable.

Item 4A. Information about our Executive Officers

The executive officers are elected by the Board of Directors normally for a term of one year and until the election of their successors. All executive officers have been employed by Timken during the past five-year period. The executive officers of the Company as of February 16, 2023 are as follows:

Name	Age	Current Position and Previous Positions During Last Five Years
Christopher A. Coughlin	62	2022 Executive Vice President and President of Industrial Motion 2014 Executive Vice President and Group President
Philip D. Fracassa	54	2014 Executive Vice President and Chief Financial Officer
Richard G. Kyle	57	2014 President and Chief Executive Officer
Hansal N. Patel	42	2019 Vice President, General Counsel and Secretary 2019 Vice President - Legal and Corporate Secretary 2018 Director - Legal and Corporate Secretary
Natasha Pollock	48	2021 Vice President, Human Resources 2020 Director - Human Resources 2015 General Manager - Human Resources
Andreas Roellgen	55	2022 Executive Vice President and President of Engineered Bearings 2016 Vice President - Europe, Asia and Africa

PART II.

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

The Company’s common shares are traded on the New York Stock Exchange under the symbol “TKR”. The estimated number of record holders of the Company’s common shares at December 31, 2022 was 3,046. The estimated number of beneficial shareholders at December 31, 2022 exceeds 90,000.

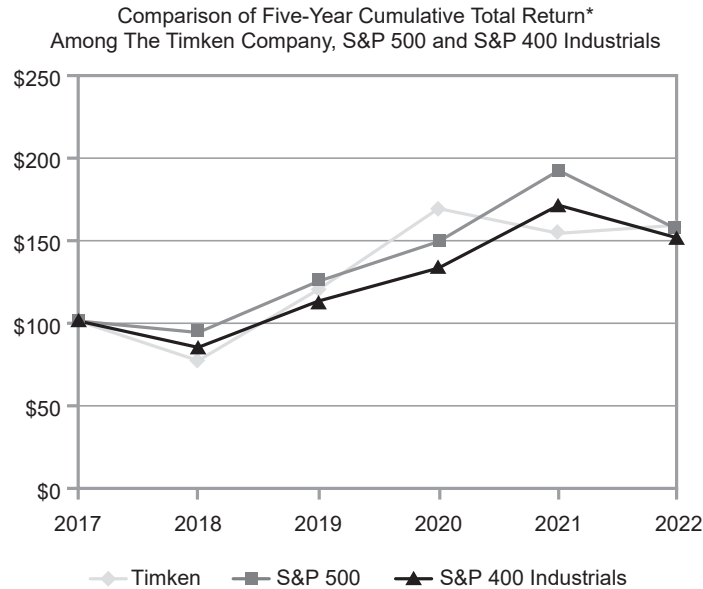
Issuer Purchases of Common Shares:

The following table provides information about purchases of its common shares by the Company during the quarter ended December 31, 2022.

Period	Total number of shares purchased ⁽¹⁾	Average price paid per share ⁽²⁾	Total number of shares purchased as part of publicly announced plans or programs	Maximum number of shares that may yet be purchased under the plans or programs ⁽³⁾
10/1/2022 - 10/31/2022	—	\$ —	—	6,050,000
11/1/2022 - 11/30/2022	240,985	72.86	225,000	5,825,000
12/1/2022 - 12/31/2022	25,500	74.55	25,000	5,800,000
Total	266,485	\$ 73.02	250,000	—

- (1) Of the shares purchased in November and December, 15,985 and 500 respectively, represent common shares of the Company that were owned and tendered by employees to exercise stock options, and to satisfy withholding obligations in connection with the exercise of stock options and vesting of restricted shares.
- (2) For shares tendered in connection with the vesting of restricted shares, the average price paid per share is an average calculated using the daily high and low of the Company’s common shares as quoted on the New York Stock Exchange at the time of vesting. For shares tendered in connection with the exercise of stock options, the price paid is the real-time trading share price at the time the options are exercised.
- (3) On February 12, 2021, the Company’s Board of Directors approved a new share repurchase plan, effective March 1, 2021, pursuant to which the Company may purchase up to ten million of its common shares, in the aggregate. This share purchase plan expires on February 28, 2026. Under this plan, the Company may purchase shares from time to time in open market purchases or privately negotiated transaction, and it may make all or part of the purchases pursuant to accelerated share repurchases or Rule 10b5-1 plans.

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



*Total return assumes reinvestment of dividends. Fiscal years ending December 31.

	2018	2019	2020	2021	2022
Timken	\$ 78	\$ 120	\$ 169	\$ 154	\$ 160
S&P 500	96	126	149	192	157
S&P 400 Industrials	85	114	132	170	151

The line graph compares the cumulative total shareholder returns over five years for The Timken Company, the S&P 500 Stock Index and the S&P 400 Industrials Index. The graph assumes, in each case, an initial investment of \$100 on January 1, 2018, in Timken common shares, S&P 500 Index and S&P 400 Industrials Index, based on market prices at the end of each fiscal year through and including December 31, 2022, and reinvestment of dividends.

Item 6. Selected Financial Data

Summary of Operations and Other Comparative Data:

(Dollars in millions, except per share, shareholder and per employee data)	2022	2021	2020	2019	2018
Statements of Income					
Net sales	\$ 4,496.7	\$ 4,132.9	\$ 3,513.2	\$ 3,789.9	\$ 3,580.8
Gross profit	1,288.1	1,102.5	1,009.9	1,141.8	1,040.1
Operating income	606.9	513.1	454.9	516.4	454.5
Net income	417.0	381.5	292.4	374.7	305.5
Net income attributable to The Timken Company	\$ 407.4	\$ 369.1	\$ 284.5	\$ 362.1	\$ 302.8
Basic earnings per share ⁽¹⁾	5.54	4.86	3.78	4.78	3.93
Diluted earnings per share ⁽²⁾	5.48	4.79	3.72	4.71	3.86
Weighted average number of shares outstanding - basic	73,602,247	75,885,316	75,354,280	75,758,123	77,119,602
Weighted average number of shares outstanding - diluted	74,323,839	77,006,589	76,401,366	76,896,565	78,337,481
Other Comparative Data					
Total assets	\$ 5,772.4	\$ 5,170.7	\$ 5,041.6	\$ 4,859.9	\$ 4,445.2
Total liabilities	3,419.5	2,793.0	2,816.4	2,905.1	2,802.5
Total equity	2,352.9	2,377.7	2,225.2	1,954.8	1,642.7
Net income attributable to The Timken Company / net sales	9.1%	8.9%	8.1%	9.6%	8.5%
Net cash provided from operating activities	463.8	387.3	577.6	550.1	332.5
Capital expenditures	178.4	148.3	121.6	140.6	112.6
Capital expenditures / net sales	4.0%	3.6%	3.5%	3.7%	3.1%
Depreciation and amortization	164.0	167.8	167.1	160.6	146.0
Dividends per share	\$ 1.23	\$ 1.19	\$ 1.13	\$ 1.12	\$ 1.11
Number of employees at year-end	19,404	18,029	17,430	18,829	17,477
Non-GAAP Financial Information ⁽³⁾					
Adjusted earnings per share	\$ 6.02	\$ 4.72	\$ 4.10	\$ 4.60	\$ 4.18
Adjusted earnings before interest, taxes, depreciation and amortization (EBITDA)	\$ 855.9	\$ 718.0	\$ 658.9	\$ 726.3	\$ 646.5
Adjusted EBITDA Margin (% of net sales)	19.0 %	17.4 %	18.8 %	19.2 %	18.1 %
Free cash flow	285.4	239.0	456.0	409.5	219.9
Adjusted return on invested capital (ROIC)	12.6 %	11.0 %	9.9 %	11.9 %	12.8 %

(1) Based on weighted average number of shares outstanding during the year.

(2) Based on weighted average number of shares outstanding during the year, assuming dilution of stock options and awards.

(3) Refer to page 38 for reconciliations to the most directly comparable generally accepted accounting principal ("GAAP") financial measures.

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

(Dollars in millions, except per share data)

OVERVIEW

Introduction:

The Timken Company designs and manufactures a growing portfolio of engineered bearings and industrial motion products, and provides related services. With more than a century of knowledge and innovation, the Company continuously improves the reliability and efficiency of global machinery and equipment to move the world forward. Timken posted \$4.5 billion in sales in 2022 and employs more than 19,000 people globally, operating in 46 countries. The Company has historically operated under two reportable segments: (1) Mobile Industries and (2) Process Industries. The following further describes these business segments:

- **Mobile Industries** serves OEM customers that manufacture off-highway equipment for the agricultural, mining and construction markets; on-highway vehicles including passenger cars, light trucks, and medium- and heavy-duty trucks; rail cars and locomotives; outdoor power equipment; rotorcraft and fixed-wing aircraft; and other mobile equipment. Beyond service parts sold to OEMs, aftermarket sales and services to individual end users, equipment owners, operators and maintenance shops are handled directly or through the Company's extensive network of authorized automotive and heavy-truck distributors.
- **Process Industries** serves OEM and end-user customers in industries that place heavy demands on the fixed operating equipment they make or use in heavy and other general industrial sectors. This includes metals, cement and aggregate production; power generation and renewable energy sources; oil and gas extraction and refining; pulp and paper and food processing; automation and robotics; and health and critical motion control equipment. Other applications include marine equipment, gear drives, cranes, hoists and conveyors. This segment also supports aftermarket sales and service needs through its global network of authorized industrial distributors and through the provision of services directly to end users.

Timken creates value by understanding customer needs and applying its know-how to serve a broad range of customers in attractive markets and industries across the globe. The Company's business strengths include its product technology, end-market diversity, geographic reach and aftermarket mix. Timken collaborates with OEMs to improve equipment efficiency with its engineered products and captures subsequent equipment replacement cycles by selling largely through independent channels in the aftermarket. Timken focuses its international efforts and footprint in regions of the world where strong macroeconomic factors such as urbanization, infrastructure development and sustainability create demand for its products and services.

The Company's strategy has three primary elements:

Profitable Growth. The Company intends to expand into new and existing markets by leveraging its collective knowledge of metallurgy, friction management and industrial motion to create value for Timken customers. Using a highly collaborative technical selling approach, the Company places particular emphasis on creating unique solutions for challenging and/or demanding applications. The Company intends to grow in attractive market sectors around the world, emphasizing those spaces that are highly fragmented, demand high service and value the reliability and efficiency offered by Timken products. The Company also targets applications that offer significant aftermarket demand, thereby providing product and services revenue throughout the equipment's lifetime.

Operational Excellence. Timken operates with a relentless drive for exceptional results and a passion for superior execution. The Company embraces a continuous improvement culture that is charged with increasing efficiency, lowering costs, eliminating waste, encouraging organizational agility and building greater brand equity to fuel growth. This requires the Company's ongoing commitment to attract, retain and develop the best talent across the world.

Capital Deployment to Drive Shareholder Value. The Company is intently focused on providing the highest returns for shareholders through its capital allocation framework, which includes: (1) investing in the core business through capital expenditures, research and development and initiatives to drive profitable organic growth; (2) pursuing strategic acquisitions to broaden its portfolio and capabilities across diverse markets, with a focus on bearings, adjacent industrial motion products and related services; (3) returning capital to shareholders through dividends and share repurchases; and (4) maintaining a strong balance sheet and sufficient liquidity. As part of this framework, the Company may also restructure, reposition or divest underperforming product lines or assets.

The following items highlight certain of the Company's more significant strategic accomplishments in 2022:

- On November 4, 2022, the Company completed the acquisition of GGB Bearing Technology (“GGB”), a global supplier of highly engineered and customized plain bearings and a leader in metal polymer bearings. With expected annual sales of approximately \$200 million at the time of acquisition, GGB will bolster the Company’s engineered bearings portfolio.
- On May 31, 2022, the Company completed the acquisition of Spinea, s.r.o. (“Spinea”), which expanded its robotics and automation offering in attractive end market sectors. Spinea is a technology leader in highly engineered cycloidal reduction gears and actuators.
- On November 1, 2022, the Company completed the divestiture of Timken Aerospace Drives Systems, LLC (“ADS”). ADS is a supplier of drive system components and sub-assemblies for military and civil rotorcraft applications. At the time of the divestiture, ADS had revenue of approximately \$40 million in 2022.
- On September 1, 2022, the Company completed the divestiture of Timken-Rus Service Company ooo (“Timken Russia”). Refer to Russia operations in Management’s Discussion and Analysis for additional information.
- The Company repurchased 3.25 million common shares, or over 4 percent of its outstanding common shares, and increased its quarterly dividend in the second quarter. In addition, the Company achieved 100 years of paying quarterly dividends and marked its ninth consecutive year of higher annual dividends. In total, the Company returned \$303 million to shareholders during the year through dividends and share repurchases.

RESULTS OF OPERATIONS

2022 vs. 2021

Overview:

	2022	2021	\$ Change	% Change
Net sales	\$ 4,496.7	\$ 4,132.9	\$ 363.8	8.8%
Net income	417.0	381.5	35.5	9.3%
Net income attributable to noncontrolling interest	9.6	12.4	(2.8)	(22.6%)
Net income attributable to The Timken Company	\$ 407.4	\$ 369.1	\$ 38.3	10.4%
Diluted earnings per share	\$ 5.48	\$ 4.79	\$ 0.69	14.4%
Average number of diluted shares	74,323,839	77,006,589	—	(3.5%)

The increase in net sales was primarily driven by strong organic growth (including pricing) and the net benefit of acquisitions and divestitures, partially offset by the unfavorable impact of foreign currency exchange rate changes. The increase in net income was primarily due to favorable price/mix and the impact of higher volume, partially offset by higher material, logistics and other operating costs, an increase in impairment, restructuring and acquisition-related charges, an increase in net interest expense, and a higher tax rate.

Outlook:

The Company expects 2023 full-year revenue to be up approximately 6% at the midpoint compared to 2022, driven by modest organic growth and the net benefit of acquisitions and divestitures, partially offset by the net unfavorable impact of foreign currency exchange rates. The Company’s earnings are expected to be up in 2023 compared with 2022, primarily due to the favorable impact of price/mix and lower material and logistics costs, partially offset by higher manufacturing costs and selling, general and administrative expenses, and higher interest expense.

The Company expects to generate a higher amount of cash from operating activities in 2023 compared to 2022, driven by higher earnings and improved working capital performance. The Company expects higher capital expenditures in 2023 compared to 2022, but relatively in line with 2022 spending as a percentage of sales (4.0%).

THE STATEMENTS OF INCOME

Sales:

	2022	2021	\$ Change	% Change
Net sales	\$ 4,496.7	\$ 4,132.9	\$ 363.8	8.8%

Net sales increased in 2022 compared with 2021, primarily due to strong organic growth of \$478 million and the net benefit of acquisitions and divestitures of \$28 million, partially offset by the unfavorable impact of foreign currency exchange rate changes of \$142 million. The higher organic revenue was driven by higher demand across both segments, and higher net pricing.

Gross Profit:

	2022	2021	\$ Change	Change
Gross profit	\$ 1,288.1	\$ 1,102.5	\$ 185.6	16.8%
Gross profit % to net sales	28.6%	26.7%	—	190 bps

Gross profit increased in 2022 compared with 2021, primarily due to favorable price/mix of \$305 million and the impact of higher volume of \$102 million, partially offset by higher material and logistics costs of \$126 million, unfavorable manufacturing performance of \$67 million, the unfavorable impact of foreign currency exchange rate changes of \$17 million and the inventory step-up impact from acquisitions of \$8 million.

Selling, General and Administrative (“SG&A”) Expenses:

	2022	2021	\$ Change	Change
Selling, general and administrative expenses	\$ 637.1	\$ 580.5	\$ 56.6	9.8%
Selling, general and administrative expenses % to net sales	14.2%	14.0%	—	20 bps

The increase in SG&A expenses in 2022 compared with 2021 was primarily due to higher compensation costs (including incentive-based compensation) and increased spending to support the higher sales and business activity levels.

Impairment and Restructuring Charges:

	2022	2021	\$ Change
Impairment charges	\$ 38.3	\$ 4.5	\$ 33.8
Severance and related benefit costs	4.2	2.6	1.6
Exit costs	1.6	1.8	(0.2)
Total	\$ 44.1	\$ 8.9	\$ 35.2

Impairment and restructuring charges of \$44.1 million in 2022 were primarily due to impairment charges recorded in advance of the ADS divestiture, which was completed in the fourth quarter, and impairment charges recorded against property, plant and equipment at the Company’s joint venture in Russia. In addition, the Company incurred severance and related benefits, and exit costs associated with the closure of the Company’s Villa Carcina, Italy bearing plant.

Impairment and restructuring charges of \$8.9 million in 2021 were comprised primarily of severance and related benefits associated with the planned closures of the Company’s Villa Carcina, Italy bearing plant and Indianapolis, Indiana chain plant. These initiatives were undertaken to reduce headcount and right-size the Company’s manufacturing footprint. In addition, impairment and restructuring during 2021 included impairment charges related to certain engineering-related assets used in the business. Management concluded no further investment would be made in the engineering-related assets and, as a result, reduced value to zero.

Interest Expense and Income:

	2022	2021	\$ Change	% Change
Interest expense	\$ (74.6)	\$ (58.8)	\$ (15.8)	26.9%
Interest income	3.8	2.3	1.5	65.2%

Interest expense increased in 2022 compared to 2021, primarily due to higher average debt outstanding and rising interest rates. During the year, the Company issued \$350 million of 10-year fixed-rate unsecured senior notes ("2032 Notes"). Proceeds from the 2032 Notes were used for general corporate purposes, which included repayment of other borrowings outstanding at the time of issuance. In addition, a portion of the proceeds from the 2032 Notes was used to fund the Spinea acquisition, which closed in the second quarter of 2022.

Other Income (Expense):

	2022	2021	\$ Change	% Change
Non-service pension and other postretirement income	\$ 9.3	\$ 18.3	\$ (9.0)	(49.2%)
Other income, net	5.5	0.8	4.7	587.5%

The decrease in non-service pension and other postretirement income was primarily due to lower expected returns on pension assets, as well as higher net actuarial losses in 2022 compared to 2021. In 2022, \$2.9 million of net actuarial losses were recognized, compared to \$0.3 million of net actuarial losses in 2021. Refer to *Note 16 - Retirement Benefit Plans* and *Note 17 - Other Postretirement Benefit Plans* in the Notes to the Consolidated Financial Statements for more information.

The increase in other income is primarily due to sale of the Company's Villa Carcina, Italy bearing plant upon its closure in 2022. Refer to *Note 15 - Impairment and Restructuring Charges* in the Notes to the Consolidated Financial Statements for more information.

Income Tax Expense:

	2022	2021	\$ Change	Change
Income tax expense	\$ 133.9	\$ 95.1	\$ 38.8	40.8%
Effective tax rate	24.3 %	20.0%	—	430 bps

The effective tax rate for 2022 was 24.3%, which was unfavorable compared to the U.S. federal statutory rate of 21%, primarily due to the unfavorable impact of earnings in foreign jurisdictions where the effective tax rate was higher than 21%. This was partially offset by the release of accruals for uncertain tax positions and favorable U.S. permanent book-tax differences.

The effective tax rate for 2021 was 20.0%, which was favorable compared to the U.S. federal statutory rate of 21%, primarily due to the release of accruals for uncertain tax positions, favorable U.S. permanent book-tax differences and the release of a valuation allowance on certain non-U.S. deferred tax assets. This was partially offset by the unfavorable impact of earnings in foreign jurisdictions where the effective tax rate was higher than 21%.

The change in the effective rate for 2022 compared with 2021 was an increase of 4.3%. The increase was primarily due to the unfavorable impact of earnings in foreign jurisdictions with relatively higher tax rates and the net unfavorable impact of discrete tax items, including discrete tax benefits in the prior year related to the release of valuation allowance on certain non-U.S. deferred tax assets and lower U.S. permanent book-tax differences.

Refer to *Note 5 - Income Taxes* in the Notes to the Consolidated Financial Statements for more information on the computation of the income tax expense in interim periods.

For a discussion of changes in our results from 2021 to 2020, refer to Management's Discussion and Analysis of Financial Condition and Results of Operations in Part II, Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2021.

BUSINESS SEGMENTS

The Company's reportable segments are business units that serve different industry sectors. While the segments often operate using shared infrastructure, each reportable segment is managed to address specific customer needs in these diverse market sectors. The primary measurement used by management to measure the financial performance of each segment is earnings before interest, taxes, depreciation and amortization ("EBITDA"). Refer to *Note 4 - Segment Information* in the Notes to the Consolidated Financial Statements for the reconciliation of EBITDA by segment to consolidated income before income taxes.

The Company has historically operated under two reportable segments: (1) Mobile Industries and (2) Process Industries. During 2022, the Company announced certain organizational changes, which included the appointment of executive leaders for its Engineered Bearings and Industrial Motion product groups. After evaluation of the organizational changes and other factors, the Company has concluded that it will operate under two new reportable segments, Engineered Bearings and Industrial Motion, beginning with the first quarter of 2023.

The presentation of segment results below includes a reconciliation of the changes in net sales for each segment reported in accordance with U.S. GAAP to net sales adjusted to remove the effects of acquisitions and divestitures completed in 2022 and 2021 and foreign currency exchange rate changes. The effects of acquisitions, divestitures and foreign currency exchange rate changes on net sales are removed to allow investors and the Company to meaningfully evaluate the percentage change in net sales on a comparable basis from period to period.

The following items highlight the Company's acquisitions and divestitures completed in 2022 and 2021 by segment based on the customers and underlying markets served:

- The Company acquired GGB during the fourth quarter of 2022. Results for GGB were reported in the Mobile Industries and Process Industries segments based on customers and underlying market sectors served.
- The Company completed the sale of ADS during the fourth quarter of 2022. The majority of the results for ADS are reported in the Mobile Industries segment.
- The Company completed the sale of Timken Russia during the third quarter of 2022. Results for Timken Russia were reported in the Mobile Industries and Process Industries segments based on customers and underlying market sectors served.
- The Company acquired Spinea during the second quarter of 2022. The majority of the results for Spinea are reported in the Process Industries segment.
- The Company acquired Intelligent Machine Solutions ("iMS") during the third quarter of 2021. The majority of the results for iMS are reported in the Process Industries segment.

Mobile Industries Segment:

	2022	2021	\$ Change	Change
Net sales	\$ 2,106.5	\$ 1,965.7	\$ 140.8	7.2%
EBITDA	\$ 217.1	\$ 240.1	\$ (23.0)	(9.6%)
EBITDA margin	10.3%	12.2%	—	(190) bps

	2022	2021	\$ Change	% Change
Net sales	\$ 2,106.5	\$ 1,965.7	\$ 140.8	7.2%
Less: Acquisitions	12.7	—	12.7	NM
Divestitures	(10.4)	—	(10.4)	NM
Currency	(62.6)	—	(62.6)	NM
Net sales, excluding the impact of acquisitions, divestitures and currency	\$ 2,166.8	\$ 1,965.7	\$ 201.1	10.2%

The Mobile Industries segment's net sales, excluding the effects of acquisitions, divestitures and foreign currency exchange rate changes, increased \$201.1 million or 10.2% in 2022 compared with 2021, reflecting increased shipments in the off-highway, rail, heavy truck and automotive sectors, as well as higher net pricing. EBITDA decreased in 2022 by \$23.0 million or 9.6% compared with 2021, primarily due to higher operating costs, as well as higher impairment and restructuring charges, partially offset by favorable price/mix and the impact of higher volume.

Process Industries Segment:

	2022	2021	\$ Change	Change
Net sales	\$ 2,390.2	\$ 2,167.2	\$ 223.0	10.3%
EBITDA	\$ 621.5	\$ 506.3	\$ 115.2	22.8%
EBITDA margin	26.0%	23.4%	—	260 bps

	2022	2021	\$ Change	% Change
Net sales	\$ 2,390.2	\$ 2,167.2	\$ 223.0	10.3%
Less: Acquisitions	31.2	—	31.2	NM
Divestitures	(5.3)	—	(5.3)	NM
Currency	(79.8)	—	(79.8)	NM
Net sales, excluding the impact of acquisitions, divestitures and currency	\$ 2,444.1	\$ 2,167.2	\$ 276.9	12.8%

The Process Industries segment's net sales, excluding the effects of acquisitions, divestitures and foreign currency exchange rate changes, increased \$276.9 million or 12.8% in 2022 compared with 2021. The increase was primarily driven by increased demand in the distribution, general and heavy industrial, marine and service sectors, as well as higher net pricing, partially offset by lower revenue in the renewable energy sector. EBITDA increased \$115.2 million or 22.8% in 2022 compared with 2021 primarily due to favorable price/mix and the impact of higher volume, partially offset by higher operating costs and acquisition-related expenses.

Unallocated Corporate:

	2022	2021	\$ Change	Change
Unallocated corporate expense	\$ (50.0)	\$ (46.1)	\$ (3.9)	8.5%
Unallocated corporate expense % to net sales	(1.1%)	(1.1%)	—	— bps

Unallocated corporate expense increased in 2022 compared with 2021 primarily due to higher compensation costs (including incentive-based compensation) and other spending to support increased business activity levels, partially offset by the impact of foreign currency exchange gains in 2022 as compared with foreign currency exchange losses in the prior year.

CASH FLOWS

	2022	2021	\$ Change
Net cash provided by operating activities	\$ 463.8	\$ 387.3	\$ 76.5
Net cash used in investing activities	(573.3)	(173.8)	(399.5)
Net cash provided by (used in) financing activities	206.8	(269.3)	476.1
Effect of exchange rate changes on cash	(14.5)	(7.4)	(7.1)
Increase (decrease) in cash, cash equivalents and restricted cash	\$ 82.8	\$ (63.2)	\$ 146.0

Operating Activities:

The increase in net cash provided by operating activities in 2022 compared with 2021 was primarily due to higher net income of \$35.5 million, a net increase in non-cash charges of \$44.0 million included in net income, including impairment charges and stock-based compensation expense, and the favorable impact of income taxes of \$19.3 million, partially offset by an increase in the cash used for working capital items of \$29.9 million. Refer to the table below for additional detail of the impact of each line on net cash provided by operating activities.

The following chart displays the impact of working capital items on cash during 2022 and 2021, respectively:

	2022	2021	\$ Change
Cash (used in) provided by:			
Accounts receivable	\$ (73.5)	\$ (55.8)	\$ (17.7)
Unbilled receivables	(26.0)	6.2	(32.2)
Inventories	(145.6)	(215.8)	70.2
Trade accounts payable	(10.2)	76.7	(86.9)
Other accrued expenses	91.9	55.2	36.7
Cash used in working capital items	\$ (163.4)	\$ (133.5)	\$ (29.9)

The following table displays the impact of income taxes on cash during 2022 and 2021, respectively:

	2022	2021	\$ Change
Accrued income tax expense	\$ 133.9	\$ 95.1	\$ 38.8
Income tax payments	(120.6)	(100.7)	(19.9)
Other miscellaneous	(0.6)	(1.0)	0.4
Change in income taxes	\$ 12.7	\$ (6.6)	\$ 19.3

Investing Activities:

The increase in net cash used in investing activities in 2022 compared with 2021 was primarily due to an increase in cash used for acquisitions of \$446.2 million, partially offset by proceeds from divestitures of \$33.9 million.

Financing Activities:

The change in net cash provided by financing activities in 2022 compared with 2021 was primarily due to a decrease in net payments of \$598.7 million on outstanding debt, partially offset by an increase in the purchase of treasury shares of \$118.6 million.

LIQUIDITY AND CAPITAL RESOURCES

Reconciliation of total debt to net debt and the ratio of net debt to capital:

Net Debt:

	December 31,	
	2022	2021
Short-term debt, including current portion of long-term debt	\$ 49.0	\$ 53.8
Long-term debt	1,914.2	1,411.1
Total debt	\$ 1,963.2	\$ 1,464.9
Less: Cash and cash equivalents	331.6	257.1
Net debt	\$ 1,631.6	\$ 1,207.8

Ratio of Net Debt to Capital:

	December 31,	
	2022	2021
Net debt	\$ 1,631.6	\$ 1,207.8
Total equity	2,352.9	2,377.7
Net debt plus total equity (capital)	\$ 3,984.5	\$ 3,585.5
Ratio of net debt to capital	40.9%	33.7%

The Company presents net debt because it believes net debt is more representative of the Company's financial position than total debt due to the amount of cash and cash equivalents held by the Company and the ability to utilize such cash and cash equivalents to reduce debt if needed.

