



2019 ANNUAL REPORT



THE TIMKEN CO



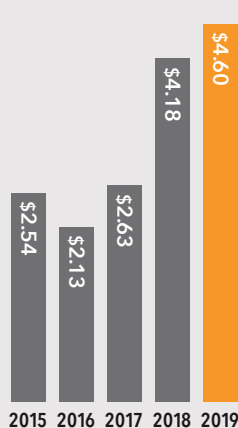
OPERATING DATA	2019	2018
Net Sales	\$ 3,789.9	\$ 3,580.8
Adjusted EBITDA*	726.3	646.5
Adjusted EBITDA Margin*	19.2%	18.1%
Adjusted Net Income*	353.8	327.5
Free Cash Flow*	409.5	219.9
SHAREHOLDER RETURNS		
Adjusted EPS*	\$ 4.60	\$ 4.18
Dividends	1.12	1.11
KEY RATIOS		
Net Debt to Capital*	43.8%	48.5%
Net Debt to Adjusted EBITDA**	2.1	2.4
Adjusted Return on Invested Capital*	11.9%	12.8%

COMPANY

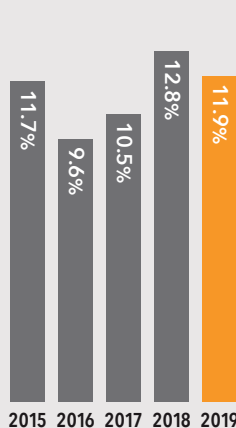
REVENUE
Dollars in Billions



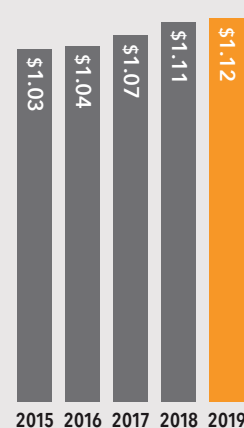
ADJUSTED EARNINGS PER SHARE*



ADJUSTED RETURN ON INVESTED CAPITAL*



DIVIDENDS PER SHARE



10-YEAR TOTAL SHAREHOLDER RETURN* 15.3%**

* See appendix on last page for reconciliations to the most directly comparable generally accepted accounting principal (GAAP) financial measures. 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.

** The Ratio of Net Debt to Adjusted EBITDA is defined as net debt at December 31 of the applicable period divided by adjusted EBITDA for the twelve months ended December 31 of the applicable period. See appendix on last page for the reconciliations of net debt and adjusted EBITDA to the most directly comparable GAAP financial measures.

*** Total shareholder return for the Company was calculated on an annualized basis, assumes quarterly reinvestment of dividends and takes into account the value of TimkenSteel Corporation common shares distributed in the spinoff on June 30, 2014. See Item 5 in the 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.



RICHARD G. KYLE
President and
Chief Executive Officer

To Our Valued Shareholders:

In 2019, The Timken Company celebrated 120 years of advancing as a global industrial leader by delivering record-setting financial performance.

Our focused strategy continues to drive our progress. Timken's expanding portfolio of leading engineered bearings and power transmission brands enables us to serve the needs of global industries more fully. We are building scale, entering new product lines, expanding geographically and diversifying our end markets. The result is a stronger company, creating value for our customers and delivering strong financial performance and returns to shareholders.

We achieved record adjusted earnings per share (EPS) for the second year in a row. Our 2019 adjusted EPS of \$4.60 was 10 percent higher than 2018. We generated strong free cash flow of \$410 million and an adjusted earnings before interest, taxes, depreciation and amortization (EBITDA) margin of

19.2 percent, up 110 basis points from the prior year. In addition, we grew our annual dividend for the sixth straight year, paid our 390th consecutive quarterly dividend and repurchased more than 1.4 million shares totaling nearly \$63 million. We completed the acquisition of two respected brands – BEKA and Diamond Chain – and as of the end of 2019, we delivered an annualized shareholder return of 15.3 percent over the last 10 years.

Our focus on diversification has been key to our performance despite a relatively soft and uncertain global industrial economy. Our strategy to drive growth and solid shareholder returns through industrial cycles positions us well to deliver strong results in 2020 and beyond.



We are building scale, entering new product lines, expanding geographically and diversifying our end markets. The result is a stronger company, creating value for our customers and delivering strong financial performance and returns to shareholders.

SCALING FOR NEXT-GENERATION PERFORMANCE

Timken is now more productive and profitable, and we are expanding our global industrial leadership for the future.

We remain focused on bearings, power transmission and motion products. Engineered bearings are at the core of our business and reflect our long-standing industry leadership and innovation. Power transmission products are adjacent offerings that allow us to serve customers in new ways, fuel our growth and drive cost synergies.

To leverage our portfolio's potential, our strategy is threefold: drive profitable organic growth, operate with excellence across the enterprise and deploy capital to deliver shareholder value.

It is clear our strategy is working. We have steadily diversified our products, markets and geographic reach, and we are expanding and innovating to address emerging trends. To further drive our performance, we are improving our cost structure and manufacturing footprint, while enhancing our cash flow and margin profile.

Today, we have a better mix on the top line and a more variable cost structure that supports the

bottom line. With our focus on the future, we have set new financial goals that continue to focus on growing the earnings power of the company.

MEETING TOMORROW'S MARKET DEMANDS TODAY

Our end-market mix provides us with a leading edge in meeting global trends. We serve a diverse and fragmented set of industrial end markets, as well as emerging or higher-growth markets such as renewable energy and food and beverage.

Global customer needs continue to evolve, driven by advancements in automation, electrification, fuel efficiency, lightweighting and miniaturization. These trends require Timken's 120 years of expertise and knowledge. We are strongly positioned with three distinct competitive advantages:

- Known to solve the toughest, most complicated challenges for global industries, we collaborate closely with our customers to engineer the next-generation of industrial equipment.
- We continue to expand our worldwide presence and build on our extensive distribution network to be closer to our customers in order to serve them faster.



While we address future market demands, our long-standing reputation, industry-leading reliability and unparalleled customer service continue to differentiate us from our competition.

- While we address future market demands, our long-standing reputation, industry-leading reliability and unparalleled customer service continue to differentiate us from our competition.

We are confident in our ability to win with our customers today and into the future. Timken is a leader in the markets we serve and we are a trusted business partner with a 120-year track record to back it up.

DELIVERING ON A STRONG INVESTMENT WITH ENDURING VALUE

Timken has made a step change in financial performance, and we are well positioned to continue this momentum.


To do so, we are deploying our strong cash flow and capital to drive attractive returns for shareholders. We are investing in organic growth through capital expenditures and R&D, and we are expanding our business inorganically through acquisitions. We are consistently returning capital to our shareholders through share buybacks and a growing dividend – all while maintaining a strong investment-grade balance sheet.

Our top priority remains investing in our core business to drive organic growth while sustaining our profitability. In 2019, we funded projects that advanced our product vitality and engineering leadership. We also invested in new digital capabilities to improve our customer experience and launched efficiency initiatives across our global footprint.

We continue to broaden our reach through value-accretive acquisitions. In 2019, we added Diamond Chain and BEKA to build our leadership in engineered chain and automatic lubrication system product lines. These acquisitions expand our global presence in growing markets, especially in China and Europe, and are expected to deliver significant cost and revenue synergies.

At the same time, we are committed to paying an attractive dividend that grows over time with earnings. We expect that share repurchases will also continue to play a critical role in our capital deployment strategy. Since 2013, we have repurchased nearly a quarter of our outstanding shares, driving significant accretion in earnings per share.

Timken is well-positioned to generate strong profitable growth for years to come. We recently set new five-year targets of approximately 6 percent



Our strategy to drive growth and solid shareholder returns through industrial cycles positions us well to deliver strong results in 2020 and beyond.

top-line growth, 20 percent EBITDA margins, 10 percent earnings per share CAGR and conversion of 100 percent of net income to free cash flow.

Looking ahead, we will continue to be deliberate in where we grow, how our mix evolves and how we allocate capital to deliver top-tier shareholder returns.

TIMKEN: STRONGER BY DESIGN

The result of Timken's strategic evolution is a stronger investment and future-ready company. We have built this business to deliver strong financial performance year after year. How we operate and invest in our company differentiates us clearly from our competitors and presents an attractive value-creation opportunity for our shareholders.

As we advance as a global industrial leader, scale our business and meet tomorrow's market demands, we will follow our strategy and uphold our core values.

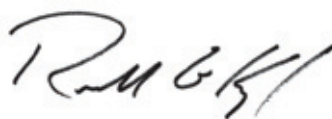
We have built a portfolio of strong brands; our product technology is leading-edge and our innovation pipeline is expanding. We have invested in our global expansion, and our Timken team is more focused and moving faster to deliver outgrowth. We run our business with great efficiency, eliminating

costs and driving performance in our operations by the hour. We are intently focused on winning with customers and achieving strong financial performance.

Our commitment to our customers, doing the right thing and conducting our business with ethics and integrity remains unwavering. We continue to embrace a strong spirit of social responsibility. We believe in making our communities better. We are committed to being good stewards of the earth's resources. And we take pride in being an employer of choice. We will continue moving the world forward through our products and actions, for good.

Thank you to all our associates and stakeholders for another record year. Your continued confidence and support drives our success. Together, we look forward to delivering strong results in 2020 and into the future.

Sincerely,



Richard G. Kyle
President and Chief Executive Officer

FROM THE CHAIRMAN



The Timken Company's 120 years of staying power is the result of an effective combination of leadership and stewardship. In 2019, that formula enabled our company to deliver another record year as we continued to pursue the proven strategy that guides our advancement as a global industrial leader.

Timken associates worldwide bring that approach to life through their unwavering commitment to innovation, quality and excellence. Thanks to their contributions, we again delivered impressive results, and we are confident we will continue to prosper in 2020 and beyond. I speak for the Board in expressing our sincere gratitude to all the Timken associates around the world.

At the same time, Timken remains committed to moving the world forward, for good – through our products, services and the way we do business. Throughout our company's long history, we have always operated with ethics and integrity while innovating and closely collaborating with our customers to advance the many industries we serve. In recognition of our business practices, Ethisphere Institute recently named Timken one of the world's most ethical companies for the 10th time. That is more than just a great honor; it is a call to action for us to continue to lead by example. We will remain unwavering in our commitment to best business practices wherever we participate.

How we operate and invest in our business is a differentiator and a value-creation opportunity for our shareholders. Timken remains in good hands with our management team. Their focus on executing our strategy has evolved Timken into a company with continued staying power that can grow – and flourish – through industrial cycles.

We thank our customers for their longstanding trust they have in The Timken Company. Finally, we thank our shareholders, for your continued confidence in our ability to create value for you. We look forward to reporting on further positive results in the years ahead.

Sincerely,

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



John A. Luke, Jr.
Chairman
WestRock Company



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



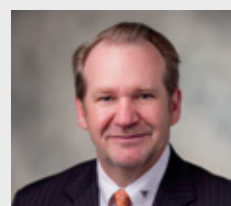
James F. Palmer
Retired Corporate Vice President
and Chief Financial Officer
Northrop Grumman Corporation



Ajita G. Rajendra
Executive Chairman
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



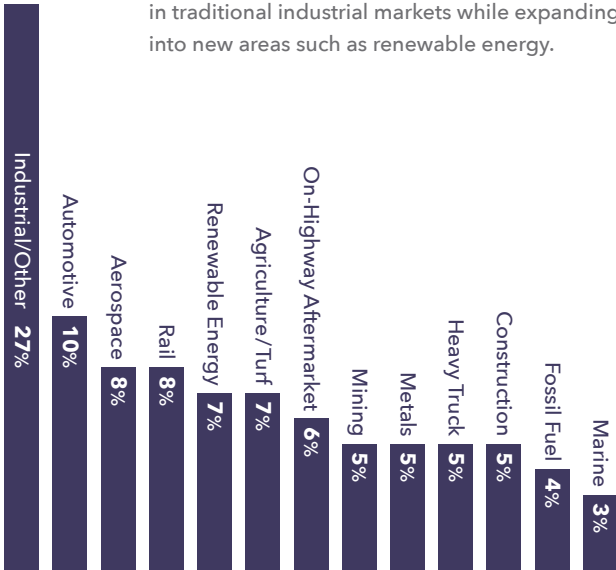
Jacqueline F. Woods
Retired President
AT&T Ohio

The Timken Company (NYSE: TKR; timken.com) designs a growing portfolio of engineered bearings and power transmission products. With more than a century of knowledge and innovation, we continuously improve the reliability and efficiency of global machinery and equipment to move the world forward. Timken posted \$3.8 billion in sales in 2019 and employs more than 18,000 people globally, operating from 42 countries.

2019

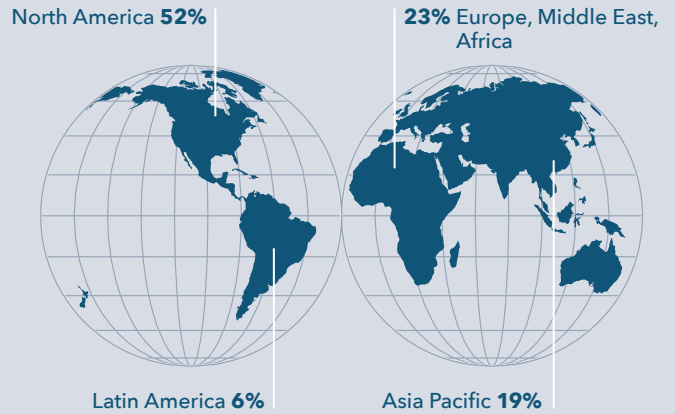
END-MARKET SECTORS

We keep the world in motion by serving a diverse mix of end-market sectors. We continue to lead in traditional industrial markets while expanding into new areas such as renewable energy.



SALES BY GEOGRAPHY

We solve the most complex challenges for global industries by operating where our customers need us, from North America to Europe and throughout Asia and Latin America.



BUSINESS SEGMENT SALES

50%
Mobile Industries

50%
Process Industries

PRODUCT OFFERING SALES

70%
Engineered Bearings

30%
Power Transmission Products

CHANNEL OVERVIEW

56%
Original Equipment Manufacturers

44%
Distribution / End Users

OUR FLAGSHIP BRANDS

Our growing portfolio of engineered bearings and power transmission product brands serve our customers' evolving needs.

TIMKEN

ROLLON

PHILADELPHIA GEAR

DIAMOND


Cone Drive

DRIVES

GROENEVELD

BEKA
LUBRICATION SYSTEMS

Lovejoy



Timken today is a more diversified, productive and profitable company. While we maintain focus on our bearing leadership position, we have added complementary product lines to our portfolio to meet emerging customer demands, enter new growth markets and scale the business overall. Driven by our associates' diverse thought leadership and innovative approaches, we have expanded our role as a critical

THE POWER

ingredient brand for global industries, serving a diverse end-market sector mix. The sum of our knowledge, products, services and actions make a daily, positive impact around the globe and move industries forward, powerfully.

Throughout 2019 we took many steps to strengthen our global industrial leadership position – from addressing emerging trends to winning with customers and formalizing our deep commitment to corporate social responsibility.

Powering Renewable Energy Solutions

As the world increasingly embraces renewable energy, we continue to bolster our capabilities in areas such as solar and wind power. This burgeoning industry has grown from just a small fraction of our business a decade ago to 7 percent of our portfolio today, making renewable energy our fourth-largest market sector. Our strategic acquisitions of BEKA Lubrication, Cone Drive, PT Tech and Lovejoy, combined with organic innovations, have helped make us a trusted partner for the world's wind turbine and gearbox manufacturers, as well as a leading supplier for the global solar industry. Looking ahead, we will continue to play a key role in helping this sector optimize cost, reliability and performance.

OF TIMKEN

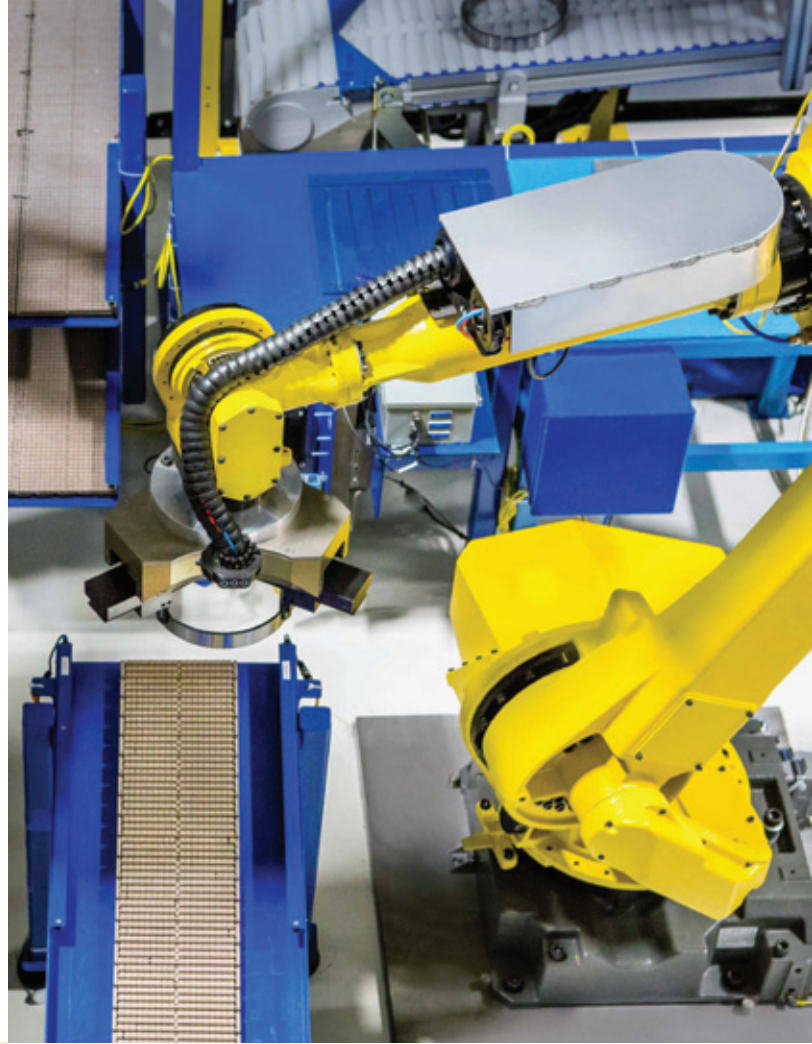
Capturing Opportunities Across Asia

Across Asia, population growth and urbanization are fueling investments in infrastructure and changes in the energy mix, providing new opportunities for Timken solutions. As we have delivered a CAGR of around 19 percent in Asia since 2016, we have built tremendous momentum in fast-growing market sectors like heavy industrial, energy, rail and off-highway vehicles. With our expanded manufacturing footprint, record number of new product introductions and expanded network of distribution partners, we have all the assets in place for continued growth in this dynamic region.



Delivering Industry-Leading Service

Over the past 120 years, Timken has cultivated technical capabilities and engineering knowledge to help solve our customers' most difficult challenges. Our globally connected digital infrastructure – which we continue to invest in and broaden – spans customers, suppliers, manufacturing, sales, engineering and pricing to ensure product availability and on-time delivery. We have also deployed state-of-the-art manufacturing processes leveraging the latest in robotics and automation, as well as advanced vision and sensing systems, to ensure quality while driving productivity to better serve our customer base. We continue to invest in our global manufacturing footprint and are working to link it to our growing digital platform to provide an industry-leading customer experience.



Strengthening a Diversified Portfolio

Over the last 10 years, we have been diversifying and strengthening our business beyond bearings through acquisition. These additions have advanced our position in industrial end markets and expanded our offerings into adjacent power transmission product lines, enabling us to more fully serve more customers and grow the bottom line. Driven by strong product brands with market-leading positions, our power transmission products have surpassed \$1 billion in annual sales. We believe in the value-creation potential of M&A and will continue to selectively add attractive businesses to our portfolio.



Expanding Capabilities to Serve Customers

At Timken, we have built a portfolio of industry-leading brands that have strengthened our existing capabilities and spurred innovation across the spectrum of engineered bearings and power transmission products. A powerful example of this is our rapid development of housed units to serve the food and beverage, cement, aggregate, marine and other process industries. Thanks to a combination of organic and inorganic growth, our broad line of mounted bearings continues to fill the varied needs of customers with highly specialized requirements, delivering a double-digit CAGR over the last decade. Housed units reduce damage, contamination and downtime, helping our customers achieve consistency, control and confidence, and enabling us to deliver solutions that will drive growth for years to come.

Growing Together with Shared Values

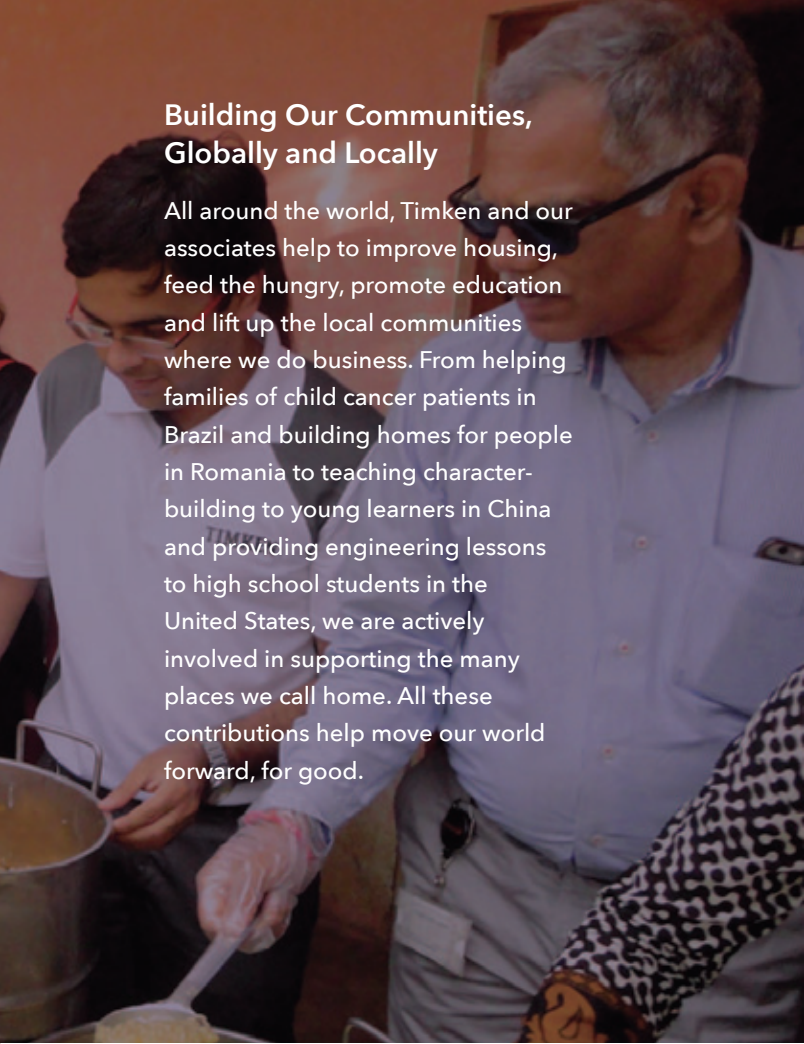
Timken associates live our core values of ethics and integrity, quality, teamwork and excellence. As they do, they enrich our culture by bringing to life a diverse and inclusive workplace where their health, safety, development and satisfaction are top priorities. We employ strong health and safety management systems. In fact, our 2019 lost time accident rate was the lowest in our company's 120-year history, with 70 percent of our factories reporting zero lost time. We also offer competitive benefits, along with numerous professional development opportunities to help our associates learn and grow.





Building Our Communities, Globally and Locally

All around the world, Timken and our associates help to improve housing, feed the hungry, promote education and lift up the local communities where we do business. From helping families of child cancer patients in Brazil and building homes for people in Romania to teaching character-building to young learners in China and providing engineering lessons to high school students in the United States, we are actively involved in supporting the many places we call home. All these contributions help move our world forward, for good.



Advancing Environmental Sustainability

We are advancing environmental sustainability through both our operations and our customer solutions. We embrace energy efficiency, pollution prevention, waste management and recycling at our global facilities and have the management structures in place to ensure success. Our goal is for each of our major manufacturing facilities worldwide to have an environmental management system (EMS) based on the principles of the ISO 14001 standard. We are also innovating products that help our customers improve the reliability and efficiency of renewable energy options, increase fuel efficiency, lower emissions and support the rising demand for electric vehicles.



The result of Timken's strategic evolution is a stronger investment and future-ready company.

EXECUTIVE LEADERSHIP TEAM

Richard G. Kyle

President and
Chief Executive Officer

Christopher A. Coughlin

Executive Vice President,
Group President

Philip D. Fracassa

Executive Vice President,
Chief Financial Officer

Ronald J. Myers

Executive Vice President,
Human Resources

Hans Landin

Group Vice President

Hansal N. Patel

Vice President,
General Counsel and Secretary

Andreas Roellgen

Vice President, Europe,
Asia and Africa

Richard M. Boyer

Vice President, Operations

Shelly M. Chadwick

Vice President, Finance,
Chief Accounting Officer

Michael J. Connors

Vice President, Global Marketing

Ajay K. Das

Vice President, Strategy and
Business Development

Michael A. Discenza

Vice President, Group Controller

Christopher W. Henson

Vice President,
Industrial Bearings

Amanda J. Montgomery

Vice President,
Tapered Roller Bearings

Douglas C. Nelson

Vice President,
Compensation and Benefits

Carl D. Rapp

Group Vice President

Brian J. Ruel

Vice President, Americas

Douglas H. Smith

Vice President, Technology

Peter M. Sproson

Vice President, Sales and
Managing Director of Europe

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, 2019

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 is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

As of June 28, 2019, the aggregate market value of the registrant's common shares held by non-affiliates of the registrant was \$3,408,380,507 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, 2020
Common Shares, without par value	75,565,361 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 8, 2020 (Proxy Statement)	Part III

THE TIMKEN COMPANY
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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 growing portfolio of engineered bearings and power transmission products and services. The Company’s growing portfolio features many strong brands, including Timken®, Philadelphia Gear®, Drives®, Cone Drive®, Rollon®, Lovejoy®, Diamond®, BEKA® and Groeneveld®.

The Company was founded in 1899 by Henry Timken, who received two patents on the design of a tapered roller bearing. Timken later became, and continues to be, the world’s largest manufacturer of tapered roller bearings, leveraging its expertise to develop a full portfolio of industry-leading products and services. Timken built its reputation as a global leader by applying its knowledge of metallurgy, friction management and power transmission to increase the reliability and efficiency of its customers’ equipment across a diverse range of industries. Today, the Company’s global footprint consists of 125 manufacturing facilities/service centers, 21 technology and engineering centers, and 68 distribution centers and warehouses, supported by a team comprised of more than 18,000 employees. Timken operates in 42 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, automotive, aerospace, rail, renewable energy, agriculture/turf, on-highway, aftermarket, mining, construction, heavy truck, metals, fossil fuels 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 power transmission 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; thrust and specialty ball bearings; and housed units. 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 original equipment 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 Units. Timken markets among the broadest range of housed bearing units 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.

Power Transmission Products:

Linear Motion Products. The Company designs and manufactures a global portfolio of Rollon® engineered linear motion products, including linear guides, telescopic rails and linear actuators. 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.

Gear 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-markets, including solar, oil and gas, aerial platforms, automation and food and beverage.

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 enhance vehicle and machine uptime in on- and off-highway applications. These systems complement the Company's Interlube® line of lubrication systems, which are used by the commercial vehicle, mining, and heavy and general industries. Timken also offers 27 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® and Carlisle® 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 highly 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 power transmission 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.

Aerospace Drive Systems. The Company's portfolio of parts, systems and services for the aerospace market sector includes products used in helicopters for military and commercial use. Timken designs, manufactures and tests a wide variety of power transmission and drive train components, including transmissions, gears and rotor-head assemblies and housings. In addition to original equipment, Timken provides aftermarket overhaul and repair services for transmissions, gearboxes and other components.

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 mining, aggregate, wood recycling and metals industries.

Other Products. The Company also offers a full line of seals, augers and other power transmission 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 central 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 5% of the Company's net sales for the year ended December 31, 2019.

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 all friction management products and market sector trends, and Timken employees assist customers during 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, ABB Group 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 anti-friction bearing and power transmission businesses are highly competitive in every country where Timken sells products. 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 domestic manufacturers and many foreign manufacturers of anti-friction bearings, including SKF Group, Schaeffler Group, NTN Corporation, JTEKT Corporation and NSK Ltd., and with manufacturers of power transmission products, including Rexnord Corporation, Altra Industrial Motion Corporation and Regal Beloit Corporation.

Joint Ventures:

Investments in affiliated companies accounted for under the equity method were \$2.5 million and \$2.3 million, respectively, at December 31, 2019 and 2018. The investment balance at December 31, 2019 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, 2019 and 2018:

(Dollars in millions)	December 31,	
	2019	2018
Segment:		
Mobile Industries	\$ 952.9	\$ 955.0
Process Industries	782.5	699.3
Total Company	\$ 1,735.4	\$ 1,654.3

Approximately 91% of the Company's backlog at December 31, 2019 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.

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.

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 friction management and power transmission 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; Manchester, Connecticut; Downer's Grove and Fulton, Illinois; Rochester Hills and Traverse City, Michigan; Springfield, Missouri; Keene and Lebanon, New Hampshire; and King of Prussia, Pennsylvania. Within Europe, the Company has technology facilities in Plymouth, England; Colmar, France; Pegnitz and Werdohl, Germany; Valmadrera, Italy; Gorinchem, Netherlands; and Ploiesti, Romania. In Asia, Timken operates technology and engineering facilities in Bangalore, India and Shanghai, China.

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. All of the Company's plants are expected to have an effective environmental management system which follows the ISO 14001 principles and management performs internal audits 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 2019, 20 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.

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, 2019, Timken had more than 18,000 employees worldwide. Approximately 8.6% of Timken's U.S. employees are covered under collective bargaining agreements.

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 SEC also maintains a website, www.sec.gov, which contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. The content on any website referred to in this Annual Report on Form 10-K is not incorporated by reference into this Annual Report unless expressly noted.

Item 1A. Risk Factors

The following are certain risk factors that could affect our business, financial condition and results of operations. The risks that are 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. If any of the following risks actually occur, our business, financial condition or results of operations could be negatively affected.

Risk Relating to our Business

The bearing industry is highly competitive, and this competition results in significant pricing pressure for our bearings products that could affect our revenues and profitability.

The global bearing industry is highly competitive. We compete with domestic manufacturers and many foreign manufacturers of anti-friction bearings, including SKF Group, Schaeffler Group, NTN Corporation, JTEKT Corporation and NSK Ltd., and an increasing number of emerging market competitors. Due to competitiveness within the bearing industry, we may not be able to increase prices for our products to cover increases in our costs or to achieve desired profitability. In many cases we face pressure from our customers to reduce prices, which 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 management, which are subject to risks that we may not be able to control. If there are downturns in the industries that we serve, 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 \$52 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 programs and may require us to take additional charges in the future, which could have a material adverse effect on our earnings.

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.

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 recent years, 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.

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.

Our level of debt and financial covenants or a failure to maintain our credit ratings could limit our ability to invest in our business.

Due to our current level of debt, we may 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.

Any change in raw material prices or the availability or cost of raw materials 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 interrupted for a variety of reasons, including availability and pricing. Prices for raw materials necessary for production have fluctuated significantly in the past and could 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 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 or require us to pay higher prices in order to obtain these raw materials from other sources. Any significant increase in the prices for such raw materials could adversely affect our results of operations and profit margins.

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.

Environmental health and safety laws and regulations 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 environmental laws and regulations. We are subject to extensive federal, state, local and foreign environmental, health and safety laws and regulations concerning matters such as air emissions, wastewater discharges, solid and hazardous waste handling and disposal and the investigation and remediation of contamination. The risks of substantial costs 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 achieve and maintain compliance with these requirements at our facilities, and we expect that we will continue to make significant expenditures related to such compliance in the future. From time to time, we may be subject to legal proceedings brought by private parties or governmental authorities with respect to environmental matters, including matters involving alleged noncompliance with or liability 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, stricter enforcement of existing laws and regulations, the discovery of previously unknown contamination or the imposition of new clean-up requirements could require us to incur costs or become the basis for new or increased liabilities that could have a material adverse effect on our business, financial condition or results of operations.

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, supplier error, malfeasance or other disruptions. 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 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 data can result in fines, reputational damage and civil lawsuits, any of which may adversely affect our results of operations and profitability.

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 asset values, net sales, operating income and competitiveness.

For those countries outside the United States where we have significant sales, a strengthening in the U.S. dollar 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.

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 (e.g., the UK's probable withdrawal from the European Union, commonly referred to as "Brexit"), 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;
- 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;
- disadvantages of competing against companies from countries that are not subject to U.S. laws and regulations, including the Foreign Corrupt Practices Act ("FCPA");
- difficulty in staffing and managing geographically diverse operations; and
- tax exposures related to cross-border intercompany transfer pricing and other tax risks unique to international operations.

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.

Changes in U.S. trade policy, including the imposition of tariffs and the resulting consequences, could adversely impact our revenue and profit margins.

The U.S. government has indicated an intent to renegotiate, or potentially terminate, certain existing bilateral or multi-lateral trade agreements. It has also 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. These measures have resulted in increased costs for goods imported into the U.S. 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.

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.

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, pandemics, 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. Although we have experienced no material strikes or work stoppages recently, no assurances can be made that we will not experience these 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 likely would halt or limit purchases of our products, which could have a material adverse effect on our business, financial condition and 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, employment and pension-related laws, competition laws, U.S. and foreign export and trade laws, 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 or agents. If we are found to be liable for FCPA, export control or sanction violations, we could suffer from criminal or civil penalties or other sanctions, including loss of export privileges or authorization needed to conduct aspects of our international business, which could have a material adverse effect on our business.

Also, our sales to public-sector customers are subject to complex regulations. Noncompliance with government procurement regulations 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.

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

Our business substantially depends on the continued service of key members of our management 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 and retain 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 we could experience difficulty from time to time in hiring and retaining the personnel necessary to support our business. If we do not succeed in retaining our current employees and attracting new high-quality employees, our business could be materially adversely affected.

We may not realize the improved operating results that we anticipate from past and future acquisitions and we may experience difficulties in integrating 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, 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, the continued rising importance of e-commerce and increased digitalization. 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.

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, 2019, 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 guidance 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 guidance 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.

Certain members of our Board of Directors and management may have actual or potential conflicts of interest because of their ownership of shares of TimkenSteel Corporation ("TimkenSteel") following the spinoff of TimkenSteel into an independent publicly traded company on June 30, 2014 (the "Spinoff").

Certain members of our Board of Directors and management own shares of TimkenSteel and/or options to purchase shares of TimkenSteel, which could create, or appear to create, potential conflicts of interest when our directors and executive officers are faced with decisions that could have different implications for us and TimkenSteel.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Timken has manufacturing facilities at multiple locations in the United States and in a number of countries outside the United States. The aggregate floor area of these facilities worldwide is approximately 12.4 million square feet, all of which, except for approximately 3.3 million square feet, is owned in fee. The facilities not owned in fee are leased. 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.

Timken's Mobile Industries segment's manufacturing facilities and service centers in the United States are located in Los Alamitos, California; Manchester, Connecticut; Carlyle, Illinois; Lenexa, Kansas; Keene and Lebanon, New Hampshire; Iron Station, North Carolina; Bucyrus, Canton, New Philadelphia and Sharon Center, Ohio; Gaffney and Honea Path, South Carolina; Knoxville, Tennessee; and Ogden, Utah. These facilities, including warehouses at plant locations and a technology center and wind center in North Canton, Ohio, have an aggregate floor area of approximately 3.1 million square feet.

Timken's Mobile Industries segment's manufacturing plants and service centers outside the United States are located in Belo Horizonte and Rio Clara, Brazil; Yantai, China; Cheltenham, Northampton and Plymouth, England; Colmar, France; Cruessen, Pegnitz and Wannberg, Germany; Bharuch and Jamshedpur, India; Karmiel, Israel; Arcore, Cassago, Brianza, Valmadrea and Villa Carcina, Italy; Sosnowiec, Poland; Tikhvin, Russia; and Gauteng, South Africa. These facilities, including warehouses at plant locations, have an aggregate floor area of approximately 3.1 million square feet.

Timken's Process Industries segment's manufacturing plants and service centers in the United States are located in Hueytown, Alabama; Sante Fe Springs, California; Broomfield and Denver, Colorado; New Haven, Connecticut; New Castle, Delaware; Downers Grove, Fulton and Mokena, Illinois; Indianapolis and Mishawaka, Indiana; Fort Scott, Kansas; Portland, Maine; Springfield, Massachusetts; Ludington, Rochester Hills, South Haven and Traverse City, Michigan; Springfield, Missouri; Hackettstown, New Jersey; Randleman and Rutherfordton, North Carolina; Union, South Carolina; Ferndale and Pasco, Washington; and Princeton, West Virginia. These facilities, including warehouses at plant locations and a wind center in North Canton, Ohio, have an aggregate floor area of approximately 3.5 million square feet.

Timken's Process Industries segment's manufacturing plants and service centers outside the United States are located in Mississauga, Prince George and Sasakatoon, Canada; Chengdu, Jiangsu, Wuxi and Xiangtan, China; Dudley, England; Dusseldorf and Werdohl, Germany; Chennai, India; Arcore and Vimercate, Italy; and Ploiesti and Prahova, Romania. These facilities, including warehouses at plant locations, have an aggregate floor area of approximately 2.7 million square feet.

In addition to the manufacturing and distribution facilities discussed above, Timken owns or leases warehouses and distribution facilities in Argentina, Australia, Austria, Belgium, Brazil, Canada, China, England, France, Germany, India, Japan, Mexico, Netherlands, New Zealand, Poland, South Africa, Singapore, Spain and the United States.

The extent to which the Company uses 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. 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.

In October 2014, the Brazilian government antitrust agency, Administrative Council for Economic Defense ("CADE"), announced that it had opened an investigation of alleged antitrust violations in the bearing industry. The Company's Brazilian subsidiary, Timken do Brasil Comercial Importadora Ltda. ("Timken do Brasil"), was included in the investigation. During the fourth quarter of 2019, the Company paid approximately \$1.8 million to settle the matter with CADE.

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 or by a subsidiary of the Company during the past five-year period. The executive officers of the Company as of February 14, 2020 are as follows:

Name	Age	Current Position and Previous Positions During Last Five Years
Christopher A. Coughlin	59	2014 Executive Vice President, Group President
Philip D. Fracassa	51	2014 Executive Vice President and Chief Financial Officer
Richard G. Kyle	54	2014 President and Chief Executive Officer
Hans Landin	47	2018 Group Vice President
		2017 Vice President - Mechanical Power Transmission
		2014 Vice President - Power Transmission and Engineering Systems
Ronald J. Myers	61	2017 Executive Vice President - Human Resources
		2015 Vice President of Human Resources
		2014 Vice President - Organizational Advancement
Hansal N. Patel	39	2019 Vice President, General Counsel and Secretary
		2019 Vice President - Legal and Corporate Secretary
		2018 Director - Legal and Corporate Secretary
		2016 Managing Attorney - M&A, Securities and Assistant Corporate Secretary
		2014 Senior Corporate Attorney, Securities and Finance
Andreas Roellgen	52	2016 Vice President - Europe, Asia and Africa
		2014 Vice President - Process Industries and Managing Director, Europe

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, 2019 was 3,635. The estimated number of beneficial shareholders at December 31, 2019 exceeds 40,000.

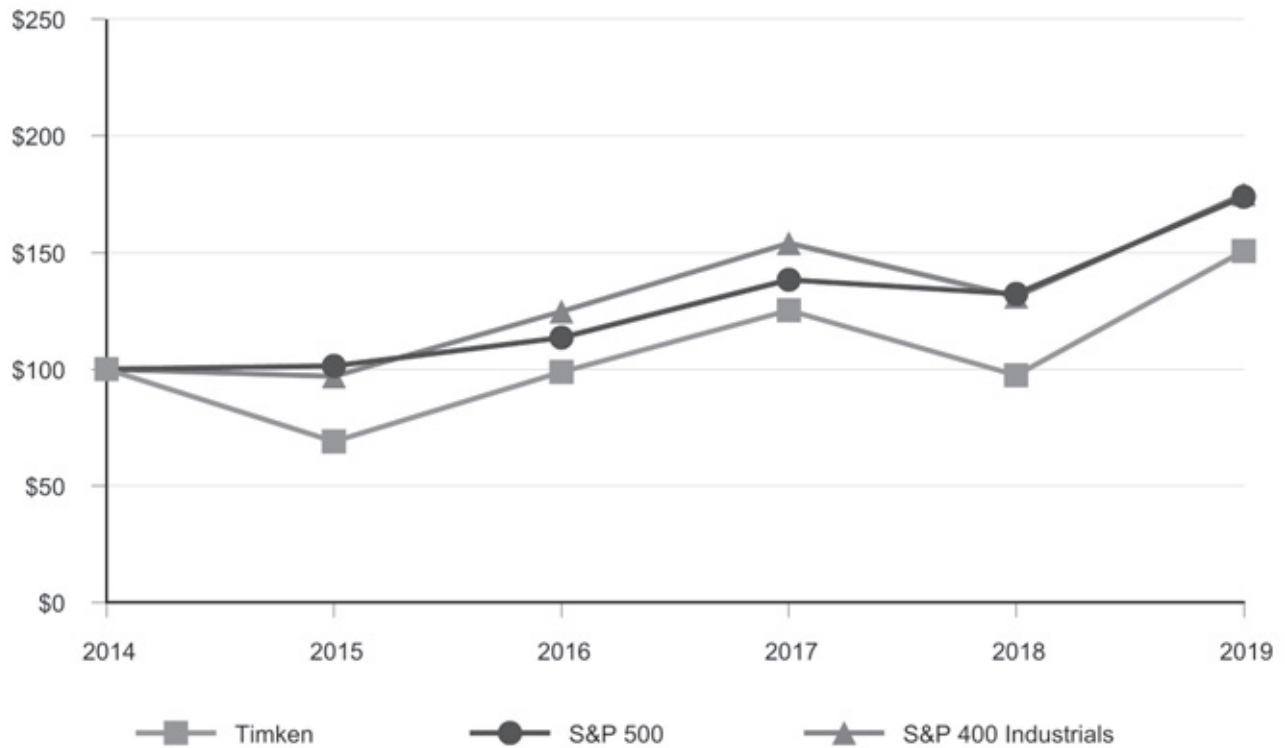
Issuer Purchases of Common Shares:

The following table provides information about purchases of its common shares by the Company during the quarter ended December 31, 2019.

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⁾
10/1/2019 - 10/31/2019	154,253	\$ 42.75	153,668	5,357,042
11/1/2019 - 11/30/2019	26,432	52.81	—	5,357,042
12/1/2019 - 12/31/2019	1,301	55.21	—	5,357,042
Total	181,986	\$ 44.30	153,668	—

- (1) Of the shares purchased in October, November and December, 585, 26,432 and 1,301, 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 6, 2017, the Company's Board of Directors approved a share repurchase plan 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, 2021. Under this plan the Company purchased shares from time to time in open market purchases or privately negotiated transactions and was able to make all or part of the purchases pursuant to accelerated share repurchases or Rule 10b5-1 plans.