At December 31, 2022, the Company had strong liquidity with \$331.6 million of cash and cash equivalents on the Consolidated Balance Sheet, as well as \$828.2 million available under committed credit lines. Of the \$331.6 million of cash and cash equivalents, \$305.7 million resided in jurisdictions outside the United States. Repatriation of non-U.S. cash could be subject to taxes and some portion may be subject to governmental restrictions. Part of the Company's strategy is to grow in attractive market sectors, many of which are outside the United States. This strategy includes making investments in facilities, equipment and potential new acquisitions. The Company plans to fund these investments, as well as meet working capital requirements, with cash and cash equivalents and unused lines of credit within the geographic location of these investments where feasible.

On December 5, 2022 the Company entered into the Fifth Amended and Restated Credit Agreement ("Credit Agreement"), which is comprised of the \$750.0 million unsecured revolving credit facility ("Senior Credit Facility") and a \$400 million unsecured term loan facility ("2027 Term Loan") that mature on December 5, 2027. The Credit Agreement amended and restated the Company's previous revolving credit agreement, dated as of June 25, 2019, and replaced the \$350 million term loan that was set to mature on September 11, 2023 ("2023 Term Loan"). The Credit Agreement also replaced interest rates based on LIBOR with interest rates based on Secured Overnight Financing Rate ("SOFR"). At December 31, 2022, the Senior Credit Facility had outstanding borrowings of \$8.5 million, which reduced the availability to \$741.5 million. The Credit Agreement has two financial covenants: a consolidated leverage ratio and a consolidated interest coverage ratio. The maximum consolidated leverage ratio permitted under the Senior Credit Facility is 4.0 to 1.0 for the next four fiscal quarters as there was a leverage increase period following a qualified acquisition, after which it reverts to 3.5 to 1.0. As of December 31, 2022, the Company's consolidated leverage ratio was 1.85 to 1.0. The minimum consolidated interest coverage ratio permitted under the Senior Credit Facility is 3.0 to 1.0. As of December 31, 2022, the Company's consolidated interest coverage ratio was 12.02 to 1.0.

The interest rate under the Senior Credit Facility is variable with a spread based on the Company's debt rating. The average rate on outstanding U.S. dollar borrowings was 5.10% and the average rate on outstanding Euro borrowings was 2.21% as of December 31, 2022. In addition, the Company pays a facility fee based on the applicable rate, which is variable with a spread based on the Company's debt rating, multiplied by the aggregate commitments of all of the lenders under the Senior Credit Facility. As of December 31, 2022, the Company carried investment-grade credit ratings with Moody's (Baa2) and S&P Global (BBB-).

The Company has a \$100.0 million Amended and Restated Asset Securitization Agreement (the “Accounts Receivable Facility”), which matures on November 30, 2024. The Accounts Receivable Facility is subject to certain borrowing base limitations and is secured by certain domestic trade accounts receivable of the Company. These limitations reduced the availability of the Accounts Receivable Facility to \$86.7 million at December 31, 2022. As of December 31, 2022, there were \$85.0 million outstanding borrowings under the Accounts Receivable Facility, which reduced the availability under this facility to \$1.7 million.

Other sources of liquidity include uncommitted short-term lines of credit for certain of the Company’s foreign subsidiaries, which provide for borrowings of up to approximately \$234.2 million. At December 31, 2022, the Company had borrowings outstanding of \$46.3 million and bank guarantees of \$2.8 million, which reduced the aggregate availability under these facilities to approximately \$185.1 million.

On March 28, 2022, the Company issued the 2032 Notes in the aggregate principal amount of \$350 million with an interest rate of 4.125%, maturing on April 1, 2032. Proceeds from the 2032 Notes were used for general corporate purposes, which included repayment of borrowings under the Senior Credit Facility and the Accounts Receivable Facility outstanding at the time of issuance. In addition, a portion of the proceeds from the 2032 Notes was used to fund the Spinea acquisition, which closed in the second quarter of 2022.

At December 31, 2022, the Company was in full compliance with all applicable covenants on its outstanding debt.

Timken expects higher net interest expense in 2023 compared to 2022, due to higher average debt balances and increased interest rates.

The Company expects to generate a higher amount of cash from operating activities in 2023 compared to 2022, driven by higher earnings and improved working capital performance. The Company expects higher capital expenditures in 2023 compared to 2022, but relatively in line with 2022 spending as a percentage of sales (4.0%).

FUTURE CONTRACTUAL AND OTHER PAYMENTS

The Company's material cash requirements for contractual debt obligations and other contractual commitments outstanding as of December 31, 2022 were as follows:

Payments due by period:

Future Contractual and Other Payments	Total	Less than 1 Year	1-5 Years	More than 5 Years
Interest payments	\$ 523.0	\$ 87.6	\$ 302.3	\$ 133.1
Long-term debt	1,926.1	—	1,049.0	877.1
Short-term debt, including current portion of long-term debt	49.0	49.0	—	—
Purchase commitments	54.3	35.7	18.6	—
Operating leases	99.6	27.0	54.7	17.9
Retirement benefit plans	240.8	28.5	102.8	109.5
Total	\$ 2,892.8	\$ 227.8	\$ 1,527.4	\$ 1,137.6

The interest payments beyond five years primarily relate to long-term fixed-rate notes. Refer to *Note 12 - Financing Arrangements* in the Notes to the Consolidated Financial Statements for additional information.

In order to maintain minimum funding requirements, the Company is required to make contributions to the trusts established for its defined benefit pension plans and other postretirement benefit plans. The table above shows the expected future minimum cash contributions to the trusts for the funded plans as well as estimated future benefit payments to participants for the unfunded plans. Those minimum funding requirements and estimated benefit payments can vary significantly. The amounts in the table above are based on actuarial estimates using current assumptions for, among other things, discount rates, expected return on assets and health care cost trend rates. During 2022, the Company made cash contributions and payments of approximately \$11.2 million to its global defined benefit pension plans and \$3.4 million to its other postretirement benefit plans. Refer to *Note 16 - Retirement Benefit Plans* and *Note 17 - Other Postretirement Benefit Plans* in the Notes to the Consolidated Financial Statements for additional information.

Refer to *Note 5 - Income Taxes* and *Note 13 - Contingencies* in the Notes to the Consolidated Financial Statements for additional information regarding the Company's exposure for certain tax and legal matters.

In the ordinary course of business, the Company utilizes standby letters of credit issued by financial institutions to guarantee certain obligations, most of which relate to insurance contracts. At December 31, 2022, outstanding letters of credit totaled \$50.2 million, primarily having expiration dates within 12 months.

NEW ACCOUNTING GUIDANCE ISSUED AND NOT YET ADOPTED

Information required for this Item is incorporated by reference to *Note 1 - Significant Accounting Policies* in the Notes to the Consolidated Financial Statements.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The Company's financial statements are prepared in accordance with accounting principles generally accepted in the United States. 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. The following paragraphs include a discussion of some critical areas that require a higher degree of judgment, estimates and complexity.

Inventory:

Inventories are valued at the lower of cost or market, with approximately 58% valued by the first-in, first-out ("FIFO") method and the remaining 42% valued by the last-in, first-out ("LIFO") method. The majority of the Company's domestic inventories are valued by the LIFO method, while all of the Company's international inventories are valued by the FIFO method. An actual valuation of the inventory under the LIFO method can be made only at the end of each year based on the inventory levels and costs at that time. Accordingly, interim LIFO calculations are based on management's estimates of expected year-end inventory levels and costs. Because these are subject to many factors beyond management's control, annual results may differ from interim results as they are subject to the final year-end LIFO inventory valuation. The Company recognized an increase in its LIFO reserve of \$36.0 million during 2022 compared to an increase in its LIFO reserve of \$27.3 million during 2021.

Goodwill and Indefinite-lived Intangible Assets:

The Company tests goodwill and indefinite-lived intangible assets for impairment at least annually, performing its annual impairment test as of October 1st. Furthermore, goodwill and indefinite-lived intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Each interim period, the Company assesses whether or not an indicator of impairment is present that would necessitate a goodwill and indefinite-lived intangible assets impairment analysis be performed in an interim period other than during the fourth quarter.

As of December 31, 2022, the Company had \$1,098.3 million of goodwill on its Consolidated Balance Sheet, of which \$390.6 million was attributable to the Mobile Industries segment and \$707.7 million was attributable to the Process Industries segment. See *Note 9 - Goodwill and Other Intangible Assets* in the Notes to the Consolidated Financial Statements for movements in the carrying amount of goodwill by segment.

The Company reviews goodwill for impairment at the reporting unit level. The Mobile Industries segment has three reporting units and the Process Industries segment has two reporting units. The reporting units within the Mobile Industries segment are Mobile Industries, Lubrication Systems and Aerospace Bearing Inspection. The reporting units within the Process Industries segment are Process Industries and Industrial Services.

Accounting guidance permits an entity to first assess qualitative factors to determine whether additional indefinite-lived intangible asset impairment testing, including goodwill, is required. The Company chose to utilize this qualitative assessment in the annual goodwill impairment testing for all reporting units. Based on the qualitative assessment, the Company concluded that it was more likely than not that the fair value of these reporting units exceeded their respective carrying values.

As of December 31, 2022, the Company had \$161.5 million of indefinite-lived intangible assets on its Consolidated Balance Sheet. The Company's indefinite-lived intangible assets primarily consist of acquired trade names. The Company chose to perform a quantitative impairment analysis in the annual impairment testing of indefinite-lived intangible assets. The Company prepares its quantitative indefinite-lived intangible analysis by comparing the estimated fair value of each indefinite-lived intangible asset, using a relief from royalty method, with its carrying value. The relief from royalty method requires several assumptions including future sales growth, terminal revenue growth rate, royalty rate and discount rate. During the fourth quarter of 2022, the Company used discount rates for its indefinite-lived intangible assets in the range of 11.5% to 14.8%, royalty rates in the range of 1.0% to 6.0% and terminal growth rates in the range of 1.0% to 3.5%.

Based on the October 1, 2022 quantitative assessment of indefinite-lived intangible assets, there were four indefinite-lived intangibles with carrying values totaling \$78.1 million in which the fair value exceeded the carrying value of the assets by 10% or less.

Management believes the future sales growth and EBITDA margins in the long-range plan and the discount rate used in the valuations requires significant use of judgment. If any of the Company's reporting units or indefinite-lived intangible assets do not meet their long-range plan estimates or discount rates increase significantly, the Company could be required to perform an interim goodwill or indefinite-lived intangible asset impairment analysis and record impairment charges in future periods. The assumptions used for the indefinite-lived intangibles with fair values exceeding carrying values of 10% or less are more sensitive to future performance and will be monitored accordingly.

Income taxes:

Significant management judgment is required in determining the provision for income taxes, deferred tax assets and liabilities, valuation allowances against deferred tax assets, and accruals for uncertain tax positions.

The Company, which is subject to income taxes in the U.S. and numerous non-U.S. jurisdictions, accounts for income taxes in accordance with Accounting Standards Codification ("ASC") Topic 740, "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 losses 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. Deferred tax assets relate primarily to tax loss carryforwards in foreign jurisdictions, as well as pension and postretirement benefit obligations in the U.S., which the Company believes are more likely than not to result in future tax benefits. 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. The Company recorded \$0.9 million in 2022 and \$7.8 million in 2021 of tax benefits related to the reversal of valuation allowances. Refer to *Note 5 - Income Taxes* in the Notes to the Consolidated Financial Statements for further discussion on the valuation allowance reversals.

In the ordinary course of the Company's business, there are many transactions and calculations where the ultimate income tax determination is uncertain. The Company is regularly under audit by tax authorities. Accruals for uncertain tax positions are provided for in accordance with the requirements of ASC Topic 740. The Company records interest and penalties related to uncertain tax positions as a component of income tax expense. In 2022, the Company recorded \$8.9 million of net tax benefit for uncertain tax positions, which consisted primarily of \$14.6 million related to the net reversal of accruals for prior year uncertain tax positions and settlements with tax authorities. This benefit was partially offset by \$5.7 million of interest and increases to current and prior year uncertain tax positions. During 2022, the Company recorded a \$3.1 million decrease of uncertain tax positions related to foreign currency translation adjustments and deferred tax liabilities. The Company also recorded \$1.9 million of uncertain tax positions related to prior years for acquisitions made during 2022.

Purchase accounting and business combinations:

Assets acquired and liabilities assumed as part of a business combination are recognized at their acquisition date fair values. In determining these fair values, the Company utilized various forms of the income, cost and market approaches depending on the asset or liability being valued. The Company used a discounted cash flow model to measure the trade names, customer relationship, and technology and know-how-related intangible assets. The estimation of fair value required significant judgment related to future net cash flows based on assumptions related to revenue and EBITDA growth rates and discount rates. Inputs were generally determined by taking into account competitive trends, market comparisons, independent appraisals, and historical data, among other factors, and were supplemented by current and anticipated market conditions.

Refer to *Note 1 - Significant Accounting Policies* for further discussion regarding the fair value process.

Revenue recognition:

A contract exists when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability of consideration is probable.

Revenue is generally recognized as performance obligations under the terms of a contract with a customer of the Company are satisfied. Refer to *Note 1 - Significant Accounting Policies* in the Notes to the Consolidated Financial Statements for further discussion around the Company's revenue policy.

Benefit Plans:

The Company sponsors a number of defined benefit pension plans that cover eligible employees. The Company also sponsors several funded and unfunded postretirement plans that provide health care and life insurance benefits for eligible retirees and their dependents. These plans are accounted for in accordance with ASC Topic 715-30, "Defined Benefit Plans – Pension," and ASC Topic 715-60, "Defined Benefit Plans – Other Postretirement."

The measurement of liabilities related to these plans is based on management's assumptions related to future events, including discount rates and health care cost trend rates. Management regularly evaluates these assumptions and adjusts them as required and appropriate. Other plan assumptions also are reviewed on a regular basis to reflect recent experience and the Company's future expectations. Actual experience that differs from these assumptions may affect future liquidity, expense and the overall financial position of the Company. While the Company believes that current assumptions are appropriate, significant differences in actual experience or significant changes in these assumptions may affect materially the Company's pension and other postretirement employee benefit obligations and its future expense and cash flow.

The discount rate is used to calculate the present value of expected future pension and postretirement cash flows as of the measurement date. The Company establishes the discount rate by constructing a notional portfolio of high-quality corporate bonds and matching the coupon payments and bond maturities to projected benefit payments under the Company's pension and postretirement welfare plans. The bonds included in the portfolio generally are non-callable. A lower discount rate will result in a higher benefit obligation; conversely, a higher discount rate will result in a lower benefit obligation. The discount rate also is used to calculate the annual interest cost, which is a component of net periodic benefit cost.

The expected rate of return on plan assets is determined by analyzing the historical long-term performance of the Company's pension plan assets, as well as the mix of plan assets between equities, fixed-income securities and other investments, the expected long-term rate of return expected for those asset classes and long-term inflation rates. Short-term asset performance can differ significantly from the expected rate of return, especially in volatile markets. A lower-than-expected rate of return on pension plan assets will increase pension expense and future contributions.

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.

Defined Benefit Pension Plans:

The Company recognized net periodic benefit cost of \$21.0 million during 2022 for defined benefit pension plans, compared to net periodic benefit cost of \$5.9 million during 2021. The Company recognized mark-to-market charges of \$16.0 million during 2022 compared to \$4.4 million during 2021. Mark-to-market charges during 2022 were primarily a result of the impact of lower than expected returns on plan assets of \$220.6 million, the impact of experience losses of \$33.0 million, the impact of inflation of \$5.4 million and other actuarial losses of \$0.2 million, partially offset by the net increase in the discount rate used to measure its defined benefit pension obligations of \$243.2 million. The impact of the net increase in the discount rate used to measure the Company's defined benefit pension obligations was primarily driven by a 257 basis point increase in the weighted-average discount rate used to measure its U.S. plan obligations, which increased from 3.07% in 2021 to 5.64% in 2022, and a 301 basis point increase in the discount rate used to measure its U.K. plan obligations, which increased from 1.80% in 2021 to 4.81% in 2022.

In 2023, the Company expects net periodic benefit cost to be approximately \$12 million for defined benefit pension plans, compared with net periodic benefit cost of \$21.0 million in 2022. Net periodic benefit cost for 2023 does not include mark-to-market charges that will be recognized immediately through earnings in the fourth quarter of 2023, or on an interim basis if specific events trigger a remeasurement. Excluding the mark-to-market charges of \$16.0 million recognized in 2022, net periodic benefit cost was \$5.0 million in 2022. The expected increase in net periodic benefit cost, excluding mark-to-market charges, primarily reflects a lower expected return on plan assets.

The Company expects to contribute to its defined benefit pension plans or pay directly to participants of defined benefit plans approximately \$25 million in 2023 compared with \$11.2 million of contributions and payments in 2022.

For expense purposes in 2022, the Company applied a weighted-average discount rate of 3.07% to its U.S. defined benefit pension plans. For expense purposes in 2023, the Company will apply a weighted-average discount rate of 5.64% to its U.S. defined benefit pension plans.

For expense purposes in 2022, the Company applied an expected weighted-average rate of return of 4.84% for the Company's U.S. pension plan assets. For expense purposes in 2023, the Company will apply an expected weighted-average rate of return on plan assets of 4.43%.

The following table presents the sensitivity of the Company's global projected pension benefit obligation ("PBO") to the indicated increase/decrease in key assumptions:

	Change	+ / - Change at December 31, 2022 PBO
Assumption:		
Discount rate	.25%	\$ 14.9

In the table above, a 25 basis point decrease in the discount rate will increase the PBO by \$14.9 million and decrease income before income taxes through the recognition of actuarial losses of \$14.9 million. A 25 basis point increase in the discount rate will decrease the PBO by \$14.9 million and increase income before income taxes through the recognition of actuarial gains of \$14.9 million.

Other Postretirement Benefit Plans:

The Company recognized net periodic benefit credit of \$21.6 million during 2022 for other postretirement benefit plans, compared to net periodic benefit credit of \$12.5 million during 2021. The Company recognized mark-to-market gains of \$13.1 million during 2022 compared to mark-to-market gains of \$4.1 million during 2021. Mark-to-market gains in 2022 were primarily due to the impact of a 276 basis point increase in the discount rate used to measure the Company's defined benefit postretirement obligations, which increased from 2.99% in 2021 to 5.75% in 2022. The increase in the discount rate resulted in a \$8.4 million gain. In addition to the gain from the discount rate increases, the Company recognized actuarial gains of \$3.0 million due to the impact of a reduction in the rate for Medicare Advantage plans and \$1.9 million due to lower than expected benefit payments. These actuarial gains were offset by \$0.2 million of changes to other assumptions.

In 2023, the Company expects net periodic benefit credit of approximately \$6 million for other postretirement benefit plans, compared to net periodic benefit credit of \$21.6 million in 2022. Net periodic benefit credit for 2023 does not include mark-to-market charges that will be recognized immediately through earnings in the fourth quarter of 2023, or on an interim basis if specific events trigger a remeasurement. Excluding the mark-to-market gains of \$13.1 million recognized in 2022, the net periodic benefit credit was \$8.5 million in 2022.

For expense purposes in 2022, the Company applied a discount rate of 2.99% to its other postretirement benefit plans. For expense purposes in 2023, the Company will apply a discount rate of 5.75% to its other postretirement benefit plans.

The following table presents the sensitivity of the Company's accumulated other postretirement benefit obligation ("APBO") to the indicated increase/decrease in key assumptions:

	Change	+ / - Change at December 31, 2022 APBO
Assumption:		
Discount rate	.25%	\$ 0.6

In the table above, a 25 basis point decrease in the discount rate will increase the APBO by \$0.6 million and decrease income before income taxes through the recognition of actuarial losses of \$0.6 million. A 25 basis point increase in the discount rate will decrease the APBO by \$0.6 million and increase income before income taxes through the recognition of actuarial gains of \$0.6 million.

For measurement purposes, the Company assumed a weighted-average annual rate of increase in the per capita cost (health care cost trend rate) for medical benefits of 6.5% for 2023, declining gradually to 5.0% in 2029 and thereafter for medical and prescription drug benefits. For Medicare Advantage benefits, actual contract rates have been set for 2023, and are assumed to increase by \$5 for 2026 to 2028 and then 6.0% for 2028, declining gradually to 5.0% in 2032 and thereafter. The assumed health care cost trend rate may have a significant effect on the amounts reported. A one percentage point increase in the assumed health care cost trend rate would have increased the 2022 total service and interest cost components by \$0.1 million and would have increased the postretirement benefit obligation by \$0.7 million. A one percentage point decrease would provide corresponding reductions of \$0.1 million and \$0.6 million, respectively.

Other loss reserves:

The Company has a number of loss exposures that are incurred in the ordinary course of business such as environmental clean-up, product liability, product warranty, litigation, compliance and accounts receivable reserves. Establishing loss reserves for these matters requires management's judgment with regards to estimating 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.

NON-GAAP MEASURES

Supplemental Non-GAAP Measures:

In addition to results reported in accordance with U.S. GAAP, the Company provides information on non-GAAP financial measures. These non-GAAP financial measures include adjusted net income, adjusted earnings per share, adjusted EBITDA and adjusted EBITDA margins, segment adjusted EBITDA and segment adjusted EBITDA margins, ratio of net debt to adjusted EBITDA (for the trailing 12 months), net debt, ratio of net debt to capital, free cash flow and return on invested capital. This information is intended to supplement GAAP financial measures and is not intended to replace GAAP financial measures. Net debt and the ratio of net debt to capital is disclosed in the "Liquidity and Capital Resources" section of Management's Discussion and Analysis of Financial Condition and Results of Operations.

Adjusted Net Income and Adjusted EBITDA:

Adjusted net income and adjusted earnings per share represent net income attributable to The Timken Company and diluted earnings per share, respectively, adjusted for impairment, restructuring and reorganization charges, acquisition costs, including transaction costs and the amortization of the inventory step-up, property losses and recoveries, actuarial gains and losses associated with the remeasurement of the Company's defined benefit pension and other postretirement benefit plans, gains and losses on the sale of real estate, gains and losses on divestitures, the income tax impact of these adjustments, as well as other income tax discrete items, and other items from time to time that are not part of the Company's core operations. Management believes adjusted net income and adjusted earnings per share are useful to investors as they are representative of the Company's core operations and are used in the management of the business.

Adjusted EBITDA represents earnings before interest, taxes, depreciation and amortization, adjusted for items that are not part of the Company's core operations. These items include impairment, restructuring and reorganization charges, acquisition costs, including transaction costs and the amortization of the inventory step-up, property losses and recoveries, actuarial gains and losses associated with the remeasurement of the Company's defined benefit pension and other postretirement benefit plans, gains and losses on the sale of real estate, gains and losses on divestitures, and other items from time to time that are not part of the Company's core operations. Management believes adjusted EBITDA is useful to investors as it is representative of the Company's core operations and is used in the management of the business, including decisions concerning the allocation of resources and assessment of performance.

Reconciliation of net income attributable to The Timken Company to adjusted net income, adjusted EBITDA and adjusted EBITDA Margin:

	Twelve Months Ended December 31,				
	2022	2021	2020	2019	2018
Net Sales	\$ 4,496.7	\$ 4,132.9	\$ 3,513.2	\$ 3,789.9	\$ 3,580.8
Net Income Attributable to The Timken Company	407.4	369.1	284.5	362.1	302.8
Impairment, restructuring and reorganization charges ⁽¹⁾	39.5	15.1	29.0	9.8	7.1
Corporate pension and other postretirement benefit related expense (income) ⁽²⁾	2.9	0.3	18.5	(4.1)	12.8
Acquisition-related charges ⁽³⁾	14.8	3.2	3.7	15.5	20.6
Acquisition-related gain ⁽⁴⁾	—	(0.9)	(11.1)	—	—
Russia-related charges ⁽⁵⁾	15.6	—	—	—	—
(Gain) loss on divestitures and sale of real estate ⁽⁶⁾	(2.9)	—	(0.4)	(4.5)	0.8
Property losses (recoveries) and related expenses ⁽⁷⁾	—	—	(5.5)	7.6	—
Brazil legal matter	—	—	—	1.8	—
Tax indemnification and related items	0.3	0.2	0.5	0.7	1.5
Noncontrolling interest of above adjustments	(5.3)	—	(0.1)	(0.5)	(1.3)
Provision for income taxes ⁽⁸⁾	(24.5)	(23.6)	(6.0)	(34.6)	(16.8)
Adjusted Net Income	\$ 447.8	\$ 363.4	\$ 313.1	\$ 353.8	\$ 327.5
Net income attributable to noncontrolling interest	9.6	12.4	7.9	12.6	2.7
Provision for income taxes (as reported)	133.9	95.1	103.9	97.7	102.6
Interest expense	74.6	58.8	67.6	72.1	51.7
Interest income	(3.8)	(2.3)	(3.7)	(4.9)	(2.1)
Depreciation and amortization expense ⁽⁹⁾	164.0	167.0	164.0	159.9	146.0
Less: Noncontrolling interest	(5.3)	—	(0.1)	(0.5)	(1.3)
Less: Provision for income taxes ⁽⁸⁾	(24.5)	(23.6)	(6.0)	(34.6)	(16.8)
Adjusted EBITDA	\$ 855.9	\$ 718.0	\$ 658.9	\$ 726.3	\$ 646.5
Adjusted EBITDA Margin (% of net sales)	19.0 %	17.4 %	18.8 %	19.2 %	18.1 %

Diluted earnings and adjusted earnings per share in the table below are based on net income attributable to The Timken Company and adjusted net income, respectively, in the table above.

	Twelve Months Ended December 31,				
	2022	2021	2020	2019	2018
Diluted earnings per share (EPS)	\$ 5.48	\$ 4.79	\$ 3.72	\$ 4.71	\$ 3.86
Adjusted EPS	\$ 6.02	\$ 4.72	\$ 4.10	\$ 4.60	\$ 4.18
Diluted Shares	74,323,839	77,006,589	76,401,366	76,896,565	78,337,481

Reconciliation of segment EBITDA to segment adjusted EBITDA and segment adjusted EBITDA margin:

Twelve Months Ended December 31, 2022				
	Mobile	Process	Unallocated Corporate	Total
Net Sales	\$ 2,106.5	\$ 2,390.2	\$ —	\$ 4,496.7
EBITDA	217.1	621.5	(52.9)	785.7
Impairment, restructuring and reorganization charges ⁽¹⁾	35.4	4.1	—	39.5
Corporate pension and other postretirement benefit related expense ⁽²⁾	—	—	2.9	2.9
Acquisition-related charges ⁽³⁾	3.1	8.0	3.7	14.8
Russia-related charges ⁽⁵⁾	16.8	(1.2)	—	15.6
Gain on divestitures and sale of real estate ⁽⁶⁾	(2.7)	(0.2)	—	(2.9)
Tax indemnification and related items	0.3	—	—	0.3
Adjusted EBITDA	\$ 270.0	\$ 632.2	\$ (46.3)	\$ 855.9
Adjusted EBITDA Margin (% of net sales)	12.8 %	26.4 %	NM	19.0 %

Twelve Months Ended December 31, 2021				
	Mobile	Process	Unallocated Corporate	Total
Net Sales	\$ 1,965.7	\$ 2,167.2	\$ —	\$ 4,132.9
EBITDA	240.1	506.3	(45.5)	700.9
Impairment, restructuring and reorganization charges ⁽¹⁾	7.3	7.0	—	14.3
Corporate pension and other postretirement benefit related expense ⁽²⁾	—	—	0.3	0.3
Acquisition-related charges ⁽³⁾	0.7	0.6	1.9	3.2
Acquisition-related gain ⁽⁴⁾	—	—	(0.9)	(0.9)
Tax indemnification and related items	0.2	—	—	0.2
Adjusted EBITDA	\$ 248.3	\$ 513.9	\$ (44.2)	\$ 718.0
Adjusted EBITDA Margin (% of net sales)	12.6 %	23.7 %	NM	17.4 %

⁽¹⁾ Impairment, restructuring and reorganization charges (including items recorded in cost of products sold) relate to: (i) plant closures; (ii) the rationalization of certain plants; (iii) severance related to cost reduction initiatives; (iv) impairment of assets held for sale; and (v) related depreciation and amortization. Impairment, restructuring and reorganization charges for 2022 included \$29.3 million related to the sale of ADS. The Company re-assesses its operating footprint and cost structure periodically, and makes adjustments as needed that result in restructuring charges. However, management believes these actions are not representative of the Company's core operations.