Comparison of Five-Year Cumulative Total Return* Among The Timken Company, S&P 500 and S&P 400 Industrials



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

	2015	2016	2017	2018	2019
Timken	\$ 69	\$ 99	\$ 125	\$ 97	151
S&P 500	101	114	138	132	174
S&P 400 Industrials	97	125	154	131	175

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, 2015, 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, 2019, 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)	2019	2018	2017	2016	2015
Statements of Income					
Net sales	\$ 3,789.9	\$ 3,580.8	\$ 3,003.8	\$ 2,669.8	\$ 2,872.3
Gross profit	1,141.8	1,040.1	812.1	706.3	803.8
Operating income	516.4	454.5	299.5	244.4	333.2
Net income	374.7	305.5	202.3	141.1	191.4
Net income attributable to The Timken Company	\$ 362.1	\$ 302.8	\$ 203.4	\$ 140.8	\$ 188.6
Balance Sheets					
Total assets	\$ 4,859.9	\$ 4,445.2	\$ 3,402.4	\$ 2,763.2	\$ 2,789.0
Total debt	1,730.1	1,681.6	962.3	659.2	656.5
Total liabilities	2,905.1	2,802.5	1,927.5	1,452.3	1,439.4
Total equity	\$ 1,954.8	\$ 1,642.7	\$ 1,474.9	\$ 1,310.9	\$ 1,349.6
Other Comparative Data					
Net income / net sales	9.9%	8.5%	6.7%	5.3%	6.7%
Net income attributable to The Timken Company / net sales	9.6%	8.5%	6.8%	5.3%	6.6%
Return on equity ⁽¹⁾	19.2%	18.6%	13.7%	10.8%	14.2%
Net sales per employee ⁽²⁾	\$ 208.8	\$ 220.5	\$ 206.3	\$ 185.3	\$ 197.5
Capital expenditures	140.6	112.6	104.7	137.5	105.6
Capital expenditures / net sales	3.7%	3.1%	3.5%	5.2%	3.7%
Depreciation and amortization	160.6	146.0	137.7	131.7	130.8
Basic earnings per share ⁽³⁾	4.78	3.93	2.62	1.79	2.23
Diluted earnings per share ⁽⁴⁾	4.71	3.86	2.58	1.78	2.21
Dividends per share	\$ 1.12	\$ 1.11	\$ 1.07	\$ 1.04	\$ 1.03
Weighted average number of shares outstanding - basic	75,758,123	77,119,602	77,736,398	78,516,029	84,631,778
Weighted average number of shares outstanding - diluted	76,896,565	78,337,481	78,911,149	79,234,324	85,346,246
Number of employees at year-end	18,829	17,477	15,006	14,111	14,709

(1) Return on equity is defined as net income divided by ending total equity.

(2) Dollars in thousands, based on average number of employees employed during the year.

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

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

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 power transmission products. 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 \$3.8 billion in sales in 2019 and employs more than 18,000 people globally, operating in 42 countries. The Company operates 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 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 power transmission 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 other organic growth initiatives; (2) pursuing strategic acquisitions to broaden its portfolio and capabilities across diverse markets, with a focus on bearings, adjacent power transmission 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 2019:

- On November 1, 2019, the Company completed the acquisition of BEKA Lubrication ("BEKA"), a leading global supplier of automatic lubrications systems serving a diverse range of industrial sectors including wind, food and beverage, rail, on- and off-highway and other process industries. BEKA, located in Pegnitz, Germany, employs approximately 900 people, and had annual sales at the time of the acquisition of approximately \$135 million. The acquisition was funded with cash on hand and through borrowings under existing credit facilities.
- On April 1, 2019, the Company acquired the Diamond Chain Company ("Diamond Chain"), a leading supplier of high-performance roller chains for industrial markets. Diamond Chain serves a diverse range of sectors, including industrial distribution, material handling, food and beverage, agriculture, construction and other process industries. At the time of the acquisition, Diamond had annual sales of approximately \$60 million. Diamond Chain has manufacturing operations in the U.S. and China and employs approximately 370 people. The acquisition was funded with cash on hand and through borrowings under existing credit facilities.

RESULTS OF OPERATIONS
2019 vs. 2018

Overview:

	2019	2018	\$ Change	% Change
Net sales	\$ 3,789.9	\$ 3,580.8	\$ 209.1	5.8%
Net income	374.7	305.5	69.2	22.7%
Net income attributable to noncontrolling interest	12.6	2.7	9.9	366.7%
Net income attributable to The Timken Company	\$ 362.1	\$ 302.8	\$ 59.3	19.6%
Diluted earnings per share	\$ 4.71	\$ 3.86	\$ 0.85	22.0%
Average number of diluted shares	76,896,565	78,337,481	—	(1.8%)

The increase in net sales was primarily driven by the benefit of acquisitions, the impact of higher pricing and higher demand in the Process Industries segment, partially offset by the unfavorable impact of foreign currency exchange rate changes and lower shipments in the Mobile Industries segment. The increase in net income in 2019 compared with 2018 was primarily due to the net benefit of acquisitions, favorable price/mix and the impact of a lower tax rate driven by net discrete benefits, partially offset by the impact of lower volume, unfavorable currency and higher interest expense. Results for 2019 also benefited from pension and other postretirement plan remeasurement income compared to expense in 2018.

Outlook:

The Company expects 2020 full-year revenue to be in the range of down 2% to up 2% compared with 2019 primarily due to the benefit of acquisitions made in 2019, offset by expected organic declines and the impact of currency. The Company's earnings are expected to be down in 2020 compared with 2019, primarily due to the impact of lower volume, higher manufacturing costs and higher income tax expense, partially offset by lower material and logistics costs, favorable price/mix and the impact of acquisitions.

The Company expects to generate operating cash of approximately \$585 million in 2020, an increase from 2019 of approximately \$35 million, or 6%, as the Company anticipates lower pension and medical benefit plan payments, partially offset by less cash generation from working capital and higher capital expenditures. The Company expects capital expenditures to be approximately \$160 million in 2020, compared with \$141 million in 2019.

THE STATEMENTS OF INCOME

Sales:

	2019	2018	\$ Change	% Change
Net sales	\$ 3,789.9	\$ 3,580.8	\$ 209.1	5.8%

Net sales increased in 2019 compared with 2018, primarily due to the benefit of acquisitions of \$270 million and higher organic revenue of \$11 million, partially offset by the unfavorable impact of foreign currency exchange rate changes of \$72 million. The increase in organic revenue was driven primarily by improved demand in the Process Industries segment and the impact of positive pricing, partially offset by lower shipments in the Mobile Industries segment.

Gross Profit:

	2019	2018	\$ Change	Change
Gross profit	\$ 1,141.8	\$ 1,040.1	\$ 101.7	9.8%
Gross profit % to net sales	30.1%	29.0%	—	110 bps

Gross profit increased in 2019 compared with 2018, primarily due to the benefit of acquisitions of \$86 million, favorable price/mix of \$51 million and lower material and logistics costs (including tariffs) of \$5 million. These factors were partially offset by the impact of lower volume of \$19 million, the unfavorable impact of foreign currency exchange rate changes of \$15 million and property losses of \$8 million.

Selling, General and Administrative Expenses:

	2019	2018	\$ Change	Change
Selling, general and administrative expenses	\$ 618.6	\$ 580.7	\$ 37.9	6.5%
Selling, general and administrative expenses % to net sales	16.3%	16.2%	—	10 bps

The increase in selling, general and administrative ("SG&A") expenses in 2019 compared with 2018 was primarily due to SG&A expense from acquisitions of \$45 million, partially offset by the favorable impact from changes in foreign currency exchange rates of \$10 million.

Interest Expense and Income:

	2019	2018	\$ Change	% Change
Interest expense	\$ (72.1)	\$ (51.7)	\$ (20.4)	39.5%
Interest income	4.9	2.1	2.8	133.3%

Interest expense increased in 2019 compared to 2018 primarily due to higher average outstanding debt during the year, which was primarily used to fund acquisitions. Refer to *Note 11 - Financing Arrangements* in the Notes to the Consolidated Financial Statements for further discussion.

Other Income (Expense):

	2019	2018	\$ Change	% Change
Non-service pension and other postretirement income (expense)	\$ 10.2	\$ (6.2)	\$ 16.4	(264.5%)
Other income, net	13.0	9.4	3.6	38.3%

The increase in non-service pension and other postretirement income (expense) for 2019 compared with 2018 was primarily due to the recognition of net actuarial gains ("Mark-to-Market Charges") of \$4.2 million in 2019 compared to actuarial losses of \$22.1 million in 2018. The Mark-to-Market Charges were the result of higher than expected returns on plan assets and the impact of a reduction in contractual rates for Medicare Advantage plans, driven by a law change that repealed the tax on Health Care Insurers after 2020, partially offset by lower discount rates to measure the benefit obligations for pension and other postretirement plans. Actuarial losses in 2018 were partially offset by the benefit of curtailment gains of \$10.2 million for two of the U.S. pension plans. Refer to *Note 14 - Retirement Benefit Plans* and *Note 15 - Other Postretirement Benefit Plans* in the Notes to the Consolidated Financial Statements for more information.

Income Tax Expense:

	2019	2018	\$ Change	Change
Income tax expense	\$ 97.7	\$ 102.6	\$ (4.9)	(4.8%)
Effective tax rate	20.7%	25.1%	—	(440) bps

The effective tax rate for 2019 was 20.7%, which was slightly favorable compared to the U.S. federal statutory rate of 21%, primarily due to the release of foreign valuation allowance against certain foreign deferred tax assets and the remeasurement of deferred tax balances to reflect the reduced India statutory tax rate. These impacts were partially offset by earnings in foreign jurisdictions where the effective tax rate was higher than 21%, additional discrete accruals for uncertain tax positions, U.S. state and local income taxes and withholding taxes recorded on planned dividend distributions.

The effective tax rate for 2018 was 25.1%, which was unfavorable compared to the U.S. federal statutory rate of 21%, primarily due to earnings in certain foreign jurisdictions where the effective tax rate was higher than 21%, unfavorable U.S. permanent differences and U.S. state and local income taxes. These impacts were partially offset by reductions to the one-time net charge related to the taxation of unremitted foreign earnings and the remeasurement of U.S. deferred tax balances to reflect the new U.S. corporate income tax rate enacted under the Tax Cuts and Jobs Act of 2017 ("U.S. Tax Reform").

The change in the effective rate for 2019 compared with 2018 was a decrease of 4.4%. The decrease was primarily due to the release of certain valuation allowances and the remeasurement of deferred tax balances to reflect the reduced India statutory tax rate. These impacts were partially offset by additional discrete accruals for uncertain tax positions and withholding taxes recorded on planned dividend distributions.

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.

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. Beginning in the fourth quarter of 2019, the main operating income metric used by management to measure the financial performance of each segment was earnings before interest, taxes, depreciation and amortization ("EBITDA"). The Company made this change because recent acquisitions have resulted in an increased amount of purchase accounting amortization expense that affects comparability of results across periods and versus other companies. The primary measurement used by management to measure the financial performance of each segment prior to the fourth quarter of 2019 was earnings before interest and taxes ("EBIT"). Segment results have been revised for all periods presented to be consistent with new measure of segment performance. 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 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 2019 and 2018 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 completed in 2019 and 2018 by segment based on the customers and underlying markets served:

- The Company acquired BEKA during the fourth quarter of 2019. The majority of the results for BEKA are reported in the Mobile Industries segment.
- The Company acquired Diamond Chain during the second quarter of 2019. The majority of the results for Diamond Chain are reported in the Process Industries segment.
- The Company acquired ABC Bearings Limited ("ABC Bearings"), Apiary Investments Holding Limited ("Cone Drive"), and Rollon S.p.A. ("Rollon") during the third quarter of 2018. Substantially all of the results for ABC Bearings are reported in the Mobile Industries segment. Results for Cone Drive and Rollon are reported in the Mobile Industries and Process Industries segments based on customers and underlying market sectors served.
- The Company divested Groeneveld Information Technology Holding B.V. (the "ICT Business") on September 19, 2018. The Company acquired the ICT Business in July 2017 as part of the Groeneveld Group ("Groeneveld") acquisition. The ICT Business is separate from the Groeneveld lubrication solutions business and was considered non-core to the operations. Results for the ICT Business were reported in the Mobile Industries segment.

Mobile Industries Segment:

	2019	2018	\$ Change	Change
Net sales	\$ 1,893.9	\$ 1,903.7	\$ (9.8)	(0.5%)
EBITDA	\$ 284.9	\$ 272.2	\$ 12.7	4.7%
EBITDA margin	15.0%	14.3%	—	70 bps

	2019	2018	\$ Change	% Change
Net sales	\$ 1,893.9	\$ 1,903.7	\$ (9.8)	(0.5%)
Less: Acquisitions	82.5	—	82.5	NM
Divestitures	(8.5)	—	(8.5)	NM
Currency	(36.0)	—	(36.0)	NM
Net sales, excluding the impact of acquisitions, divestitures and currency	\$ 1,855.9	\$ 1,903.7	\$ (47.8)	(2.5%)

The Mobile Industries segment's net sales, excluding the effects of acquisitions, divestitures and foreign currency exchange rate changes, decreased \$47.8 million or 2.5% in 2019 compared with 2018, reflecting lower shipments in the off highway and heavy truck sectors, partially offset by growth in the aerospace and rail sectors, as well as higher pricing. EBITDA increased in 2019 by \$12.7 million or 4.7% compared with 2018, primarily due to favorable price/mix, lower material and logistics costs, the net benefit of acquisitions, and lower SG&A expenses. These factors were partially offset by the impact of lower volume and related manufacturing utilization, as well as property losses and related expenses from flood damage at a Company facility in Tennessee and fire damage at a facility in China.

Full-year sales for the Mobile Industries segment are expected to be roughly flat to down 4% in 2020 compared with 2019. This reflects a decrease of organic revenue in the off-highway, heavy truck and automotive sectors, partially offset by the impact of acquisitions. EBITDA for the Mobile Industries segment is expected to decrease in 2020 compared with 2019 primarily due to lower shipments and higher manufacturing costs, partially offset by favorable price/mix, lower material and logistics costs and the impact of acquisitions.

Process Industries Segment:

	2019	2018	\$ Change	Change
Net sales	\$ 1,896.0	\$ 1,677.1	\$ 218.9	13.1%
EBITDA	\$ 466.6	\$ 405.7	\$ 60.9	15.0%
EBITDA margin	24.6%	24.2%	—	40 bps

	2019	2018	\$ Change	% Change
Net sales	\$ 1,896.0	\$ 1,677.1	\$ 218.9	13.1%
Less: Acquisitions	196.4	—	196.4	NM
Currency	(36.5)	—	(36.5)	NM
Net sales, excluding the impact of acquisitions and currency	\$ 1,736.1	\$ 1,677.1	\$ 59.0	3.5%

The Process Industries segment's net sales, excluding the effects of acquisitions and foreign currency exchange rate changes, increased \$59.0 million or 3.5% in 2019 compared with 2018. The increase was primarily driven by growth in the renewable energy sector, as well as positive pricing. EBITDA increased \$60.9 million or 15.0% in 2019 compared with 2018 primarily due to the net benefit of acquisitions, favorable price/mix and the impact of higher volume, partially offset by higher SG&A expenses.

Full-year sales for the Process Industries segment are expected to be flat to up 4% in 2020 compared with 2019. This reflects expected growth in the renewable energy and industrial services sectors, as well as the benefit of acquisitions, partially offset by a decline in revenue in the industrial distribution sector. EBITDA for the Process Industries segment is expected to increase in 2020 compared with 2019 primarily due to favorable price/mix, lower material costs and the impact of acquisitions, partially offset by higher manufacturing costs and SG&A expenses.

Corporate:

	2019	2018	\$ Change	Change
Corporate expenses	\$ 56.2	\$ 62.0	\$ (5.8)	(9.4%)
Corporate expenses % to net sales	1.5%	1.7%	—	(20) bps

Corporate expenses decreased in 2019 compared with 2018 primarily due to higher transaction costs related to acquisitions in 2018.

RESULTS OF OPERATIONS:
2018 vs. 2017

Overview:

	2018	2017	\$ Change	% Change
Net sales	\$ 3,580.8	\$ 3,003.8	\$ 577.0	19.2%
Net income	305.5	202.3	103.2	51.0%
Income (loss) attributable to noncontrolling interest	2.7	(1.1)	3.8	(345.5%)
Net income attributable to The Timken Company	\$ 302.8	\$ 203.4	\$ 99.4	48.9%
Diluted earnings per share	\$ 3.86	\$ 2.58	\$ 1.28	49.6%
Average number of diluted shares	78,337,481	78,911,149	—	(0.7%)

The increase in net sales was primarily due to organic revenue growth driven by higher end-market demand, the benefit of acquisitions and the impact of higher pricing. The increase in net income in 2018 compared with 2017 was primarily due to improved performance across the business, driven by the impact of higher volume, favorable price/mix, the net benefit of acquisitions and improved manufacturing performance, as well as lower Mark-to-Market Charges due to the remeasurement of pension and other postretirement assets and obligations, restructuring charges, and interest expense. These factors were partially offset by the impact of higher SG&A expenses, higher income tax expenses and higher material and logistics costs (including tariffs).

THE STATEMENTS OF INCOME

Sales:

	2018	2017	\$ Change	% Change
Net sales	\$ 3,580.8	\$ 3,003.8	\$ 577.0	19.2%

Net sales increased in 2018 compared with 2017 primarily due to higher organic revenue of \$396 million and the benefit of acquisitions of \$177 million. The increase in organic revenue was driven by higher demand across all of the Company's end-market sectors, as well as the impact of higher pricing.

Gross Profit:

	2018	2017	\$ Change	Change
Gross profit	\$ 1,040.1	\$ 812.1	\$ 228.0	28.1%
Gross profit % to net sales	29.0%	27.0%	—	200 bps

Gross profit increased in 2018 compared with 2017 primarily due to the impact of higher volume of \$133 million, the favorable price/mix of \$66 million, the benefit of acquisitions of \$54 million, improved manufacturing performance of \$12 million and lower restructuring costs of \$6 million. These factors were partially offset by higher material and logistics costs of \$44 million (including tariffs).

Selling, General and Administrative Expenses:

	2018	2017	\$ Change	Change
Selling, general and administrative expenses	\$ 580.7	\$ 508.3	\$ 72.4	14.2%
Selling, general and administrative expenses % to net sales	16.2%	16.9%	—	(70) bps

The increase in SG&A expenses in 2018 compared with 2017 was primarily due to the impact of acquisitions of \$39 million, higher compensation expense and other spending increases to support the higher sales levels.

Interest Expense and Income:

	2018	2017	\$ Change	% Change
Interest expense	\$ (51.7)	\$ (37.1)	\$ (14.6)	39.4%
Interest income	2.1	2.9	(0.8)	(27.6%)

Interest expense increased in 2018 compared to 2017 primarily due to an increase in outstanding debt to fund the acquisitions of Groeneveld, Rollon and Cone Drive.

Other Income (Expense):

	2018	2017	\$ Change	% Change
Non-service pension and other postretirement expense	\$ (6.2)	\$ (15.0)	\$ 8.8	(58.7%)
Other income (expense), net	9.4	9.6	(0.2)	(2.1)%

The decrease in non-service pension and other postretirement expense for 2018 compared to 2017 was primarily due to lower Mark-to-Market Charges of \$8.8 million. The Mark-to-Market Charges resulted from the remeasurement of pension and postretirement plan obligations and assets due to changes in actuarial assumptions, partially offset by the benefit of curtailments for two of the U.S. pension plans.

Income Tax Expense:

	2018	2017	\$ Change	Change
Income tax expense	\$ 102.6	\$ 57.6	\$ 45.0	78.1%
Effective tax rate	25.1%	22.2%	—	290 bps

The effective tax rate for 2018 was 25.1%, which was unfavorable compared to the U.S. federal statutory rate of 21% primarily due to earnings in certain foreign jurisdictions where the effective rate was higher than 21%, unfavorable U.S. permanent differences and U.S. state and local income tax expenses. These impacts were partially offset by reductions to the one-time net charge related to the taxation of unremitted foreign earnings and the remeasurement of U.S. deferred tax balances to reflect the new U.S. corporate income tax rate enacted under U.S. Tax Reform.

The effective tax rate for 2017 was 22%, which was favorable compared to the U.S. federal statutory rate of 35% primarily due to earnings in certain foreign jurisdictions where the effective tax rate was less than 35%, U.S. foreign tax credits realized on earnings distributed to the United States, and favorable U.S. permanent deductions and tax credits. The effective tax rate was also favorably impacted by the net reversal of accruals for prior year uncertain tax positions, a valuation allowance release and other discrete items.

These favorable impacts were partially offset by provisional amounts for the one-time net charge related to the taxation of unremitted foreign earnings and the remeasurement of U.S. deferred tax balances to reflect the new U.S. corporate income tax rate enacted under U.S. Tax Reform. U.S. Tax Reform included a number of changes to existing U.S. tax laws that impact the Company, most notably a reduction of the U.S. corporate income tax rate from 35% to 21% for tax years beginning after December 31, 2017. U.S. Tax Reform also requires companies to pay a one-time net charge related to the taxation of unremitted foreign earnings, created new taxes on certain foreign sourced earnings and allowed for immediate expensing of certain depreciable assets after September 27, 2017.

The change in the effective rate for 2018 compared with 2017 was an increase of 2.9%. The increase was primarily due to the net reversal of accruals for prior year uncertain tax positions in 2017. The effective tax rate also increased due to earnings in certain foreign jurisdictions where the effective rate was higher than 21%, unfavorable U.S. permanent differences and the release of valuations allowances in 2017. These impacts were partially offset by reductions to the one-time net charge related to the taxation of unremitted foreign earnings and the remeasurement of U.S. deferred tax balances to reflect the new U.S. corporate income tax rate.

BUSINESS SEGMENTS

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 completed in 2018 and 2017 and foreign currency exchange rate changes. The effects of acquisitions 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 2018 and 2017:

- The Company acquired ABC Bearings, Cone Drive and Rollon during the third quarter of 2018. Substantially all of the results for ABC Bearings are reported in the Mobile Industries segment. Results for Cone Drive and Rollon are reported in the Mobile Industries and Process Industries segments based on customers and underlying market sectors served.
- The Company acquired Groeneveld during the third quarter of 2017. Substantially all of the results for Groeneveld are reported in the Mobile Industries segment.
- The Company acquired Torsion Control Products, Inc. ("Torsion Control Products") and PT Tech, Inc. ("PT Tech") during the second quarter of 2017. Results for Torsion Control Products and PT Tech are reported in the Mobile Industries and Process Industries segments based on customers and underlying market sectors served.

Mobile Industries Segment:

	2018	2017	\$ Change	Change
Net sales	\$ 1,903.7	\$ 1,640.0	\$ 263.7	16.1%
EBITDA	\$ 272.2	\$ 209.9	\$ 62.3	29.7%
EBITDA margin	14.3%	12.8%	—	150 bps

	2018	2017	\$ Change	% Change
Net sales	\$ 1,903.7	\$ 1,640.0	\$ 263.7	16.1%
Less: Acquisitions	98.6	—	98.6	NM
Currency	(2.3)	—	(2.3)	NM
Net sales, excluding the impact of acquisitions and currency	\$ 1,807.4	\$ 1,640.0	\$ 167.4	10.2%

The Mobile Industries segment's net sales, excluding the effects of acquisitions and foreign currency exchange rate changes, increased in 2018 compared with 2017, reflecting organic growth across all market sectors, as well as higher pricing. EBITDA increased in 2018 compared with 2017 primarily due to higher volume of \$53 million, the benefit of acquisitions of \$15 million, favorable price/mix of \$11 million, lower restructuring charges of \$9 million and improved manufacturing performance of \$5 million. These factors were offset partially by higher material and logistics costs of \$24 million (including tariffs) and higher SG&A expenses of \$8 million.

Process Industries Segment:

	2018	2017	\$ Change	Change
Net sales	\$ 1,677.1	\$ 1,363.8	\$ 313.3	23.0%
EBITDA	\$ 405.7	\$ 288.6	\$ 117.1	40.6%
EBITDA margin	24.2%	21.2%	—	300 bps

	2018	2017	\$ Change	% Change
Net sales	\$ 1,677.1	\$ 1,363.8	\$ 313.3	23.0%
Less: Acquisitions	78.7	—	78.7	NM
Currency	6.0	—	6.0	NM
Net sales, excluding the impact of acquisitions and currency	\$ 1,592.4	\$ 1,363.8	\$ 228.6	16.8%

The Process Industries segment's net sales, excluding the effects of acquisitions and foreign currency exchange rate changes, increased in 2018 compared with 2017 reflecting increased demand across all market sectors, as well as higher pricing. EBITDA increased in 2018 compared with 2017 primarily due to the impact of higher volume of \$84 million, favorable price/mix of \$51 million, improved manufacturing performance of \$6 million and the benefit of acquisitions of \$12 million (excluding inventory step-up expense of \$8 million). These factors were partially offset by higher material and logistics costs of \$20 million (including tariffs) and higher SG&A expenses of \$16 million.

Corporate:

	2018	2017	\$ Change	Change
Corporate expenses	\$ 62.0	\$ 49.1	\$ 12.9	26.3%
Corporate expenses % to net sales	1.7%	1.6%	—	10 bps

Corporate expense increased in 2018 compared with 2017 primarily due to the impact of acquisition-related costs of \$10 million.

THE BALANCE SHEETS

The following discussion is a comparison of the Consolidated Balance Sheets at December 31, 2019 and 2018.

Current Assets:

	December 31,			
	2019	2018	\$ Change	% Change
Cash and cash equivalents	\$ 209.5	\$ 132.5	\$ 77.0	58.1%
Restricted cash	6.7	0.6	6.1	NM
Accounts receivable, net	545.1	546.6	(1.5)	(0.3%)
Unbilled receivables	129.2	116.6	12.6	10.8%
Inventories, net	842.0	835.7	6.3	0.8%
Deferred charges and prepaid expenses	36.7	28.2	8.5	30.1%
Other current assets	105.4	77.0	28.4	36.9%
Total current assets	\$ 1,874.6	\$ 1,737.2	\$ 137.4	7.9%

Refer to the "Cash Flows" section for discussion on the change in cash and cash equivalents. Unbilled receivables increased primarily due to higher marine production and related revenue recognized over time in December 2019 of \$110 million compared to \$101 million in December 2018. The increase in other current assets was primarily due to the increase current income taxes receivable and in the fair value of derivative instruments outstanding.

Property, Plant and Equipment, Net:

	December 31,			
	2019	2018	\$ Change	% Change
Property, plant and equipment, net	\$ 989.2	\$ 912.1	\$ 77.1	8.5%

The increase in property, plant and equipment, net in 2019 was primarily due to capital expenditures of \$136.8 million and \$51.1 million from businesses acquired in 2019, partially offset by depreciation of \$103.3 million and the net impact of foreign currency exchange rate changes of \$8.2 million in 2019.

Operating Lease Assets

	December 31,			
	2019	2018	\$ Change	% Change
Operating lease assets	\$ 114.1	\$ —	\$ 114.1	NM

The increase in operating lease assets in 2019 was primarily due to the adoption of the new lease accounting standard. The increase also includes the reclassification of \$15.3 million of lease assets from non-current assets to operating lease assets related to purchase accounting adjustments from the ABC Bearings acquisition. These reclassified assets do not have corresponding lease liabilities. Refer to *Note 1 - Significant Accounting Policies* in the Notes to the Consolidated Financial Statements for further discussion.

Other Assets:

	December 31,			
	2019	2018	\$ Change	% Change
Goodwill	\$ 993.7	\$ 960.5	\$ 33.2	3.5%
Other intangible assets	758.5	733.2	25.3	3.5%
Non-current pension assets	3.4	6.2	(2.8)	(45.2%)
Non-current other postretirement benefit assets	36.6	—	36.6	NM
Deferred income taxes	71.8	59.0	12.8	21.7%
Other non-current assets	18.0	37.0	(19.0)	(51.4%)
Total other assets	\$ 1,882.0	\$ 1,795.9	\$ 86.1	4.8%

The increase in goodwill in 2019 was primarily due to acquisitions in 2019. The increase in other intangible assets was primarily due to the impact of acquisitions of \$87.1 million in 2019, partially offset by amortization of \$57.3 million and the impact of foreign currency exchange rate changes of \$8.0 million in 2019. During the third quarter of 2019, the Company made changes to the medical plan offerings for certain Company postretirement benefit plans, effective January 1, 2020, which will impact the benefits provided to certain retirees. The plan amendment triggered a remeasurement, which resulted in a reduction in the postretirement benefit obligation with a corresponding amount recorded to accumulated other comprehensive loss. As a result of the plan amendment, one of the Company's postretirement benefit plans became overfunded. See *Note 15 - Other Postretirement Benefit Plans* for further discussion. The increase in deferred income taxes was primarily due to the reversal of foreign valuation allowances in the fourth quarter of 2019, partially offset by a reduction in deferred income taxes related to the plan amendment of the Company's postretirement benefit plans. See *Note 5 - Income Taxes* for further discussion. The decrease in other non-current assets was primarily due to the reclassification of \$15.3 million of lease assets from non-current assets to operating lease assets related to the ABC Bearings acquisition.

Current Liabilities:

	December 31,			
	2019	2018	\$ Change	% Change
Short-term debt	\$ 17.3	\$ 33.6	\$ (16.3)	(48.5%)
Current portion of long-term debt	64.7	9.4	55.3	NM
Accounts payable	301.7	273.2	28.5	10.4%
Salaries, wages and benefits	134.5	174.9	(40.4)	(23.1%)
Income taxes payable	17.8	23.5	(5.7)	(24.3%)
Other current liabilities	172.3	171.0	1.3	0.8%
Total current liabilities	\$ 708.3	\$ 685.6	\$ 22.7	3.3%

The decrease in short-term debt was primarily due to the decrease in borrowings under the variable-rate lines of credit for the Company's foreign subsidiaries. The increase in the current portion of long-term debt was primarily due to the 2020 Term Loan (as defined below) being reclassified to the current portion of long-term debt as it matures on September 18, 2020. Refer to *Note 11 - Financing Arrangements* to the Notes to the Consolidated Financial Statements for additional information.

The increase in accounts payable was primarily due to efforts by the Company to extend supplier payment terms in 2019, as well as the impact of acquisitions. The decrease in accrued salaries, wages and benefits was primarily due to timing as the payments for 2018 performance-based compensation exceeded accruals for 2019 performance-based compensation expense. In addition, the current pension liability decreased due to the payout of deferred compensation to a former executive of the Company. Refer to *Note 14 - Retirement Benefit Plans* to the Notes to the Consolidated Financial Statements for additional information.

Non-Current Liabilities:

	December 31,			
	2019	2018	\$ Change	% Change
Long-term debt	\$ 1,648.1	\$ 1,638.6	\$ 9.5	0.6%
Accrued pension benefits	165.1	161.3	3.8	2.4%
Accrued postretirement benefits	31.8	108.7	(76.9)	(70.7%)
Long-term operating lease liabilities	71.3	—	71.3	NM
Deferred income taxes	168.2	138.0	30.2	21.9%
Other non-current liabilities	84.0	70.3	13.7	19.5%
Total non-current liabilities	\$ 2,168.5	\$ 2,116.9	\$ 51.6	2.4%

The decrease in accrued postretirement benefits was primarily due to changes to the medical plan offerings for certain of the Company's postretirement benefit plans, effective January 1, 2020, which will impact the benefits provided to certain retirees. The plan amendment triggered a remeasurement, which resulted in a \$92.8 million reduction in the postretirement benefit obligation and a corresponding amount of income recorded to accumulated other comprehensive loss. This reduction was partially offset by the reclassification of the overfunded status of one of the Company's postretirement benefit plans as a result of the above-described plan amendment. Refer to *Note 15 - Other Postretirement Benefit Plans* in the Notes to the Consolidated Financial Statements for further discussion.

The increase in long-term operating lease liabilities was primarily due to the adoption of the new lease accounting standard. Refer to *Note 1 - Significant Accounting Policies* in the Notes to the Consolidated Financial Statements for further discussion.

The increase in the deferred income taxes was primarily due to the decrease in accrued postretirement benefits discussed above and additional deferred tax liabilities from recent acquisitions. Refer to *Note 5 - Income Taxes* in the Notes to the Consolidated Financial Statements for further discussion.

Shareholders' Equity:

	December 31,			
	2019	2018	\$ Change	% Change
Common stock	\$ 990.7	\$ 1,005.0	\$ (14.3)	(1.4%)
Earnings invested in the business	1,907.4	1,630.2	277.2	17.0%
Accumulated other comprehensive loss	(50.1)	(95.3)	45.2	(47.4%)
Treasury shares	(979.8)	(960.3)	(19.5)	(2.0%)
Noncontrolling interest	86.6	63.1	23.5	37.2%
Total equity	\$ 1,954.8	\$ 1,642.7	\$ 312.1	19.0%

Earnings invested in the business in 2019 increased primarily by net income attributable to the Company of \$362.1 million, partially offset by dividends declared of \$84.9 million. The decrease in accumulated other comprehensive loss was primarily due to a reduction in the postretirement benefit obligation due to a plan amendment that resulted in a corresponding after-tax reduction in accumulated other comprehensive loss of \$70.5 million (\$92.8 million pretax), partially offset by current year foreign currency adjustments of \$19.9 million. See *"Other Disclosures - Foreign Currency"* for further discussion regarding the impact of foreign currency translation.

The decrease in treasury shares was primarily due to the Company's purchase of 1.4 million of its common shares for \$62.7 million, partially offset by \$43.2 million of shares issued, net of shares surrendered, for stock compensation plans for 2019. The increase in noncontrolling interest was primarily due to a lower income tax rate and higher income of \$10 million at Timken India Limited ("Timken India"), and the 2019 acquisition of the joint venture partner's interest in Timken-XEMC (Hunan) Bearing Co., Ltd, which had losses of \$9 million in 2018 and are now included in total Company retained earnings as of December 31, 2019.

CASH FLOWS

	2019	2018	\$ Change
Net cash provided by operating activities	\$ 550.1	\$ 332.5	\$ 217.6
Net cash used in investing activities	(364.9)	(865.2)	500.3
Net cash (used) provided by financing activities	(100.7)	553.1	(653.8)
Effect of exchange rate changes on cash	(1.4)	(12.7)	11.3
Increase (decrease) in cash and cash equivalents	\$ 83.1	\$ 7.7	\$ 75.4

Operating Activities:

The increase in net cash provided by operating activities in 2019 compared with 2018 was primarily due a favorable impact of working capital items of \$218.6 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 2019 and 2018, respectively:

	2019	2018	\$ Change
Cash (used) provided:			
Accounts receivable	\$ 24.1	\$ (66.4)	\$ 90.5
Unbilled receivables	(12.6)	(21.8)	9.2
Inventories	50.7	(87.1)	137.8
Trade accounts payable	19.9	(20.2)	40.1
Other accrued expenses	(26.8)	32.2	(59.0)
Cash used in working capital items	\$ 55.3	\$ (163.3)	\$ 218.6

The following table displays the impact of income taxes on cash during 2019 and 2018, respectively:

	2019	2018	\$ Change
Accrued income tax expense	\$ 97.7	\$ 102.6	\$ (4.9)
Income tax payments	(118.6)	(121.3)	2.7
Other miscellaneous	(2.2)	(0.8)	(1.4)
Change in income taxes	\$ (23.1)	\$ (19.5)	\$ (3.6)

Investing Activities:

The decrease in net cash used in investing activities in 2019 compared with 2018 was primarily due to a \$538.9 million decrease in cash used for acquisitions, partially offset by a \$28.0 million increase in cash used in capital expenditures and a \$14 million decrease in cash proceeds from the divestiture of the ICT Business completed in 2018.

Financing Activities:

The decrease in net cash used by financing activities in 2019 compared with 2018 was primarily due to a decrease in net borrowings of \$695.7 million. Net borrowings were higher in 2018 due to the funding of the Cone Drive and Rollon acquisitions. The decrease was partially offset by an increase in cash used for share repurchases of \$35.8 million and an increase in proceeds from stock option activity of \$14.7 million during 2019 compared with 2018.

LIQUIDITY AND CAPITAL RESOURCES

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

Net Debt:

	December 31,	
	2019	2018
Short-term debt	\$ 17.3	\$ 33.6
Current portion of long-term debt	64.7	9.4
Long-term debt	1,648.1	1,638.6
Total debt	\$ 1,730.1	\$ 1,681.6
Less: Cash and cash equivalents	209.5	132.5
Net debt	\$ 1,520.6	\$ 1,549.1

Ratio of Net Debt to Capital:

	December 31,	
	2019	2018
Net debt	\$ 1,520.6	\$ 1,549.1
Total equity	1,954.8	1,642.7
Capital (net debt + total equity)	\$ 3,475.4	\$ 3,191.8
Ratio of net debt to capital	43.8%	48.5%

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.

The Company has a \$100 million Amended and Restated Asset Securitization Agreement (the "Accounts Receivable Facility"), which matures on November 30, 2021. The Accounts Receivable Facility is subject to certain borrowing base limitations and is secured by certain domestic accounts receivable of the Company. Borrowings under the Accounts Receivable Facility were not reduced by any such borrowing base limitations at December 31, 2019. As of December 31, 2019, the Company had \$100.0 million in outstanding borrowings, which reduced the availability under the facility to zero. The interest rate on the Accounts Receivable Facility is variable and was 2.77% as of December 31, 2019, which reflects the prevailing commercial paper rate plus facility fees.

On June 25, 2019, the Company entered into a Fourth Amended and Restated Credit Agreement (the "Senior Credit Facility"), which is a \$650.0 million unsecured revolving credit facility that matures on June 25, 2024. The Senior Credit Facility amends and restates the Company's previous credit agreement, dated as of June 19, 2015. At December 31, 2019, the Senior Credit Facility had outstanding borrowings of \$132.7 million, which reduced the availability to \$517.3 million. The Senior Credit Facility 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 3.5 to 1.0 (increasing for a limited time period following the qualifying acquisitions). As of December 31, 2019, the Company's consolidated leverage ratio was 2.40 to 1.0. The minimum consolidated interest coverage ratio permitted under the Senior Credit Facility is 3.5 to 1.0. As of December 31, 2019, the Company's consolidated interest coverage ratio was 10.53 to 1.0.

The interest rate under the Senior Credit Facility is variable with a spread based on the Company's credit rating. The average rate on outstanding U.S. dollar borrowings was 2.85% and the average rate on outstanding Euro borrowings was 1.00% as of December 31, 2019. In addition, the Company pays a facility fee based on the Company's credit rating multiplied by the aggregate commitments of all of the lenders under the Senior Credit Facility. As of December 31, 2019, the Company's credit ratings were investment grade with Standard and Poor's (BBB), Moody's (Baa3) and Fitch (BBB).

Other sources of liquidity include short-term lines of credit for certain of the Company's foreign subsidiaries, which provide for borrowings up to approximately \$268.9 million. At December 31, 2019, the Company had borrowings outstanding of \$15.5 million and bank guarantees of \$0.5 million, which reduced the aggregate availability under these facilities to \$252.9 million.

On September 6, 2018, the Company issued \$400 million aggregate principal amount of fixed-rate 4.50% senior unsecured notes that mature on December 15, 2028 (the "2028 Notes"). On September 11, 2018, the Company entered into a \$350 million variable-rate term loan that matures on September 11, 2023 (the "2023 Term Loan"). Proceeds from the 2028 Notes and the 2023 Term Loan were used to fund the acquisitions of Cone Drive and Rollon, which closed on September 1, 2018 and September 18, 2018, respectively. On July 12, 2019, the Company amended the terms of the 2023 Term Loan to, among other things, align covenants and other terms with the Company's Senior Credit Facility. Refer to *Note 11 - Financing Arrangements* to the Notes to the Consolidated Financial Statements for additional information.

On September 7, 2017, the Company issued €150 million aggregate principal amount of senior unsecured notes with a fixed interest rate of 2.02% that mature on September 7, 2027 in the aggregate principal amount of €150 million. On September 18, 2017, the Company entered into a variable-rate €100 million term loan that matures on September 18, 2020 (the "2020 Term Loan"). During the second quarter of 2019, the Company repaid approximately €51.5 million under the 2020 Term Loan, reducing the principal balance to €48.5 million as of December 31, 2019. The 2020 Term Loan was classified as a current portion of long-term debt as of December 31, 2019. The Company expects to service interest and repay the remaining principal balance of the 2020 Term Loan with cash held or generated outside the U.S.

At December 31, 2019, \$207.2 million of the Company's \$209.5 million of cash and cash equivalents resided in jurisdictions outside the U.S. It is the Company's practice to use available cash in the U.S. to pay down its Senior Credit Facility or Accounts Receivable Facility in order to minimize total interest expense. 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 U.S. 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.

The Company expects that any cash requirements in excess of cash on hand and cash generated from operating activities will be met by the committed funds available under its Accounts Receivable Facility and Senior Credit Facility. Management believes it has sufficient liquidity to meet its obligations through the term of the Senior Credit Facility.

At December 31, 2019, the Company was in full compliance with all applicable covenants on its outstanding debt, and the Company expects to remain in full compliance with its debt covenants. However, the Company may need to limit its borrowings under the Senior Credit Facility or other facilities from time to time in order to remain in compliance. As of December 31, 2019, the Company could have borrowed the full amounts available under the Senior Credit Facility and Accounts Receivable Facility and still would have been in compliance with its debt covenants.

The Company expects to generate operating cash of approximately \$585 million in 2020, an increase from 2019 of approximately \$35 million or 6%, as the Company anticipates lower pension and medical benefit plan payments, partially offset by less cash generated from working capital and higher capital expenditures. The Company expects capital expenditures to be approximately \$160 million in 2020, compared with \$141 million in 2019.

CONTRACTUAL OBLIGATIONS

The Company's contractual debt obligations and contractual commitments outstanding as of December 31, 2019 were as follows:

Payments due by period:

Contractual Obligations	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Interest payments	\$ 380.6	\$ 61.8	\$ 117.9	\$ 94.0	\$ 106.9
Long-term debt, including current portion	1,712.8	64.7	120.8	797.3	730.0
Short-term debt	17.3	17.3	—	—	—
Purchase commitments	50.5	44.6	4.9	1.0	—
Operating leases	110.4	31.7	39.1	19.6	20.0
Retirement benefits	165.8	14.4	38.7	27.2	85.5
Total	\$ 2,437.4	\$ 234.5	\$ 321.4	\$ 939.1	\$ 942.4

The interest payments beyond five years primarily relate to long-term fixed-rate notes. Refer to *Note 11 - Financing Arrangements* in the Notes to the Consolidated Financial Statements for additional information.

Purchase commitments are defined as an agreement to purchase goods or services that are enforceable and legally binding on the Company. Included in purchase commitments above are certain obligations related to take-or-pay contracts, capital commitments, service agreements and utilities. Many of these commitments relate to take-or-pay contracts in which the Company guarantees payment to ensure availability of products or services. These purchase commitments do not represent the entire anticipated purchases in the future, but represent only those items that the Company is contractually obligated to purchase. The majority of the products and services purchased by the Company are purchased as needed, with no commitment.

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 2019, the Company made cash contributions and payments of approximately \$35.4 million to its global defined benefit pension plans and \$8.0 million to its other postretirement benefit plans. Refer to *Note 14 - Retirement Benefit Plans* and *Note 15 - Other Postretirement Benefit Plans* in the Notes to the Consolidated Financial Statements for additional information.