⁽²⁾ Corporate pension and other postretirement benefit related (expense) income represents actuarial losses and (gains) that resulted from the remeasurement of plan assets and obligations as a result of changes in assumptions or experience. The Company recognizes actuarial losses and (gains) in connection with the annual remeasurement in the fourth quarter, or if specific events trigger a remeasurement. Refer to Note 16 - Retirement *Benefit Plans* and Note 17 - Other *Postretirement Benefit Plans* for additional discussion.

⁽³⁾ Acquisition-related charges represent deal-related expenses associated with completed transactions and certain unsuccessful transactions, as well as any resulting inventory step-up impact.

⁽⁴⁾ The acquisition-related gain represents a bargain purchase gain on the acquisition of the assets of Aurora Bearing Company ("Aurora") that closed on November 30, 2020.

⁽⁵⁾ Russia-related charges include impairments or allowances recorded against certain property, plant and equipment, inventory and trade receivables to reflect the current impact of Russia's invasion of Ukraine (and associated sanctions) on the Company's operations. In addition to impairments and allowances recorded, the Company recorded a loss on the divestiture of its Timken Russia business during the third quarter of 2022. Refer to Russia Operations in Management Discussion and Analysis within the Company's annual report on Form 10-K for additional information.

⁽⁶⁾ Represents the net gain resulting from divestitures and the sale of real estate.

⁽⁷⁾ Represents property loss and related expenses during the periods presented (net of insurance recoveries received in 2020) resulting from property loss that occurred during the first quarter of 2019 at one of the Company's warehouses in Knoxville, Tennessee and during the third quarter of 2019 at one of the Company's warehouses in Yantai, China.

⁽⁸⁾ Provision for income taxes includes the net tax impact on pre-tax adjustments (listed above), the impact of discrete tax items recorded during the respective periods as well as other adjustments to reflect the use of one overall effective tax rate on adjusted pre-tax income.

⁽⁹⁾ Depreciation and amortization shown excludes depreciation recognized in reorganization charges, if any.

Free Cash Flow:

Free cash flow represents net cash provided by operating activities less capital expenditures. Management believes free cash flow is useful to investors because it is a meaningful indicator of cash generated from operating activities available for the execution of its business strategy.

Reconciliation of net cash provided by operating activities to free cash flow:

	Twelve Months Ended December 31,				
	2022	2021	2020	2019	2018
Net cash provided by operating activities	\$ 463.8	\$ 387.3	\$ 577.6	\$ 550.1	\$ 332.5
Capital expenditures	(178.4)	(148.3)	(121.6)	(140.6)	(112.6)
Free cash flow	\$ 285.4	\$ 239.0	\$ 456.0	\$ 409.5	\$ 219.9

Ratio of Net Debt to Adjusted EBITDA:

The ratio of net debt to adjusted EBITDA for the trailing twelve months represents total debt less cash and cash equivalents divided by adjusted EBITDA for the trailing twelve months. The Company presents net debt to adjusted EBITDA because it believes it is more representative of the Company's financial position as it is reflective of the Company's ability to cover its net debt obligations with results from its core operations. Net income for the trailing twelve months ended December 31, 2022 and December 31, 2021 was \$417.0 million and \$381.5 million, respectively. Net debt to adjusted EBITDA for the trailing twelve months was 1.9 at December 31, 2022, compared with 1.7 at December 31, 2021.

Reconciliation of Net income to Adjusted EBITDA for the twelve months:

	Twelve Months Ended December 31,	
	2022	2021
Net income	\$ 417.0	\$ 381.5
Provision for income taxes	133.9	95.1
Interest expense	74.6	58.8
Interest income	(3.8)	(2.3)
Depreciation and amortization	164.0	167.8
Consolidated EBITDA	785.7	700.9
Adjustments:		
Impairment, restructuring and reorganization charges ⁽¹⁾	\$ 39.5	\$ 14.3
Corporate pension and other postretirement benefit related expense ⁽²⁾	2.9	0.3
Acquisition-related charges ⁽³⁾	14.8	3.2
Acquisition-related gain ⁽⁴⁾	—	(0.9)
Russia-related charges ⁽⁵⁾	15.6	—
Gain on divestitures and the sale of real estate, net ⁽⁶⁾	(2.9)	—
Tax indemnification and related items	0.3	0.2
Total Adjustments	70.2	17.1
Adjusted EBITDA	\$ 855.9	\$ 718.0
Net Debt	\$ 1,631.6	\$ 1,207.8
Ratio of Net Debt to Adjusted EBITDA	1.9	1.7

⁽¹⁾ Impairment, restructuring and reorganization charges (including items recorded in cost of products sold) relate to: (i) plant closures; (ii) the rationalization of certain plants; (iii) severance related to cost reduction initiatives; and (iv) impairment of assets held for sale. Impairment, restructuring and reorganization charges for 2022 included \$29.3 million related to the sale of ADS. The Company re-assesses its operating footprint and cost structure periodically, and makes adjustments as needed that result in restructuring charges. However, management believes these actions are not representative of the Company's core operations.

⁽²⁾ Corporate pension and other postretirement benefit related (expense) income represents actuarial losses and (gains) that resulted from the remeasurement of plan assets and obligations as a result of changes in assumptions or experience. The Company recognizes actuarial losses and (gains) in connection with the annual remeasurement in the fourth quarter, or if specific events trigger a remeasurement. Refer to *Note 16 - Retirement Benefit Plans* and *Note 17 - Other Postretirement Benefit Plans* for additional discussion.

⁽³⁾ Acquisition-related charges represent deal-related expenses associated with completed transactions and certain unsuccessful transactions, as well as any resulting inventory step-up impact.

⁽⁴⁾ The acquisition-related gain represents a bargain purchase gain on the acquisition of the assets of Aurora that closed on November 30, 2020.

⁽⁵⁾ Russia-related charges include impairments or allowances recorded against certain property, plant and equipment, inventory and trade receivables to reflect the current impact of Russia's invasion of Ukraine (and associated sanctions) on the Company's operations. In addition to impairments and allowances recorded, the Company recorded a loss on the divestiture of its Timken Russia business during the third quarter of 2022. Refer to *Russia Operations* in Management Discussion and Analysis within the Company's annual report on Form 10-K for additional information.

⁽⁶⁾ Represents the net gain resulting from divestitures and the sale of real estate.

Return on Invested Capital:

Return on Invested Capital is defined as adjusted net operating profit after taxes divided by average invested capital. The Company uses Average Invested Capital as a type of non-GAAP ratio that indicates return on invested capital, which management believes is useful to investors as a measure of return on their investment.

Reconciliation of adjusted net operating profit after taxes, adjusted invested capital and return on adjusted invested capital:

Adjusted Net Operating profit after Taxes (ANOPAT):

	Twelve Months Ended December 31,				
	2022	2021	2020	2019	2018
Adjusted EBITDA ⁽¹⁾	\$ 855.9	\$ 718.0	\$ 658.9	\$ 726.3	\$ 646.5
Less: depreciation and amortization expense ⁽²⁾	164.0	167.0	164.0	159.9	146.0
Adjusted EBIT	691.9	551.0	494.9	566.4	500.5
Adjusted tax rate	25.5 %	24.0 %	25.5 %	26.5 %	26.5 %
Calculated income taxes	176.4	132.2	126.2	150.1	132.6
ANOPAT	\$ 515.5	\$ 418.8	\$ 368.7	\$ 416.3	\$ 367.9

Adjusted Invested Capital:

	Twelve Months Ended December 31,					
	2022	2021	2020	2019	2018	2017
Total debt	\$ 1,963.2	\$ 1,464.9	\$ 1,564.6	\$ 1,730.1	\$ 1,681.6	\$ 962.3
Total equity	2,352.9	2,377.7	2,225.2	1,954.8	1,642.7	1,474.9
Invested capital (total debt + total equity)	4,316.1	3,842.6	3,789.8	3,684.9	3,324.3	2,437.2
Invested capital (two-point average)	\$ 4,079.4	\$ 3,816.2	\$ 3,737.4	\$ 3,504.6	\$ 2,880.8	

Return on Invested Capital:

	Twelve Months Ended December 31,				
	2022	2021	2020	2019	2018
ANOPAT	\$ 515.5	\$ 418.8	\$ 368.7	\$ 416.3	\$ 367.9
Invested capital (two-point average)	4,079.4	3,816.2	3,737.4	3,504.6	2,880.8
Return on invested capital	12.6 %	11.0 %	9.9 %	11.9 %	12.8 %

⁽¹⁾ Refer to page 40 for reconciliations to the most directly comparable GAAP financial measures.

⁽²⁾ Depreciation and amortization shown excludes depreciation recognized in reorganization charges, if any.

OTHER DISCLOSURES:

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 reporting period. Related translation adjustments are reflected as a separate component of accumulated other comprehensive loss. Foreign currency gains and losses resulting from transactions are included in the Consolidated Statements of Income.

Net of related derivative activity, the Company recognized a foreign currency exchange gain resulting from transactions of \$15.4 million for the year ended December 31, 2022, and recognized losses of \$9.4 million and \$10.0 million for the years ended December 31, 2021 and 2020, respectively. For the year ended December 31, 2022, the Company recorded a negative non-cash foreign currency translation adjustment of \$155.4 million that decreased shareholders' equity, compared with a negative non-cash foreign currency translation adjustment of \$62.3 million that decreased shareholders' equity for the year ended December 31, 2021. The foreign currency translation adjustments for the year ended December 31, 2022 were negatively impacted by the strengthening of the U.S. dollar relative to other currencies as of December 31, 2022 compared to December 31, 2021.

Russia Operations:

At the beginning of 2022, the Company had two subsidiaries in Russia, Timken Russia, which was 100% owned by Timken, and a 51%-owned joint venture company to serve the Russian rail market ("Rail JV"). As a result of Russia's invasion of Ukraine (and associated sanctions), the Company suspended operations and recorded property, plant and equipment impairment charges of \$9.0 million and inventory write-downs of \$4.1 million during the year ended December 31, 2022. During the third quarter of 2022, the Company sold its Timken Russia business resulting in a loss of \$2.7 million on the sale. After giving effect to these impairments and write-downs, as well as the sale of Timken Russia, as of December 31, 2022, the Company has net assets (net of noncontrolling interest of \$5.9 million), totaling \$7.7 million on its Consolidated Balance Sheet related to its Rail JV. Net assets related to the Company's Russia operations include \$8.5 million of cash and cash equivalents that the Company has classified as restricted as the Company is presently unable to repatriate these funds to one of its subsidiaries outside of Russia. The Company will continue to monitor the events in Russia and Ukraine and may record additional asset impairments or write-offs in the future.

Trade Law Enforcement:

The U.S. government has an antidumping duty order in effect covering tapered roller bearings from China. The Company is a producer of these bearings, as well as ball bearings and other bearing types, in the U.S.

Quarterly Dividend:

On February 10, 2023, the Company's Board of Directors declared a quarterly cash dividend of \$0.31 per common share. The quarterly dividend will be paid on March 6, 2023 to shareholders of record as of February 21, 2023. This will be the 403rd consecutive quarterly dividend paid on the common shares of the Company.

Forward-Looking Statements

Certain statements set forth in this Annual Report on Form 10-K and in the Company's 2022 Annual Report to Shareholders that are not historical in nature (including the Company's forecasts, beliefs and expectations) are "forward-looking" statements within the meaning of the Private Securities Litigation Reform Act of 1995. In particular, Management's Discussion and Analysis contains numerous forward-looking statements. Forward-looking statements generally will be accompanied by words such as "anticipate," "believe," "could," "estimate," "expect," "forecast," "outlook," "intend," "may," "possible," "potential," "predict," "project" or other similar words, phrases or expressions. You are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date of this Annual Report on Form 10-K. The Company cautions readers that actual results may differ materially from those expressed or implied in forward-looking statements made by or on behalf of the Company due to a variety of factors, such as:

- (a) deterioration in world economic conditions, or in economic conditions in any of the geographic regions in which the Company or its customers or suppliers conduct business, including adverse effects from a global economic slowdown or recession, terrorism, or hostilities. This includes: political risks associated with the potential instability of governments and legal systems in countries in which the Company or its customers or suppliers conduct business, changes in currency valuations and recent world events that have increased the risks posed by international trade disputes, tariffs and sanctions;
- (b) negative impacts to the Company's business, results of operations, financial position or liquidity, disruption to the Company's supply chains, negative impacts to customer demand or operations, and availability and health of employees, as a result of COVID-19 or other pandemics and associated governmental measures such as restrictions on travel and manufacturing operations;
- (c) the effects of fluctuations in customer demand on sales, product mix and prices in the industries in which the Company operates. This includes: the ability of the Company to respond to rapid changes in customer demand, disruptions to the Company's supply chain, logistical issues associated with port closures or congestion, delays or increased costs, the effects of customer or supplier bankruptcies or liquidations, the impact of changes in industrial business cycles, the effects of distributor inventory corrections reflecting de-stocking of the supply chain and whether conditions of fair trade continue in the Company's markets;
- (d) competitive factors, including changes in market penetration, increasing price competition by existing or new foreign and domestic competitors, the introduction of new products or services by existing and new competitors, competition for skilled labor and new technology that may impact the way the Company's products are produced, sold or distributed;
- (e) changes in operating costs. This includes: the effect of changes in the Company's manufacturing processes; changes in costs associated with varying levels of operations and manufacturing capacity; availability and cost of raw materials and energy; disruptions to the Company's supply chain and logistical issues associated with port closures or congestion, delays or increased costs; changes in the expected costs associated with product warranty claims; changes resulting from inventory management and cost reduction initiatives; the effects of unplanned plant shutdowns; the effects of government-imposed restrictions, commercial requirements and Company goals associated with climate change and emissions or other waste reduction initiatives; and changes in the cost of labor and benefits;
- (f) the impact of inflation on employee expenses, shipping costs, raw material costs, energy and fuel costs and other production costs;
- (g) the success of the Company's operating plans, announced programs, initiatives and capital investments; the ability to integrate acquired companies and to address material issues both identified and not uncovered during the Company's due diligence review; and the ability of acquired companies to achieve satisfactory operating results, including results being accretive to earnings, realization of synergies and expected cash flow generation;
- (h) the Company's ability to maintain appropriate relations with unions or works councils that represent Company associates in certain locations in order to avoid disruptions of business; the continued attraction, retention and development of management and other key employees, the successful development and execution of succession plans and management of other human capital matters;
- (i) unanticipated litigation, claims, investigations or assessments. This includes: claims, investigations or problems related to intellectual property, product liability or warranty, foreign export and trade laws, government procurement regulations, competition and anti-bribery laws, climate change, environmental or health and safety issues, data privacy and taxes;

- (j) changes in worldwide financial and capital markets, including availability of financing and interest rates on satisfactory terms in a rising interest rate environment, which affect the Company's cost of funds and/or ability to raise capital, as well as customer demand and the ability of customers to obtain financing to purchase the Company's products or equipment that contain the Company's products;
- (k) the Company's ability to satisfy its obligations and comply with covenants under its debt agreements, maintain favorable credit ratings and its ability to renew or refinance borrowings on favorable terms;
- (l) the impact on the Company's pension obligations and assets due to changes in interest rates, investment performance and other tactics designed to reduce risk; and
- (m) those items identified under Item 1A. Risk Factors on pages 8 through 17.

Additional risks relating to the Company's business, the industries in which the Company operates or the Company's common shares may be described from time to time in the Company's filings with the SEC. All of these risk factors are difficult to predict, are subject to material uncertainties that may affect actual results and may be beyond the Company's control.

Readers 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, the Company undertakes no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Risk:

Changes in short-term interest rates related to several separate funding sources impact the Company's earnings. These sources are borrowings under the Accounts Receivable Facility, borrowings under the Senior Credit Facility and short-term bank borrowings by the Company's international subsidiaries. If the market rates for short-term borrowings increased by one-percentage-point around the globe, the impact from our variable rate debt would be an increase in interest expense of \$5.4 million annually, with a corresponding decrease in income from continuing operations before income taxes of the same amount. This amount was determined by considering the impact of hypothetical interest rates on the Company's borrowing cost and year-end debt balances by category.

Foreign Currency Exchange Rate Risk:

Fluctuations in the value of the U.S. dollar compared to foreign currencies, including the Euro, can impact the Company's earnings. The greatest risk relates to products shipped between the Company's European operations and the United States, as well as intercompany loans between Timken affiliates. Foreign currency forward contracts are used to hedge a portion of these intercompany transactions. Additionally, hedges are used to cover third-party purchases of products and equipment. As of December 31, 2022, there were \$635.6 million of hedges in place. A uniform 10% weakening of the U.S. dollar against all currencies would have resulted in a charge of \$13.8 million related to these hedges, which would have partially offset the otherwise favorable impact of the underlying currency fluctuation. In addition to the direct impact of the hedged amounts, changes in exchange rates also affect the volume of sales or foreign currency sales price as competitors' products become more or less attractive.

Commodity Price Risk:

In the ordinary course of business, the Company is exposed to market risk with respect to commodity price fluctuations, primarily related to our purchases of raw materials and energy, principally steel and natural gas. Whenever possible, the Company manages its exposure to commodity risks primarily through the use of supplier pricing agreements that enable the Company to establish the purchase prices for certain inputs that are used in our manufacturing and distribution business.

Item 8. Financial Statements and Supplementary Data
The Timken Company and Subsidiaries

<u>Financial Statements</u>	<u>Page</u>
Consolidated Statements of Income	46
Consolidated Statements of Comprehensive Income	46
Consolidated Balance Sheets	47
Consolidated Statements of Cash Flows	48
Consolidated Statements of Shareholders' Equity	49
Notes to Consolidated Financial Statements	50
Report of Independent Registered Public Accounting Firm (PCAOB ID: 42)	94

Consolidated Statements of Income

	Year Ended December 31,		
	2022	2021	2020
(Dollars in millions, except per share data)			
Net sales	\$ 4,496.7	\$ 4,132.9	\$ 3,513.2
Cost of products sold	3,208.6	3,030.4	2,503.3
Gross Profit	1,288.1	1,102.5	1,009.9
Selling, general and administrative expenses	637.1	580.5	533.8
Impairment and restructuring charges	44.1	8.9	21.2
Operating Income	606.9	513.1	454.9
Interest expense	(74.6)	(58.8)	(67.6)
Interest income	3.8	2.3	3.7
Non-service pension and other postretirement income (expense)	9.3	18.3	(4.7)
Other income (expense), net	5.5	0.8	(1.1)
Acquisition-related gain	—	0.9	11.1
Income Before Income Taxes	550.9	476.6	396.3
Provision for income taxes	133.9	95.1	103.9
Net Income	417.0	381.5	292.4
Less: Net income attributable to noncontrolling interest	9.6	12.4	7.9
Net Income Attributable to The Timken Company	\$ 407.4	\$ 369.1	\$ 284.5
Net Income per Common Share Attributable to The Timken Company			
Common Shareholders			
Basic earnings per share	\$ 5.54	\$ 4.86	\$ 3.78
Diluted earnings per share	\$ 5.48	\$ 4.79	\$ 3.72

See accompanying Notes to the Consolidated Financial Statements.

Consolidated Statements of Comprehensive Income

	Year Ended December 31,		
	2022	2021	2020
(Dollars in millions)			
Net Income	\$ 417.0	\$ 381.5	\$ 292.4
Other comprehensive (loss) income, net of tax:			
Foreign currency translation adjustments	(162.7)	(63.7)	92.7
Pension and postretirement liability adjustments	(5.8)	(6.8)	(3.5)
Change in fair value of derivative financial instruments	2.3	4.8	(2.4)
Other comprehensive (loss) income, net of tax	(166.2)	(65.7)	86.8
Comprehensive Income, net of tax	250.8	315.8	379.2
Less: comprehensive income attributable to noncontrolling interest	2.3	11.0	3.3
Comprehensive Income Attributable to The Timken Company	\$ 248.5	\$ 304.8	\$ 375.9

See accompanying Notes to the Consolidated Financial Statements.

Consolidated Balance Sheets

	December 31,	
	2022	2021
(Dollars in millions)		
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 331.6	\$ 257.1
Restricted cash	9.1	0.8
Accounts receivable, less allowances: (2022 - \$17.9 million; 2021 - \$16.9 million)	699.6	626.4
Unbilled receivables	103.9	104.5
Inventories, net	1,191.3	1,042.7
Deferred charges and prepaid expenses	44.4	32.2
Other current assets	124.1	149.8
Total Current Assets	2,504.0	2,213.5
Property, Plant and Equipment, Net	1,207.4	1,055.3
Other Assets		
Goodwill	1,098.3	1,022.7
Other intangible assets, net	765.3	668.8
Operating lease assets	101.4	118.9
Deferred income taxes	71.0	67.6
Other non-current assets	25.0	23.9
Total Other Assets	2,061.0	1,901.9
Total Assets	\$ 5,772.4	\$ 5,170.7
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable, trade	\$ 403.9	\$ 430.0
Short-term debt, including current portion of long-term debt	49.0	53.8
Salaries, wages and benefits	155.3	136.0
Income taxes payable	51.3	26.2
Other current liabilities	352.9	250.6
Total Current Liabilities	1,012.4	896.6
Non-Current Liabilities		
Long-term debt	1,914.2	1,411.1
Accrued pension benefits	160.3	155.6
Accrued postretirement benefits	31.4	45.8
Long-term operating lease liabilities	65.2	77.6
Deferred income taxes	139.8	121.4
Other non-current liabilities	96.2	84.9
Total Non-Current Liabilities	2,407.1	1,896.4
Shareholders' Equity		
Class I and II Serial Preferred Stock without par value:		
Authorized - 10,000,000 shares each class, none issued	—	—
Common stock without par value:		
Authorized - 200,000,000 shares		
Issued (including shares in treasury) (2022 – 77,767,640 shares; 2021 – 77,090,104 shares)		
Stated capital	40.7	40.7
Other paid-in capital	829.6	786.9
Retained earnings	1,932.1	1,616.4
Accumulated other comprehensive loss	(181.9)	(23.0)
Treasury shares at cost (2022 – 5,188,257 shares; 2021 – 1,715,282 shares)	(352.2)	(126.1)
Total Shareholders' Equity	2,268.3	2,294.9
Noncontrolling interest	84.6	82.8
Total Equity	2,352.9	2,377.7
Total Liabilities and Equity	\$ 5,772.4	\$ 5,170.7

See accompanying Notes to the Consolidated Financial Statements.

Consolidated Statements of Cash Flows

	Year Ended December 31,		
	2022	2021	2020
(Dollars in millions)			
CASH PROVIDED (USED)			
Operating Activities			
Net income	\$ 417.0	\$ 381.5	\$ 292.4
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	164.0	167.8	167.1
Impairment charges	38.3	4.5	0.4
(Gain) loss on sale of assets	(1.9)	1.3	0.9
Acquisition-related gain	—	(0.9)	(11.1)
Loss on divestitures	3.5	—	—
Deferred income tax benefit	(3.6)	(15.1)	(23.2)
Stock-based compensation expense	30.4	20.2	23.2
Pension and other postretirement (income) expense	(0.6)	(6.6)	17.4
Pension and other postretirement benefit contributions and payments	(14.6)	(24.5)	(20.6)
Changes in operating assets and liabilities:			
Accounts receivable	(73.5)	(55.8)	(20.7)
Unbilled receivables	(26.0)	6.2	18.5
Inventories	(145.6)	(215.8)	27.4
Accounts payable, trade	(10.2)	76.7	22.6
Other accrued expenses	91.9	55.2	55.1
Income taxes	16.3	8.5	8.5
Other, net	(21.6)	(15.9)	19.7
Net Cash Provided by Operating Activities	463.8	387.3	577.6
Investing Activities			
Capital expenditures	(178.4)	(148.3)	(121.6)
Acquisitions, net of cash acquired of \$19.4 million in 2022	(453.7)	(7.5)	(24.0)
Proceeds from disposals of property, plant and equipment	9.6	0.6	1.5
Proceeds from divestitures, net of cash divested of \$5.3 million in 2022	33.9	—	—
Investments in short-term marketable securities, net	14.6	(18.0)	(9.4)
Other	0.7	(0.6)	—
Net Cash Used in Investing Activities	(573.3)	(173.8)	(153.5)
Financing Activities			
Cash dividends paid to shareholders	(91.7)	(92.2)	(87.0)
Purchase of treasury shares	(211.6)	(93.0)	(49.3)
Proceeds from exercise of stock options	8.5	26.0	37.4
Payments related to tax withholding for stock-based compensation	(10.7)	(23.8)	(16.0)
Proceeds from long-term debt	1,399.5	325.0	562.0
Payments on long-term debt	(978.5)	(338.3)	(757.7)
Deferred financing costs	(6.6)	—	(1.7)
Accounts receivable facility financing borrowings	297.0	310.9	144.0
Accounts receivable facility financing payments	(212.0)	(368.9)	(186.0)
Short-term debt activity, net	6.9	(14.5)	40.1
Noncontrolling interest dividends paid	(0.5)	(0.5)	(16.9)
Other	6.5	—	—
Net Cash Provided by (Used in) Financing Activities	206.8	(269.3)	(331.1)
Effect of exchange rate changes on cash	(14.5)	(7.4)	11.9
Increase (Decrease) In Cash, Cash Equivalents and Restricted Cash	82.8	(63.2)	104.9
Cash, cash equivalents and restricted cash at beginning of year	257.9	321.1	216.2
Cash, Cash Equivalents and Restricted Cash at End of Year	\$ 340.7	\$ 257.9	\$ 321.1

See accompanying Notes to the Consolidated Financial Statements.