Refer to *Note 5 - Income Taxes* and *Note 12 - 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, 2019, outstanding letters of credit totaled \$42.4 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.

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 recognized when 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.

Inventory:

Inventories are valued at the lower of cost or market, with approximately 59% valued by the first-in, first-out ("FIFO") method and the remaining 41% 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 a decrease in its LIFO reserve of \$5.0 million during 2019 compared to an increase in its LIFO reserve of \$6.2 million during 2018.

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.

The Company reviews goodwill for impairment at the reporting unit level. The Mobile Industries segment has four reporting units and the Process Industries segment has two reporting units. The reporting units within the Mobile Industries segment are Mobile Industries, Lubrication Systems, Aerospace Drive 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 indefinite-lived asset impairment testing, including the goodwill of the Mobile Industries, Aerospace Bearing Inspection, Process Industries, Industrial Services and Lubrication Systems reporting units and other material indefinite-lived intangible trade name assets in the fourth quarter of 2019. Based on this qualitative assessment, the Company concluded that it was more likely than not that the fair values of these reporting units and trade names exceeded their respective carrying values.

The Company chose to perform a quantitative goodwill impairment analysis in the annual goodwill impairment testing of the Aerospace Drive Systems reporting unit having a goodwill balance of \$1.8 million. The quantitative goodwill impairment analysis compares the carrying amount of the reporting unit to its estimated fair value. To the extent that the carrying value of the reporting unit exceeds its estimated fair value, impairment exists and must be recognized. The quantitative analysis performed in 2019 resulted in an estimated fair value that was less than the carrying value, such that full impairment of the \$1.8 million goodwill balance in the Aerospace Drive Systems reporting unit was recorded during the fourth quarter. Further analysis of the undiscounted cash flows for the reporting unit determined there was no impairment of long-lived assets held by the Aerospace Drive Systems reporting unit.

As of December 31, 2019, the Company had \$993.7 million of goodwill on its Consolidated Balance Sheet, of which \$361.3 million was attributable to the Mobile Industries segment and \$632.4 million was attributable to the Process Industries segment. See *Note 9 - Goodwill and Other Intangibles* in the Notes to the Consolidated Financial Statements for movements in the carrying amount of goodwill by segment.

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 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 \$44.5 million in 2019 and \$12.6 million in 2017 of tax benefits related to the reversal of valuation allowances. There were no valuation allowance reversals in 2018. 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 2019, the Company recorded \$9.6 million of net tax expense for uncertain tax positions, which consisted of \$12.1 million of interest and increases to current and prior year uncertain tax positions. This expense was partially offset by \$2.5 million related to the net reversal of accruals for prior year uncertain tax positions and settlements with tax authorities. The Company also recorded \$2.9 million of uncertain tax positions related to prior years for acquisitions made during 2019 and \$2.8 million of uncertain tax positions related to deferred tax liabilities.

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, discount rates, and royalty 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.

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 \$22.7 million during 2019 for defined benefit pension plans, compared to net periodic benefit cost of \$35.0 million during 2018. The Company recognized actuarial losses of \$13.9 million during 2019 compared to \$38.8 million during 2018, partially offset by a curtailment gain of \$10.2 million recognized in 2018. Actuarial losses in 2019 were primarily due to the impact of a net reduction in the discount rate used to measure its defined benefit pension obligations of \$100.9 million and the impact of experience losses and other changes in valuation assumptions of \$3.1 million, partially offset by higher than expected returns on plan assets of \$90.1 million. The impact of the net reduction in the discount rate used to measure the Company's defined benefit obligation was primarily driven by a 86 basis point reduction in the weighted-average discount rate used to measure its U.S. defined benefit plan obligations, which decreased from 4.36% in 2018 to 3.50% in 2019.

In 2020, the Company expects net periodic benefit cost of \$6.6 million for defined benefit pension plans, compared with net periodic benefit cost of \$22.7 million in 2019. Net periodic benefit cost for 2020 does not include Mark-to-Market charges that will be recognized immediately through earnings in the fourth quarter of 2020, or on an interim basis if specific events trigger a remeasurement. Excluding the actuarial losses of \$13.9 million recognized in 2019, the expected net periodic benefit cost of \$6.6 million in 2020 compares to net periodic benefit cost of \$8.8 million in 2019 as the Company expects lower interest costs of \$4.1 million, partially offset by lower expected return on plan assets of \$1.7 million.

The Company expects to contribute to its defined benefit pension plans or pay directly to participants of defined benefit plans approximately \$11.8 million in 2020 compared with \$35.4 million of contributions and payments in 2019. The decrease in 2020 planned employer contributions/payments is primarily due to the 2019 payout of deferred compensation to a former executive officer of the Company.

For expense purposes in 2019, the Company applied a weighted-average discount rate of 4.36% to its U.S. defined benefit pension plans. For expense purposes in 2020, the Company will apply a weighted-average discount rate of 3.50% to its U.S. defined benefit pension plans.

For expense purposes in 2019, the Company applied an expected weighted-average rate of return of 6.12% for the Company's U.S. pension plan assets. For expense purposes in 2020, the Company will apply an expected weighted-average rate of return on plan assets of 5.22%.

The following table presents the sensitivity of the Company's U.S. projected pension benefit obligation ("PBO") and 2019 expense to the indicated increase/decrease in key assumptions:

	Change	+ / - Change at December 31, 2019 PBO	Change to 2019 Expense
Assumption:			
Discount rate	+ 0.25%	\$ 20.2	\$ 20.2
Overall return on plan assets	+ 0.25%	N/A	1.1

In the table above, a 25 basis point decrease in the discount rate will increase the PBO by \$20.2 million and decrease income before income taxes by \$20.2 million. Defined benefit pension plans in the U.S. represent 66% of the Company's benefit obligation and 65% of the fair value of the Company's plan assets at December 31, 2019.

Other Postretirement Benefit Plans:

The Company recognized net periodic benefit credit of \$20.5 million during 2019 for other postretirement benefit plans, compared to net periodic benefit credit of \$14.3 million during 2018. The Company recognized prior service credits of \$5.4 million during 2019 compared to \$1.7 million during 2018. During July 2019, the Company announced changes to the medical plan offerings for certain of its postretirement benefit plans, effective January 1, 2020, which will impact the benefits provided to certain retirees. This plan amendment resulted in a \$92.8 million reduction in the postretirement benefit obligation and a corresponding pretax adjustment to accumulated other comprehensive loss. Starting with the three months ended September 30, 2019, the pretax adjustment of \$92.8 million will be amortized from accumulated other comprehensive loss into net periodic benefit cost (as a benefit) over the next twelve years.

In 2020, the Company expects net periodic benefit credit of \$7.9 million for other postretirement benefit plans, compared to net periodic benefit credit of \$20.5 million in 2019. Net periodic benefit credit for 2020 does not include Mark-to-Market charges that will be recognized immediately through earnings in the fourth quarter of 2020, or on an interim basis if specific events trigger a remeasurement. Excluding the actuarial gain of \$18.0 million recognized in 2019, the expected net periodic benefit credit of \$7.9 million in 2020 compares to net periodic benefit credit of \$2.5 million in 2019 as the Company expects higher amortization of prior service credit of \$4.4 million in 2020 related to the plan amendment in 2019.

In January 2020, the Company established a second Voluntary Employee Beneficiary Association ("VEBA") trust for certain active employees' medical benefits. The Company transferred \$50 million from the existing VEBA trust to fund this new VEBA trust. The \$50 million that was transferred will primarily be classified as other current assets based on the portfolio of the assets in the trust. The Company expects to fully utilize the assets of the new trust in 2020 for the payout of certain active employees' medical benefits.

For expense purposes in 2019, the Company applied a discount rate of 3.48% to 4.30% to its other postretirement benefit plans. For expense purposes in 2020, the Company will apply a discount rate of 3.43% to its other postretirement benefit plans. For expense purposes in 2019, the Company applied an expected rate of return of 4.85% to the VEBA trust assets. For expense purposes in 2020, the Company will apply an expected rate of return of 3.00% to the VEBA trust assets.

The following table presents the sensitivity of the Company's accumulated other postretirement benefit obligation ("APBO") and 2019 expense to the indicated increase/decrease in key assumptions:

	Change	+ / - Change at December 31, 2019 APBO	Change to 2019 Expense
Assumption:			
Discount rate	+ 0.25%	\$ 1.3	\$ 1.3
Overall return on plan assets	+ 0.25%	N/A	0.2

In the table above, a 25 basis point decrease in the discount rate will increase the APBO by \$1.3 million and decrease income before income taxes by \$1.3 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 5.8% for 2020, declining gradually to 5.0% in 2023 and thereafter for medical and prescription drug benefits. For Medicare Advantage benefits, actual contract rates have been set for 2020 through 2022, and are assumed to increase by 7.3% for 2023, declining gradually to 5.0% in 2031 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 2019 total service and interest cost components by \$0.1 million and would have increased the postretirement benefit obligation by \$2.4 million. A one percentage point decrease would provide corresponding reductions of \$0.1 million and \$2.0 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 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.

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 \$6.1 million for the year ended December 31, 2019, and recognized a gain of \$3.6 million and a loss of \$3.7 million for the years ended December 31, 2018 and 2017, respectively. For the year ended December 31, 2019, the Company recorded a negative non-cash foreign currency translation adjustment of \$19.7 million that decreased shareholders' equity, compared with a negative non-cash foreign currency translation adjustment of \$60.5 million that decreased shareholders' equity for the year ended December 31, 2018. The foreign currency translation adjustments for the year ended December 31, 2019 were impacted negatively by the strengthening of the U.S. dollar relative to other currencies as of December 31, 2019 compared to December 31, 2018.

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 7, 2020, the Company's Board of Directors declared a quarterly cash dividend of \$0.28 per common share. The quarterly dividend will be paid on March 4, 2020 to shareholders of record as of February 21, 2020. This will be the 391st 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 2019 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, terrorism, pandemics 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) 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, 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 our markets;

- (c) 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, and new technology that may impact the way the Company's products are produced, sold or distributed;
- (d) 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; 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 or natural disasters; and changes in the cost of labor and benefits;
- (e) the success of the Company's operating plans, announced programs, initiatives and capital investments; the ability to integrate acquired companies; and the ability of acquired companies to achieve satisfactory operating results, including results being accretive to earnings;
- (f) the Company's ability to maintain appropriate relations with unions or works councils that represent Company employees in certain locations in order to avoid disruptions of business and to maintain the continued service of our management and other key employees;
- (g) unanticipated litigation, claims or assessments. This includes: claims, investigations or problems related to intellectual property, product liability or warranty, foreign export and trade laws, competition and anti-bribery laws, environmental or health and safety issues, data privacy and taxes;
- (h) changes in worldwide financial and capital markets, including availability of financing and interest rates on satisfactory terms, 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;
- (i) the Company's ability to satisfy its obligations under its debt agreements and maintain favorable credit ratings, as well as its ability to renew or refinance borrowings on favorable terms;
- (j) 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
- (k) those items identified under Item 1A. Risk Factors on pages 6 through 11.

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 \$6.4 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 Change Risk:

Fluctuations in the value of the U.S. dollar compared to foreign currencies, including the Euro, also 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, 2019, there were \$295.7 million of hedges in place. A uniform 10% weakening of the U.S. dollar against all currencies would have resulted in a charge of \$7.6 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

Consolidated Statements of Income

	Year Ended December 31,		
	2019	2018	2017
(Dollars in millions, except per share data)			
Net sales	\$ 3,789.9	\$ 3,580.8	\$ 3,003.8
Cost of products sold	2,648.1	2,540.7	2,191.7
Gross Profit	1,141.8	1,040.1	812.1
Selling, general and administrative expenses	618.6	580.7	508.3
Impairment and restructuring charges	6.8	4.9	4.3
Operating Income	516.4	454.5	299.5
Interest expense	(72.1)	(51.7)	(37.1)
Interest income	4.9	2.1	2.9
Non-service pension and other postretirement income (expense)	10.2	(6.2)	(15.0)
Other income, net	13.0	9.4	9.6
Income Before Income Taxes	472.4	408.1	259.9
Provision for income taxes	97.7	102.6	57.6
Net Income	374.7	305.5	202.3
Less: Net income (loss) attributable to noncontrolling interest	12.6	2.7	(1.1)
Net Income Attributable to The Timken Company	\$ 362.1	\$ 302.8	\$ 203.4
Net Income per Common Share Attributable to The Timken Company Common Shareholders			
Basic earnings per share	\$ 4.78	\$ 3.93	\$ 2.62
Diluted earnings per share	\$ 4.71	\$ 3.86	\$ 2.58

See accompanying Notes to the Consolidated Financial Statements.

Consolidated Statements of Comprehensive Income

	Year Ended December 31,		
	2019	2018	2017
(Dollars in millions)			
Net Income	\$ 374.7	\$ 305.5	\$ 202.3
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustments	(19.9)	(67.4)	47.1
Pension and postretirement liability adjustments	66.9	0.4	(1.8)
Change in fair value of derivative financial instruments	(2.0)	3.8	(3.3)
Other comprehensive income (loss), net of tax	45.0	(63.2)	42.0
Comprehensive Income, net of tax	419.7	242.3	244.3
Less: comprehensive income (loss) attributable to noncontrolling interest	12.4	(4.2)	1.3
Comprehensive Income Attributable to The Timken Company	\$ 407.3	\$ 246.5	\$ 243.0

See accompanying Notes to the Consolidated Financial Statements.

Consolidated Balance Sheets

	December 31,	
	2019	2018
(Dollars in millions)		
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 209.5	\$ 132.5
Restricted cash	6.7	0.6
Accounts receivable, less allowances: (2019 - \$18.1 million; 2018 - \$21.9 million)	545.1	546.6
Unbilled receivables	129.2	116.6
Inventories, net	842.0	835.7
Deferred charges and prepaid expenses	36.7	28.2
Other current assets	105.4	77.0
Total Current Assets	1,874.6	1,737.2
Property, Plant and Equipment, Net	989.2	912.1
Operating Lease Assets	114.1	—
Other Assets		
Goodwill	993.7	960.5
Other intangible assets	758.5	733.2
Non-current pension assets	3.4	6.2
Non-current other postretirement benefit assets	36.6	—
Deferred income taxes	71.8	59.0
Other non-current assets	18.0	37.0
Total Other Assets	1,882.0	1,795.9
Total Assets	\$ 4,859.9	\$ 4,445.2
LIABILITIES AND EQUITY		
Current Liabilities		
Short-term debt	\$ 17.3	\$ 33.6
Current portion of long-term debt	64.7	9.4
Short-term operating lease liabilities	28.3	—
Accounts payable, trade	301.7	273.2
Salaries, wages and benefits	134.5	174.9
Income taxes payable	17.8	23.5
Other current liabilities	172.3	171.0
Total Current Liabilities	736.6	685.6
Non-Current Liabilities		
Long-term debt	1,648.1	1,638.6
Accrued pension benefits	165.1	161.3
Accrued postretirement benefits	31.8	108.7
Long-term operating lease liabilities	71.3	—
Deferred income taxes	168.2	138.0
Other non-current liabilities	84.0	70.3
Total Non-Current Liabilities	2,168.5	2,116.9
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) (2019 – 98,375,135 shares; 2018 – 98,375,135 shares)		
Stated capital	53.1	53.1
Other paid-in capital	937.6	951.9
Earnings invested in the business	1,907.4	1,630.2
Accumulated other comprehensive loss	(50.1)	(95.3)
Treasury shares at cost (2019 – 22,836,180 shares; 2018 – 22,421,213 shares)	(979.8)	(960.3)
Total Shareholders' Equity	1,868.2	1,579.6
Noncontrolling interest	86.6	63.1
Total Equity	1,954.8	1,642.7
Total Liabilities and Equity	\$ 4,859.9	\$ 4,445.2

See accompanying Notes to the Consolidated Financial Statements.

Consolidated Statements of Cash Flows

Year Ended December 31,

	2019	2018	2017
(Dollars in millions)			
CASH PROVIDED (USED)			
Operating Activities			
Net income	\$ 374.7	\$ 305.5	\$ 202.3
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	160.6	146.0	137.7
Impairment charges	2.6	1.3	0.1
Loss (gain) on sale of assets	(3.6)	0.3	(2.1)
Gain on disposal of lease assets	(0.4)	—	—
Loss on divestitures	—	0.8	—
Deferred income tax benefit	(8.9)	(21.4)	(0.4)
Stock-based compensation expense	27.1	32.3	24.7
Pension and other postretirement expense	2.2	20.7	28.9
Pension and other postretirement benefit contributions and payments	(43.4)	(18.7)	(23.9)
Operating lease expense	36.6	—	—
Operating lease payments	(35.6)	—	—
Changes in operating assets and liabilities:			
Accounts receivable	24.1	(66.4)	(42.3)
Unbilled receivables	(12.6)	(21.8)	—
Inventories	50.7	(87.1)	(132.1)
Accounts payable, trade	19.9	(20.2)	70.7
Other accrued expenses	(26.8)	32.2	36.3
Income taxes	(14.2)	1.9	(36.2)
Other, net	(2.9)	27.1	(26.9)
Net Cash Provided by Operating Activities	550.1	332.5	236.8
Investing Activities			
Capital expenditures	(140.6)	(112.6)	(104.7)
Acquisitions, net of cash acquired of \$5.9 million in 2019, \$30.1 million in 2018 and \$35.4 million in 2017	(226.5)	(765.4)	(346.8)
Proceeds from disposals of property, plant and equipment	6.3	1.5	7.1
Proceeds from divestitures	—	14.0	—
Investments in short-term marketable securities, net	(4.2)	(2.8)	(3.6)
Other	0.1	0.1	(0.7)
Net Cash Used in Investing Activities	(364.9)	(865.2)	(448.7)
Financing Activities			
Cash dividends paid to shareholders	(84.9)	(85.7)	(83.3)
Purchase of treasury shares	(62.7)	(98.5)	(43.4)
Proceeds from exercise of stock options	27.5	12.8	32.9
Payments related to tax withholding for stock-based compensation	(15.4)	(5.4)	(11.4)
Proceeds from long-term debt	662.8	1,391.1	927.8
Payments on long-term debt	(633.8)	(663.8)	(684.5)
Deferred financing costs	(1.9)	(1.2)	(1.2)
Accounts receivable facility financing borrowings	25.0	152.0	56.7
Accounts receivable facility financing payments	—	(139.9)	(42.7)
Short-term debt activity, net	(17.0)	(6.7)	19.9
Other	(0.3)	(1.6)	(2.6)
Net Cash (Used in) Provided by Financing Activities	(100.7)	553.1	168.2
Effect of exchange rate changes on cash	(1.4)	(12.7)	17.6
Increase (decrease) In Cash, Cash Equivalents and Restricted Cash	83.1	7.7	(26.1)
Cash, cash equivalents and restricted cash at beginning of year	133.1	125.4	151.5
Cash, Cash Equivalents and Restricted Cash at End of Year	\$ 216.2	\$ 133.1	\$ 125.4

See accompanying Notes to the Consolidated Financial Statements.

Consolidated Statements of Shareholders' Equity

	The Timken Company Shareholders						
	Total	Stated Capital	Other Paid-In Capital	Earnings Invested in the Business	Accumulated Other Comprehensive Income (Loss)	Treasury Shares	Non-controlling Interest
(Dollars in millions, except per share data)							
Year Ended December 31, 2017							
Balance at January 1, 2017	\$ 1,310.9	\$ 53.1	\$ 906.9	\$ 1,289.3	\$ (77.9)	\$ (891.7)	\$ 31.2
Cumulative effect of ASU 2016-09	0.5		1.5	(1.0)			
Net income (loss)	202.3			203.4			(1.1)
Foreign currency translation adjustments	47.1				44.7		2.4
Pension and other postretirement liability adjustments (net of income tax benefit of \$1.1 million)	(1.8)				(1.8)		
Change in fair value of derivative financial instruments, net of reclassifications	(3.3)				(3.3)		
Dividends declared to noncontrolling interest	(0.3)						(0.3)
Dividends – \$1.07 per share	(83.3)			(83.3)			
Stock-based compensation expense	24.7		24.7				
Purchase of treasury shares	(43.4)					(43.4)	
Stock option exercise activity	32.9		(10.7)			43.6	
Restricted share activity	—		(18.6)			18.6	
Payments related to tax withholding for stock-based compensation	(11.4)					(11.4)	
Balance at December 31, 2017	\$ 1,474.9	\$ 53.1	\$ 903.8	\$ 1,408.4	\$ (38.3)	\$ (884.3)	\$ 32.2
Year Ended December 31, 2018							
Cumulative effect of the revenue standard (net of income tax benefit of \$1.5 million)	4.0			4.0			
Cumulative effect of ASU 2018-02	—			0.7	(0.7)		
Net income	305.5			302.8			2.7
Foreign currency translation adjustments	(67.4)				(60.5)		(6.9)
Pension and other postretirement liability adjustments (net of \$0.5 income tax expense)	0.4				0.4		
Change in fair value of derivative financial instruments, net of reclassifications	3.8				3.8		
Shares issued for the acquisition of ABC Bearings	66.0		30.9				35.1
Dividends – \$1.11 per share	(85.7)			(85.7)			
Stock-based compensation expense	32.3		32.3				
Purchase of treasury shares	(98.5)					(98.5)	
Stock option exercise activity	12.8		(3.8)			16.6	
Restricted share activity	—		(11.3)			11.3	
Payments related to tax withholding for stock-based compensation	(5.4)					(5.4)	
Balance at December 31, 2018	\$ 1,642.7	\$ 53.1	\$ 951.9	\$ 1,630.2	\$ (95.3)	\$ (960.3)	\$ 63.1
Year Ended December 31, 2019							
Net income	374.7			362.1			12.6
Foreign currency translation adjustments	(19.9)				(19.7)		(0.2)
Pension and other postretirement liability adjustments (net of \$22.2 income tax expense)	66.9				66.9		
Change in fair value of derivative financial instruments, net of reclassifications	(2.0)				(2.0)		
Change in ownership of noncontrolling interest	(0.5)		(10.3)				9.8
Noncontrolling interest acquired	1.8						1.8
Dividends declared to noncontrolling interest	(0.5)						(0.5)
Dividends – \$1.12 per share	(84.9)			(84.9)			
Stock-based compensation expense	27.1		27.1				
Purchase of treasury shares	(62.7)					(62.7)	
Stock option exercise activity	27.5		(7.8)			35.3	
Restricted share activity	—		(23.3)			23.3	
Payments related to tax withholding for stock-based compensation	(15.4)					(15.4)	
Balance at December 31, 2019	\$ 1,954.8	\$ 53.1	\$ 937.6	\$ 1,907.4	\$ (50.1)	\$ (979.8)	\$ 86.6

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 recognized when performance obligations under the terms of a contract with a customer of the Company are satisfied. Of the Company's revenue, approximately 85-90% is from short-term, fixed-price contracts and continues to be recognized as of a point in time when products are shipped from the Company's manufacturing facilities or at a later point in time when control of the products transfers to the customer. In accordance with applicable accounting guidance adopted by the Company on January 1, 2018 and applied on a modified retrospective basis, the Company recognizes approximately 10-15% 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 30 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 commercially based on a competitive market. Under the payment terms of those U.S. government fixed-price contracts, the customer pays the Company performance-based payments, which are interim payments of up to 80% of the contract price for 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 Sheet. 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 add, 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 of \$6.7 million and \$0.6 million at December 31, 2019 and 2018, respectively, was restricted for contractually specified uses. The increase was primarily due to the Company's contractual hold-back of cash for potential working capital adjustments as part of the BEKA acquisition.

Accounts Receivable, Less Allowances:

Accounts receivable, less allowances on the Consolidated Balance Sheet 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 Sheet 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 primarily subject only to the passage of time. The amounts recorded for unbilled amounts 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 59% valued by the FIFO method and the remaining 41% 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 three months and one year and are valued at amortized cost, which approximates fair value. The Company held short-term investments as of December 31, 2019 and 2018 with a fair value and cost basis of \$25.8 million and \$21.8 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 approximately 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.

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.

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.

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. 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 \$6.1 million for the year ended December 31, 2019, and recognized a gain of \$3.6 million and a loss of \$3.7 million for the years ended December 31, 2018 and 2017, 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.

With the adoption of Accounting Standards Update ("ASU") 2017-07 on January 1, 2018, service cost is included in other employee compensation costs within operating income and is the only component of net periodic benefit cost that may be capitalized when applicable. The other components of net periodic benefit cost are presented outside of operating income. Also, 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. These changes in accounting principles were applied retrospectively; therefore, prior period amounts impacted have been revised accordingly herein.

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.

Earnings Per Share:

Only certain unvested restricted share grants provide for the payment of nonforfeitable 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.

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 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.

Note 1 – Significant Accounting Policies (continued)

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 February 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)." ASU 2016-02 was issued to increase transparency and comparability among entities by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about lease arrangements. The Company adopted the new leasing standard on January 1, 2019 using the cumulative-effect adjustment transition method. The Company also elected several practical expedients to not assess the following as part of adoption: (1) whether any expired or existing contracts contain leases; (2) the lease classification between finance and operating leases for any expired or existing leases; and (3) the recognition of initial direct costs for existing leases. The Company also elected to not recognize leases with a term of 12 months or less on the Consolidated Balance Sheets. The adoption of the lease standard had no impact to the Company's consolidated results of operations or the captions on the consolidated statements of cash flows. The cumulative effect of the changes made to the balance sheet as of January 1, 2019 for the adoption of the new lease standard was as follows:

	Balance at December 31, 2018	Effect of Accounting Change	Balance at January 1, 2019
Operating lease assets	\$ —	\$ 114.1	\$ 114.1
Other intangible assets	733.2	0.7	733.9
Other non-current assets ⁽¹⁾	37.0	(15.3)	21.7
Total Assets	4,445.2	99.5	4,544.7
Short-term operating lease liability	—	29.8	29.8
Long-term operating lease liability	—	69.7	69.7
Total Liabilities	\$ 2,802.5	\$ 99.5	\$ 2,902.0

⁽¹⁾ Due to the adoption of the new leasing standard, the Company recognized operating lease assets and corresponding operating lease liabilities on the Consolidated Balance Sheet. In conjunction with the adoption of the new leasing standard, the Company reclassified \$15.3 million of lease assets related to purchase accounting adjustments from the ABC Bearings acquisition from Other assets to Operating lease assets. These assets do not have material corresponding lease liabilities.

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 less than 12 months or less and the lease expenses related to these leases is recognized as incurred over the lease term.

In August 2017, the FASB issued ASU 2017-12, "Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities", which impacts both designation and measurement guidance for qualifying hedging relationships and the presentation of hedge results. ASU 2017-12 amends and clarifies the requirements to qualify for hedge accounting, removes the requirement to recognize changes in fair value from certain hedges in current earnings, and specifies the presentation of changes in fair value in the income statement for all hedging instruments. ASU 2017-12 is effective for public companies for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The Company adopted ASU 2017-12 effective January 1, 2019, and the impact of adoption was not material to the Company's results of operations and financial condition.

Note 1 – Significant Accounting Policies (continued)

New Accounting Guidance Issued and Not Yet Adopted:

In June 2016, the FASB issued ASU 2016-13, "Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments". ASU 2016-13 changes how entities will measure credit losses for most financial assets and certain other instruments that are not measured at fair value through net income. The new guidance will replace the current incurred loss approach with an expected loss model. The new expected credit loss impairment model will apply to most financial assets measured at amortized cost and certain other instruments, including trade, unbilled and other receivables, loans, held-to-maturity debt instruments, net investments in leases, loan commitments and standby letters of credit. Upon initial recognition of the exposure, the expected credit loss model requires entities to estimate the credit losses expected over the life of an exposure (or pool of exposures). The estimate of expected credit losses should consider historical information, current information and reasonable and supportable forecasts, including estimates of prepayments. Financial instruments with similar risk characteristics should be grouped together when estimating expected credit losses. ASU 2016-13 does not prescribe a specific method to make the estimate, so its application will require significant judgment. ASU 2016-13 is effective for public companies in fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. Based on the Company's analysis, ASU 2016-13 did not have a material impact on the Company's results of operations and financial condition upon adoption on January 1, 2020.

Note 2 - Acquisitions and Divestitures

The Company completed two acquisitions in 2019. On November 1, 2019, the Company completed the acquisition of BEKA, a leading global supplier of automatic lubrication systems. With expected 2019 annual sales of approximately \$135 million, BEKA serves a diverse range of industrial sectors, including wind, food and beverage, rail, on- and off-highway and other process industries. Headquartered in Pegnitz, Germany, BEKA has manufacturing and research and development based in Germany, and assembly facilities and sales offices around the world. On April 1, 2019, the Company completed the acquisition of Diamond Chain, a leading supplier of high-performance roller chains for industrial markets. Diamond Chain serves a diverse range of market sectors, including industrial distribution, material handling, food and beverage, agriculture, construction and other process industries. Diamond Chain, located in Indianapolis, Indiana, operates primarily in the United States and China and had sales of approximately \$60 million for the twelve months ended March 31, 2019. The total purchase price for these acquisitions was \$252.2 million, which includes cash consideration of \$228.4 million, net of cash acquired of \$5.9 million, plus assumed debt of \$17.9 million. The Company incurred acquisition-related costs of \$4.0 million in 2019 to complete these acquisitions. Based on markets and customers served, the majority of the results for BEKA are reported in the Mobile Industries segment, and a majority of the results for Diamond Chain are reported in the Process Industries segment.

During 2018, the Company completed three acquisitions. On September 18, 2018, the Company completed the acquisition of Rollon, a leader in engineered linear motion products, specializing in the design and manufacture of linear guides, telescopic rails and linear actuators used in a wide range of industries such as passenger rail, aerospace, packaging and logistics, medical and automation. On September 1, 2018, the Company completed the acquisition of Cone Drive, a leader in precision drives used in diverse markets including solar, automation, aerial platforms, and food and beverage. On August 30, 2018, the Company's majority-owned subsidiary, Timken India, completed the acquisition of ABC Bearings, a manufacturer of tapered, cylindrical and spherical roller bearings and slewing rings in India. Consideration for the acquisition of ABC Bearings consisted of Timken India stock. Refer to the Consolidated Statement of Shareholders' Equity for more information on the acquisition of ABC Bearings. The total purchase price for these acquisitions, net of cash acquired of \$30.1 million, was \$829.5 million, which represents \$834.3 million as of December 31, 2018 net of purchase price adjustments of \$4.8 million made in 2019. Also, the total purchase price for 2018 acquisitions included \$540.0 million for Rollon. The Company incurred acquisition-related costs of \$9.6 million in 2018 to complete these acquisitions. Based on markets and customers served, the majority of the results for Rollon and Cone Drive are reported in the Process Industries segment and substantially all of the results for ABC Bearings are reported in the Mobile Industries segment.

Note 2 - Acquisitions and Divestitures (continued)

The purchase price allocations at fair value, net of cash acquired, for 2019 and 2018 acquisitions as of December 31, 2019 and 2018 are presented below:

	2019	2018
Assets:		
Accounts receivable	\$ 26.3	\$ 42.5
Inventories	62.9	61.6
Other current assets	4.9	8.5
Property, plant and equipment	57.4	71.7
Operating lease assets	4.7	—
Goodwill	44.2	468.2
Other intangible assets	84.4	372.6
Other non-current assets	0.7	20.2
Total assets acquired	\$ 285.5	\$ 1,045.3
Liabilities:		
Accounts payable, trade	\$ 10.8	\$ 35.2
Salaries, wages and benefits	6.8	9.1
Income taxes payable	2.1	2.5
Other current liabilities	6.7	8.2
Short-term debt	0.8	2.5
Long-term debt	17.2	3.0
Accrued pension cost	0.5	5.7
Accrued postretirement liability	0.1	11.7
Long-term operating lease liabilities	4.1	—
Deferred taxes	5.1	116.2
Other non-current liabilities	1.1	16.9
Total liabilities assumed	\$ 55.3	\$ 211.0
Noncontrolling interest acquired	1.8	—
Net assets acquired	\$ 228.4	\$ 834.3
Cash flow reconciling items:		
Indemnification payment (accrual)	\$ 2.9	\$ (2.9)
Working capital purchase price adjustment	(4.8)	—
Shares issued for the acquisition of ABC Bearings	—	(66.0)
Cash paid for acquisitions, net of cash acquired	\$ 226.5	\$ 765.4

As reflected in table above, the Company paid a working capital adjustment of \$2.9 million in January 2019 in connection with the Cone Drive acquisition, which was accrued and reflected in the purchase price in 2018. In May 2019, the Company received a \$4.8 million payment from escrow related to an indemnification settlement for the Cone Drive acquisition, which is reflected as a purchase price adjustment. This adjustment, as well as other measurement period adjustments recorded in 2019, resulted in a \$1.9 million increase to Goodwill.

The 2019 acquisitions presented above include goodwill of \$25.4 million and intangible assets of \$55.1 million for BEKA, and the 2018 acquisitions presented above include goodwill of \$311.5 million and intangible assets of \$261.7 million for Rollon.

Note 2 - Acquisitions and Divestitures (continued)

The amounts for 2019 in the table above represent the preliminary purchase price allocations for Diamond Chain and BEKA. These purchase price allocations, including the residual amount allocated to goodwill, are based on preliminary information and are subject to change as additional information concerning final asset and liability valuations is obtained. The purchase price allocation for Diamond Chain is incomplete as it relates to the final determination of fair value for contingencies, intangible assets and certain income tax adjustments. The purchase price allocation for BEKA is preliminary as a result of the proximity of the acquisition date to December 31, 2019, and as a result, no elements of the purchase price allocation have been finalized. During the measurement period for each acquisition, we 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.

The following table summarizes the preliminary purchase price allocation at fair value for identifiable intangible assets acquired in 2019 and 2018:

	2019		2018	
		Weighted-Average Life		Weighted-Average Life
Trade names (indefinite life)	\$ 28.2	Indefinite	\$ 45.3	Indefinite
Trade names (finite life)	—		4.4	10 years
Technology and know-how	22.4	17 years	122.3	17 years
Customer relationships	33.3	19 years	201.5	18 years
Other	—		0.2	6 years
Capitalized software	0.5	2 years	1.7	5 years
Total intangible assets	\$ 84.4		\$ 375.4	

The total acquired intangible asset amount for 2018 does not agree to the purchase price allocations shown previously due to measurement period adjustments reflected in the purchase price allocations.

Divestiture:

On September 19, 2018, the Company completed the sale of the ICT Business, located in Gorinchem, Netherlands. The Company acquired the business in July 2017 as part of the Groeneveld acquisition. The ICT Business is separate from the Groeneveld lubrications solutions business and had sales of approximately \$15 million for the twelve months ended September 30, 2018.

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, 2019 and 2018:

	December 31, 2019		
	Mobile	Process	Total
United States	\$ 1,007.1	\$ 821.0	\$ 1,828.1
Americas excluding United States	209.6	167.7	377.3
Europe / Middle East / Africa	390.8	489.2	880.0
Asia-Pacific	286.4	418.1	704.5
Net sales	\$ 1,893.9	\$ 1,896.0	\$ 3,789.9

	December 31, 2018		
	Mobile	Process	Total
United States	\$ 1,028.8	\$ 769.5	\$ 1,798.3
Americas excluding United States	208.9	176.7	385.6
Europe / Middle East / Africa	382.5	380.2	762.7
Asia-Pacific	283.5	350.7	634.2
Net sales	\$ 1,903.7	\$ 1,677.1	\$ 3,580.8

	December 31, 2017		
	Mobile	Process	Total
United States	\$ 938.4	\$ 664.6	\$ 1,603.0
Americas excluding United States	182.5	150.7	333.2
Europe / Middle East / Africa	305.0	265.3	570.3
Asia-Pacific	214.1	283.2	497.3
Net sales	\$ 1,640.0	\$ 1,363.8	\$ 3,003.8

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 year ended December 31, 2019 and December 31, 2018:

Revenue by sales channel	December 31, 2019	December 31, 2018
Original equipment manufacturers	56%	56%
Distribution/end users	44%	44%

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 year ended December 31, 2019 and December 31, 2018, approximately 12% and 10%, respectively, of total net sales were recognized on an over-time basis because of the continuous transfer of control to the customer, with the remainder recognized as of a point in time. The payment terms with the U.S. government or its contractors, which represented approximately 8% and 7% of total net sales for 2019 and 2018, respectively, differ from those of non-government customers. Finally, approximately 5% of total net sales represented service revenue in both 2019 and 2018.

Remaining Performance Obligations:

Remaining performance obligations represent the transaction price of orders meeting the definition of a contract in the new revenue standard 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 \$204.6 million at December 31, 2019.

Note 3 - Revenue (continued)

Unbilled Receivables:

The following table contains a rollforward of unbilled receivables for the year ended December 31, 2019:

	December 31, 2019
Beginning balance, January 1	\$ 116.6
Additional unbilled revenue recognized	444.0
Less: amounts billed to customers	(431.4)
Ending balance	\$ 129.2

There were no impairment losses recorded on unbilled receivables for the year ended December 31, 2019.

Note 4 - Segment Information

The Company operates 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 power transmission 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, helicopter transmission systems, rotor-head assemblies, turbine engine components, gears and housings.

Process Industries supplies industrial bearings and assemblies, power transmission 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. Beginning in the fourth quarter of 2019, the primary measurement used by management to measure the financial performance of each segment was EBITDA. The Company began using EBITDA as its main operating income metric as recent acquisitions have resulted in an increased amount of purchase accounting amortization expense that affects comparability of results across periods and versus other companies. The primary measurement used by management to measure the financial performance of each segment prior to the fourth quarter of 2019 was EBIT. Segment results have been revised for all periods presented to be consistent with new measure of segment performance.

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

Note 4 - Segment Information (continued)

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.

Business Segment Information:

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

	2019	2018	2017
Net sales to external customers:			
Mobile Industries	\$ 1,893.9	\$ 1,903.7	\$ 1,640.0
Process Industries	1,896.0	1,677.1	1,363.8
	\$ 3,789.9	\$ 3,580.8	\$ 3,003.8
Segment EBITDA:			
Mobile Industries	\$ 284.9	\$ 272.2	\$ 209.9
Process Industries	466.6	405.7	288.6
Total EBITDA, for reportable segments	\$ 751.5	\$ 677.9	\$ 498.5
Corporate EBITDA	(55.4)	(61.4)	(48.6)
Corporate pension-related charges ⁽¹⁾	4.1	(12.8)	(18.1)
Depreciation and amortization	(160.6)	(146.0)	(137.7)
Interest expense, net	(67.2)	(49.6)	(34.2)
Income before income taxes	\$ 472.4	\$ 408.1	\$ 259.9

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

	2019	2018
Assets employed at year-end:		
Mobile Industries	\$ 2,109.9	\$ 1,984.5
Process Industries	2,366.7	2,211.3
Corporate ⁽²⁾	383.3	249.4
	\$ 4,859.9	\$ 4,445.2

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

	2019	2018	2017
Capital expenditures:			
Mobile Industries	\$ 74.2	\$ 48.3	\$ 57.3
Process Industries	65.3	63.3	46.2
Corporate	1.1	1.0	1.2
	\$ 140.6	\$ 112.6	\$ 104.7
Depreciation and amortization:			
Mobile Industries	\$ 73.6	\$ 73.5	\$ 70.9
Process Industries	86.2	71.9	66.3
Corporate	0.8	0.6	0.5
	\$ 160.6	\$ 146.0	\$ 137.7

Note 4 - Segment Information (continued)

Geographic Financial Information:

	2019	2018
Property, Plant and Equipment, net:		
United States	\$ 391.7	\$ 371.7
Americas excluding United States	28.1	13.7
Europe / Middle East / Africa	252.6	236.6
Asia-Pacific	316.8	290.1
	\$ 989.2	\$ 912.1

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:

	2019	2018	2017
United States	\$ 190.7	\$ 202.0	\$ 107.4
Non-United States	281.7	206.1	152.5
Income before income taxes	\$ 472.4	\$ 408.1	\$ 259.9

The provision for income taxes consisted of the following:

	2019	2018	2017
Current:			
Federal	\$ 20.8	\$ 46.1	\$ 9.1
State and local	4.8	9.9	4.6
Foreign	81.0	68.0	44.3
	\$ 106.6	\$ 124.0	\$ 58.0
Deferred:			
Federal	\$ 39.8	\$ (19.9)	\$ 13.6
State and local	6.5	(0.7)	(4.6)
Foreign	(55.2)	(0.8)	(9.4)
	\$ (8.9)	\$ (21.4)	\$ (0.4)
United States and foreign tax provision on income	\$ 97.7	\$ 102.6	\$ 57.6

The Company made net income tax payments of \$118.6 million, \$121.3 million and \$89.9 million in 2019, 2018 and 2017, respectively.

Note 5 - Income Taxes (continued)

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% (35% in 2017) to income before taxes:

	2019	2018	2017
Income tax at the U.S. federal statutory rate	\$ 99.2	\$ 85.7	\$ 91.0
Adjustments:			
State and local income taxes, net of federal tax benefit	7.4	6.8	3.1
Tax on foreign remittances and U.S. tax on foreign income	26.4	21.1	93.0
Tax expense related to undistributed earnings of foreign subsidiaries	6.0	—	—
Foreign losses without current tax benefits	3.2	3.7	8.9
Foreign earnings taxed at different rates including tax holidays	12.6	11.1	(18.0)
U.S. domestic manufacturing deduction	—	—	(3.9)
U.S. foreign tax credit	(18.3)	(21.2)	(104.2)
Accruals and settlements related to tax audits	11.1	(3.8)	(34.4)
Valuation allowance changes	(44.5)	—	(12.6)
Deferred taxes related to branch operations	5.3	—	—
U.S. Tax Reform	—	(10.6)	35.3
Other tax rate change	(5.0)	(2.4)	—
Other items, net	(5.7)	12.2	(0.6)
Provision for income taxes	\$ 97.7	\$ 102.6	\$ 57.6
Effective income tax rate	20.7%	25.1%	22.2%

The Company released \$44.5 million of foreign valuation allowances for the year ended December 31, 2019, \$40.7 million of which relates to the valuation allowance that was recorded against German indefinite-lived loss carryforwards and pension deferred tax assets. Once established, the 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. As a result of the execution of a tax planning strategy in the fourth quarter of 2019, management reached this conclusion and accordingly released the valuation allowance. Because the local German entity is treated as a branch under U.S. tax law, the valuation allowance release was partially offset by income tax expense of \$5.3 million related to a U.S. deferred tax liability.

U.S. Tax Reform reduced the U.S. federal statutory rate from 35% to 21% beginning in 2018. U.S. Tax Reform also required companies to pay a one-time net charge related to the taxation of unremitted foreign earnings and to remeasure its U.S. deferred tax balances to the lower corporate income tax rate for the 2017 tax year. Additionally, U.S. Tax Reform created taxes on certain foreign sourced earnings known as the global intangible low-taxed income (“GILTI”) tax beginning with tax year 2018. The Company has elected to account for GILTI as a period cost in the year the tax is incurred. The accounting for the tax effects of U.S. Tax Reform was completed as of December 31, 2018 under Staff Accounting Bulletin No. 118.