Consolidated Statements of Shareholders' Equity

The Timken Company Shareholders

(Dollars in millions, except per share data)	The Timken Company Shareholders						
	Total	Stated Capital	Other Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive (Loss) Income	Treasury Shares	Non-controlling Interest
Year Ended December 31, 2020							
Balance at January 1, 2020	\$1,954.8	\$ 53.1	\$ 937.6	\$1,907.4	\$ (50.1)	\$ (979.8)	\$ 86.6
Cumulative effect of ASU 2016-13 (net of \$0.2 million income tax benefit)	(0.5)			(0.5)			
Net income	292.4			284.5			7.9
Foreign currency translation adjustments	92.7				97.3		(4.6)
Pension and other postretirement liability adjustments (net of \$1.1 million income tax benefit)	(3.5)				(3.5)		
Change in fair value of derivative financial instruments, net of reclassifications	(2.4)				(2.4)		
Change in ownership of noncontrolling interest	0.5						0.5
Noncontrolling interest acquired	(1.0)		1.0				(2.0)
Dividends declared to noncontrolling interest	(16.1)						(16.1)
Treasury stock retirement	—	(12.4)	(213.3)	(764.9)		990.6	
Dividends – \$1.13 per share	(87.0)			(87.0)			
Stock-based compensation expense	23.2		23.2				
Purchase of treasury shares	(49.3)					(49.3)	
Stock option exercise activity	37.4		16.1			21.3	
Restricted share activity	—		(23.9)			23.9	
Payments related to tax withholding for stock-based compensation	(16.0)					(16.0)	
Balance at December 31, 2020	\$2,225.2	\$ 40.7	\$ 740.7	\$1,339.5	\$ 41.3	\$ (9.3)	\$ 72.3
Year Ended December 31, 2021							
Net income	381.5			369.1			12.4
Foreign currency translation adjustments	(63.7)				(62.3)		(1.4)
Pension and other postretirement liability adjustments (net of \$2.3 million income tax benefit)	(6.8)				(6.8)		
Change in fair value of derivative financial instruments, net of reclassifications	4.8				4.8		
Dividends declared to noncontrolling interest	(0.5)						(0.5)
Dividends – \$1.19 per share	(92.2)			(92.2)			
Stock-based compensation expense	20.2		20.2				
Purchase of treasury shares	(93.0)					(93.0)	
Stock option exercise activity	26.0		26.0				
Payments related to tax withholding for stock-based compensation	(23.8)					(23.8)	
Balance at December 31, 2021	\$2,377.7	\$ 40.7	\$ 786.9	\$1,616.4	\$ (23.0)	\$ (126.1)	\$ 82.8
Year Ended December 31, 2022							
Net income	417.0			407.4			9.6
Foreign currency translation adjustments	(162.7)				(155.4)		(7.3)
Pension and other postretirement liability adjustments (net of \$1.9 million income tax benefit)	(5.8)				(5.8)		
Change in fair value of derivative financial instruments, net of reclassifications	2.3				2.3		
Dividends declared to noncontrolling interest	(0.5)						(0.5)
Dividends – \$1.23 per share	(91.7)			(91.7)			
Stock-based compensation expense	30.4		30.4				
Purchase of treasury shares	(211.6)					(211.6)	
Stock option exercise activity	8.5		8.5				
Shares surrendered for stock option activity	—		3.8			(3.8)	
Payments related to tax withholding for stock-based compensation	(10.7)					(10.7)	
Balance at December 31, 2022	\$2,352.9	\$ 40.7	\$ 829.6	\$1,932.1	\$ (181.9)	\$ (352.2)	\$ 84.6

See accompanying Notes to the Consolidated Financial Statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Dollars in millions, except per share data)

Note 1 - Significant Accounting Policies

Principles of Consolidation:

The consolidated financial statements include the accounts and operations of the Company in which a controlling interest is maintained. Investments in affiliated companies where the Company exercises significant influence, but does not control, and the activities of which it is not the primary beneficiary, are accounted for using the equity method. All intercompany accounts and transactions are eliminated upon consolidation.

Revenue:

A contract exists when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability of consideration is probable.

Revenue is generally recognized as performance obligations under the terms of a contract with a customer of the Company are satisfied. Of the Company's revenue, approximately 85% to 90% is from fixed-price contracts and continues to be recognized as of a point in time when products are shipped from the Company's manufacturing or distribution facilities or at a later point in time when control of the products transfers to the customer. The Company recognizes approximately 10% to 15% of revenue over time for services and certain sales of customer-specific product as it satisfies the performance obligations because of the continuous transfer of control to the customer, supported as follows:

- For certain service contracts, this continuous transfer of control to the customer occurs as the Company's service enhances assets that the customer owns and controls at all times, and the Company is contractually entitled to payment for work performed to date plus a reasonable margin.
- For U.S. government contracts, the customer is allowed to unilaterally terminate the contract for convenience, and is required to pay the Company for costs incurred plus a reasonable margin and can take control of any work in process.
- For certain non-U.S. government contracts involving customer-specific products, the customer controls the work in process based on contractual termination clauses or restrictions on the Company's use of the product, and the Company possesses a right to payment for work performed to date plus a reasonable margin.

As a result of control transferring over time for these products and services, revenue is recognized based on progress toward completion of the performance obligation. The selection of the method to measure progress towards completion requires judgment and is based on the nature of the products or services to be provided. The Company has elected to use the cost-to-cost input measure of progress for these contracts because it best depicts the transfer of goods or services to the customer based on incurring costs on the contracts. Under the cost-to-cost measure of progress, the extent of progress towards completion is measured based on the ratio of costs incurred to date to the total estimated costs at completion of the performance obligation. Revenues are recorded proportionally as costs are incurred.

The pricing and payment terms for non-U.S. government contracts are based on the Company's standard terms and conditions or the result of specific negotiations with each customer. The Company's standard terms and conditions require payment 45 to 75 days from the invoice date, but the timing of payment for specific negotiated terms may vary. The Company also has both prime and subcontracts in support of the provision of goods and services to the U.S. government. Certain of these contracts are subject to the Federal Acquisition Regulation ("FAR") and are priced based on competitive market prices. Under the payment terms of certain of those U.S. government fixed-price contracts, the customer pays the Company performance-based payments, which are interim payments of up to 90% of the costs incurred to date based on quantifiable measures of performance or on the achievement of specified events or milestones. Because the customer retains a portion of the contract price until completion of such contracts, certain of these U.S. government fixed-price contracts result in revenue recognized in excess of billings, which is presented within "Unbilled receivables" on the Consolidated Balance Sheets. The portion of the payments retained by the customer until final contract settlement is not considered a significant financing component because the intent is to protect the customer.

Note 1 - Significant Accounting Policies (continued)

Revenue is measured as the amount of consideration the Company expects to receive in exchange for transferring goods or providing services. Sales, value-added, and other taxes the Company collects concurrent with revenue-producing activities are excluded from revenue. As a practical expedient, the Company may exclude an assessment of whether promised goods or services are performance obligations, if such promised goods and services are immaterial to the customer contract taken as a whole, and combine these with other performance obligations. The Company has also elected not to adjust the promised amount of consideration for the effects of any significant financing component where the Company expects, at contract inception, that the period between when the Company transfers a promised good or service to a customer and when the customer pays for that good or service will be one year or less. Finally, the Company's policy is to exclude performance obligations resulting from contracts with a duration of one year or less from its disclosures related to remaining performance obligations.

The amount of consideration to which the Company expects to be entitled in exchange for the goods and services is not generally subject to significant variations. However, the Company does offer certain customers rebates, prompt payment discounts, end-user discounts, the right to return eligible products, and/or other forms of variable consideration. The Company estimates this variable consideration using the expected value amount, which is based on historical experience. The Company includes estimated amounts in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved. The Company adjusts the estimate of revenue at the earlier of when the amount of consideration the Company expects to receive changes or when the consideration becomes fixed. The Company recognizes the cost of freight and shipping when control of the products or services has transferred to the customer as an expense in "Cost of products sold" on the Consolidated Statement of Income, because those are costs incurred to fulfill the promise recognized, not a separate performance obligation. To the extent certain freight and shipping fees are charged to customers, the Company recognizes the amounts charged to customers as revenues and the related costs as an expense in "Cost of products sold" when control of the related products or services has transferred to the customer.

Contracts are occasionally modified to account for changes in contract specifications, requirements, and pricing. The Company considers contract modifications to exist when the modification either creates new enforceable rights and obligations or changes existing ones. Substantially all of the Company's contract modifications are for goods or services that are distinct from the existing contract. Therefore, the effect of a contract modification on the transaction price and the Company's measure of progress for the performance obligation to which it relates is generally recognized on a prospective basis.

Cash Equivalents:

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

Restricted Cash:

Cash and cash equivalents of \$9.1 million and \$0.8 million were restricted at December 31, 2022 and 2021, respectively. \$8.5 million of this amount at December 31, 2022 is in Russia under the Company's Rail JV, and the Company is presently unable to repatriate these funds to one of its subsidiaries outside of Russia.

Accounts Receivable, Less Allowances:

Accounts receivable, less allowances on the Consolidated Balance Sheets include amounts billed and currently due from customers. The amounts due are stated at their net estimated realizable value. The Company maintains an allowance for doubtful accounts, which represents an estimate of the losses expected from the accounts receivable portfolio, to reduce accounts receivable to their net realizable value. The allowance is based upon historical trends in collections and write-offs, management's judgment of the probability of collecting accounts and management's evaluation of business risk. The Company extends credit to customers satisfying pre-defined credit criteria. The Company believes it has limited concentration of credit risk due to the diversity of its customer base.

Unbilled Receivables:

Unbilled receivables on the Consolidated Balance Sheets primarily include unbilled amounts typically resulting from sales under long-term contracts when the following conditions exist: (i) cost-to-cost method of revenue recognition is utilized; (ii) the revenue recognized exceeds the amount billed to the customer; and (iii) the right to payment is generally subject to the passage of time as milestones are achieved. The amounts recorded for unbilled receivables do not exceed their net realizable value.

Note 1 - Significant Accounting Policies (continued)

Inventories:

Inventories are valued at the lower of cost or net realizable value, with approximately 58% valued by the FIFO method and the remaining 42% valued by the LIFO method. The majority of the Company's domestic inventories are valued by the LIFO method, while all of the Company's international inventories are valued by the FIFO method.

Investments:

Short-term investments are investments with maturities between four months and one year and are valued at amortized cost, which approximates fair value. The Company held short-term investments as of December 31, 2022 and 2021 with a fair value and cost basis of \$39.2 million and \$56.9 million, respectively, which were included in "Other current assets" on the Consolidated Balance Sheets.

Property, Plant and Equipment:

Property, plant and equipment, net on the Consolidated Balance Sheets is valued at cost less accumulated depreciation. Maintenance and repairs are charged to expense as incurred. The provision for depreciation is computed by the straight-line method based upon the estimated useful lives of the assets. The useful lives are 10 to 30 years for buildings, three to 10 years for computer software and three to 20 years for machinery and equipment.

The impairment of long-lived assets is evaluated when events or changes in circumstances indicate that the carrying amount of the asset or related group of assets may not be recoverable. If the expected future undiscounted cash flows are less than the carrying amount of the asset, an impairment loss is recognized at that time to reduce the asset to the lower of its fair value or its net book value.

Leases:

The Company determines if any arrangement is a lease at the inception of a contract. For leases where the Company is the lessee, it recognizes lease assets and related lease liabilities at the lease commencement date based on the present value of lease payments over the lease term. Most of the Company's leases do not provide an implicit interest rate. As a result, the Company uses its incremental borrowing rate based on the information available at the commencement date in determining the present value of lease payments. The lease assets also consist of amounts for favorable or unfavorable lease terms related to acquisitions. Lease expense for operating leases is recognized on a straight-line basis over the lease term as an operating expense while the expense for finance leases is recognized as depreciation expense and interest expense using the accelerated interest method of recognition. A lease asset and lease liability are not recorded for leases with an initial term of 12 months or less, and the lease expense related to these leases is recognized as incurred over the lease term.

Goodwill and Other Intangible Assets:

Intangible assets subject to amortization are amortized on a straight-line method over their legal or estimated useful lives, with useful lives ranging from one to 20 years. Goodwill and indefinite-lived intangible assets not subject to amortization are tested for impairment at least annually. The Company performs its annual impairment test as of October 1st. Furthermore, goodwill and intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying values may not be recoverable in accordance with accounting rules related to goodwill and other intangible assets.

Purchase Accounting and Business Combinations:

Assets acquired and the liabilities assumed as part of a business combination are recognized at their acquisition date fair values. Goodwill as of the acquisition date is measured as the excess of consideration transferred over the net of the acquisition date fair values of the assets acquired and the liabilities assumed. The Company considers inputs to value the assets and liabilities by taking into account competitive trends, market comparisons, independent appraisals, and historical data, among other factors, as supplemented by current and anticipated market conditions. The valuation inputs in these analyses are based on market participant assumptions. The Company may refine these estimates and record adjustments to an asset or liability with the offset to goodwill during the measurement period, which may be up to one year from the acquisition date. Upon the conclusion of the measurement period or final determination of the values of the assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded in the Company's Consolidated Statements of Income.

Note 1 - Significant Accounting Policies (continued)

Product Warranties:

The Company provides limited warranties on certain of its products. The Company accrues liabilities for warranties generally based upon specific claims and in certain instances based on historical warranty claim experience in accordance with accounting rules relating to contingent liabilities. When the Company becomes aware of a specific potential warranty claim for which liability is probable and reasonably estimable, a specific charge is recorded and accounted for accordingly. Adjustments are made quarterly to the accruals as claim data and historical experience change.

Income Taxes:

The Company accounts for income taxes in accordance with ASC 740, "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. The Company recognizes valuation allowances against deferred tax assets by tax jurisdiction when it is more likely than not those assets will not be realized. Accruals for uncertain tax positions are provided for in accordance with ASC 740-10. The Company recognizes interest and penalties related to uncertain tax positions as a component of income tax expense. The Company has elected to account for Global Intangible Low Tax ("GILTI") as a period cost.

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 reporting period. Translation adjustments for assets and liabilities are reflected as a separate component of accumulated other comprehensive loss (income). Foreign currency gains and losses resulting from transactions are included in the Consolidated Statements of Income. Net of related derivative activity, the Company recognized a foreign currency exchange gain resulting from transactions of \$15.4 million for the year ended December 31, 2022 and recognized losses of \$9.4 million and \$10.0 million for the years ended December 31, 2021 and 2020, respectively.

Pension and Other Postretirement Benefits:

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. Actuarial gains and losses are excluded from segment results, while all other components of net periodic benefit cost will continue to be included within segment results.

Stock-Based Compensation:

The Company recognizes stock-based compensation expense over the related vesting period of the awards based on the fair value on the grant date. Stock options are issued with an exercise price equal to the opening market price of Timken 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. The fair value of stock-based awards that will settle in Timken common shares, other than stock options, is based on the opening market price of Timken common shares on the grant date. The fair value of stock-based awards that will settle in cash are remeasured at each reporting period until settlement of the awards. The Company recognizes forfeitures on stock-based awards as they occur. In addition, the Company's share grants provide for the payment of dividends to employees and the Board of Directors upon vesting; these dividends are charged to retained earnings when paid.

Earnings Per Share:

Certain unvested restricted share grants provide for the payment of non-forfeitable dividends. The Company considers these awards as participating securities. Earnings per share are computed using the two-class method. Basic earnings per share are computed by dividing net income less undistributed earnings allocated to unvested restricted shares by the weighted-average number of common shares outstanding during the year. Diluted earnings per share are computed by dividing net income less undistributed earnings allocated to unvested restricted shares by the weighted-average number of common shares outstanding, adjusted for the dilutive impact of outstanding stock-based awards. As of December 31, 2022, there are no participating securities outstanding.

Derivative Instruments:

The Company recognizes all derivatives on the Consolidated Balance Sheets at fair value. Derivatives that are not designated as hedges are adjusted to fair value through earnings. If the derivative is designated and qualifies as a hedge, depending on the nature of the hedge, changes in the fair value of the derivatives are either offset against the change in fair value of the hedged assets, liabilities or firm commitments through earnings or recognized in accumulated other comprehensive loss (income) until the hedged item is recognized in earnings. The Company's holdings of forward foreign currency exchange contracts qualify as derivatives pursuant to the criteria established in derivative accounting guidance, and the Company has designated certain of those derivatives as hedges.

Government Assistance:

From time to time, the Company receives government assistance in the form of grants and other incentives from various governments to support capital projects and other business development. The amount received is typically based on the amount of qualifying capital expenditures or business development costs in the countries providing the government assistance. The Company typically has to meet certain requirements, such as adding a specified number of qualifying positions, to retain the government assistance or the funds can be clawed back by the government. Once the Company determines that it will meet the requirements of the government assistance, the funds are recognized over the life of the related assets or as the costs are incurred. For amounts that are expected to be paid back, the Company recognizes interest expense on those funds.

As of December 31, 2022, the Company has \$0.9 million and \$33.8 million of government assistance in other current liabilities and other non-current liabilities, respectively. In addition, the Company cumulatively recorded \$3.3 million and \$0.2 million of government assistance as a reduction to cost of products sold and SG&A, respectively. The Company also cumulatively recognized interest expense of \$0.9 million related to the expected shortfall of incentive obligations. The following paragraphs discuss the Company's most significant government assistance programs.

In 2022, the Company acquired Spinea. Prior to the acquisition, Spinea received incentives totaling \$18.0 million from the Slovakian Government to invest in a new production facility and related machinery and equipment. As a result, Spinea is required to create 450 new jobs. If Spinea is unable to meet these commitments, a portion of the incentive and related interest will be paid back in October 2024. The Company is currently accounting for a potential shortfall of \$14.7 million, including interest. The remaining amount is being amortized over the period the costs are being incurred. In 2022, the Company recorded amortization expense of \$0.2 million as a reduction to cost of products sold. In addition, the Company recorded total interest expense of \$0.1 million due to the expectation of having to pay a portion of the incentive back.

In 2017 and 2018, the Company received grants from the Romanian Government for the reimbursement of capital investments for its new production facility, totaling \$16.5 million. While the original grants were based on capital investments, the Company needs to pay various taxes, including corporate income tax, payroll taxes and building tax, totaling \$16.5 million between 2019 through 2024. If the total tax obligation is not met, any shortfall will require that the grant and related interest will be paid back in December 2024. The Company is currently accounting for a potential shortfall of \$8.4 million, including interest. The incentive is being amortized over the useful life of the assets. Cumulatively as of December 31, 2022, the Company recorded amortization expense of \$1.2 million as a reduction to cost of products sold. In addition, the Company recorded total interest expense of \$0.8 million due to the expectation of having to pay a portion of the grant back.

The Company may receive other government assistance that is not described above; however, the total amount of the government assistance is immaterial to the Company's Consolidated Financial Statements.

Use of Estimates:

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Because actual results could differ from these estimates, the Company reviews and updates these estimates and assumptions regularly to reflect recent experience.

Recent Accounting Pronouncements:

New Accounting Guidance Adopted:

In November 2021, the FASB issued Accounting Standards Update (“ASU”) 2021-10, “Government Assistance (Topic 832).” ASU 2021-10 is intended to increase transparency of government assistance by requiring entities to disclose the types of government assistance, the entity’s accounting for government assistance, and the effect of the government assistance on an entity’s financial statements. This new guidance is effective for all entities for annual reporting periods beginning after December 15, 2021. Refer to the section above “Government Assistance” for further discussion.

In October 2021, the FASB issued ASU 2021-08, “Business Combinations (Topic 805), Accounting for Contract Assets and Contract Liabilities from Contracts with Customers.” ASU 2021-08 requires contract assets and contract liabilities acquired in a business combination to be recognized in accordance with ASC Topic 606 as if the acquirer had originated the contracts. This new guidance is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. Early adoption is permitted. The Company adopted ASU 2021-08 effective January 1, 2022, and the impact of the adoption was not material to the Company’s results of operations and financial condition.

In December 2019, the FASB issued ASU 2019-12, “Income Taxes (ASC 740) – Simplifying the Accounting for Income Taxes,” which is intended to reduce complexity in the accounting for income taxes while maintaining or improving the usefulness of information provided to financial statement users. The guidance amends certain existing provisions under ASC 740 to address a number of distinct items. This standard was effective for public companies in fiscal years beginning after December 15, 2020, including interim periods within those fiscal years. The Company adopted ASU 2019-12 effective January 1, 2021, and the impact of the adoption was not material to the Company’s results of operations and financial condition.

New Accounting Guidance Issued and Not Yet Adopted:

In September 2022, the FASB issued ASU 2022-04, “Liabilities - Supplier Finance Programs (Subtopic 405-50).” ASU 2022-04 is intended to establish disclosures that enhance the transparency of a supplier finance program used by an entity in connection with the purchase of goods and services. Supplier finance programs, which also may be referred to as reverse factoring, payables finance or structured payables arrangements, allow a buyer to offer its suppliers the option for access to payment in advance of an invoice due date, which is paid by a third-party finance provider or intermediary. Under the guidance, a buyer in a supplier finance program would disclose qualitative and quantitative information about its supplier finance programs. The new guidance is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years, except for the amendment on rollforward information, which is effective for fiscal years beginning after December 15, 2023. Early adoption is permitted. The Company is currently evaluating the impact of the new guidance.

In March 2020, the FASB issued ASU 2020-04, “Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting.” ASU 2020-04 is intended to provide temporary optional expedients and exceptions to the U.S. GAAP guidance on contract modifications and hedge accounting to ease the financial reporting burden related to the expected market transition from the London Interbank Offered Rate (“LIBOR”) and other interbank offered rates to alternative reference rates. In December 2022, the FASB issued ASU 2022-06, “Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848.” ASU 2022-06 extends the period of time financial statement preparers can utilize the reference rate reform relief guidance. The amendments in ASU 2022-06 defer the sunset date of Topic 848 from December 31, 2022, to December 31, 2024, after which entities will no longer be permitted to apply the relief in Topic 848. This guidance is available immediately and may be implemented in any period prior to the guidance expiration on December 31, 2024. On December 5, 2022, the Company entered into the Senior Credit Facility. The Credit Agreement amended and restated the Company’s previous revolving credit agreement, including replacing interest rates based on LIBOR to SOFR. The Company’s remaining activity with LIBOR is intercompany based which eliminates in total for the Company and will be transitioned during 2023.

Acquisitions:

The Company completed two acquisitions in 2022. On November 4, 2022, the Company completed the acquisition of GGB, a global technology and market leader of premium engineered metal-polymer plain bearings for \$302.5 million, net of cash acquired of \$19.2 million, subject to customary post-closing adjustments. GGB's revenue was estimated to be approximately \$200 million for the full year 2022. GGB's products are used mainly in industrial applications, including pumps and compressors, HVAC, off-highway, energy, material handling and aerospace. With manufacturing facilities across the United States, Europe and China, GGB employs approximately 900 people and has a global engineering, distribution and sales footprint. On May 31, 2022, the Company completed the acquisition of Spinea, a European technology leader and manufacturer of highly engineered cycloidal reduction gears and actuators, with estimated 2022 full year sales of approximately \$40.0 million. Spinea's solutions primarily serve high-precision automation and robotics applications in the factory automation sector. Spinea is located in Presov, Slovakia. The purchase price for this acquisition was \$151.2 million, net of cash acquired of \$0.2 million. The Company incurred acquisition-related costs of \$3.6 million in 2022 to complete these acquisitions. Based on markets and customers served, results for GGB are reported in the Mobile Industries and Process Industries segments, and results for Spinea are reported in the Process Industries segment.

On August 20, 2021, the Company completed the acquisition of the assets of iMS, a manufacturer of industrial robotics and automation solutions, with annual sales of approximately \$6.0 million. iMS is headquartered in Norton Shores, Michigan. The purchase price for this acquisition was \$7.7 million. Based on markets and customers served, results for iMS are primarily reported in the Process Industries segment.

Note 2 - Acquisitions and Divestitures (continued)

The purchase price allocations at fair value, net of cash acquired, for 2022 and 2021 acquisitions as of December 31, 2022 and 2021 are presented below:

	2022	2021
Assets:		
Accounts receivable	\$ 30.6	\$ 0.2
Inventories	52.3	1.1
Other current assets	7.6	—
Property, plant and equipment	153.6	0.6
Goodwill	106.9	5.4
Other intangible assets	182.6	2.2
Other non-current assets	12.1	0.2
Total assets acquired	\$ 545.7	\$ 9.7
Liabilities:		
Accounts payable, trade	\$ 16.8	\$ 0.3
Salaries, wages and benefits	11.8	—
Income taxes payable	3.2	—
Other current liabilities	7.0	1.5
Deferred income taxes	30.0	—
Other non-current liabilities	23.2	0.2
Total liabilities assumed	\$ 92.0	\$ 2.0
Net assets acquired	\$ 453.7	\$ 7.7
Cash flow reconciling items:		
Working capital adjustment related to 2020 acquisitions paid in 2021	—	(0.2)
Cash paid for acquisitions, net of cash acquired	\$ 453.7	\$ 7.5

The 2022 acquisitions presented above includes goodwill of \$63.6 million and intangible assets of \$152.0 million for GGB, and \$43.3 million of goodwill and \$30.6 million of intangible assets for Spinea.

The amounts for 2022 in the table above represent the preliminary purchase price allocations for GGB and Spinea. These purchase price allocations, including the residual amount allocated to goodwill, is based on preliminary information and is subject to change as additional information concerning final asset and liability valuations are obtained. The purchase price allocation for GGB is preliminary as a result of the proximity of the acquisition date to December 31, 2022, and as a result, no elements of the purchase price allocation has been finalized. The purchase price allocation for Spinea is preliminary with respect to certain working capital items, specifically inventory, and certain income tax adjustments. During the measurement period for each acquisition, the Company will adjust assets and liabilities if new information is obtained about facts and circumstances that existed as of the acquisition date that, if known, would have resulted in revised estimated values of those assets or liabilities as of that date. The effect of measurement period adjustments to the estimated fair values will be reflected as if the adjustments had been completed on the acquisition date.

Note 2 - Acquisitions and Divestitures (continued)

The following table summarizes the preliminary purchase price allocation at fair value for identifiable intangible assets acquired in 2022 and 2021:

	2022		2021	
		Weighted-Average Life		Weighted-Average Life
Trade names (indefinite life)	\$ 35.2	Indefinite	\$ —	—
Trade names (finite life)	6.2	20 years	—	—
Technology and know-how	38.7	15 years	1.5	19 years
Customer relationships	100.2	16 years	0.5	2 years
Non-competes	—	—	0.2	5 years
Capitalized software	2.3	2 years	—	—
Total intangible assets	\$ 182.6		\$ 2.2	

Divestitures:

During the third quarter of 2022, the Company made the decision to sell its ADS business, located in Manchester, Connecticut. The business met the held for sale criteria, and the Company reclassified its assets and liabilities accordingly. As a result of the carrying value of the business exceeding the estimated sales price less costs to sell, the Company recorded an impairment charge of \$29.3 million. On November 1, 2022, the Company completed the divestiture of the ADS business. ADS had net sales of \$39.7 million and \$48.8 million in 2022 and 2021, respectively. The results of operations of ADS were reported in the Mobile Industries segment based on customers and underlying market sectors served. The Company recorded proceeds of \$33.0 million on the sale of the business.

On September 1, 2022, the Company completed the divestiture of Timken Russia, one of its two subsidiaries in Russia. Timken Russia had net sales of \$4.8 million and \$19.6 million in 2022 and 2021, respectively. The results of operations of Timken Russia were reported in the Mobile Industries and Process Industries segments based on customers and underlying market sectors served. The Company recorded proceeds of \$1.0 million, net of cash divested of \$5.3 million, and recognized a loss of \$2.7 million on the sale of the business. The loss was reflected in other income (expense), net in the Consolidated Statement of Income.

Note 3 - Revenue

The following table presents details deemed most relevant to the users of the financial statements about total revenue for the years ended December 31, 2022, 2021 and 2020:

	December 31, 2022		
	Mobile	Process	Total
United States	\$ 1,060.0	\$ 931.7	\$ 1,991.7
Americas excluding United States	236.4	240.1	476.5
Europe / Middle East / Africa	463.6	532.6	996.2
China	120.1	488.4	608.5
Asia-Pacific excluding China	226.4	197.4	423.8
Net sales	\$ 2,106.5	\$ 2,390.2	\$ 4,496.7

	December 31, 2021		
	Mobile	Process	Total
United States	\$ 950.9	\$ 782.7	\$ 1,733.6
Americas excluding United States	207.3	188.4	395.7
Europe / Middle East / Africa	487.8	540.3	1,028.1
China	125.8	486.1	611.9
Asia-Pacific excluding China	193.9	169.7	363.6
Net sales	\$ 1,965.7	\$ 2,167.2	\$ 4,132.9

	December 31, 2020		
	Mobile	Process	Total
United States	\$ 853.8	\$ 699.6	\$ 1,553.4
Americas excluding United States	168.1	138.0	306.1
Europe / Middle East / Africa	389.9	457.0	846.9
China	102.2	421.0	523.2
Asia-Pacific excluding China	157.6	126.0	283.6
Net sales	\$ 1,671.6	\$ 1,841.6	\$ 3,513.2

When reviewing revenues by sales channel, the Company separates net sales to OEMs from sales to distributors and end users. The following table presents the percent of revenues by sales channel for the years ended December 31, 2022, 2021 and 2020:

Revenue by sales channel	2022	2021	2020
Original equipment manufacturers	60%	60%	60%
Distribution/end users	40%	40%	40%

In addition to disaggregating revenue by segment and geography and by sales channel as shown above, the Company believes information about the timing of transfer of goods or services, type of customer and distinguishing service revenue from product sales is also relevant. During the years ended December 31, 2022 and December 31, 2021, approximately 9% of total net sales were recognized on an over-time basis, compared to 11% in 2020. These sales were recognized over-time due to the continuous transfer of control to the customer, with the remainder recognized as of a point in time. Approximately 4% of total net sales represented service revenue in 2022, 2021 and 2020. Finally, business with the U.S. government or its contractors represented approximately 7% of total net sales for 2022, 2021 and 2020.