Provisional estimates of \$25.2 million for the one-time net charge related to the taxation of unremitted foreign earnings and \$10.1 million related to the remeasurement of U.S. deferred tax balances to reflect the new U.S. corporate income tax rate were recognized as components of income tax expense for the year ended December 31, 2017. For the year ended December 31, 2018, the Company recorded \$8.2 million of tax benefit for changes to the provisional estimate for the remeasurement of net U.S. deferred tax balances as a result of adjustments to finalize purchase accounting for prior-year acquisitions, the remeasurement of anticipatory tax credits for foreign branches and changes to U.S. deferred tax assets included in the 2017 U.S. federal income tax return. Over the same period, the Company recorded \$2.4 million of tax benefit for changes in the provisional estimate of the 2017 one-time net charge related to the taxation of unremitted foreign earnings as a result of additional federal and state regulatory guidance issued and the filing of the Company's 2017 U.S. federal income tax return.

Note 5 - Income Taxes (continued)

There are no changes to the Company's assertion about its permanent reinvestment in undistributed foreign earnings. For the year ended December 31, 2019, the Company recorded \$6.0 million of income tax expense related to foreign withholding taxes on planned one-time distributions. 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 \$785.3 million and \$651.1 million at December 31, 2019 and December 31, 2018, 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, 2019 and 2018 was as follows:

	2019	2018
Deferred tax assets:		
Accrued postretirement benefits cost	\$ 0.1	\$ 28.9
Accrued pension cost	55.1	59.5
Other employee benefit accruals	10.9	16.8
Tax loss and credit carryforwards	86.0	86.1
Other, net	46.9	42.9
Valuation allowances	(33.7)	(77.5)
	\$ 165.3	\$ 156.7
Deferred tax liabilities - principally depreciation and amortization	(261.6)	(235.7)
Net deferred tax (liabilities) assets	\$ (96.3)	\$ (79.0)

The Company has U.S. federal and state tax credit and loss carryforwards with tax benefits totaling \$3.7 million, portions of which will expire in 2020 and continue until 2039. In addition, the Company has loss carryforwards in various non-U.S. jurisdictions with tax benefits totaling \$82.3 million, portions of which will expire in 2020 while others will be carried forward indefinitely. The Company has provided valuation allowances of \$33.5 million against certain of these carryforwards and \$0.2 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, 2019, the Company had \$38.9 million of total gross unrecognized tax benefits, \$36.1 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, 2019, the Company believes it is reasonably possible that the amount of unrecognized tax positions could decrease by approximately \$7.7 million during the next 12 months. The potential decrease would be primarily driven by settlements with tax authorities and the expiration of various applicable statutes of limitation. As of December 31, 2019, the Company had accrued \$5.0 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, 2018, the Company had \$26.0 million of total gross unrecognized tax benefits, all 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, 2018, the Company had accrued \$2.5 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, 2017, the Company had \$14.0 million of total gross unrecognized tax benefits, all 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, 2017, the Company had accrued \$3.0 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, 2019, 2018 and 2017:

	2019	2018	2017
Beginning balance, January 1	\$ 26.0	\$ 14.0	\$ 39.2
Tax positions related to the current year:			
Additions	3.6	0.4	2.7
Tax positions related to prior years:			
Additions	11.7	17.8	6.9
Reductions	(1.1)	(2.9)	(5.2)
Settlements with tax authorities	(1.2)	(2.2)	—
Lapses in statutes of limitation	(0.1)	(1.1)	(29.6)
Ending balance, December 31	\$ 38.9	\$ 26.0	\$ 14.0

During 2019, gross unrecognized tax benefits increased primarily for additional accruals for uncertain tax positions related to U.S. Tax Reform along with prior year tax matters in multiple jurisdictions related to acquisitions. These increases were partially offset by settlements with the tax authorities for prior year tax matters related to the Company's foreign operations.

During 2018, gross unrecognized tax benefits increased primarily for prior year tax matters in multiple jurisdictions related to acquisitions. These increases were partially offset by settlements with the tax authorities for prior year tax matters related to the Company's international operations.

During 2017, gross unrecognized tax benefits decreased primarily due to expiration of applicable statutes of limitations in multiple jurisdictions. These decreases were partially offset by accruals related to both current and prior year tax matters, including certain U.S. federal taxes, U.S. state and local taxes and taxes related to the Company's international operations.

As of December 31, 2019, the Company is subject to examination by the IRS for tax years 2016 to the present. The Company also is subject to tax examination in various U.S. state and local tax jurisdictions for tax years 2012 to the present, as well as various foreign tax jurisdictions, including Mexico, China, Poland, France, Germany and India for tax years as early as 2003 to the present. The Company's unrecognized tax benefits were presented on the Consolidated Balance Sheets as a component of other non-current liabilities.

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, 2019, 2018 and 2017:

	2019	2018	2017
Numerator:			
Net income attributable to The Timken Company	\$ 362.1	\$ 302.8	\$ 203.4
Less: undistributed earnings allocated to nonvested stock	—	—	—
Net income available to common shareholders for basic and diluted earnings per share	\$ 362.1	\$ 302.8	\$ 203.4
Denominator:			
Weighted average number of shares outstanding - basic	75,758,123	77,119,602	77,736,398
Effect of dilutive securities:			
Stock options and awards - based on the treasury stock method	1,138,442	1,217,879	1,174,751
Weighted average number of shares outstanding, assuming dilution of stock options and awards	76,896,565	78,337,481	78,911,149
Basic earnings per share	\$ 4.78	\$ 3.93	\$ 2.62
Diluted earnings per share	\$ 4.71	\$ 3.86	\$ 2.58

The exercise prices for certain stock options that the Company has awarded exceed the average market price of the Company's common shares. Such stock options are antidilutive and were not included in the computation of diluted earnings per share. The antidilutive stock options outstanding were 1,016,435, 1,139,146 and 512,657 during 2019, 2018 and 2017, respectively.

Note 7 - Inventories

The components of inventories at December 31, 2019 and 2018 were as follows:

	2019	2018
Manufacturing supplies	\$ 34.2	\$ 32.4
Raw materials	99.8	102.4
Work in process	307.2	287.7
Finished products	436.6	452.7
Subtotal	\$ 877.8	\$ 875.2
Allowance for surplus and obsolete inventory	(35.8)	(39.5)
Total Inventories, net	\$ 842.0	\$ 835.7

Inventories at December 31, 2019 valued on the FIFO cost method were 59% and the remaining 41% were valued by the LIFO method. If all inventories had been valued at FIFO, inventories would have been \$168.9 million and \$173.9 million greater at December 31, 2019 and 2018, respectively. The Company recognized a decrease in its LIFO reserve of \$5.0 million during 2019, compared to an increase in its LIFO reserve of \$6.2 million during 2018.

Note 8 - Property, Plant and Equipment

The components of property, plant and equipment, net at December 31, 2019 and 2018 were as follows:

	2019	2018
Land and buildings	\$ 510.9	\$ 484.1
Machinery and equipment	2,093.3	2,002.4
Subtotal	\$ 2,604.2	\$ 2,486.5
Less: accumulated depreciation	(1,615.0)	(1,574.4)
Property, Plant and Equipment, net	\$ 989.2	\$ 912.1

Total depreciation expense was \$103.3 million, \$99.2 million and \$97.7 million in 2019, 2018 and 2017, respectively. In addition, depreciation expense is expected to increase in 2020, primarily due to incremental depreciation from acquisitions completed in 2019.

Note 9 - Goodwill and Other Intangibles

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 four 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, 2019:

	Mobile Industries	Process Industries	Total
Beginning Balance	\$ 349.7	\$ 610.8	\$ 960.5
Acquisitions	18.2	27.9	46.1
Foreign currency translation adjustments and other changes	(6.6)	(6.3)	(12.9)
Ending Balance	\$ 361.3	\$ 632.4	\$ 993.7

The \$46.1 million addition from acquisitions resulted primarily from the acquisitions of BEKA and Diamond Chain, in addition to measurement period adjustments of \$1.9 million recorded in 2019 for 2018 acquisitions. The Company is still evaluating the tax deductibility of goodwill from the BEKA acquisition. Refer to *Note 2 - Acquisitions and Divestitures* for further information.

Year ended December 31, 2018:

	Mobile Industries	Process Industries	Total
Beginning Balance	\$ 254.3	\$ 257.5	\$ 511.8
Acquisitions	108.4	356.6	465.0
Divestiture	(5.1)	—	(5.1)
Foreign currency translation adjustments and other changes	(7.9)	(3.3)	(11.2)
Ending Balance	\$ 349.7	\$ 610.8	\$ 960.5

In 2018, the \$465.0 million addition from acquisitions resulted primarily from the acquisitions of Rollon, Cone Drive and ABC Bearings, partially offset by measurement period adjustments of \$3.2 million recorded in 2018 for 2017 acquisitions. In addition, goodwill was reduced by \$5.1 million as a result of the divestiture of the ICT Business.

No material goodwill impairment losses were recorded in 2019, 2018 or 2017.

Note 9 - Goodwill and Other Intangibles (continued)

Intangible Assets:

The following table displays intangible assets as of December 31, 2019 and 2018:

	2019			2018		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Intangible assets subject to amortization:						
Customer relationships	\$ 510.9	\$ (128.8)	\$ 382.1	\$ 481.5	\$ (99.8)	\$ 381.7
Technology and know-how	265.1	(54.7)	210.4	245.0	(40.4)	204.6
Trade names	12.7	(6.1)	6.6	11.3	(4.8)	6.5
Capitalized Software	270.3	(245.8)	24.5	266.4	(236.5)	29.9
Other	13.8	(9.1)	4.7	40.8	(35.2)	5.6
	\$ 1,072.8	\$ (444.5)	\$ 628.3	\$ 1,045.0	\$ (416.7)	\$ 628.3
Intangible assets not subject to amortization:						
Trade names	\$ 121.5		\$ 121.5	\$ 96.2		\$ 96.2
FAA air agency certificates	8.7		8.7	8.7		8.7
	\$ 130.2		\$ 130.2	\$ 104.9		\$ 104.9
Total intangible assets	\$ 1,203.0	\$ (444.5)	\$ 758.5	\$ 1,149.9	\$ (416.7)	\$ 733.2

The gross carrying amount and accumulated amortization balances were impacted by \$28.5 million of fully-amortized intangible assets that were written off in 2019.

Intangible assets acquired in 2019 totaled \$84.4 million from the Beka and Diamond Chain acquisitions. Intangible assets subject to amortization were assigned useful lives of two to 20 years and had a weighted-average amortization period of 18.1 years. Intangible assets acquired in 2018 totaled \$375.4 million from the acquisitions of Rollon, Cone Drive and ABC Bearings. Intangible assets subject to amortization acquired in 2018 were assigned useful lives of two to 20 years and had a weighted-average amortization period of 17.1 years.

Amortization expense for intangible assets was \$57.3 million, \$46.8 million and \$40.0 million for the years ended December 31, 2019, 2018 and 2017, respectively. Amortization expense for intangible assets is estimated to be approximately \$55.4 million in 2020, \$51.4 million in 2021, \$46.6 million in 2022, \$43.7 million in 2023 and \$42.1 million in 2024.

Note 10 - 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 year ended December 31, 2019 was as follows:

	2019	
Operating lease expense	\$	36.6
Amortization of right-of-use assets on finance leases		1.2
Total lease expense	\$	37.8

Lease expense for operating leases under the prior leasing standard amounted to \$35.7 million and \$35.2 million for the years ended December 31, 2018 and 2017, respectively.

The following tables present the impact of leasing on the Consolidated Balance Sheet.

Operating Leases	December 31, 2019	
Lease assets:		
Operating lease assets	\$	114.1
Lease liabilities:		
Short-term operating lease liabilities	\$	28.3
Long-term operating lease liabilities		71.3
Total operating lease liabilities	\$	99.6

Finance Leases	December 31, 2019	
Lease assets:		
Property, plant and equipment, net	\$	5.0
Lease liabilities:		
Current portion of long-term debt	\$	0.5
Long-term debt		2.9
Total finance lease liabilities	\$	3.4

Future minimum lease payments under non-cancellable leases at December 31, 2019 were as follows:

	Operating Leases		Finance Leases	
Year Ending December 31,				
2020	\$	31.7	\$	1.1
2021		22.5		1.1
2022		16.6		1.0
2023		11.8		0.3
2024		7.8		—
Thereafter		20.0		—
Total future minimum lease payments	\$	110.4	\$	3.5
Less: imputed interest		(10.8)		(0.1)
Total	\$	99.6	\$	3.4

Note 10 - Leasing (continued)

The following tables present other information related to leases:

	2019	
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	\$	35.6
Financing cash flows from finance leases		1.6
Lease assets added in the period:		
Operating leases	\$	58.6
Finance leases		2.0

	December 31, 2019	
Weighted-average remaining lease term:		
Operating leases		5.3 years
Finance leases		3.3 years
Weighted-average discount rate:		
Operating leases		3.87%
Finance leases		2.55%

Note 11 - Financing Arrangements

Short-term debt as of December 31, 2019 and 2018 was as follows:

	2019		2018	
Variable-rate Accounts Receivable Facility with an interest rate of 2.77% at December 31, 2019	\$	1.8	\$	—
Borrowings under lines of credit for certain of the Company's foreign subsidiaries with various banks with interest rates ranging from 0.27% to 1.75% at December 31, 2019 and 0.29% to 1.00% at December 31, 2018		15.5		33.6
Short-term debt	\$	17.3	\$	33.6

The Company has a \$100 million Accounts Receivable Facility, which matures November 30, 2021. 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; however, availability under the Accounts Receivable Facility was not reduced by any such borrowing base limitations at December 31, 2019. As of December 31, 2019, there were outstanding borrowings of \$100.0 million under the Accounts Receivable Facility, which reduced the availability under this facility to zero. \$1.8 million of the outstanding borrowings under the Accounts Receivable Facility was classified as short-term and reflects the Company's expectations over the next 12 months relative to the minimum borrowing base. 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 yield rate was 2.77%, 3.22% and 2.15% at December 31, 2019, 2018 and 2017, respectively.

The lines of credit for certain of the Company's foreign subsidiaries provide for short-term borrowings up to \$268.9 million in the aggregate. Most of these lines of credit are uncommitted. At December 31, 2019, the Company's foreign subsidiaries had borrowings outstanding of \$15.5 million and guarantees of \$0.5 million, which reduced the aggregate availability under these facilities to \$252.9 million. The weighted-average interest rate on these lines of credit during the year were 0.5%, 0.6% and 0.7% in 2019, 2018 and 2017, respectively. The decrease in the weighted-average interest rate was primarily due to a decrease in borrowing rates in Europe. The weighted-average interest rate on lines of credit outstanding at December 31, 2019 and 2018 was 1.03% and 0.33%, respectively.

Note 11 – Financing Arrangements (continued)

Long-term debt as of December 31, 2019 and 2018 was as follows:

	2019	2018
Variable-rate Senior Credit Facility with an average interest rate on U.S. Dollar of 2.85% and Euro of 1.00% at December 31, 2019 and 3.40% and 1.10%, respectively, at December 31, 2018	\$ 132.7	\$ 43.9
Variable-rate Euro Term Loan ⁽¹⁾ , maturing on September 18, 2020, with an interest rate of 1.13% at December 31, 2019 and December 31, 2018	54.4	107.1
Variable-rate Accounts Receivable Facility, with an interest rate of 2.77% at December 31, 2019 and 3.22% at December 31, 2018	98.2	75.0
Variable-rate Term Loan ⁽¹⁾ , maturing on September 11, 2023, with an interest rate of 2.92% at December 31, 2019 and 3.77% at December 31, 2018	338.5	347.1
Fixed-rate Senior Unsecured Notes ⁽¹⁾ , maturing on September 1, 2024, with an interest rate of 3.875%	348.5	347.7
Fixed-rate Euro Senior Unsecured Notes ⁽¹⁾ , maturing on September 7, 2027, with an interest rate of 2.02%	167.7	171.4
Fixed-rate Senior Unsecured Notes ⁽¹⁾ , maturing on December 15, 2028, with an interest rate of 4.50%	396.1	395.8
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%	154.6	154.6
Fixed-rate Bank Loan, maturing on June 30, 2033, with an interest rate of 2.15% at December 31, 2019	18.0	—
Other	4.1	5.4
Total debt	\$ 1,712.8	\$ 1,648.0
Less current maturities	64.7	9.4
Long-term debt	\$ 1,648.1	\$ 1,638.6

⁽¹⁾ Net of discount and fees

On June 25, 2019, the Company entered into the Senior Credit Facility. The Senior Credit Facility amends and restates the Company's previous credit agreement, dated as of June 19, 2015. The Senior Credit Facility is a \$650.0 million unsecured revolving credit facility, which matures on June 25, 2024. At December 31, 2019, the Company had \$132.7 million of outstanding borrowings under the Senior Credit Facility, which reduced the availability under this facility to \$517.3 million. The Senior Credit Facility has two financial covenants: a consolidated leverage ratio and a consolidated interest coverage ratio.

On November 1, 2019, the Company assumed certain fixed-rate debt of €16 million associated with the BEKA acquisition that matures on June 30, 2033.

On September 6, 2018, the Company issued \$400 million aggregate principal amount of the 2028 Notes. On September 11, 2018, the Company entered into the \$350 million 2023 Term Loan. Proceeds from the 2028 Notes and the 2023 Term Loan were used to fund the acquisitions of Cone Drive and Rollon, which closed on September 1, 2018 and September 18, 2018, respectively. Refer to Note 2 - Acquisitions and Divestitures for additional information.

The Company expects to service interest and repay the remaining principal balance of \$54.4 million for the 2020 Term Loan with cash held or generated outside the U.S.

At December 31, 2019, the Company was in full compliance with all applicable covenants on its outstanding debt.

Note 11 – Financing Arrangements (continued)

The maturities of long-term debt (including \$3.4 million of finance leases) for the five years subsequent to December 31, 2019 are as follows:

Year		
2020	\$	64.7
2021		110.2
2022		10.6
2023		313.6
2024		483.7
Thereafter		730.0

Interest paid was \$67.4 million in 2019, \$42.5 million in 2018 and \$31.5 million in 2017. This differs from interest expense due to the timing of payments, the amortization of deferred financing fees and interest capitalized of \$1.1 million in 2019, \$0.4 million in 2018 and \$0.7 million in 2017.

Note 12 - Contingencies

The Company and certain of its subsidiaries have been identified as potentially responsible parties for investigation and remediation under the CERCLA, 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 have been settled or dismissed.

The Company had total environmental accruals of \$5.2 million and \$5.5 million for various known environmental matters that are probable and reasonably estimable as of December 31, 2019 and 2018, 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.

In October 2014, the Brazilian government antitrust agency, CADE, announced that it had opened an investigation of alleged antitrust violations in the bearing industry. The Company's Brazilian subsidiary, Timken do Brasil, was included in the investigation. During the fourth quarter of 2019, the Company paid approximately \$1.8 million to settle the matter with CADE.

The Company is a defendant in a 2017 lawsuit filed in the U.S. by a former employee asserting workplace-related negligence by the Company's medical personnel. No specific amount of damages have been asserted by the plaintiff as of this time. While the Company's defense is ongoing, management's low end of the range of probable outcomes is immaterial to the Company.

Product Warranties:

In addition to the contingencies above, the Company provides limited warranties on certain products. The product warranty liability included in other current liabilities on the Consolidated Balance Sheets for 2019 and 2018 was \$7.5 million and \$7.1 million, respectively.

Note 13 - 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 and key employees in the form of stock option awards. Stock option awards typically have a ten-year term and generally vest in 25% increments annually beginning on the first anniversary of the date of grant.

During 2019, 2018 and 2017, the Company recognized stock-based compensation expense of \$4.9 million (\$3.7 million after tax or \$0.05 per diluted share), \$4.8 million (\$3.7 million after tax or \$0.05 per diluted share) and \$5.2 million (\$3.2 million after tax or \$0.04 per diluted share), respectively, for stock option awards.

The fair value of stock option awards granted was estimated at the date of grant using a Black-Scholes option-pricing method with the following assumptions:

	2019	2018	2017
Weighted-average fair value per option	\$ 9.58	\$ 10.29	\$ 10.60
Risk-free interest rate	2.46%	2.62%	1.96%
Dividend yield	2.52%	2.30%	2.96%
Expected stock volatility	28.29%	27.78%	32.25%
Expected life - years	5	5	5

Historical information was the primary basis for the selection of the expected dividend yield, expected volatility and the expected lives of the options. The dividend yield was calculated based upon the last dividend prior to the grant compared to the trailing 12 months' daily stock prices. The risk-free interest rate was based upon yields of U.S. zero coupon issues with a term equal to the expected life of the option being valued.

A summary of stock option award activity for the year ended December 31, 2019 is presented below:

	Number of Shares	Weighted-average Exercise Price	Weighted-average Remaining Contractual Term	Aggregate Intrinsic Value (millions)
Outstanding - beginning of year	3,189,950	\$ 38.21		
Granted - new awards	558,760	42.61		
Exercised	(803,604)	34.25		
Canceled or expired	(31,834)	42.36		
Outstanding - end of year	2,913,272	\$ 40.10	6 years	\$ 47.2
Options expected to vest	2,913,272	\$ 40.10	6 years	\$ 47.2
Options exercisable	1,676,248	\$ 38.91	5 years	\$ 29.2

The total intrinsic value of stock option awards exercised during the years ended December 31, 2019, 2018 and 2017 was \$13.4 million, \$6.7 million and \$14.7 million, respectively. Net cash proceeds from the exercise of stock option awards were \$27.5 million, \$12.8 million and \$32.9 million, respectively.