Note 3 - Revenue (continued)

Remaining Performance Obligations:

Remaining performance obligations represent the transaction price of orders meeting the definition of a contract for which work has not been performed and excludes unexercised contract options. Performance obligations having a duration of more than one year are concentrated in contracts for certain products and services provided to the U.S. government or its contractors. The aggregate amount of the transaction price allocated to remaining performance obligations for such contracts with a duration of more than one year was approximately \$171 million at December 31, 2022. The decrease in the remaining performance obligations compared to December 31, 2021 was due to the divestiture of ADS in the fourth quarter of 2022. Refer to *Note 2 - Acquisitions and Divestitures* for further information regarding the divestiture.

Unbilled Receivables:

The following table contains a rollforward of unbilled receivables for the years ended December 31, 2022 and 2021:

	2022	2021
Beginning balance, January 1	\$ 104.5	\$ 110.9
Additional unbilled revenue recognized	396.2	383.0
Less: amounts billed to customers	(370.5)	(389.4)
Less: unbilled receivables divested	(26.3)	—
Ending balance	\$ 103.9	\$ 104.5

There were no impairment losses recorded on unbilled receivables for the years ended December 31, 2022 and 2021.

Note 4 - Segment Information

The Company has historically operated under two reportable segments: (1) Mobile Industries and (2) Process Industries.

Description of types of products and services from which each reportable segment derives its revenues:

The Company's reportable segments are business units that target different industry sectors. While the segments often operate using a shared infrastructure, each reportable segment is managed to address specific customer needs in these diverse market segments.

Mobile Industries offers an extensive portfolio of bearings, seals, lubrication devices and systems, as well as industrial motion components, engineered chain, augers, belts, couplings, clutches, brakes and related products and maintenance services, to OEMs and end users of: off-highway equipment for the agricultural, construction, mining, outdoor power equipment and powersports markets; on-highway vehicles including passenger cars, light trucks and medium- and heavy-duty trucks; rail cars and locomotives. Beyond service parts sold to OEMs, aftermarket sales and services to individual end users, equipment owners, operators and maintenance shops are handled directly or through the Company's extensive network of authorized automotive and heavy-truck distributors, and include hub units, specialty kits and more. Mobile Industries also provides power transmission systems and flight-critical components for civil and military aircraft, which include bearings, turbine engine components, gears and housings.

Process Industries supplies industrial bearings and assemblies, industrial motion components such as gears and gearboxes, linear motion products, couplings, seals, lubricants, chains, belts and related products and services to OEMs and end users in industries that place heavy demands on operating equipment they make or use. This includes: metals, mining, cement and aggregate production; wind energy and solar; coal power generation and oil and gas; pulp and paper in applications including printing presses; packaging and automation; and cranes, hoists, drawbridges, gear drives, conveyors, health and critical motion control equipment, marine equipment and food processing equipment. This segment also supports aftermarket sales and service needs through its global network of authorized industrial distributors and through the provision of services directly to end users. In addition, the Company's industrial services group offers end users a broad portfolio of maintenance support and capabilities that include repair and service for bearings and gearboxes as well as electric motor rewind, repair and services.

Measurement of segment profit or loss and segment assets:

The Company evaluates performance and allocates resources based on return on capital and profitable growth. The primary measurement used by management to measure the financial performance of each segment is EBITDA.

The accounting policies of the reportable segments are the same as those described in the summary of significant accounting policies.

Factors used by management to identify the enterprise's reportable segments:

Net sales by geographic area are reported by the destination of net sales, which is reflective of how the Company operates its segments. Long-lived assets by geographic area are reported by the location of the subsidiary.

Timken's non-U.S. operations are subject to normal international business risks not generally applicable to a domestic business. These risks include currency fluctuation, changes in tariff restrictions, difficulties in establishing and maintaining relationships with local distributors and dealers, import and export licensing requirements, difficulties in staffing and managing geographically diverse operations and restrictive regulations by foreign governments, including price and exchange controls, compliance with a variety of foreign laws and regulations, including unexpected changes in taxation and environmental regulatory requirements, and disadvantages of competing against companies from countries that are not subject to U.S. laws and regulations, including the FCPA.

Note 4 - Segment Information (continued)

Business Segment Information:

The following tables provide segment financial information and a reconciliation of segment results to consolidated results:

	2022	2021	2020
Net sales to external customers:			
Mobile Industries	\$ 2,106.5	\$ 1,965.7	\$ 1,671.6
Process Industries	2,390.2	2,167.2	1,841.6
	\$ 4,496.7	\$ 4,132.9	\$ 3,513.2
Segment EBITDA:			
Mobile Industries	\$ 217.1	\$ 240.1	\$ 232.5
Process Industries	621.5	506.3	442.9
Total EBITDA, for reportable segments	\$ 838.6	\$ 746.4	\$ 675.4
Unallocated corporate expense	(50.0)	(46.1)	(40.7)
Corporate pension and other postretirement benefit related expense ⁽¹⁾	(2.9)	(0.3)	(18.5)
Acquisition-related gain ⁽²⁾	—	0.9	11.1
Depreciation and amortization	(164.0)	(167.8)	(167.1)
Interest expense	(74.6)	(58.8)	(67.6)
Interest income	3.8	2.3	3.7
Income before income taxes	\$ 550.9	\$ 476.6	\$ 396.3

⁽¹⁾ Corporate pension and other postretirement benefit related expense represents curtailments, professional fees associated with pension de-risking and actuarial losses that resulted from the remeasurement of pension and other postretirement plan assets and obligations as a result of changes in assumptions.

⁽²⁾ The acquisition-related gain represents a bargain purchase price gain on the acquisition of Aurora, acquired on November 30, 2020. See Note 2 - Acquisitions and Divestitures for additional information.

	2022	2021
Assets employed at year-end:		
Mobile Industries	\$ 2,371.6	\$ 2,216.4
Process Industries	2,963.4	2,548.3
Corporate ⁽²⁾	437.4	406.0
	\$ 5,772.4	\$ 5,170.7

⁽²⁾ Corporate assets include corporate buildings and cash and cash equivalents.

	2022	2021	2020
Capital expenditures:			
Mobile Industries	\$ 71.2	\$ 52.3	\$ 70.5
Process Industries	105.8	95.4	50.1
Corporate	1.4	0.6	1.0
	\$ 178.4	\$ 148.3	\$ 121.6
Depreciation and amortization:			
Mobile Industries	\$ 75.2	\$ 80.1	\$ 79.7
Process Industries	87.6	86.6	86.6
Corporate	1.2	1.1	0.8
	\$ 164.0	\$ 167.8	\$ 167.1

Note 4 - Segment Information (continued)

Geographic Financial Information:

	2022	2021
Property, Plant and Equipment, net:		
United States	\$ 418.3	\$ 398.2
China	272.5	235.3
India	130.6	142.9
Romania	101.8	112.1
Rest of world	284.2	166.8
	\$ 1,207.4	\$ 1,055.3

Refer to *Note 3 - Revenue* for further information pertaining to geographic net sales information.

Note 5 - Income Taxes

Income before income taxes, based on geographic location of the operations to which such earnings are attributable, is provided below. As the Company has elected to treat certain foreign subsidiaries as branches for U.S. income tax purposes, pretax income attributable to the United States shown below may differ from the pretax income reported in the Company's annual U.S. federal income tax return.

Income before income taxes:

	2022	2021	2020
United States	\$ 86.0	\$ 125.8	\$ 144.1
Non-United States	464.9	350.8	252.2
Income before income taxes	\$ 550.9	\$ 476.6	\$ 396.3

The provision for income taxes consisted of the following:

	2022	2021	2020
Current:			
Federal	\$ 11.2	\$ 8.1	\$ 40.3
State and local	6.7	3.9	7.9
Foreign	119.6	98.2	78.9
	\$ 137.5	\$ 110.2	\$ 127.1
Deferred:			
Federal	\$ (7.8)	\$ (5.2)	\$ (19.5)
State and local	(0.3)	(3.4)	(1.3)
Foreign	4.5	(6.5)	(2.4)
	\$ (3.6)	\$ (15.1)	\$ (23.2)
United States and foreign tax provision on income	\$ 133.9	\$ 95.1	\$ 103.9

The Company made net income tax payments of \$120.6 million, \$100.7 million and \$119.3 million in 2022, 2021 and 2020, respectively.

The following table is the reconciliation between the provision for income taxes and the amount computed by applying the U.S. federal income tax rate of 21% to income before taxes:

	2022	2021	2020
Income tax at the U.S. federal statutory rate	\$ 115.7	\$ 100.1	\$ 83.2
Adjustments:			
State and local income taxes, net of federal tax benefit	5.3	4.0	4.8
Tax on foreign remittances and U.S. tax on foreign income	19.0	15.4	22.5
Tax expense related to undistributed earnings of foreign subsidiaries	1.0	0.1	0.1
Foreign losses without current tax benefits	3.1	2.6	2.5
Foreign earnings taxed at different rates including tax holidays	19.4	15.4	11.1
U.S. foreign tax credit	(15.2)	(11.5)	(13.8)
Accruals and settlements related to tax audits	(9.5)	(7.7)	3.4
Valuation allowance changes	(0.9)	(7.8)	(0.7)
Stock based compensation	(1.2)	(8.1)	(3.1)
Other items, net	(2.8)	(7.4)	(6.1)
Provision for income taxes	\$ 133.9	\$ 95.1	\$ 103.9
Effective income tax rate	24.3%	20.0%	26.2%

Note 5 - Income Taxes (continued)

The Company released \$7.8 million of foreign valuation allowance for the year ended December 31, 2021, which was related to a valuation allowance that was recorded against certain net operating loss carryforwards in China. Once established, a valuation allowance is released when, based on the weight of all available evidence, management concludes that related deferred tax assets are more likely than not to be realized. Management concluded in the fourth quarter of 2021 that there was sufficient evidence to release the valuation allowance.

There are no changes to the Company's assertion about its permanent reinvestment in undistributed foreign earnings. The Company recorded \$1.0 million and \$0.1 million of income tax expense related to foreign withholding taxes on planned one-time distributions for the years ended December 31, 2022 and 2021, respectively. No additional deferred taxes have been recorded for any other outside basis differences as these amounts continue to be indefinitely reinvested in foreign operations. The amounts of undistributed foreign earnings were \$1,620.0 million and \$1,249.1 million at December 31, 2022 and December 31, 2021, respectively. It is not practicable to calculate the additional taxes that might be payable on such unremitted earnings due to the variety of circumstances and tax laws applicable at the time of distribution.

The effect of temporary differences giving rise to deferred tax assets and liabilities at December 31, 2022 and 2021 was as follows:

	2022	2021
Deferred tax assets:		
Accrued postretirement benefits cost	\$ 8.4	\$ 12.4
Accrued pension cost	46.5	49.9
Other employee benefit accruals	16.1	15.7
Tax loss and credit carryforwards	80.7	83.2
Other, net	61.7	63.9
Valuation allowances	(31.3)	(31.0)
	\$ 182.1	\$ 194.1
Deferred tax liabilities - principally depreciation and amortization	(250.9)	(247.9)
Net deferred tax liabilities	\$ (68.8)	\$ (53.8)

The Company has U.S. federal and state tax credit and loss carryforwards with tax benefits totaling \$9.8 million, portions of which will expire in 2023 and continue until 2040. In addition, the Company has loss carryforwards in various non-U.S. jurisdictions with tax benefits totaling \$70.9 million, portions of which will expire in 2023 while others will be carried forward indefinitely. The Company has provided valuation allowances of \$30.6 million against certain of these carryforwards and \$0.7 million against other deferred tax assets. A majority of the non-U.S. loss carryforwards represent local country net operating losses for branches of the Company or entities treated as branches of the Company under U.S. tax law for which deferred taxes have been recorded.

As of December 31, 2022, the Company had \$26.0 million of total gross unrecognized tax benefits, \$23.3 million of which would favorably impact the Company's effective income tax rate in any future period if such benefits were recognized. As of December 31, 2022, the Company believes it is reasonably possible that the amount of unrecognized tax positions could decrease by approximately \$2.7 million during the next 12 months. The potential decrease would primarily be driven by settlements with tax authorities and the expiration of various applicable statutes of limitation. As of December 31, 2022, the Company had accrued \$8.8 million of interest and penalties related to uncertain tax positions. The Company records interest and penalties related to uncertain tax positions as a component of income tax expense.

As of December 31, 2021, the Company had \$36.1 million of total gross unrecognized tax benefits, \$30.7 million of which would favorably impact the Company's effective income tax rate in any future period if such benefits were recognized. As of December 31, 2021, the Company had accrued \$8.9 million of interest and penalties related to uncertain tax positions. The Company records interest and penalties related to uncertain tax positions as a component of income tax expense.

As of December 31, 2020, the Company had \$45.6 million of total gross unrecognized tax benefits, \$39.2 million of which would favorably impact the Company's effective income tax rate in any future period if such benefits were recognized. As of December 31, 2020, the Company had accrued \$8.6 million of interest and penalties related to uncertain tax positions.

Note 5 - Income Taxes (continued)

The following table reconciles the Company's total gross unrecognized tax benefits for the years ended December 31, 2022, 2021 and 2020:

	2022	2021	2020
Beginning balance, January 1	\$ 36.1	\$ 45.6	\$ 38.9
Tax positions related to the current year:			
Additions	0.6	1.6	2.2
Tax positions related to prior years:			
Additions	4.0	3.7	8.7
Reductions	(4.7)	(8.1)	(1.0)
Settlements with tax authorities	(1.9)	(1.7)	(0.3)
Lapses in statutes of limitation	(8.1)	(5.0)	(2.9)
Ending balance, December 31	\$ 26.0	\$ 36.1	\$ 45.6

During 2022, gross unrecognized tax benefits decreased primarily for releases of accruals related to lapses in statute of limitations and reductions related to foreign currency for non-U.S. positions. These decreases were partially offset by accruals for uncertain tax positions related to prior year tax matters in multiple jurisdictions related to acquisitions.

During 2021, gross unrecognized tax benefits decreased primarily for releases of accruals related to closing agreements and lapses in statute of limitations for the U.S. and a favorable non-U.S. transfer pricing settlement. These decreases were partially offset by accruals for uncertain tax positions related to non-U.S. non-deductible expenses.

During 2020, gross unrecognized tax benefits increased primarily for additional accruals for uncertain tax positions related to non-U.S. transfer pricing along with prior year tax matters in multiple jurisdictions related to previous acquisitions and non-deductible expenses. These increases were partially offset by releases of accrual for lapses in statutes of limitations.

As of December 31, 2022, the Company is subject to examination by the IRS for tax years 2017 to the present. The Company also is subject to tax examination in various U.S. state and local tax jurisdictions for tax years 2015 to the present, as well as various foreign tax jurisdictions, including Mexico, China, Poland, France, Germany, India, Romania and Slovakia for tax years as early as 2003 to the present. The Company's unrecognized tax benefits are presented on the Consolidated Balance Sheets as a component of other non-current liabilities, or in certain instances, as a reduction to deferred income taxes.

Note 6 - Earnings Per Share

The following table sets forth the reconciliation of the numerator and the denominator of basic earnings per share and diluted earnings per share for the years ended December 31, 2022, 2021 and 2020:

	2022		2021		2020
Numerator:					
Net income attributable to The Timken Company	\$ 407.4	\$	369.1	\$	284.5
Less: undistributed earnings allocated to nonvested stock	—		—		—
Net income available to common shareholders for basic and diluted earnings per share	\$ 407.4	\$	369.1	\$	284.5
Denominator:					
Weighted average number of shares outstanding - basic	73,602,247		75,885,316		75,324,280
Effect of dilutive securities:					
Stock options and awards - based on the treasury stock method	721,592		1,121,273		1,047,086
Weighted average number of shares outstanding, assuming dilution of stock options and awards	74,323,839		77,006,589		76,371,366
Basic earnings per share	\$ 5.54	\$	4.86	\$	3.78
Diluted earnings per share	\$ 5.48	\$	4.79	\$	3.72

The dilutive effect of stock options and awards includes all outstanding stock options and awards except stock options that are considered antidilutive. Stock options are antidilutive when the exercise price exceeds the average market price of the Company's common shares during the periods presented. The antidilutive stock options outstanding were zero during 2022 and 2021, and 676,627 during 2020.

Note 7 - Inventories

The components of inventories at December 31, 2022 and 2021 were as follows:

	2022		2021
Manufacturing supplies	\$ 41.7	\$	38.0
Raw materials	132.0		121.8
Work in process	491.2		418.4
Finished products	584.8		527.8
Subtotal	\$ 1,249.7	\$	1,106.0
Allowance for surplus and obsolete inventory	(58.4)		(63.3)
Total Inventories, net	\$ 1,191.3	\$	1,042.7

Inventories at December 31, 2022 valued on the FIFO cost method were 58% and the remaining 42% were valued by the LIFO method. If all inventories had been valued at FIFO, inventories would have been \$235.4 million and \$199.4 million greater at December 31, 2022 and 2021, respectively. The Company recognized an increase in its LIFO reserve of \$36.0 million during 2022, compared to an increase in its LIFO reserve of \$27.3 million during 2021. The increase in inventories from 2021 was primarily due to higher demand levels.

Note 8 - Property, Plant and Equipment

The components of property, plant and equipment, net at December 31, 2022 and 2021 were as follows:

	2022	2021
Land and buildings	\$ 628.4	\$ 554.1
Machinery and equipment	2,316.5	2,252.4
Subtotal	\$ 2,944.9	\$ 2,806.5
Less: accumulated depreciation	(1,737.5)	(1,751.2)
Property, Plant and Equipment, net	\$ 1,207.4	\$ 1,055.3

Total depreciation expense was \$113.4 million, \$113.3 million and \$110.9 million in 2022, 2021 and 2020, respectively.

Note 9 - Goodwill and Other Intangible Assets

Goodwill:

The Company tests goodwill and indefinite-lived intangible assets for impairment at least annually, performing its annual impairment test as of October 1st. Furthermore, goodwill and indefinite-lived intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable.

The Company reviews goodwill for impairment at the reporting unit level. The Mobile Industries segment has three reporting units and the Process Industries segment has two reporting units. Changes in the carrying value of goodwill were as follows:

Year ended December 31, 2022:

	Mobile Industries	Process Industries	Total
Beginning Balance	\$ 371.7	\$ 651.0	\$ 1,022.7
Acquisitions	30.5	76.4	106.9
Foreign currency translation adjustments	(11.6)	(19.7)	(31.3)
Ending Balance	\$ 390.6	\$ 707.7	\$ 1,098.3

The acquisition of GGB added \$63.6 million of goodwill, and the acquisition of Spinea added \$43.3 million of goodwill. The Company is still evaluating the tax deductibility of goodwill from the GGB acquisition, but it expects a portion of the goodwill to be deductible for tax purposes. The goodwill for Spinea is expected to be 100% tax deductible.

Year ended December 31, 2021:

	Mobile Industries	Process Industries	Total
Beginning Balance	\$ 384.6	\$ 663.0	\$ 1,047.6
Acquisitions	—	5.4	5.4
Foreign currency translation adjustments and other changes	(12.9)	(17.4)	(30.3)
Ending Balance	\$ 371.7	\$ 651.0	\$ 1,022.7

The acquisition of iMS added \$5.4 million of goodwill and was 100% tax deductible.

No material goodwill impairment losses were recorded in 2022, 2021 or 2020.

Note 9 - Goodwill and Other Intangible Assets (continued)

Intangible Assets:

The following table displays intangible assets as of December 31, 2022 and 2021:

	2022			2021		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Intangible assets subject to amortization:						
Customer relationships	\$ 561.5	\$ (183.2)	\$ 378.3	\$ 518.1	\$ (189.3)	\$ 328.8
Technology and know-how	273.1	(80.4)	192.7	270.7	(86.6)	184.1
Trade names	18.4	(8.7)	9.7	14.3	(9.6)	4.7
Capitalized Software	288.4	(266.3)	22.1	280.0	(261.3)	18.7
Other	3.3	(2.3)	1.0	4.7	(3.6)	1.1
	\$ 1,144.7	\$ (540.9)	\$ 603.8	\$ 1,087.8	\$ (550.4)	\$ 537.4
Intangible assets not subject to amortization:						
Trade names	\$ 152.8		\$ 152.8	122.7		\$ 122.7
FAA air agency certificates	8.7		8.7	8.7		8.7
	\$ 161.5		\$ 161.5	131.4		\$ 131.4
Total intangible assets	\$ 1,306.2	\$ (540.9)	\$ 765.3	\$ 1,219.2	\$ (550.4)	\$ 668.8

Intangible assets acquired in 2022 totaled \$182.6 million. Intangible assets subject to amortization were assigned useful lives of one to 20 years and had a weighted-average amortization period of 16.3 years.

Amortization expense for intangible assets was \$50.6 million, \$54.5 million and \$56.2 million for the years ended December 31, 2022, 2021 and 2020, respectively. Amortization expense included \$43.9 million, \$46.8 million and \$47.3 million related to intangible assets acquired as part of a business combination for the years ended December 31, 2022, 2021 and 2020, respectively. Amortization expense for intangible assets is estimated to be approximately \$54.9 million in 2023, \$49.0 million in 2024, \$47.5 million in 2025, \$45.9 million in 2026 and \$44.5 million in 2027. Substantially all amortization expense for intangible assets was recorded in Cost of product sold on the Consolidated Statements of Income.

Note 10 - Other Current Liabilities

The following table displays other current liabilities as of December 31, 2022 and 2021:

(Dollars in millions)

	2022	2021
Sales rebates	\$ 82.9	\$ 70.3
Deferred revenue	54.3	3.8
Operating lease liabilities	24.1	26.2
Product warranty	23.5	11.7
Freight and duties	21.7	25.5
Current derivative liability	19.8	0.9
Taxes other than income and payroll taxes	18.7	16.0
Professional fees	17.4	10.8
Interest	15.0	10.8
Restructuring	3.1	7.0
Other	72.4	67.6
Total other current liabilities	\$ 352.9	\$ 250.6

Note 11 - Leasing

The Company enters into operating and finance leases for manufacturing facilities, warehouses, sales offices, information technology equipment, plant equipment, vehicles and certain other equipment.

Lease expense for the years ended December 31, 2022, 2021 and 2020 as follows:

	2022		2021		2020
Operating lease expense	\$ 30.3	\$	34.1	\$	36.0
Amortization of right-of-use assets on finance leases	1.7		2.3		1.5
Total lease expense	\$ 32.0	\$	36.4	\$	37.5

Cash flows from operating and financing leases for the years ended December 31, 2022, 2021 and 2020 as follows:

	2022		2021		2020
Cash paid for amounts included in the measurement of lease liabilities:					
Operating cash flows from operating leases	\$ 30.1	\$	32.9	\$	35.7
Financing cash flows from finance leases	1.2		2.2		1.2

The following tables present the impact of leasing on the Consolidated Balance Sheets at December 31, 2022 and 2021:

Operating Leases	2022		2021
Lease assets:			
Operating lease assets	\$ 101.4	\$	118.9
Lease liabilities:			
Short-term operating lease liabilities	\$ 24.1	\$	26.2
Long-term operating lease liabilities	65.2		77.6
Total operating lease liabilities	\$ 89.3	\$	103.8

Short-term operating lease liabilities at December 31, 2022 and 2021 are included in other current liabilities on the Consolidated Balance Sheets.

Finance Leases	2022		2021
Lease assets:			
Property, plant and equipment, net	\$ 4.0	\$	5.3
Lease liabilities:			
Current portion of long-term debt	\$ 1.3	\$	1.4
Long-term debt	1.9		2.9
Total finance lease liabilities	\$ 3.2	\$	4.3

Note 11 - Leasing (continued)

Future minimum lease payments under non-cancellable leases at December 31, 2022 were as follows:

	Operating Leases		Finance Leases	
Year Ending December 31,				
2023	\$	27.0	\$	1.4
2024		18.6		0.9
2025		15.2		0.6
2026		11.4		0.3
2027		9.5		0.1
Thereafter		17.9		—
Total future minimum lease payments	\$	99.6	\$	3.3
Less: imputed interest		(10.3)		(0.1)
Total	\$	89.3	\$	3.2

The following tables present lease assets added for the periods ended December 31, 2022 and 2021:

	2022		2021	
Lease assets added in the period:				
Operating leases	\$	22.1	\$	22.9
Finance leases		0.9		1.2

The following tables present other information related to leases at December 31, 2022 and 2021:

	2022		2021	
Weighted-average remaining lease term:				
Operating leases		5.4 years		5.4 years
Finance leases		2.8 years		2.9 years
Weighted-average discount rate:				
Operating leases		3.55%		3.30%
Finance leases		3.07%		2.71%

Note 12 - Financing Arrangements

Short-term debt as of December 31, 2022 and 2021 was as follows:

	2022	2021
Borrowings under lines of credit for certain of the Company's foreign subsidiaries with various banks with interest rates ranging from 2.38% to 5.50% at December 31, 2022 and 0.50% to 2.00% at December 31, 2021	46.3	42.6
Short-term debt	\$ 46.3	\$ 42.6

The lines of credit for certain of the Company's foreign subsidiaries provide for short-term borrowings up to \$234.2 million in the aggregate. Most of these lines of credit are uncommitted. At December 31, 2022, the Company's foreign subsidiaries had borrowings outstanding of \$46.3 million and bank guarantees of \$2.8 million, which reduced the aggregate availability under these facilities to \$185.1 million. The weighted-average interest rate on these lines of credit during the year were 1.4%, 0.8% and 0.6% in 2022, 2021 and 2020, respectively. The increase in the weighted-average interest rate was primarily due to higher borrowing rates. The weighted-average interest rate on lines of credit outstanding at December 31, 2022 and 2021 was 1.4% and 0.6%, respectively.

Long-term debt as of December 31, 2022 and 2021 was as follows:

	2022	2021
Variable-rate Senior Credit Facility with an average interest rate on U.S. Dollar of 5.10% and Euro of 2.21% at December 31, 2022 and 1.09% and 1.00%, respectively, at December 31, 2021	\$ 8.5	\$ 9.0
Variable-rate Accounts Receivable Facility, with an interest rate of 5.01% at December 31, 2022.	85.0	—
Variable-rate Term Loan ⁽¹⁾ , maturing on December 5, 2027, with an interest rate of 5.55% at December 31, 2022 and of 1.23% at December 31, 2021	399.1	321.1
Fixed-rate Senior Unsecured Notes ⁽¹⁾ , maturing on September 1, 2024, with an interest rate of 3.875%	349.8	349.5
Fixed-rate Euro Senior Unsecured Notes ⁽¹⁾ , maturing on September 7, 2027, with an interest rate of 2.02%	160.4	170.3
Fixed-rate Senior Unsecured Notes ⁽¹⁾ , maturing on December 15, 2028, with an interest rate of 4.50%	397.2	396.9
Fixed-rate Medium-Term Notes, Series A ⁽¹⁾ , maturing at various dates through May 2028, with interest rates ranging from 6.74% to 7.76%	154.8	154.7
Fixed-rate Senior Unsecured Notes ⁽¹⁾ , maturing on April 1, 2032, with an interest rate of 4.125%	342.1	—
Fixed-rate Euro Bank Loan, maturing on June 30, 2033, with an interest rate of 2.15%	13.6	15.8
Other	6.4	5.0
Total debt	\$ 1,916.9	\$ 1,422.3
Less current maturities	2.7	11.2
Long-term debt	\$ 1,914.2	\$ 1,411.1

⁽¹⁾ Net of discount and fees

The Company has a \$100.0 million Accounts Receivable Facility that matures on November 30, 2024. Under the terms of the Accounts Receivable Facility, the Company sells, on an ongoing basis, certain domestic trade receivables to Timken Receivables Corporation, a wholly owned consolidated subsidiary that, in turn, uses the trade receivables to secure borrowings that are funded through a vehicle that issues commercial paper in the short-term market. Borrowings under the Accounts Receivable Facility may be limited to certain borrowing base limitations. These limitations reduced the availability of the Accounts Receivable Facility to \$86.7 million at December 31, 2022. As of December 31, 2022, there were \$85.0 million outstanding borrowings under the Accounts Receivable Facility, which reduced the availability under this facility to \$1.7 million. The cost of this facility, which is the prevailing commercial paper rate plus facility fees, is considered a financing cost and is included in interest expense in the Consolidated Statements of Income. The interest rate was 5.0%, 0.9% and 1.0% at December 31, 2022, 2021 and 2020, respectively.

Note 12 - Financing Arrangements (continued)

On December 5, 2022, the Company entered into the Credit Agreement, which is comprised of the \$750.0 million Senior Credit Facility and \$400.0 million 2027 Term Loan that mature on December 5, 2027. The Credit Agreement amended and restated the Company's previous revolving credit agreement, dated as of June 25, 2019, and replaced the \$350.0 million 2023 Term Loan that was set to mature on September 11, 2023. At December 31, 2022, the Senior Credit Facility had outstanding borrowings of \$8.5 million, which reduced the availability under this facility to \$741.5 million. The Credit Agreement has two financial covenants: a consolidated leverage ratio and a consolidated interest coverage ratio.

On March 28, 2022, the Company issued the 2032 Notes in the aggregate principal amount of \$350.0 million with an interest rate of 4.125%, maturing on April 1, 2032. Proceeds from the 2032 Notes were used for general corporate purposes, which included repayment of borrowings under the Senior Credit Facility and the Accounts Receivable Facility outstanding at the time of issuance. In addition, a portion of the proceeds from the 2032 Notes was used to fund the Spinea acquisition, which closed in the second quarter of 2022.

At December 31, 2022, the Company was in full compliance with all applicable covenants on its outstanding debt.

In the ordinary course of business, the Company utilizes standby letters of credit issued by financial institutions to guarantee certain obligations, most of which relate to insurance contracts. At December 31, 2022, outstanding letters of credit totaled \$50.2 million, primarily having expiration dates within 12 months.

The maturities of long-term debt (including \$3.2 million of finance leases) for the years subsequent to December 31, 2022 are as follows:

Year	
2023	\$ 2.7
2024	442.0
2025	26.6
2026	51.4
2027	529.0
Thereafter	877.1

Interest paid was \$72.5 million in 2022, \$56.5 million in 2021 and \$65.2 million in 2020. This differs from interest expense due to the timing of payments, the amortization of deferred financing fees and interest capitalized of \$1.0 million in 2022, \$2.6 million in 2021 and \$1.5 million in 2020.

Note 13 - Contingencies

The Company and certain of its subsidiaries have been identified as potentially responsible parties for investigation and remediation under the Comprehensive Environmental Response, Compensation and Liability Act, known as the Superfund, or similar state laws with respect to certain sites. Claims for investigation and remediation have been asserted against numerous other entities, which are believed to be financially solvent and are expected to fulfill their proportionate share of the obligation.

On December 28, 2004, the United States Environmental Protection Agency (“USEPA”) sent Lovejoy, Inc. (“Lovejoy”) a Special Notice Letter that identified Lovejoy as a potentially responsible party, together with at least 14 other companies, at the Ellsworth Industrial Park Site in Downers Grove, DuPage County, Illinois (the “Site”). The Company acquired Lovejoy in 2016. Lovejoy’s Downers Grove property is situated within the Ellsworth Industrial Complex. The USEPA and the Illinois Environmental Protection Agency (“IEPA”) allege there have been one or more releases or threatened releases of hazardous substances, allegedly including, but not limited to, a release or threatened release on or from Lovejoy’s property, at the Site. The relief sought by the USEPA and IEPA includes further investigation and potential remediation of the Site and reimbursement of response costs. Lovejoy’s allocated share of past and future costs related to the Site, including for investigation and/or remediation, could be significant. All previously pending property damage and personal injury lawsuits against Lovejoy related to the Site were settled or dismissed prior to our acquisition of Lovejoy.

The Company had total environmental accruals of \$4.8 million and \$6.0 million for various known environmental matters that are probable and reasonably estimable as of December 31, 2022 and 2021, respectively, which includes the Lovejoy matter discussed above. These accruals were recorded based upon the best estimate of costs to be incurred in light of the progress made in determining the magnitude of remediation costs, the timing and extent of remedial actions required by governmental authorities and the amount of the Company’s liability in proportion to other responsible parties.

Product Warranties:

In addition to the contingencies above, the Company provides limited warranties on certain of its products. The product warranty liability included in “Other current liabilities” on the Consolidated Balance Sheets for 2022 and 2021 was \$23.5 million and \$11.7 million, respectively. The balances at the end of each respective period represent the best estimates of costs for future claims for products that are still under warranty. The increase in the liability for 2022 primarily relates to additional accruals for certain products sold into the automotive and wind energy sectors. Accrual estimates are based on actual claims and expected trends that continue to mature. The Company is currently evaluating claims raised by certain customers with respect to the performance of bearings sold into the wind energy sector. Management believes that the outcome of these claims will not have a material effect on the Company’s consolidated financial position; however, the effect of any such outcome may be material to the results of operations of any particular period in which costs in excess of amounts provided, if any, are recognized.

The following is a rollforward of the consolidated product warranty accrual at December 31, 2022 and December 31, 2021, respectively:

	December 31, 2022	December 31, 2021
Beginning balance, January 1	\$ 11.7	\$ 9.4
Expense	14.7	10.1
Payments	(2.9)	(7.8)
Ending balance	\$ 23.5	\$ 11.7

Note 14 - Stock Compensation

Under its long-term incentive plan, the Company's common shares have been made available for grant, at the discretion of the Compensation Committee of the Board of Directors, to officers, directors and other key employees. Grants can take the form of performance- or time-based restricted stock units, deferred shares and stock options. A summary of the awards granted in 2022 is presented below:

	Expected to be Settled in Equity	Expected to be Settled in Cash	Total Awards Granted
Performance-based restricted stock units	194,875	8,755	203,630
Time-based restricted stock units	155,470	5,845	161,315
Deferred shares	19,500	—	19,500

Performance-based restricted stock units are calculated and awarded based on the achievement of specified performance objectives and cliff vest three years from the date of grant. Time-based restricted stock units generally vest in 25% increments annually beginning on the first anniversary of the grant. Deferred shares generally cliff vest in a range of one to five years from the date of grant. For time-based restricted stock units that are expected to settle in cash, the Company had \$2.9 million and \$0.9 million accrued in salaries, wages and benefits as of December 31, 2022 and 2021, respectively, on the Consolidated Balance Sheets.

A summary of stock award activity, including performance-based restricted stock units, time-based restricted stock units and deferred shares that will settle in common shares for the year ended December 31, 2022 is as follows:

	Number of Shares	Weighted-average Grant Date Fair Value
Outstanding - beginning of year	993,971	\$ 56.06
Granted - new awards	369,845	66.49
Adjusted for performance results achieved ⁽¹⁾	(12,836)	42.60
Vested	(386,594)	48.33
Canceled or expired	(26,415)	64.13
Outstanding - end of year	937,971	\$ 63.61

⁽¹⁾ Adjustments for the number of shares vested under the 2019 awards at the end of the three-year period ended December 31, 2021 being slightly lower than the target number of shares.

As of December 31, 2022, a total of 937,971 stock awards have been awarded that have not yet vested. The Company distributed shares totaling 386,594 in 2022, 577,948 in 2021 and 557,590 in 2020 due to the vesting of stock awards. The grant date fair value of these vested shares was \$18.7 million, \$25.5 million and \$24.4 million, respectively. The Company recognized compensation expense of \$29.3 million, \$18.2 million and \$19.6 million for the years ended December 31, 2022, 2021 and 2020, respectively, relating to performance-based restricted stock units, time-based restricted stock units, deferred shares and restricted shares.

In addition to performance-based restricted stock units, time-based restricted stock units and deferred shares, the Company has granted stock option awards to officers and key employees. Stock options typically have a ten-year term and generally vest in 25% increments beginning annually on the first anniversary date of grant.

Note 14 - Stock Compensation (continued)

During 2022, 2021 and 2020, the Company recognized stock-based compensation expense of \$1.1 million, \$2.0 million and \$3.6 million, respectively, for stock option awards.

Beginning in 2020, the Company discontinued the use of nonqualified stock options. As such, there were no stock option awards granted in 2022, 2021 or 2020.

A summary of stock option award activity for the year ended December 31, 2022 is presented below:

	Number of Shares	Weighted-average Exercise Price	Weighted-average Remaining Contractual Term	Aggregate Intrinsic Value (millions)
Outstanding - beginning of year	1,217,945	\$ 41.59		
Exercised	(295,695)	41.54		
Canceled or expired	(940)	43.44		
Outstanding - end of year	921,310	\$ 41.61	6 years	\$ 26.8
Options expected to vest	921,310	41.61	6 years	26.8
Options exercisable	810,445	41.37	6 years	23.7

The total intrinsic value of stock option awards exercised during the years ended December 31, 2022, 2021 and 2020 was \$7.3 million, \$29.4 million and \$20.7 million, respectively. Net cash proceeds from the exercise of stock option awards were \$8.5 million, \$26.0 million and \$37.4 million, respectively.

As of December 31, 2022, the Company had unrecognized compensation expense of \$32.1 million related to stock options and stock awards, which is expected to be recognized over a total weighted-average period of two years. There were 4.3 million shares available for future grants for all plans at December 31, 2022.

Note 15 - Impairment and Restructuring Charges

Impairment and restructuring charges by segment were as follows:

Year ended December 31, 2022:

	Mobile Industries	Process Industries	Unallocated Corporate	Total
Impairment charges	\$ 38.3	\$ —	\$ —	\$ 38.3
Severance and related benefit costs	3.8	0.4	—	4.2
Exit costs	1.5	0.1	—	1.6
Total	\$ 43.6	\$ 0.5	\$ —	\$ 44.1

Year ended December 31, 2021:

	Mobile Industries	Process Industries	Unallocated Corporate	Total
Impairment charges	\$ 1.1	\$ 3.4	\$ —	\$ 4.5
Severance and related benefit costs	1.7	0.9	—	2.6
Exit costs	1.4	0.4	—	1.8
Total	\$ 4.2	\$ 4.7	\$ —	\$ 8.9

Year ended December 31, 2020:

	Mobile Industries	Process Industries	Unallocated Corporate	Total
Impairment charges	\$ 0.2	\$ 0.2	\$ —	\$ 0.4
Severance and related benefit costs	8.2	11.0	0.4	19.6
Exit costs	0.6	0.6	—	1.2
Total	\$ 9.0	\$ 11.8	\$ 0.4	\$ 21.2

The following discussion explains the major impairment and restructuring charges recorded for the periods presented; however, it is not intended to reflect a comprehensive discussion of all amounts in the tables above.

Mobile Industries:

In 2022, the Company classified the ADS business as assets held for sale and recorded impairment charges of \$29.3 million. The Company subsequently completed the sale of the ADS business on November 1, 2022. In addition, the Company recorded impairment charges of \$9.0 million related to certain assets of its joint venture in Russia. As a result of Russia's invasion of Ukraine (and associated sanctions), the Company suspended its operations in Russia.

On July 19, 2021, the Company announced the closure of its bearing manufacturing facility in Villa Carcina, Italy. The Company transferred the manufacturing of its single-row tapered roller bearing production to other bearing facilities in Europe, Asia and the United States. The Company completed the closure of the facility on October 31, 2022, and it affected approximately 110 employees. The Company expected to incur approximately \$9 million to \$11 million of expenses related to this closure. During 2022, the Company recorded severance and related benefits of \$1.4 million and exit costs of \$1.6 million related to this closure. During 2021, the Company recorded impairment charges of \$1.0 million, severance and related benefit costs of \$1.8 million and exit costs of \$1.1 million related to this closure. The exit costs recognized in 2022 and 2021 primarily related to environmental remediation. The Company incurred cumulative pretax costs related to this closure of \$9.9 million as of December 31, 2022, including rationalization costs recorded in cost of products sold. On November 1, 2022, the Company completed the sale of this facility and recognized a pretax gain of \$3.6 million.

Note 15 - Impairment and Restructuring Charges (continued)

On October 16, 2019, the Company announced the reorganization of its bearing plant in Gaffney, South Carolina. The Company transferred its high-volume bearing production and roller production to other Timken manufacturing facilities in the U.S. The transfer of these operations was completed by the end of the fourth quarter of 2021, and it affected approximately 150 employees. The Company expected to incur approximately \$8 million to \$10 million of pretax costs in total related to this reorganization. During 2020, the Company recognized severance and related benefits of \$0.3 million and exit costs of \$0.4 million related to this reorganization. The Company has incurred cumulative pretax costs related to this reorganization of \$7.9 million as of December 31, 2022, including rationalization costs recorded in cost of products sold.

On January 16, 2023, the Company announced the closure of its bearing plant, mentioned above, in Gaffney, South Carolina. The Company expects to transfer its remaining operations to other Timken manufacturing facilities in North America. The closure of this facility is expected to occur by the end of the fourth quarter of 2023 and is expected to affect approximately 225 employees. The Company expects to incur approximately \$10 million to \$12 million of pretax costs in total related to this closure. During 2022, the Company recognized severance and related benefits of \$0.9 million under an ongoing benefit arrangement related to this closure.

Process Industries:

On February 4, 2020, the Company announced the closure of its chain plant in Indianapolis, Indiana. This plant was part of the Diamond Chain acquisition completed on April 1, 2019. The Company will be transferring the manufacturing of its Diamond Chain product line to its chain facility in Fulton, Illinois. The chain plant is expected to cease operations by the end of the first quarter of 2023 and is expected to affect approximately 240 employees. The Company expects to hire approximately 130 full-time positions in Fulton, Illinois and expects to incur approximately \$12 million to \$15 million of expenses related to this closure. During 2021 and 2020, the Company recorded severance and related benefit costs of \$1.2 million and \$3.1 million related to this closure, respectively. The Company has incurred cumulative pretax costs related to this closure of \$14.0 million as of December 31, 2022, including rationalization costs recorded in cost of products sold.

In addition, the Company recorded impairment charges of \$3.4 million related to certain engineering-related assets used in the business during the year ended December 31, 2021. Management concluded no further investment would be made in these assets and as a result, reduced the value to zero.

COVID-19 Pandemic Cost Reduction Initiatives:

During 2020, the Company recorded severance and related benefit costs of \$12.0 million to eliminate approximately 200 salaried positions to align current employment levels with customer demand. Of the \$12.0 million charge, \$5.8 million related to the Mobile Industries segment, \$5.8 million related to the Process Industries segment and \$0.4 million related to Unallocated Corporate.

Consolidated Restructuring Accrual:

The following is a rollforward of the consolidated restructuring accrual for the years ended December 31, 2022 and 2021:

	2022		2021	
Beginning balance, January 1	\$	7.0	\$	8.0
Expense		5.8		4.4
Payments		(9.7)		(5.4)
Ending balance, December 31	\$	3.1	\$	7.0

The restructuring accrual at December 31, 2022 and 2021 is included in other current liabilities on the Consolidated Balance Sheets.

Note 16 - Retirement Benefit Plans

The Company and its subsidiaries sponsor a number of defined benefit pension plans, which cover eligible employees, including certain employees in foreign countries. These plans generally are noncontributory. Pension benefits earned generally are based on years of service and compensation during active employment. The cash contributions and payments for the Company's defined benefit pension plans were \$11.2 million, \$20.4 million and \$17.9 million in 2022, 2021 and 2020, respectively. The 2021 contributions and payments included a \$10 million payout of deferred compensation to a former executive officer of the Company.

The following tables summarize the net periodic benefit cost information and the related assumptions used to measure the net periodic benefit cost for the years ended December 31:

	U.S. Plans			International Plans		
	2022	2021	2020	2022	2021	2020
Components of net periodic benefit cost:						
Service cost	\$ 6.9	\$ 9.5	\$ 10.7	\$ 1.6	\$ 2.0	\$ 1.8
Interest cost	17.7	17.6	21.0	5.7	4.4	5.5
Expected return on plan assets	(18.9)	(23.2)	(25.3)	(9.3)	(10.2)	(8.7)
Amortization of prior service cost	1.2	1.2	1.6	0.1	0.2	0.2
Recognition of net actuarial losses (gains)	22.6	13.9	(3.9)	(6.6)	(9.5)	20.1
Curtailment losses	—	—	0.9	—	—	—
Net periodic benefit cost (credit)	\$ 29.5	\$ 19.0	\$ 5.0	\$ (8.5)	\$ (13.1)	\$ 18.9

Assumptions	2022	2021	2020
U.S. Plans:			
Discount rate	3.03% to 4.95%	2.71% to 2.91%	3.04% to 3.55%
Future compensation assumption	2.50% to 3.50%	2.50%	2.50%
Expected long-term return on plan assets	4.35% to 5.65%	4.15% to 4.90%	4.50% to 6.25%
International Plans:			
Discount rate	1.00% to 9.50%	0.25% to 7.75%	0.75% to 9.00%
Future compensation assumption	2.10% to 8.00%	1.90% to 8.18%	2.00% to 8.20%
Expected long-term return on plan assets	2.00% to 8.90%	2.00% to 9.00%	1.75% to 9.00%

The following table summarizes assumptions used to measure the benefit obligation for the defined benefit pension plans at December 31:

Assumptions	2022	2021
U.S. Plans:		
Discount rate	5.62% to 5.74%	3.03% to 3.09%
Future compensation assumption	2.50%	2.50% to 3.50%
International Plans:		
Discount rate	3.70% to 10.70%	1.00% to 9.50%
Future compensation assumption	2.80% to 10.00%	2.10% to 8.00%

Note 16 - Retirement Benefit Plans (continued)

The Company recognized actuarial losses of \$16.0 million during 2022 primarily due to the impact of lower than expected returns on plan assets of \$220.6 million, the impact of experience losses of \$33.0 million, the impact of inflation of \$5.4 million and other actuarial losses of \$0.2 million, partially offset by the favorable impact of a net increase in the discount rate used to measure its defined benefit pension obligations of \$243.2 million. The impact of the net increase in the discount rate used to measure the Company's defined benefit pension obligations was primarily driven by a 257 basis point increase in the weighted-average discount rate used to measure its U.S. plan obligations, which increased from 3.07% in 2021 to 5.64% in 2022 and a 301 basis point increase in the discount rate used to measure its U.K. plan obligations, which increased from 1.80% in 2021 to 4.81% in 2022.

The Company recognized actuarial losses of \$4.4 million during 2021 primarily due to the impact of lower than expected returns on plan assets of \$28.4 million, the impact of experience losses of \$9.3 million, the impact of inflation of \$8.5 million and other changes in actuarial assumptions of \$3.2 million, partially offset by the favorable impact of a net increase in the discount rate used to measure its defined benefit pension obligations of \$45.0 million. The impact of the net increase in the discount rate used to measure the Company's defined benefit pension obligations was primarily driven by a 55 basis point increase in the discount rate used to measure its U.K. plan obligations, which increased from 1.25% in 2020 to 1.80% in 2021, and a 23 basis point increase in the weighted-average discount rate used to measure its U.S. plan obligations, which increased from 2.84% in 2020 to 3.07% in 2021.

The Company recognized actuarial losses of \$16.2 million during 2020 primarily due to the impact of a net reduction in the discount rate used to measure its defined benefit pension obligations of \$88.0 million and the impact of experience losses of \$16.9 million, partially offset by higher than expected returns on plan assets of \$84.3 million and other changes in valuation assumptions of \$4.4 million. The impact of the net reduction in the discount rate used to measure the Company's defined benefit pension obligations was primarily driven by a 66 basis point reduction in the weighted-average discount rate used to measure its U.S. plan obligations, which decreased from 3.50% in 2019 to 2.84% in 2020.

For expense purposes in 2022, the Company applied a weighted-average discount rate of 3.07% to its U.S. defined benefit pension plans. For expense purposes in 2023, the Company will apply a weighted-average discount rate of 5.64% to its U.S. defined benefit pension plans.

For expense purposes in 2022, the Company applied a weighted-average expected rate of return of 4.84% for the Company's U.S. pension plan assets. For expense purposes in 2023, the Company will apply a weighted-average expected rate of return on plan assets of 4.43%.

Note 16 - Retirement Benefit Plans (continued)

The following tables set forth the change in benefit obligation, change in plan assets, funded status and amounts recognized on the Consolidated Balance Sheets for the defined benefit pension plans as of December 31, 2022 and 2021:

	U.S. Plans		International Plans	
	2022	2021	2022	2021
Change in benefit obligation:				
Benefit obligation at beginning of year	\$ 566.3	\$ 663.1	\$ 343.1	\$ 379.7
Service cost	6.9	9.5	1.6	2.0
Interest cost	17.7	17.6	5.7	4.4
Plan amendments	—	—	—	0.5
Actuarial gains	(116.4)	(4.4)	(88.2)	(19.6)
International plan exchange rate change	—	—	(32.6)	(8.7)
Benefits paid	(139.2)	(119.5)	(14.7)	(15.2)
Acquisitions	—	—	3.2	—
Benefit obligation at end of year	\$ 335.3	\$ 566.3	\$ 218.1	\$ 343.1
Change in plan assets:				
Fair value of plan assets at beginning of year	\$ 455.7	\$ 553.3	\$ 296.8	\$ 312.8
Actual return on plan assets	(120.1)	4.9	(72.3)	0.1
Company contributions / payments	5.2	17.0	6.0	3.4
International plan exchange rate change	—	—	(30.3)	(4.3)
Benefits paid	(139.2)	(119.5)	(14.7)	(15.2)
Fair value of plan assets at end of year	201.6	455.7	185.5	296.8
Funded status at end of year	\$ (133.7)	\$ (110.6)	\$ (32.6)	\$ (46.3)
Amounts recognized on the Consolidated Balance Sheets:				
Non-current assets	\$ —	\$ 1.1	\$ 0.3	\$ 3.9
Current liabilities	(4.8)	(4.9)	(1.5)	(1.4)
Non-current liabilities	(128.9)	(106.8)	(31.4)	(48.8)
	\$ (133.7)	\$ (110.6)	\$ (32.6)	\$ (46.3)
Amounts recognized in accumulated other comprehensive loss (income):				
Net prior service cost	\$ 0.3	\$ 1.5	\$ 3.6	\$ 4.2
Accumulated other comprehensive loss (income)	\$ 0.3	\$ 1.5	\$ 3.6	\$ 4.2
Changes in prior service cost recognized in accumulated other comprehensive loss (income):				
Accumulated other comprehensive loss (income) at beginning of year	\$ 1.5	\$ 2.7	\$ 4.2	\$ 3.9
Prior service cost	—	—	—	0.5
Recognized prior service cost	(1.2)	(1.2)	(0.1)	(0.2)
Foreign currency impact	—	—	(0.5)	—
Total recognized in accumulated other comprehensive loss (income) at December 31	\$ 0.3	\$ 1.5	\$ 3.6	\$ 4.2

Note 16 - Retirement Benefit Plans (continued)

The presentation in the above tables for amounts recognized in accumulated other comprehensive loss on the Consolidated Balance Sheets is before the effect of income taxes.

Defined benefit pension plans in the U.S. represent 61% of the benefit obligation and 52% of the fair value of plan assets as of December 31, 2022.

Certain of the Company's defined benefit pension plans were overfunded as of December 31, 2022. As a result, \$0.3 million and \$5.0 million at December 31, 2022 and 2021, respectively, are included in other non-current assets on the Consolidated Balance Sheets. The current portion of accrued pension benefits, which was included in salaries, wages and benefits on the Consolidated Balance Sheets, was \$6.3 million at December 31, 2022 and 2021, respectively. In 2022, the current portion of accrued pension benefits relates to unfunded plans and represents the actuarial present value of expected payments related to the plans to be made over the next 12 months.

The accumulated benefit obligation at December 31, 2022 exceeded the market value of plan assets for several of the Company's pension plans. For these plans, the projected benefit obligation was \$544.2 million, the accumulated benefit obligation was \$539.9 million and the fair value of plan assets was \$378.0 million at December 31, 2022.

The total accumulated benefit obligation for all plans was \$546.0 million and \$897.6 million at December 31, 2022 and 2021, respectively.

Investment performance decreased the value of the Company's pension assets by 26.7% in 2022 largely due to increases in bond rates.

As of December 31, 2022, 2021 and 2020, the Company's defined benefit pension plans did not directly hold any of the Company's common shares.

Plan Assets:

The Company's target allocation for pension plan assets, as well as the actual pension plan asset allocations as of December 31, 2022 and 2021, was as follows:

Asset Category	Current Target Allocation			Percentage of Pension Plan Assets at December 31,	
				2022	2021
Equity securities	16%	to	22%	18%	19%
Fixed income securities	72%	to	82%	77%	78%
Other investments	2%	to	6%	5%	3%
Total				100%	100%

The Company 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, the Company 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, and are reviewed regularly by management. 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.

Note 16 - Retirement Benefit Plans (continued)

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 FASB provides accounting rules that classify the inputs used to measure fair value into the following hierarchy:

- Level 1 - Unadjusted quoted prices in active markets for identical assets or liabilities.
- Level 2 - Unadjusted quoted prices in active markets for similar assets or liabilities, or unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or inputs other than quoted prices that are observable for the asset or liability.
- Level 3 - Unobservable inputs for the asset or liability.

The following table presents the fair value hierarchy for those investments of the Company's pension assets measured at fair value on a recurring basis:

	December 31, 2022				December 31, 2021			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Assets:								
Cash and cash equivalents	\$ 22.9	\$ —	\$ —	\$ 22.9	\$ 13.8	\$ —	\$ —	\$ 13.8
Government and agency securities	10.7	0.9	—	11.6	22.7	2.7	—	25.4
Corporate bonds - investment grade	—	31.5	—	31.5	—	82.7	—	82.7
Equity securities - U.S. companies	0.1	—	—	0.1	—	—	—	—
Common collective funds - fixed income	29.9	—	—	29.9	42.5	—	—	42.5
Mutual funds - fixed income	31.6	—	—	31.6	51.8	—	—	51.8
Mutual funds - international equity	21.5	—	—	21.5	41.0	—	—	41.0
	\$ 116.7	\$ 32.4	\$ —	\$ 149.1	\$ 171.8	\$ 85.4	\$ —	\$ 257.2
Investments measured at net asset value:								
Equity securities - international companies				\$ 0.4				\$ 0.3
Common collective funds - domestic equities				19.9				45.9
Common collective funds - international equities				17.5				33.6
Common collective funds - fixed income				82.6				216.6
Common collective funds - diversified growth				12.1				18.5
Limited partnerships				6.8				10.4
Real estate partnerships				5.2				6.6
Other liability-driven investments				68.6				138.1
Other assets				24.9				25.3
Total Assets				\$ 387.1				\$ 752.5

International investments measured at net asset value totaled \$155.0 million and \$253.5 million at December 31, 2022 and 2021, respectively.

Cash and cash equivalents are valued at redemption value. Government and agency securities are valued at the closing price reported in the active market in which the individual securities are traded. Certain corporate bonds are valued at the closing price reported in the active market in which the bond is traded. Equity securities (both common and preferred stock) are valued at the closing price reported in the active market in which the individual security is traded. Common collective funds are valued based on a net asset value per share. Mutual funds classified as Level 1 assets include investments in fixed income and international equities. These investments are comprised of securities listed on exchange, market, or automated quotation systems, for which active, quoted prices are available. Mutual funds are valued based on a net asset value per share for shares held at year end, as determined by the closing price reported on the active market on which the individual securities are traded, or a pricing vendor or the fund family if an active market is not available. Asset-backed securities are valued based on quoted prices for similar assets in active markets. When such prices are unavailable, the plan trustee determines a valuation from the market maker dealing in the particular security.

Note 16 - Retirement Benefit Plans (continued)

Limited partnerships include investments in funds that invest primarily in private equity, venture capital and distressed debt. Limited partnerships are valued based on the ownership interest in the net asset value of the investment, which is used as a practical expedient to fair value, per the underlying investment fund, which is based upon the general partner's own assumptions about the assumptions a market participant would use in pricing the assets and liabilities of the partnership. Real estate investments include funds that invest in companies that primarily invest in commercial and residential properties, commercial mortgage-backed securities, debt and equity securities of real estate operating companies, and real estate investment trusts. Other real estate investments are valued based on the ownership interest in the net asset value of the investment, which is used as a practical expedient to fair value per the underlying investment fund, which is based on appraised values and current transaction prices.

Other liability-driven investments mainly include investments in index-linked open-end swap funds. These funds invest in cash held deposits that reflect the index-linked deferred annuity with payment terms of specific years linked to UK inflation measures. The underlying assets in this investment are valued daily.

Common collective funds - diversified growth investments are pooled funds that invest in a multiple underlying asset classes, such as equities, fixed income, commodities, alternative investments, and cash in an effort to achieve returns on investment through capital appreciation and income. The underlying assets in this investment are valued daily.

Cash Flows:

Employer Contributions to Defined Benefit Plans	
2021	\$ 20.4
2022	11.2
2023 (estimated)	25.0

Estimated future benefit payments, including estimated lump sum distributions, are expected to be as follows:

Benefit Payments	
2023	\$ 49.6
2024	43.0
2025	44.0
2026	45.3
2027	42.7
2028-2032	203.3

Employee Savings Plans:

The Company sponsors defined contribution retirement and savings plans covering substantially all employees in the United States and employees at certain non-U.S. locations. The Company made contributions to its defined contribution plans of \$29.4 million, \$27.3 million and \$27.1 million in 2022, 2021 and 2020, respectively. Effective January 1, 2019, the primary U.S. Company sponsored defined contribution plan no longer allowed contributions to be made to the Company stock fund in order to align with industry trends to remove investments in company stock as an option in a company sponsored defined contribution plan. All participants in this plan were instructed to transfer remaining funds in the Company stock fund to other fund options by December 31, 2022. At December 31, 2022, the plans held 682,831 of the Company's common shares with a fair value of \$48.3 million. These remaining common shares were fully transferred out of the Company stock fund in January 2023. The Company paid dividends totaling \$1.0 million, \$1.2 million and \$1.5 million in 2022, 2021 and 2020, respectively, to plans to be disbursed to participant accounts holding the Company's common shares.

Note 17 - Other Postretirement Benefit Plans

The Company and its subsidiaries sponsor several postretirement plans that provide health care and life insurance benefits for eligible retirees and dependents. Depending on retirement date and employee classification, certain health care plans contain contribution and cost-sharing features such as deductibles, coinsurance and limitations on employer-provided subsidies. The remaining health care and life insurance plans are noncontributory.

The following tables summarize the net periodic benefit cost information and the related assumptions used to measure the net periodic benefit cost for the years ended December 31:

	2022	2021	2020
Components of net periodic credit:			
Service cost	\$ 0.2	\$ 0.2	\$ 0.2
Interest cost	1.4	1.5	2.1
Expected return on plan assets	—	—	(0.4)
Amortization of prior service credit	(10.1)	(10.1)	(9.8)
Recognition of net actuarial (gains) losses	(13.1)	(4.1)	1.4
Net periodic credit:	\$ (21.6)	\$ (12.5)	\$ (6.5)

Assumptions:	2022	2021	2020
Discount rate	2.99%	2.62%	3.43%
Rate of return	—%	—%	3.00%

The following table summarizes assumptions used to measure the benefit obligation for the other postretirement benefit plans at December 31:

Assumptions:	2022	2021
Discount rate	5.75%	2.99%

The Company recognized actuarial gains of \$13.1 million during 2022 primarily due to the impact of a 276 basis point increase in the discount rate used to measure the Company's defined benefit postretirement obligations, which increased from 2.99% in 2021 to 5.75% in 2022. The increase in the discount rate resulted in a \$8.4 million gain. In addition to the gain from the discount rate increases, the Company recognized actuarial gains of \$3.0 million due to the impact of a reduction in the rate for Medicare Advantage plans and \$1.9 million due to lower than expected benefit payments. These actuarial gains were offset \$0.2 million of changes to other assumptions.

The Company recognized actuarial gains of \$4.1 million during 2021 primarily due to the impact of a 37 basis point increase in the discount rate used to measure the Company's defined benefit postretirement obligations, which increased from 2.62% in 2020 to 2.99% in 2021. The increase in the discount rate resulted in a \$1.6 million gain. In addition to the gain from the discount rate increases, the Company recognized actuarial gains of \$1.1 million due to lower than expected benefit payments, \$1.0 million due to the impact of a reduction in the rate for Medicare Advantage plans and \$0.4 million due to changes in other actuarial assumptions.

The Company recognized actuarial losses of \$1.4 million during 2020 primarily due to the impact of an 81 basis point decrease in the discount rate used to measure the Company's defined benefit postretirement obligations, which decreased from 3.43% in 2019 to 2.62% in 2020. The decrease in the discount rate resulted in a \$3.9 million loss. This actuarial loss was partially offset by actuarial gains of \$2.0 million due to the impact of a reduction in the rate for Medicare Advantage plans, \$0.4 million due to higher than expected returns on plans assets and \$0.1 million due to changes in other actuarial assumptions.

Note 17 - Other Postretirement Benefit Plans (continued)

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' portfolio. 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 expense purposes in 2022, the Company applied a discount rate of 2.99% to its other postretirement benefit plans. For expense purposes in 2023, the Company will apply a discount rate of 5.75% to its other postretirement benefit plans.

The following tables set forth the change in benefit obligation, change in plan assets, funded status and amounts recognized on the Consolidated Balance Sheets for the other postretirement benefit plans as of December 31, 2022 and 2021:

	2022	2021
Change in benefit obligation:		
Benefit obligation at beginning of year	\$ 51.1	\$ 57.6
Service cost	0.2	0.2
Interest cost	1.4	1.5
Plan amendments	(0.6)	—
Actuarial gains	(13.1)	(4.1)
International plan exchange rate change	(0.1)	—
Benefits paid	(3.4)	(4.1)
Benefit obligation at end of year	\$ 35.5	\$ 51.1
Change in plan assets:		
Fair value of plan assets at beginning of year	\$ —	\$ 11.1
Transfer to VEBA trust for certain active employees' medical benefits	—	(11.1)
Fair value of plan assets at end of year	—	—
Funded status at end of year	\$ (35.5)	\$ (51.1)
Amounts recognized on the Consolidated Balance Sheets:		
Current liabilities	\$ (4.1)	\$ (5.3)
Non-current liabilities	(31.4)	(45.8)
	\$ (35.5)	\$ (51.1)
Amounts recognized in accumulated other comprehensive loss:		
Net prior service credit	\$ (71.9)	\$ (81.4)
Accumulated other comprehensive loss	\$ (71.9)	\$ (81.4)
Changes to prior service credit recognized in accumulated other comprehensive loss:		
Accumulated other comprehensive loss at beginning of year	\$ (81.4)	\$ (91.5)
Prior service credit	(0.6)	—
Recognized prior service credit	10.1	10.1
Total recognized in accumulated other comprehensive loss at December 31	\$ (71.9)	\$ (81.4)

Note 17 - Other Postretirement Benefit Plans (continued)

The presentation in the above tables for amounts recognized in accumulated other comprehensive loss on the Consolidated Balance Sheets is before the effect of income taxes.

The current portion of accrued postretirement benefits, which was included in salaries, wages and benefits on the Consolidated Balance Sheets, was \$4.1 million and \$5.3 million at December 31, 2022 and 2021, respectively. In 2022, the current portion of accrued postretirement benefits related to unfunded plans and represented the actuarial present value of expected payments related to the plans to be made over the next 12 months.

For measurement purposes, the Company assumed a weighted-average annual rate of increase in the per capita cost (health care cost trend rate) for medical benefits of 6.5% for 2023, declining gradually to 5.0% in 2029 and thereafter for medical and prescription drug benefits. For Medicare Advantage benefits, actual contract rates have been set for 2023 through 2025, and are assumed to increase by \$5 per year for 2026 to 2028 and then 6.0% for 2028, declining gradually to 5.0% in 2032 and thereafter.

Plan Assets:

In 2010, the Company established a Voluntary Employee Beneficiary Association (“VEBA”) trust for certain bargained associates’ retiree medical benefits. In January 2020, the Company established a second VEBA trust for certain active employees’ medical benefits. In January 2020, the Company transferred \$50 million from the existing VEBA trust to fund the second VEBA trust. In January 2021, the Company transferred the remaining \$11.1 million in the existing VEBA trust to the second VEBA trust. The Company utilized all of the assets of the second VEBA trust in 2021 and 2020 for the payment of certain active employees’ medical benefits. As a result of the transfer, the Company expects to fund future payments for other postretirement benefit plans, which are expected to be approximately \$4 million, from the general funds of the Company.

Cash Flows:

Estimated future benefit payments to be funded by the Company are expected to be as follows:

	Future Benefit Payments
2023	\$ 4.2
2024	3.9
2025	3.7
2026	3.6
2027	3.5
2028-2032	14.7

Note 18 - Accumulated Other Comprehensive (Loss) Income

The following tables present details about components of accumulated other comprehensive (loss) income for the years ended December 31, 2022 and December 31, 2021, respectively:

	Foreign currency translation adjustments	Pension and postretirement liability adjustments	Change in fair value of derivative financial instruments	Total
Balance at December 31, 2021	\$ (80.3)	\$ 56.6	\$ 0.7	\$ (23.0)
Other comprehensive (loss) income before reclassifications and income taxes	(162.7)	1.1	6.6	(155.0)
Amounts reclassified from accumulated other comprehensive (loss) income, before income tax	—	(8.8)	(3.7)	(12.5)
Income tax benefit (expense)	—	1.9	(0.6)	1.3
Net current period other comprehensive (loss) income, net of income taxes	(162.7)	(5.8)	2.3	(166.2)
Noncontrolling interest	7.3	—	—	7.3
Net current period comprehensive (loss) income, net of income taxes and noncontrolling interest	(155.4)	(5.8)	2.3	(158.9)
Balance at December 31, 2022	\$ (235.7)	\$ 50.8	\$ 3.0	\$ (181.9)

	Foreign currency translation adjustments	Pension and postretirement liability adjustments	Change in fair value of derivative financial instruments	Total
Balance at December 31, 2020	\$ (18.0)	\$ 63.4	\$ (4.1)	\$ 41.3
Other comprehensive (loss) income before reclassifications and income taxes	(63.7)	(0.4)	2.4	(61.7)
Amounts reclassified from accumulated other comprehensive (loss) income, before income tax	—	(8.7)	4.2	(4.5)
Income tax benefit (expense)	—	2.3	(1.8)	0.5
Net current period other comprehensive (loss) income, net of income taxes	(63.7)	(6.8)	4.8	(65.7)
Noncontrolling interest	1.4	—	—	1.4
Net current period comprehensive (loss) income, net of income taxes and noncontrolling interest	(62.3)	(6.8)	4.8	(64.3)
Balance at December 31, 2021	\$ (80.3)	\$ 56.6	\$ 0.7	\$ (23.0)

Other comprehensive (loss) income before reclassifications and income taxes includes the effect of foreign currency.

Note 19 - Fair Value

The following tables present the fair value hierarchy for those assets and liabilities on the Consolidated Balance Sheets measured at fair value on a recurring basis as of December 31, 2022 and 2021:

	December 31, 2022			
	Total	Level 1	Level 2	Level 3
Assets:				
Cash and cash equivalents	\$ 292.1	\$ 289.3	\$ 2.8	\$ —
Cash and cash equivalents measured at net asset value	39.5			
Restricted cash	9.1	9.1	—	—
Short-term investments	39.2	—	39.2	—
Interest rate swap contract	3.1	—	3.1	—
Foreign currency forward contracts	4.5	—	4.5	—
Total Assets	\$ 387.5	\$ 298.4	\$ 49.6	\$ —
Liabilities:				
Foreign currency forward contracts	\$ 19.8	\$ —	\$ 19.8	\$ —
Total Liabilities	\$ 19.8	\$ —	\$ 19.8	\$ —

	December 31, 2021			
	Total	Level 1	Level 2	Level 3
Assets:				
Cash and cash equivalents	\$ 257.1	\$ 244.8	\$ 12.3	\$ —
Restricted cash	0.8	0.8	—	—
Short-term investments	56.9	—	56.9	—
Foreign currency forward contracts	5.6	—	5.6	—
Total Assets	\$ 320.4	\$ 245.6	\$ 74.8	\$ —
Liabilities:				
Foreign currency forward contracts	\$ 1.0	\$ —	\$ 1.0	\$ —
Total Liabilities	\$ 1.0	\$ —	\$ 1.0	\$ —

Cash and cash equivalents are highly liquid investments with maturities of three months or less when purchased and are valued at redemption value. Short-term investments are investments with maturities between four months and one year, and generally are valued at amortized cost, which approximates fair value. A portion of the cash and cash equivalents and short-term investments are valued based on net asset value. The Company uses publicly available foreign currency forward and spot rates to measure the fair value of its foreign currency forward contracts.

Additionally, the Company remeasures certain assets to fair value, using Level 3 measurements, as a result of the occurrence of triggering events such as purchase accounting for acquisitions.

During the third quarter of 2022, the Company's ADS business, located in Manchester, Connecticut, was reclassified to assets held for sale. In conjunction with this reclassification, the ADS business, with a carrying value of \$62.1 million, was written down to its estimated fair value less cost to sell of \$32.8 million, resulting in an impairment charge of \$29.3 million. The Company subsequently sold ADS on November 1, 2022. The fair value for these net assets was determined based on an estimate of the value expected to be received upon the sale of this business. See *Note 2 - Acquisitions and Divestitures* for further discussion.

In 2022, property, plant and equipment at the Company's joint venture in Russia, with a carrying value of \$16.1 million, were written down to their fair value of \$7.1 million, resulting in an impairment charge of \$9.0 million. The fair value for these assets was determined based on an estimate of the best price that would be received in a current transaction to sell the assets to a third party.

The Company does not believe it has significant concentrations of risk associated with the counterparts to its financial instruments.

Note 19 - Fair Value (continued)

No other material assets were measured at fair value on a nonrecurring basis during the years ended December 31, 2022 and 2021.

Financial Instruments:

The Company's financial instruments consist primarily of cash and cash equivalents, short-term investments, net accounts receivable, trade accounts payable, short-term borrowings and long-term debt. Due to their short-term nature, the carrying value of cash and cash equivalents, short-term investments, accounts receivable, trade accounts payable, and short-term borrowings are a reasonable estimate of their fair value. Due to the nature of fair value calculations for variable-rate debt, the carrying value of the Company's long-term variable-rate debt is a reasonable estimate of its fair value. The fair value of the Company's long-term fixed-rate debt, based on quoted market prices, was \$1,353.5 million and \$1,171.1 million at December 31, 2022 and 2021, respectively. The carrying value of this debt was \$1,417.9 million and \$1,087.5 million at December 31, 2022 and 2021, respectively. The fair value of long-term fixed-rate debt was measured using Level 2 inputs.

Note 20 - Derivative Instruments

The Company is exposed to certain risks relating to its ongoing business operations. The primary risks managed by using derivative instruments are foreign currency exchange rate risk and interest rate risk. Forward contracts on various foreign currencies are entered into in order to manage the foreign currency exchange rate risk associated with certain of the Company's commitments denominated in foreign currencies. From time to time, interest rate swaps are used to manage interest rate risk associated with the Company's fixed, and floating-rate borrowings.

The Company designates certain foreign currency forward contracts as cash flow hedges of forecasted revenues and certain interest rate hedges as cash flow hedges of fixed-rate borrowings.

On September 8, 2020, the Company entered into a \$100 million floating-to-fixed rate swap on the 2023 Term Loan, which hedges the change in the 1-month LIBOR rate October 30, 2020 through September 11, 2023 to a fixed rate. The Company repaid the LIBOR based 2023 Term Loan December 5, 2022 and replaced with a SOFR based 2022 Term Loan. The Company amended the swap from LIBOR to SOFR commencing January 2023. The Company's risk management objective is to hedge the risk of changes in the monthly interest expense attributable to changes in the benchmark interest rate.

On September 15, 2020, the Company designated €54.5 million of its €150.0 million fixed-rate senior unsecured notes, maturing on September 7, 2027 (the "2027 Notes") as a hedge against its net investment in one of its European affiliates. The objective of the hedge transaction is to protect the net investment in the foreign operations against changes in the exchange rate between the U.S. dollar and the Euro. The net impact for the twelve months ended December 31, 2022 was to record a gain of \$3.6 million to accumulated comprehensive loss (income) with a corresponding offset to other (expense) income, which partially offsets the impact of the foreign currency adjustment on the 2027 Notes.

The Company does not purchase or hold any derivative financial instruments for trading purposes. As of December 31, 2022 and 2021, the Company had \$635.6 million and \$300.8 million, respectively, of outstanding foreign currency forward contracts at notional value. Refer to *Note 19 - Fair Value* for the fair value disclosure of derivative financial instruments.

Cash Flow Hedging Strategy:

For certain derivative instruments that are designated and qualify as cash flow hedges (*i.e.*, hedging the exposure to variability in expected future cash flows that is attributable to a particular risk), the effective portion of the gain or loss on the derivative instrument is reported as a component of other comprehensive income and reclassified into earnings in the same line item associated with the forecasted transaction and in the same period or periods during which the hedged transaction affects earnings. The remaining gain or loss on the derivative instrument in excess of the cumulative change in the present value of future cash flows of the hedged item, if any (*i.e.*, the ineffective portion), or hedge components excluded from the assessment of effectiveness, are recognized in the Consolidated Statement of Income during the current period.

To protect against a reduction in the value of forecasted foreign currency cash flows resulting from export sales, the Company has instituted a foreign currency cash flow hedging program. The Company hedges portions of its forecasted cash flows denominated in foreign currencies with forward contracts. When the dollar strengthens significantly against foreign currencies, the decline in the present value of future foreign currency revenue is offset by gains in the fair value of the forward contracts designated as hedges. Conversely, when the dollar weakens, the increase in the present value of future foreign currency cash flows is offset by losses in the fair value of the forward contracts. As of December 31, 2022 and 2021, the Company had \$82.3 million and \$80.0 million, respectively, of outstanding foreign currency forward contracts at notional value that were classified as cash flow hedges.

The maximum length of time over which the Company hedges its exposure to the variability in future cash flows for forecast transactions is generally eighteen months or less.

Derivative Instruments not designated as Hedging Instruments:

For derivative instruments that are not designated as hedging instruments, the instruments are typically forward contracts. In general, the practice is to reduce volatility by selectively hedging transaction exposures including intercompany loans, accounts payable and accounts receivable. Intercompany loans between entities with different functional currencies typically are hedged with a forward contract at the inception of loan with a maturity date at the maturity of the loan. The revaluation of these contracts, as well as the revaluation of the underlying balance sheet items, is recorded directly to the income statement so the adjustment generally offsets the revaluation of the underlying balance sheet items to protect cash payments and reduce income statement volatility.

Note 20 - Derivative Instruments (continued)

As of December 31, 2022 and 2021, the Company had \$553.3 million and \$220.8 million, respectively, of outstanding foreign currency forward contracts at notional value that were not designated as hedging instruments. The following table presents the impact of derivative instruments not designated as hedging instruments for the years ended December 31, 2022, 2021 and 2020, and the related location within the Consolidated Statements of Income.

Derivatives not designated as hedging instruments	Location of gain or (loss) recognized in income	Amount of gain or (loss) recognized in income		
		Year Ended December 31,		
		2022	2021	2020
Foreign currency forward contracts	Other income (expense), net	\$ (25.2)	\$ 3.6	\$ (3.7)

Note 21 - Research and Development

The Company leverages its technical knowledge, research expertise, and production and engineering capabilities across all of its products and end markets to deliver high-performance products and services to its customers. Costs included in "Research and Development Expense" primarily relate to new product innovation. Costs included in "Engineering Expense" primarily relate to the technological enhancement of existing products and services as we align with our customers evolving needs. Expenditures may fluctuate from year-to-year depending on special projects and needs.

Expenditures as a percentage of sales	Year Ended December 31,		
	2022	2021	2020
Research and Development Expense	0.8%	0.9%	1.2%
Engineering Expense	1.5%	1.4%	1.0%
Total	2.3%	2.3%	2.2%

Note 22 - Quarterly Financial Data

(Unaudited)

	2022				
	1st	2nd	3rd	4th	Total
Net sales	\$ 1,124.6	\$ 1,153.7	\$ 1,136.4	\$ 1,082.0	\$ 4,496.7
Gross profit	327.4	341.8	322.8	296.1	1,288.1
Selling, general and administrative expenses	154.1	155.9	159.8	167.3	637.1
Impairment and restructuring charges	1.0	10.0	31.3	1.8	44.1
Net income ⁽¹⁾	121.9	105.6	90.4	99.1	417.0
Net income attributable to noncontrolling interests	3.7	0.6	3.4	1.9	9.6
Net income attributable to The Timken Company	118.2	105.0	87.0	97.2	407.4
Net income per share - Basic:	\$ 1.58	\$ 1.43	\$ 1.19	\$ 1.34	\$ 5.54
Net income per share - Diluted:	\$ 1.56	\$ 1.42	\$ 1.18	\$ 1.32	\$ 5.48
Dividends per share	\$ 0.30	\$ 0.31	\$ 0.31	\$ 0.31	\$ 1.23

	2021				
	1st	2nd	3rd	4th	Total
Net sales	\$ 1,025.4	\$ 1,062.9	\$ 1,037.3	\$ 1,007.3	\$ 4,132.9
Gross profit	299.2	302.3	267.9	233.1	1,102.5
Selling, general and administrative expenses	144.5	149.0	140.7	146.3	580.5
Impairment and restructuring charges	4.0	1.3	2.9	0.7	8.9
Net income ⁽²⁾	116.0	107.2	91.6	66.7	381.5
Net income attributable to noncontrolling interests	2.7	2.4	3.5	3.8	12.4
Net income attributable to The Timken Company	113.3	104.8	88.1	62.9	369.1
Net income per share - Basic:	\$ 1.49	\$ 1.38	\$ 1.16	\$ 0.83	\$ 4.86
Net income per share - Diluted:	\$ 1.47	\$ 1.36	\$ 1.14	\$ 0.82	\$ 4.79
Dividends per share	\$ 0.29	\$ 0.30	\$ 0.30	\$ 0.30	\$ 1.19

Earnings per share are computed independently for each of the quarters presented; therefore, the sum of the quarterly earnings per share may not equal the total computed for the year.

- (1) Net income for the second quarter of 2022 included net actuarial losses of \$11.6 million. Net income for the third quarter of 2022 included impairment charges of \$29.3 million related to the sale of ADS. Net income for the fourth quarter of 2022 included net actuarial gains of \$12.3 million.
- (2) Net income for the second quarter of 2021 included net actuarial losses of \$3.5 million. Net income for the third quarter of 2021 included net actuarial losses of \$3.9 million. Net income for the fourth quarter of 2021 included net actuarial gains of \$8.0 million and the reversal of tax valuation allowances of \$7.8 million.

Note 23 - Subsequent Events

On February 1, 2023, the Company acquired the assets of American Roller Bearing (“ARB”), a North Carolina-based manufacturer of industrial bearings. ARB primarily serves the aftermarket sector and operates manufacturing facilities in Hiddenite and Morganton, North Carolina. ARB generated sales of more than \$30 million in 2022 and the transaction was funded with cash on hand.

On January 30, 2023, the Company reached an agreement to acquire Nadella Group (“Nadella”), a leading European manufacturer of linear guides, telescopic rails, actuators and systems and other specialized industrial motion solutions, from ICG plc. Nadella operates manufacturing facilities in Europe and China and reported revenue of approximately €100 million in 2022. The transaction, which is subject to customary closing conditions, is expected to close in the first quarter of 2023 and will be funded with cash on hand and borrowings from committed credit facilities.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of The Timken Company and subsidiaries

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of The Timken Company and subsidiaries (the Company) as of December 31, 2022 and 2021, the related consolidated statements of income, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2022, and the related notes and the financial statement schedule listed in the Index at Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with 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, 2022, 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 16, 2023 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 consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

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

Critical Audit Matters

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

Pension Benefit Obligation

Description of the Matter

At December 31, 2022, the Company's pension benefit obligation was \$553.4 million and exceeded the fair value of pension plan assets of \$387.1 million, resulting in an unfunded pension benefit obligation of \$166.3 million. As explained in Note 1, Significant Accounting Policies and Note 16, Retirement Benefit Plans, 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 pension benefit obligation and plan assets to reflect the actual return on plan assets and updated actuarial assumptions.

Auditing the pension benefit obligation is complex and required the involvement of specialists due to the judgmental nature of certain of the actuarial assumptions (e.g., discount rate) used in the measurement process. These assumptions had a significant effect on the projected benefit obligation and net periodic benefit costs recognized.

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 the pension benefit obligation. For example, we tested controls over management's review of the pension benefit obligation calculations, the relevant data inputs and the significant actuarial assumptions used in the calculations.

To test the pension benefit obligation, 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 pension benefit obligation from prior year due to the change in service cost, interest cost, actuarial (gains) losses, benefits paid and other activities. In addition, we involved actuarial specialists 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 pension benefit obligation. 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. We also tested the completeness and accuracy of the underlying data, including the participant data used in the determination of the projected benefit obligation.

Valuation of Customer Relationships, Technology and Know-How and Trade name Intangible Assets in the Acquisition of GGB

Description of the Matter

As described in Note 2 to the consolidated financial statements, during November 2022, the Company completed the acquisition of GGB for \$302.5 million, net of cash acquired and subject to customary post-closing adjustments. The acquisition was accounted for using the acquisition method of accounting. The consideration paid in the acquisition must be allocated to the acquired assets and liabilities assumed generally based on their fair value with the excess of the purchase price over those fair values allocated to goodwill. The preliminary estimates of the fair value of intangible assets were recorded as third-party valuations were received resulting in the recognition of customer relationships, technology and know-how and trade name intangible assets (collectively referred to as the intangible assets) of approximately \$152 million.

Auditing the Company's accounting for its acquisition of GGB was complex because the intangible assets recognized were material to the consolidated financial statements and the estimates of fair value involved subjectivity. The subjectivity was primarily due to the sensitivity of the respective fair values to underlying assumptions about the future performance of the acquired business. The Company used discounted cash flow models to measure the intangible assets. The significant assumptions used to estimate the fair value of the intangible assets included the discount rates and certain assumptions that form the basis of the forecasted results (e.g., revenue growth rates and future EBITDA margins). These significant assumptions are forward looking and could be affected by future economic and market conditions.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design, and tested the operating effectiveness of the Company's controls over its accounting for the acquisition of GGB, including recognition and measurement of the intangible assets acquired. For example, we tested controls over the recognition and measurement of customer relationships, technology and know-how and trade name intangible assets, including management's review of the methods and significant assumptions used to develop the fair value estimates.

To test the estimated fair values of the customer relationships, technology and know-how and trade name intangible assets, we performed audit procedures that included, among others, evaluating the Company's selection of the valuation methodology, evaluating the methods and significant assumptions used by the Company's valuation specialist, and evaluating the completeness and accuracy of the underlying data supporting the significant assumptions and estimates. For example, when evaluating the assumptions related to the revenue growth rates and future EBITDA margins, we compared the assumptions to the past performance of GGB and expected industry trends or forecasted performance of the guideline public companies. We also performed sensitivity analyses to evaluate the changes in the fair value of the customer relationships, technology and know-how and trade name intangible assets that would result from changes in the significant assumptions. We involved our EY valuation specialists to assist with our evaluation of the methodology used by the Company and certain significant assumptions included in the fair value estimates.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 1910.

Cleveland, Ohio
February 16, 2023

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

Not applicable.

Item 9A. Controls and Procedures

As of the end of the period covered by this Annual Report on Form 10-K, the Company's 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.

There have been no changes during the Company's fourth quarter of 2022 in the Company's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Report of Management on Internal Control Over Financial Reporting

The management of The Timken Company is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. Timken'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.

Timken management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2022. 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," management believes that, as of December 31, 2022, Timken's internal control over financial reporting is effective.

On May 31, 2022, the Company completed the acquisition of Spinea, and on November 4, 2022, the Company completed the acquisition of GGB. The results of these acquisitions are included in the Company's consolidated financial statements for 2022. The total and net assets of Spinea and GGB represent 3% and 7% of the Company's total assets, and 6% and 14% of the Company's net assets, respectively, as of December 31, 2022. For 2022, the net sales of Spinea and GGB each represented less than 1% of the Company's consolidated net sales and approximately 2% of the Company's consolidated net income. The scope of the Company's assessment of the effectiveness of internal control over financial reporting does not include these acquisitions. This exclusion is in accordance with the SEC's general guidance that an assessment of a recently acquired business may be omitted from the Company's scope in the year of acquisition.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2022 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report which is presented in this Annual Report on Form 10-K.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of The Timken Company and subsidiaries

Opinion on Internal Control Over Financial Reporting

We have audited The Timken Company and subsidiaries' internal control over financial reporting as of December 31, 2022, 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, The Timken Company and subsidiaries (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on the COSO criteria.

As indicated in the accompanying Report of Management on Internal Control Over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Spinea or GGB, which is included in the 2022 consolidated financial statements of the Company. The total and net assets of Spinea and GGB represent 3% and 7% of the Company's total assets and 6% and 14% of the Company's net assets, respectively, as of December 31, 2022. For 2022, the net sales of Spinea and GGB each represented less than 1% of the Company's consolidated net sales and approximately 2% of the Company's consolidated net income. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of Spinea or GGB.

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, 2022 and 2021, the related consolidated statements of income, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2022, and the related notes and the financial statement schedule listed in the Index at Item 15(a)(2) of the Company and our report dated February 16, 2023 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 16, 2023

Item 9B. Other Information

Not applicable.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III.

Item 10. Directors, Executive Officers and Corporate Governance

Required information is set forth under the caption “Nominees” in the proxy statement filed in connection with the annual meeting of shareholders to be held on or about May 5, 2023 (the “Proxy Statement”), 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 Experts is set forth under the caption “Audit Committee” in the Proxy Statement, and is incorporated herein by reference.

The General Policies and Procedures of the Board of Directors of the Company and the charters of its Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee are also available on the Company’s website at <https://investors.timken.com/corporate-governance/documents/default.aspx> and are available to any shareholder upon request to the Vice President, General Counsel and Secretary. 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, as well as its directors. The Company’s code of ethics, The Timken Company Standards of Business Ethics Policy, is available on its website at <https://investors.timken.com/corporate-governance/documents/default.aspx>. The Company intends to disclose any amendment to, or waiver from, its code of ethics by posting such amendment or waiver, as applicable, on its website.

Item 11. Executive Compensation

Required information is set forth under the captions “Compensation Discussion and Analysis,” “2022 Summary Compensation Table,” “2022 Grants of Plan-Based Awards,” “Outstanding Equity Awards at 2022 Year-End,” “2022 Option Exercises and Stock Vested,” “2022 Pension Benefits Table,” “2022 Nonqualified Deferred Compensation,” “Potential Payments Upon Termination or Change in Control,” “Director Compensation,” “CEO Pay Ratio,” “Compensation Committee,” and “Compensation Committee Report” in the Proxy Statement, and is incorporated herein by reference.

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

Required information, including with respect to institutional investors owning more than 5% of the Company’s common shares, is set forth under the caption “Beneficial Ownership of Common Shares” in the Proxy Statement, and is incorporated herein by reference.

Required information is set forth under the caption “Equity Compensation Plan Information” in the Proxy Statement, and is incorporated herein by reference.

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

Required information is set forth under the captions “Nominees,” “Independence Determinations” and “Related Party Transactions Approval Policy” in the Proxy Statement, and is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

Required information regarding fees paid to and services provided by the Company’s independent auditor during the years ended December 31, 2022 and 2021 and the pre-approval policies and procedures of the Audit Committee of the Company’s Board of Directors is set forth under the caption “Auditor” in the Proxy Statement, and is incorporated herein by reference.

PART IV.

Item 15. Exhibits and 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

- (3.1) Amended Articles of Incorporation of Registrant, (effective May 7, 2013) were filed on July 31, 2013 with Form 10-Q (Commission File No. 1-1169) and are incorporated herein by reference.
- (3.2) Amended Regulations of the Registrant adopted on May 10, 2016, were filed on July 28, 2016 with Form 10-Q (Commission File No. 1-1169) and are incorporated herein by reference.
- (4.1) Fifth Amended and Restated Credit Agreement, dated as of December 5, 2022, among The Timken Company, Bank of America, N.A. and KeyBank National Association, as Co-Administrative Agents, and the Lenders party thereto, was filed on December 6, 2022 with Form 8-K (Commission File no. 1-1169) and is incorporated herein by reference.*
- (4.2) Indenture, dated as of August 20, 2014, by and between The Timken Company and The Bank of New York Mellon Trust Company, N.A., was filed on August 20, 2014 with Form 8-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (4.3) Indenture, dated as of September 6, 2018, by and between The Timken Company and The Bank of New York Mellon Trust Company, N.A., as Trustee, was filed on September 6, 2018 with Form 8-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (4.4) First Supplemental Indenture, dated as of September 6, 2018, by and between The Timken Company and The Bank of New York Mellon Trust Company, N.A., as Trustee (including Form of Note), was filed on September 6, 2018 with Form 8-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (4.5) Indenture, dated as of March 28, 2022, by and between the Company and U.S. Bank Trust Company, National Association, as Trustee, was filed on March 28, 2022 with Form 8-K (Commission File no. 1-1169) and is incorporated herein by reference.
- (4.6) First Supplemental Indenture, dated as of March 28, 2022, by and between the Company and U.S. Bank Trust Company, National Association, as Trustee (including Form of Note), was filed on March 28, 2022 with Form 8-K (Commission File no. 1-1169) and is incorporated herein by reference.
- (4.7) Description of The Timken Company Common Shares was filed on February 14, 2020 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.

The Company is also a party to agreements with respect to other long-term debt in total amount less than 10% of the Registrant's consolidated total assets. The Registrant agrees to furnish a copy of such agreements upon request.*

Management Contracts and Compensation Plans

- (10.1) The Timken Company 1996 Deferred Compensation Plan for officers and other key employees, amended and restated effective as of January 1, 2023, as attached hereto as Exhibit 10.1.
- (10.2) The Timken Company Director Deferred Compensation Plan, amended and restated effective December 31, 2008, was filed on February 25, 2010 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.3) Form of The Timken Company 1996 Deferred Compensation Plan Election Agreement, amended and restated as of January 1, 2008, was filed on February 25, 2010 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.4) Form of The Timken Company Director Deferred Compensation Plan Election Agreement, amended and restated as of January 1, 2008, was filed on February 25, 2010 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.5) The Timken Company 2011 Long-Term Incentive Plan, as amended and restated as of February 13, 2015 for directors, officers and other key employees as approved by the shareholders on May 7, 2015 was filed on March 27, 2015 with Definitive Proxy Statement on Schedule 14A (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.6) The Timken Company 2019 Equity and Incentive Compensation Plan for directors, officers and other key employees as approved by the shareholders on May 10, 2019 was filed on March 22, 2019 as Appendix B to Definitive Proxy Statement on Schedule 14A (Commission File No. 1-1169) and is incorporated herein by reference.

- (10.7) Amended and Restated Supplemental Pension Plan of The Timken Company, amended and restated effective as of January 1, 2011, was filed on February 17, 2012 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.8) Amended and Restated Supplemental Pension Plan of The Timken Company, effective as of June 30, 2014, was filed on October 30, 2018 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.9) Amendment No. 1 to the Amended and Restated Supplemental Pension Plan of The Timken Company, effective as of June 30, 2014, was filed on October 30, 2018 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.10) Amended and Restated Supplemental Pension Plan of The Timken Company, effective as of October 1, 2018, was filed on October 30, 2018 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.11) The Timken Company Short-Term Incentive Plan Global Plan Document for officers and other key employees, amended and restated effective as of January 1, 2021 and pursuant to The Timken Company 2019 Equity and Incentive Compensation Plan, was filed on February 15, 2022 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.12) Form of Severance Agreement (for Executive Officers appointed on or after November 12, 2015), as adopted on November 12, 2015, was filed on February 24, 2016 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.13) Form of Severance Agreement as adopted on December 9, 2010 was filed on February 22, 2011 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.14) Amended and Restated Severance Agreement with Andreas Roellgen, dated as of December 9, 2022, as attached hereto as Exhibit 10.2.
- (10.15) Form of Indemnification Agreement for Directors was filed on February 14, 2020 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.16) Form of Indemnification Agreement for Executive Officers was filed on February 14, 2020 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.17) Form of Amended and Restated Employee Excess Benefits Agreement entered into with certain Executive Officers and certain key employees of the Company, was filed on February 26, 2009 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.18) Form of Amended and Restated Employee Excess Benefits Agreement entered into with the Chief Executive Officer, was filed on February 26, 2009 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.19) Form of Employee Excess Benefits Agreement, entered into with all Executive Officers after January 1, 2011, was filed on August 4, 2011 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.20) Amendment No. 1 to the Employee Excess Benefits Agreement, dated January 1, 2011, entered into with Richard G. Kyle, approved as of November 8, 2018 was filed on February 15, 2019 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.21) Form of Amendment No. 1 to The Amended and Restated Employee Excess Benefit Agreement, entered into with certain Executive Officers and certain key employees of the Company, was filed on September 2, 2009 with Form 8-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.22) Form of Amendment No. 1 to The Amended and Restated Employee Excess Benefits Agreement with all Executive Officers after January 1, 2011 and Form of Amendment No. 2 to the Amended and Restated Excess Benefits Agreement with certain Executive Officers and certain key employees of the Company, as adopted December 8, 2011, was filed on February 17, 2012 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.23) Amendment No. 2 to the Amended and Restated Employee Excess Benefits Agreement, dated December 17, 2008, entered into with Christopher A. Coughlin, approved as of November 8, 2018 was filed on February 15, 2019 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.24) Amendment No. 3 to the Amended and Restated Employee Excess Benefits Agreement, dated December 18, 2008, entered into with Philip D. Fracassa, approved as of November 8, 2018 was filed on February 15, 2019 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.25) Form of Amendment No. 1 to The Amended and Restated Employee Excess Benefits Agreement entered into with the Chief Executive Officer, as adopted December 8, 2011, was filed on February 17, 2012 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.26) Form of Amendment No. 2 to The Amended and Restated Employee Excess Benefits Agreement entered into with the Chief Executive Officer, as adopted December 8, 2011, was filed on February 17, 2012 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.

- (10.27) Form of Nonqualified Stock Option Agreement for transferable options for Officers, as adopted on August 12, 2015, was filed on February 24, 2016 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.28) Form of Nonqualified Stock Option Agreement for non-transferable options for Non-Officer Employees, as adopted on December 8, 2011, was filed on February 17, 2012 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.29) Form of Nonqualified Stock Option Agreement, as adopted on February 8, 2018, was filed on May 1, 2018 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.30) Form of Nonqualified Stock Option Agreement (U.S.), as adopted on September 24, 2018, was filed on October 30, 2018 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.31) Form of Nonqualified Stock Option Agreement (Non-U.S.), as adopted on September 24, 2018, was filed on October 30, 2018 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.32) Form of Nonqualified Stock Option Agreement (U.S.), as adopted February 7, 2019 and pursuant to the Timken Company 2011 Long-Term Incentive Plan, was filed on May 1, 2019 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.33) Form of Nonqualified Stock Option Agreement (non-U.S.), as adopted February 7, 2019 and pursuant to the Timken Company 2011 Long-Term Incentive Plan, was filed on May 1, 2019 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.34) Form of Nonqualified Stock Option Agreement (U.S., retirement age 62), as adopted February 7, 2019 and pursuant to the Timken Company 2011 Long-Term Incentive Plan, was filed on May 1, 2019 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.35) Form of Nonqualified Stock Option Agreement (non-U.S., retirement age 62), as adopted February 7, 2019 and pursuant to the Timken Company 2011 Long-Term Incentive Plan, was filed on May 1, 2019 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.36) Form of Nonqualified Stock Option Agreement (U.S.) as adopted February 7, 2019 and to be granted pursuant to the Timken Company 2019 Equity and Incentive Compensation Plan, was filed on May 1, 2019 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.37) Form of Nonqualified Stock Option Agreement (non-U.S.) as adopted February 7, 2019 and to be granted pursuant to the Timken Company 2019 Equity and Incentive Compensation Plan, was filed on May 1, 2019 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.38) Form of Nonqualified Stock Option Agreement (U.S., retirement age 62), as adopted February 7, 2019 and to be granted pursuant to the Timken Company 2019 Equity and Incentive Compensation Plan, was filed on May 1, 2019 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.39) Form of Nonqualified Stock Option Agreement (non-U.S., retirement age 62), as adopted February 7, 2019 and to be granted pursuant to the Timken Company 2019 Equity and Incentive Compensation Plan, was filed on May 1, 2019 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.40) Form of Restricted Share Agreement for Non-Employee Directors (ratable vesting over five years), as adopted on August 12, 2015, was filed on February 24, 2016 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.41) Form of Deferred Shares Agreement (five year cliff vesting) entered into with employees after August 12, 2015, as adopted on August 12, 2015, was filed on February 24, 2016 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.42) Form of Deferred Shares Agreement (five year cliff vesting), as adopted on February 8, 2018, was filed on May 1, 2018 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.43) Form of Deferred Shares Agreement (three year cliff vesting), as adopted on September 24, 2018, was filed on October 30, 2018 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.44) Form of Deferred Shares Agreement (five year cliff vesting), as adopted on September 24, 2018, was filed on October 30, 2018 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.45) Form of Deferred Shares Agreement (three year cliff vesting), as adopted February 7, 2019 and pursuant to the Timken Company 2011 Long-Term Incentive Plan, was filed on May 1, 2019 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.46) Form of Deferred Shares Agreement (five year cliff vesting), as adopted February 7, 2019 and pursuant to the Timken Company 2011 Long-Term Incentive Plan, was filed on May 1, 2019 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.47) Form of Deferred Shares Agreement (three year cliff vesting, retirement age 62), as adopted February 7, 2019 and pursuant to the Timken Company 2011 Long-Term Incentive Plan, was filed on May 1, 2019 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.48) Form of Deferred Shares Agreement (five year cliff vesting, retirement age 62), as adopted February 7, 2019 and pursuant to the Timken Company 2011 Long-Term Incentive Plan, was filed on May 1, 2019 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.

- (10.69) Form of Time-Based Restricted Stock Unit Agreement, as adopted February 7, 2019 and to be granted pursuant to the Timken Company 2019 Equity and Incentive Compensation Plan, was filed on May 1, 2019 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.70) Form of Time-Based Restricted Stock Unit Agreement (retirement age 62), as adopted February 7, 2019 and to be granted pursuant to the Timken Company 2019 Equity and Incentive Compensation Plan, was filed on May 1, 2019 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.71) Form of Time-Based Restricted Stock Unit Agreement for Nonemployee Directors (new member grant), as adopted February 7, 2019, was filed on May 1, 2019 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.72) Form of Time-Based Restricted Stock Unit Agreement for Nonemployee Directors (annual grant), as adopted February 7, 2019, was filed on May 1, 2019 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.73) Form of Associate Non-Compete Agreement entered into with key employees was filed on December 3, 2012 with Form 10-Q/A (Commission File No. 1-1169) and is incorporated herein by reference.

*Portions of this exhibit have been omitted, which portions will be furnished to the Securities and Exchange Commission upon request.

Listing of Exhibits (continued)

- (10.1) The Timken Company 1996 Deferred Compensation Plan for officers and other key employees, amended and restated effective as of January 1, 2023.
- (10.2) Amended and Restated Severance Agreement with Andreas Roellgen, dated as of December 9, 2022.
 - (21) A list of subsidiaries of the Registrant.
 - (23) Consent of Independent Registered Public Accounting Firm.
 - (24) Power of Attorney.
- (31.1) Principal Executive Officer's Certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- (31.2) Principal Financial Officer's Certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- (32) Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- (101) Financial statements from the Annual Report on Form 10-K of The Timken Company for the year ended December 31, 2022, formatted in Inline XBRL: (i) the Consolidated Statements of Income, (ii) the Consolidated Statements of Comprehensive Income, (iii) the Consolidated Balance Sheets, (iv) the Consolidated Statements of Cash Flows, (v) the Consolidated Statements of Shareholders' Equity and (vi) the Notes to the Consolidated Financial Statements.
- (104) Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

Item 16. Form 10-K Summary

None.

SIGNATURES

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

THE TIMKEN COMPANY

By: /s/ Richard G. Kyle

Richard G. Kyle
President, Chief Executive Officer and Director
(Principal Executive Officer)

Date: February 16, 2023

By: /s/ Philip D. Fracassa

Philip D. Fracassa
Executive Vice President and Chief Financial Officer
(Principal Financial Officer and Principal
Accounting Officer)

Date: February 16, 2023

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.

By: /s/ Maria A. Crowe *

Maria A. Crowe, Director
Date: February 16, 2023

By: /s/ Ajita G. Rajendra *

Ajita G. Rajendra, Director
Date: February 16, 2023

By: /s/ Elizabeth A. Harrell *

Elizabeth A. Harrell, Director
Date: February 16, 2023

By: /s/ Frank C. Sullivan *

Frank C. Sullivan, Director
Date: February 16, 2023

By: /s/ Richard G. Kyle *

Richard G. Kyle, Director
Date: February 16, 2023

By: /s/ John M. Timken, Jr.*

John M. Timken, Jr., Director
Date: February 16, 2023

By: /s/ Sarah C. Lauber *

Sarah C. Lauber, Director
Date: February 16, 2023

By: /s/ Ward J. Timken, Jr.*

Ward J. Timken, Jr., Director
Date: February 16, 2023

By: /s/ John A. Luke, Jr. *

John A. Luke, Jr., Director
Date: February 16, 2023

By: /s/ Jacqueline F. Woods *

Jacqueline F. Woods, Director
Date: February 16, 2023

By: /s/ Christopher L. Mapes *

Christopher L. Mapes, Director
Date: February 16, 2023

By: /s/ Philip D. Fracassa

Philip D. Fracassa, attorney-in-fact
* By authority of Power of Attorney
filed as Exhibit 24 hereto
Date: February 16, 2023

By: /s/ James F. Palmer *

James F. Palmer, Director
Date: February 16, 2023

Schedule II—Valuation and Qualifying Accounts

The Timken Company and Subsidiaries

Allowance for uncollectible accounts:	2022	2021	2020
Balance at beginning of period	\$ 16.9	\$ 16.5	\$ 18.1
Additions:			
Charged to costs and expenses ⁽¹⁾	3.7	3.5	2.8
Deductions:			
Charged to costs and expenses ⁽³⁾	0.4	2.5	3.4
Charged to other accounts ⁽²⁾	2.3	0.6	1.0
Balance at end of period	\$ 17.9	\$ 16.9	\$ 16.5

Allowance for surplus and obsolete inventory:	2022	2021	2020
Balance at beginning of period	\$ 63.3	\$ 54.5	\$ 40.1
Additions:			
Charged to costs and expenses ⁽⁴⁾	12.9	13.4	11.6
Charged to other accounts ⁽²⁾	1.2	(0.7)	11.8
Deductions ⁽⁵⁾	19.0	3.9	9.0
Balance at end of period	\$ 58.4	\$ 63.3	\$ 54.5

Valuation allowance on deferred tax assets:	2022	2021	2020
Balance at beginning of period	\$ 31.0	\$ 36.7	\$ 33.7
Additions:			
Charged to costs and expenses ⁽⁶⁾	3.1	3.1	2.7
Charged to other accounts ⁽²⁾	—	—	1.0
Deductions			
Charged to costs and expenses ⁽⁷⁾	0.9	7.8	0.7
Charged to other accounts ⁽²⁾	1.9	1.0	—
Balance at end of period	\$ 31.3	\$ 31.0	\$ 36.7

- (1) Provision for uncollectible accounts included in expenses.
- (2) Currency translation and change in reserves due to acquisitions, net of divestitures.
- (3) Actual accounts written off against the allowance, net of recoveries.
- (4) Provision for surplus and obsolete inventory included in expenses.
- (5) Inventory items written off against the allowance.
- (6) Increase in valuation allowance is recorded as a component of the provision for income taxes.
- (7) Amount relates to the reversal of valuation allowances and was recorded as a component of the provision for income taxes. The Company released \$7.8 million of foreign valuation allowances for the year ended December 31, 2021. Refer to *Note 5 - Income Taxes* in the Notes to the Consolidated Financial Statements for further discussion on valuation allowance reversals.

Principal Executive Officer's Certifications
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Richard G. Kyle, certify that:

1. I have reviewed this annual report on Form 10-K of The Timken Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of 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 16, 2023

By: /s/ Richard G. Kyle

Richard G. Kyle
President and Chief Executive Officer
(Principal Executive Officer)

Principal Financial Officer's Certifications
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Philip D. Fracassa, certify that:

1. I have reviewed this annual report on Form 10-K of The Timken Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of 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 16, 2023

By: /s/ Philip D. Fracassa

Philip D. Fracassa
Executive Vice President and Chief Financial Officer
(Principal Financial Officer and Principal Accounting
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 The Timken Company (the "Company") on Form 10-K for the period ended December 31, 2022, 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. 1350, as adopted pursuant to 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 16, 2023

By: /s/ Richard G. Kyle

Richard G. Kyle
President and Chief Executive Officer
(Principal Executive Officer)

By: /s/ Philip D. Fracassa

Philip D. Fracassa
Executive Vice President and Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

The foregoing certification is being furnished solely pursuant to 18 U.S.C. 1350 and is not being filed as part of the Report or as a separate disclosure document.

(This page intentionally left blank.)

(This page intentionally left blank.)

TIMKEN

Appendix: Reconciliation of GAAP to Non-GAAP Measures

Reconciliation of Net Income to Adjusted Net Income, EBITDA and Margin¹			
	2017	2016⁶	2016⁷
Net Sales	\$ 3,003.8	\$ 2,669.8	\$ 2,669.8
Net Income Attributable to The Timken Company	203.4	140.8	152.6
Impairment, restructuring and reorganization charges ²	13.1	28.0	28.0
Corporate pension and other postretirement benefit related expense ³	18.1	67.0	28.1
Acquisition-related charges ⁴	9.0	4.2	4.2
Gain on divestitures and sale of real estate	(3.6)	(0.5)	(0.5)
Tax indemnification and related items	(1.0)	—	—
Health care plan modification costs	(0.7)	2.9	2.9
CDSOA income, net of expense	—	(59.6)	(59.6)
Provision for income taxes	(30.8)	(13.8)	0.5
Adjusted Net Income	\$ 207.5	\$ 169.0	\$ 156.2
Net income attributable to noncontrolling interest	(1.1)	0.3	0.3
Provision for income taxes (as reported)	57.6	60.5	69.2
Interest expense	37.1	33.5	33.5
Interest income	(2.9)	(1.9)	(1.9)
Depreciation and amortization expense ⁵	135.8	130.2	130.2
Less: Provision for income taxes	(30.8)	(13.8)	0.5
Adjusted EBITDA	\$ 464.8	\$ 405.4	\$ 387.0
Adjusted EBITDA Margin (% of net sales)	15.5%	15.2%	14.5%
Reconciliation of Diluted EPS to Adjusted EPS¹			
Diluted Earnings Per Share (EPS)	\$ 2.58	\$ 1.78	\$ 1.92
Adjusted EPS	\$ 2.63	\$ 2.13	\$ 1.97
Diluted Shares	78,911,149	79,234,324	79,234,324

1 Management believes consolidated earnings before interest, taxes, depreciation and amortization (EBITDA) is a non-GAAP measure that is useful to investors as it is representative of the Company's performance and that it is appropriate to compare GAAP net income to consolidated EBITDA. Management also believes that non-GAAP measures of adjusted EBITDA, adjusted EBITDA margin, adjusted net income and adjusted diluted earnings per share are useful to investors as they are representative of the Company's core operations and are used in the management of the business, including decisions concerning the allocation of resources and assessment of performance.

2 Impairment, restructuring and reorganization charges (including items recorded in cost of products sold) are related to: (i) plant closures; (ii) the rationalization of certain plants; (iii) severance related to cost reduction initiatives and (iv) related depreciation and amortization. The Company re-assesses its operating footprint and cost structure periodically, and makes adjustments as needed that result in restructuring charges. However, management believes these actions are not representative of the Company's core operations.

3 Corporate pension and other postretirement benefit related expense primarily represents actuarial losses and (gains) that resulted from the remeasurement of plan assets and obligations as a result of changes in assumptions. The Company recognizes actuarial losses and (gains) through earnings in connection with the annual remeasurement in the fourth quarter, or on an interim basis if specific events trigger a remeasurement. Corporate pension and other postretirement benefit related expense also include curtailments.

4 The acquisition-related charges represent deal-related expenses associated with completed transactions and certain unsuccessful transactions, as well as any resulting inventory step-up impact.

5 Depreciation and amortization shown excludes depreciation recognized in reorganization charges, if any.

6 2016 results depicted above are revised for the adoption of mark-to-market accounting.

7 2016 results are as originally reported prior to the adoption of mark-to-market accounting.

2023 Shareholder Information

World Headquarters

The Timken Company
4500 Mount Pleasant St. NW
North Canton, OH 44720-5450

234-262-3000

www.timken.com

Stock Listing

Timken shares are traded on the New York Stock Exchange under the symbol TKR.

Annual Meeting of Shareholders

May 5, 2023, 10 a.m.
Online-only format, with attendance via the Internet

Independent Registered Public Accounting Firm

Ernst & Young LLP
950 Main Ave.
Suite 1800
Cleveland, OH 44113-7214

Publications

The Annual Meeting Notice and Proxy Card are mailed to shareholders in March.

Copies of the Annual Report, Proxy Statement, Forms 10-K and 10-Q may be obtained from the company's website, <http://investors.timken.com/> or by written request at no charge from:

The Timken Company
Treasury/Shareholder Relations
WHQ-03
4500 Mount Pleasant St. NW
North Canton, OH 44720-5450

Investor Relations

Neil Frohnapple
Director – Investor Relations
The Timken Company
4500 Mount Pleasant St. NW
North Canton, OH 44720-5450
234-262-2310
neil.frohnapple@timken.com

Shareholder Information

Dividends on common shares are generally payable in March, June, September and December.

The Timken Company offers an open enrollment dividend reinvestment and stock purchase plan through its transfer agent EQ. This program allows current shareholders and new investors the opportunity to purchase common shares without a broker.

Shareholders of record may increase their investment in the company by reinvesting their dividends at no cost. Shares held in the name of a broker must be transferred to the shareholder's name to permit reinvestment. Information and enrollment materials are available online or by contacting EQ.

Inquiries regarding dividend reinvestment, dividend payments, change of address or lost certificates should be directed to:

EQ
Shareowner Services
P.O. Box 64874
St. Paul, MN 55164-0874

800-468-9716 or
651-450-4064

www.shareowneronline.com



TIMKEN

TIMKEN

 **GROENEVELD**
LUBRICATION SYSTEMS

 **BEKA**
LUBRICATION SYSTEMS

 **Cone Drive**

 **SPINEA**

 **PHILADELPHIA**
GEAR

 **GGB**

ROLLON

 **DIAMOND**

DRIVES

Lovejoy

 **PTTECH**

 **TORSION**
CONTROL PRODUCTS