In addition to stock option awards, the Company has granted performance-based restricted stock units, time-based restricted stock units, deferred shares and restricted shares under its long-term incentive plan. A summary of those awards granted in 2019 is presented below:

	Expected to be Settled in Equity	Expected to be Settled in Cash	Total Awards Granted
Performance-based restricted stock units	296,597	7,241	303,838
Time-based restricted stock units	157,465	3,940	161,405
Deferred shares	14,870	0	14,870

Note 13 - Stock Compensation Plans (continued)

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. The majority of time-based restricted stock units vest in 25% increments annually beginning on the first anniversary of the grant, with the remainder fully-vesting on the first anniversary of the grant. Deferred shares generally cliff vest 5 years from the date of grant. For time-based restricted stock units that are expected to settle in cash, the Company had \$1.1 million and \$0.8 million accrued in salaries, wages and benefits as of December 31, 2019 and 2018, respectively, on the Consolidated Balance Sheets.

A summary of stock award activity, including performance-based restricted stock units, time-based restricted stock units, deferred shares and restricted shares that will settle in common shares for the year ended December 31, 2019 is as follows:

	Number of Shares	Weighted-average Grant Date Fair Value
Outstanding - beginning of year	1,196,492	\$ 38.76
Granted - new awards	468,932	41.57
Vested	(539,396)	32.08
Canceled or expired	(19,304)	43.31
Outstanding - end of year	1,106,724	\$ 43.13

As of December 31, 2019, a total of 1,106,724 stock awards have been awarded that have not yet vested. The Company distributed shares totaling 539,396 in 2019, 290,287 in 2018 and 445,036 in 2017 due to the vesting of stock awards. The grant date fair value of these vested shares was \$17.3 million, \$11.8 million and \$16.5 million, respectively. Shares awarded totaled 468,932 in 2019, 388,525 in 2018 and 407,436 in 2017. The Company recognized compensation expense of \$22.3 million, \$27.5 million and \$19.5 million for the years ended December 31, 2019, 2018 and 2017, respectively, relating to performance-based restricted stock units, time-based restricted stock units, deferred shares and restricted shares.

As of December 31, 2019, the Company had unrecognized compensation expense of \$30.0 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 10 million shares available for future grants for all plans at December 31, 2019.

Note 14 - 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 \$35.4 million, \$11.3 million and \$11.5 million in 2019, 2018 and 2017, respectively. The 2019 contributions and payments include a \$24 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		
	2019	2018	2017	2019	2018	2017
Components of net periodic benefit cost:						
Service cost	\$ 10.7	\$ 12.6	\$ 12.2	\$ 1.5	\$ 1.7	\$ 1.6
Interest cost	23.5	24.0	24.6	7.3	7.2	7.5
Expected return on plan assets	(25.8)	(29.3)	(28.0)	(10.2)	(11.6)	(11.1)
Amortization of prior service cost	1.6	1.7	1.4	0.2	0.1	—
Recognition of net actuarial (gains) losses	(3.5)	30.0	23.1	17.4	8.8	0.1
Curtailment gains	—	(10.2)	(1.1)	—	—	—
Net periodic benefit cost (credit)	\$ 6.5	\$ 28.8	\$ 32.2	\$ 16.2	\$ 6.2	\$ (1.9)

Assumptions	2019	2018	2017
U.S. Plans:			
Discount rate	3.67% to 4.43%	3.75% to 3.94%	4.34% to 4.50%
Future compensation assumption	2.50%	2.50%	2.50% to 3.00%
Expected long-term return on plan assets	5.35% to 6.25%	5.75% to 6.50%	5.75% to 6.50%
International Plans:			
Discount rate	1.50% to 11.00%	1.25% to 9.00%	1.25% to 9.00%
Future compensation assumption	2.00% to 8.23%	2.00% to 8.00%	2.00% to 8.00%
Expected long-term return on plan assets	2.50% to 9.00%	2.50% to 9.00%	0.75% to 9.25%

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

Assumptions	2019	2018
U.S. Plans:		
Discount rate	3.04% to 3.55%	4.05% to 4.43%
Future compensation assumption	2.50%	2.50%
International Plans:		
Discount rate	0.75% to 9.00%	1.50% to 11.00%
Future compensation assumption	2.00% to 8.20%	2.00% to 8.23%

Note 14 - Retirement Benefit Plans (continued)

The Company recognized actuarial losses of \$13.9 million during 2019 primarily due to the impact of a net reduction in the discount rate used to measure its defined benefit pension obligations of \$100.9 million and the impact of experience losses and other changes in valuation assumptions of \$3.1 million, partially offset by higher than expected returns on plan assets of \$90.1 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 86 basis point reduction in the weighted-average discount rate used to measure its U.S. plan obligations, which decreased from 4.36% in 2018 to 3.50% in 2019.

The Company recognized actuarial losses of \$38.8 million during 2018 primarily due to lower than expected returns on plan assets of \$83.4 million driven by negative returns on fixed income investments, which were offset by the increase in discount rates used to measure its defined benefit pension obligations of \$62.4 million. The impact of experience losses and other changes in valuation assumptions resulted in losses of approximately \$17.8 million. The discount rate used to measure the U.S. plan obligations increased by 56 basis points from 3.80% during 2017 compared to 4.36% in 2018.

During the fourth quarter of 2018, the Company's Board of Directors approved the freezing of the benefits for two of the Company's U.S. defined benefit pension plans, effective December 31, 2022. In conjunction with this action, the Company recognized a curtailment gain of \$10.2 million in 2018.

The Company recognized actuarial losses of \$23.2 million during 2017 primarily due to the impact of a net reduction in the discount rate used to measure its defined benefit pension obligations of \$52.9 million and the impact of experience losses and other changes in valuation assumptions of \$8.7 million, partially offset by higher than expected returns on plan assets of \$38.4 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 54 basis point reduction in the discount rate used to measure its U.S. plan obligations, which decreased from 4.34% in 2016 to 3.80% in 2017.

For expense purposes in 2019, the Company applied a weighted-average discount rate of 4.36% to its U.S. defined benefit pension plans. For expense purposes in 2020, the Company will apply a weighted-average discount rate of 3.50% to its U.S. defined benefit pension plans.

For expense purposes in 2019, the Company applied a weighted-average expected rate of return of 6.12% for the Company's U.S. pension plan assets. For expense purposes in 2020, the Company will apply a weighted-average expected rate of return on plan assets of 5.22%.

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, 2019 and 2018:

	U.S. Plans		International Plans	
	2019	2018	2019	2018
Change in benefit obligation:				
Benefit obligation at beginning of year	\$ 586.6	\$ 643.0	\$ 300.3	\$ 335.2
Service cost	10.7	12.6	1.5	1.7
Interest cost	23.5	24.0	7.3	7.2
Plan amendments	—	—	—	3.6
Actuarial losses (gains)	74.9	(36.7)	29.1	(7.4)
International plan exchange rate change	—	—	7.6	(17.2)
Curtailments	—	(10.2)	—	—
Benefits paid	(61.0)	(95.8)	(17.4)	(24.8)
Acquisitions	—	49.7	0.4	2.0
Benefit obligation at end of year	\$ 634.7	\$ 586.6	\$ 328.8	\$ 300.3

Note 14 - Retirement Benefit Plans (continued)

	U.S. Plans		International Plans	
	2019	2018	2019	2018
Change in plan assets:				
Fair value of plan assets at beginning of year	\$ 448.3	\$ 531.9	\$ 254.6	\$ 292.4
Actual return on plan assets	104.2	(37.5)	21.9	(5.1)
Company contributions / payments	28.7	5.3	6.7	6.0
International plan exchange rate change	—	—	8.9	(15.4)
Acquisitions	—	44.4	—	1.5
Benefits paid	(61.0)	(95.8)	(17.4)	(24.8)
Fair value of plan assets at end of year	520.2	448.3	274.7	254.6
Funded status at end of year	\$ (114.5)	\$ (138.3)	\$ (54.1)	\$ (45.7)

Amounts recognized on the Consolidated Balance Sheets:

Non-current assets	\$ —	\$ —	\$ 3.4	\$ 6.2
Current liabilities	(5.4)	(27.4)	(1.5)	(1.5)
Non-current liabilities	(109.1)	(110.9)	(56.0)	(50.4)
	\$ (114.5)	\$ (138.3)	\$ (54.1)	\$ (45.7)

Amounts recognized in accumulated other comprehensive loss:

Net prior service cost	\$ 4.8	\$ 6.4	\$ 3.9	\$ 4.0
Accumulated other comprehensive loss	\$ 4.8	\$ 6.4	\$ 3.9	\$ 4.0

Changes in prior service cost recognized in accumulated other comprehensive loss:

Accumulated other comprehensive loss at beginning of year	\$ 6.4	\$ 8.1	\$ 4.0	\$ 0.5
Prior service cost	—	—	—	3.6
Recognized prior service cost	(1.6)	(1.7)	(0.2)	(0.1)
Foreign currency impact	—	—	0.1	—
Total recognized in accumulated other comprehensive loss at December 31	\$ 4.8	\$ 6.4	\$ 3.9	\$ 4.0

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 66% of the benefit obligation and 65% of the fair value of plan assets as of December 31, 2019.

Certain of the Company's defined benefit pension plans were overfunded as of December 31, 2019. As a result, \$3.4 million and \$6.2 million at December 31, 2019 and 2018, respectively, are included in non-current pension 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 \$6.9 million and \$28.9 million at December 31, 2019 and 2018, respectively. The decrease in the current portion of accrued pension benefits relates to the 2019 deferred compensation payout to a former executive officer of the Company. In 2019, 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, 2019 exceeded the market value of plan assets for several of the Company's pension plans. For these plans, the projected benefit obligation was \$244.1 million, the accumulated benefit obligation was \$237.0 million and the fair value of plan assets was \$80.7 million at December 31, 2019.

Note 14 - Retirement Benefit Plans (continued)

The total accumulated benefit obligation for all plans was \$942.0 million and \$864.9 million at December 31, 2019 and 2018, respectively.

Investment performance increased the value of the Company's pension assets by 18.7% in 2019.

As of December 31, 2019, 2018 and 2017, the Company's defined benefit pension plans did not directly hold any of the Company's common shares.

The estimated prior service cost for the defined benefit pension plans that will be amortized from accumulated other comprehensive loss into net periodic benefit cost over the next fiscal year is \$1.7 million.

Plan Assets:

The Company's target allocation for pension plan assets, as well as the actual pension plan asset allocations as of December 31, 2019 and 2018, was as follows:

Asset Category	Current Target Allocation	Percentage of Pension Plan Assets at December 31,	
		2019	2018
Equity securities	16% to 22%	21%	18%
Fixed income securities	70% to 80%	74%	76%
Other investments	4% to 8%	5%	6%
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 14 - 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, 2019				December 31, 2018			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Assets:								
Cash and cash equivalents	\$ 17.1	\$ —	\$ —	\$ 17.1	\$ 19.4	\$ —	\$ —	\$ 19.4
Government and agency securities	35.8	3.0	—	38.8	29.9	2.7	—	32.6
Corporate bonds - investment grade	—	79.5	—	79.5	—	71.7	—	71.7
Equity securities - U.S. companies	0.1	—	—	0.1	—	—	—	—
Common collective funds - fixed income	42.0	—	—	42.0	36.0	—	—	36.0
Mutual funds - fixed income	66.9	—	—	66.9	60.8	—	—	60.8
Mutual funds - international equity	36.0	—	—	36.0	24.0	—	—	24.0
Mutual funds - domestic equity	3.2	—	—	3.2	2.6	—	—	2.6
Mutual funds - other assets	1.4	—	—	1.4	1.2	—	—	1.2
Other assets	—	—	—	—	0.1	—	—	0.1
	\$ 202.5	\$ 82.5	\$ —	\$ 285.0	\$ 174.0	\$ 74.4	\$ —	\$ 248.4
Investments measured at net asset value:								
Cash and cash equivalents				\$ 0.2				\$ 0.2
Equity securities - international companies				1.0				2.2
Common collective funds - domestic equities				76.3				54.0
Common collective funds - international equities				31.9				23.0
Common collective funds - fixed income				202.5				177.5
Common collective funds - diversified growth				17.9				18.5
Limited partnerships				18.7				24.0
Real estate partnerships				11.2				11.8
Other liability-driven investments				128.2				122.9
Other assets				22.0				20.4
Total Assets				\$ 794.9				\$ 702.9

International investments measured at net asset value totaled \$231.8 million as of December 31, 2019 and \$217.8 million as of December 31, 2018, 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. 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 14 - 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	
2018	\$ 11.3
2019	35.4
2020 (planned)	11.8

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

Benefit Payments	
2020	\$ 85.1
2021	82.1
2022	72.4
2023	66.7
2024	62.2
2025-2029	283.5

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 \$27.9 million, \$23.7 million and \$21.8 million in 2019, 2018 and 2017, respectively. Effective January 1, 2019, the primary U.S. Company sponsored defined contribution plan no longer allows contributions to be made to the Company stock fund 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 are required to transfer remaining funds in the Company stock fund to other fund options by December 31, 2022. At December 31, 2019, the plans held 1,582,428 of the Company's common shares with a fair value of \$89.1 million. The Company paid dividends totaling \$2.3 million, \$2.9 million and \$3.0 million in 2019, 2018 and 2017, respectively, to plans to be disbursed to participant accounts holding the Company's common shares.

Note 15 - Other Postretirement Benefit Plans

The Company and its subsidiaries sponsor several funded and unfunded 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:

	2019	2018	2017
Components of net periodic benefit (credit) cost:			
Service cost	\$ 0.2	\$ 0.2	\$ 0.1
Interest cost	5.9	7.6	9.1
Expected return on plan assets	(3.2)	(3.7)	(5.6)
Amortization of prior service credit	(5.4)	(1.7)	(1.0)
Recognition of net actuarial gains	(18.0)	(16.7)	(4.0)
Net periodic benefit (credit) cost	\$ (20.5)	\$ (14.3)	\$ (1.4)
Assumptions:			
Discount rate	3.48% to 4.30%	3.57%	3.97%
Rate of return	4.85%	4.50%	6.00%

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

Assumptions:	2019	2018
Discount rate	3.43%	4.30%

The Company recognized actuarial gains of \$18.0 million during 2019 primarily due to the impact of a reduction in the rates for Medicare Advantage plans of \$22.7 million. The change in the contractual rates for Medicare Advantage plans was due to a law change that repealed the tax on Health Care Insurers after 2020. In addition to the change in rates on Medicare Advantage plans, the Company recognized actuarial gains of \$3.6 million due to higher than expected returns on plan assets and \$5.2 million due to changes in other actuarial assumptions. These actuarial gains were partially offset by an 87 basis point decrease in the discount rate used to measure the Company's defined benefit postretirement obligations, which decreased from 4.30% to 3.43%. The decrease in the discount rate resulted in a \$13.5 million loss.

During July 2019, the Company announced changes to the medical plan offerings for certain of its postretirement benefit plans, effective January 1, 2020, which will impact the benefits provided to certain retirees. This plan amendment resulted in a \$92.8 million reduction in its postretirement benefit obligations and a corresponding pretax adjustment to accumulated other comprehensive loss. Starting with the three months ended September 30, 2019, the pretax adjustment of \$92.8 million will be amortized from accumulated other comprehensive loss into net periodic benefit cost (as a benefit) over the next twelve years.

The Company recognized actuarial gains of \$16.7 million during 2018 primarily due to the impact of a 73 basis point increase in the discount rate used to measure the Company's defined benefit postretirement obligations, which increased from 3.57% in 2017 to 4.30% in 2018, and due to a number of participants opting out of coverage from the plans in response to a financial incentive program offered to eligible participants of the Company's retiree health and life insurance plans. The Company recognized actuarial gains of \$10.6 million as a result of the increase in the discount rate and \$10.4 million as a result of the impact of the opt-out program. These actuarial gains were partially offset by lower than expected returns on plan assets of \$4.0 million and by the impact of experience losses and other changes in valuation assumptions of \$0.3 million.

Note 15 - Other Postretirement Benefit Plans (continued)

The Company recognized actuarial gains of \$4.0 million during 2017 primarily due to a number of participants opting out of coverage from the plans in response to a financial incentive program offered to eligible participants of the Company's retiree health and life insurance plans. In addition, the Company adopted the MP-2017 scales as its best estimate of future mortality improvements for defined benefit postretirement obligations. The Company recognized actuarial gains of \$14.4 million as a result of the impact of the opt-out program, \$5.0 million as a result of changes in mortality tables and higher than expected returns on plan assets of \$3.7 million. These actuarial gains were partially offset by the impact of experience losses and other changes in valuation assumptions of \$12.2 million and a \$6.9 million impact of a 40 basis point reduction in the discount rate used to measure its defined benefit postretirement obligations, which decreased from 3.97% in 2016 to 3.57% in 2017.

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 2019, the Company applied a discount rate of 3.48% to 4.30% to its other postretirement benefit plans. For expense purposes in 2020, the Company will apply a discount rate of 3.43% to its other postretirement benefit plans.

For expense purposes in 2019, the Company applied an expected rate of return of 4.85% to the VEBA trust assets. For expense purposes in 2020, the Company will apply an expected rate of return of 3.00% to the VEBA trust assets.

The following tables set forth the change in benefit obligation, change in plan assets, funded status and amounts recognized on the Consolidated Balance Sheets of the other postretirement benefit plans as of December 31, 2019 and 2018:

	2019	2018
Change in benefit obligation:		
Benefit obligation at beginning of year	\$ 186.9	\$ 219.8
Service cost	0.2	0.2
Interest cost	5.9	7.6
Plan amendments	(92.8)	(4.4)
Actuarial gains	(14.4)	(20.7)
International plan exchange rate change	0.2	(0.1)
Benefits paid	(22.7)	(27.2)
Acquisitions	0.1	11.7
Benefit obligation at end of year	\$ 63.4	\$ 186.9
Change in plan assets:		
Fair value of plan assets at beginning of year	\$ 72.3	\$ 92.4
Company contributions / payments	8.0	7.4
Return on plan assets	6.8	(0.3)
Benefits paid	(22.7)	(27.2)
Fair value of plan assets at end of year	64.4	72.3
Funded status at end of year	\$ 1.0	\$ (114.6)
Amounts recognized on the Consolidated Balance Sheets:		
Non-current assets	\$ 36.6	\$ —
Current liabilities	(3.8)	(5.9)
Non-current liabilities	(31.8)	(108.7)
	\$ 1.0	\$ (114.6)

Note 15 - Other Postretirement Benefit Plans (continued)

	2019	2018
Amounts recognized in accumulated other comprehensive income:		
Net prior service credit	\$ (98.2)	\$ (10.8)
Accumulated other comprehensive income	\$ (98.2)	\$ (10.8)
Changes to prior service credit recognized in accumulated other comprehensive (income) loss:		
Accumulated other comprehensive income at beginning of year	\$ (10.8)	\$ (8.1)
Prior service credit	(92.8)	(4.4)
Recognized prior service credit	5.4	1.7
Total recognized in accumulated other comprehensive income at December 31	\$ (98.2)	\$ (10.8)

The presentation in the above tables for amounts recognized in accumulated other comprehensive (income) 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 \$3.8 million and \$5.9 million at December 31, 2019 and 2018, respectively. In 2019, 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.

The estimated prior service credit for the postretirement plans that will be amortized from accumulated other comprehensive (income) loss into net periodic benefit credit over the next fiscal year is \$9.8 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 5.8% for 2020, declining gradually to 5.0% in 2023 and thereafter for medical and prescription drug benefits. For Medicare Advantage benefits, actual contract rates have been set for 2020 through 2022, and are assumed to increase by 7.3% for 2023, declining gradually to 5.0% in 2031 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 2019 total service and interest cost components by \$0.1 million and would have increased the postretirement benefit obligation by \$2.4 million. A one percentage point decrease would provide corresponding reductions of \$0.1 million and \$2.0 million, respectively.

Plan Assets:

The Company's target allocation for the VEBA trust assets, as well as the actual VEBA trust asset allocation as of December 31, 2019 and 2018, was as follows:

Asset Category	Current Target Allocation			Percentage of VEBA Assets at December 31,	
				2019	2018
Equity securities	14%	to	20%	18%	17%
Fixed income securities	80%	to	86%	82%	83%
Total				100%	100%

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 postretirement funds. Asset allocations are established in a manner consistent with projected plan liabilities, benefit payments and expected rates of return for various asset classes. The expected rate of return for the investment portfolio is based on expected rates of return for various asset classes, as well as historical asset class and fund performance.

Note 15 - Other Postretirement Benefit Plans (continued)

The following table presents those investments of the Company's VEBA trust assets measured at net asset value on a recurring basis as of December 31, 2019 and 2018, respectively:

	2019	2018
Assets:		
Cash and cash equivalents	\$ 9.4	\$ 9.9
Common collective fund - U.S. equities	7.4	6.8
Common collective fund - international equities	4.2	5.2
Common collective fund - fixed income	43.4	50.4
Total Assets	\$ 64.4	\$ 72.3

Cash and cash equivalents are valued at redemption value. Common collective funds are valued based on a net asset value per share, which is used as a practical expedient to fair value. When such prices are unavailable, the plan trustee determines a valuation from the market maker dealing in the particular security.

In January 2020, the Company established a second VEBA trust for certain active employees' medical benefits. The Company transferred \$50 million from the existing VEBA trust to fund this new VEBA trust. The \$50 million that was transferred will primarily be classified as other current assets based on the portfolio of the assets in the trust. The Company expects to fully utilize the assets of the trust in 2020 for the payment of certain active employees' medical benefits.

Cash Flows:

The Company did not make any employer contributions to the VEBA Trust in 2019 and 2018. The Company does not expect to make any employer contributions in 2020.

Future benefit payments are expected to be as follows:

	Future Benefit Payments
2020	\$ 7.3
2021	5.9
2022	5.2
2023	4.9
2024	4.6
2025-2029	19.9

Note 16 - Accumulated Other Comprehensive Income (Loss)

The following tables present details about components of accumulated other comprehensive (loss) income for the years ended December 31, 2019 and December 31, 2018, respectively:

	Foreign currency translation adjustments	Pension and postretirement liability adjustments	Change in fair value of derivative financial instruments	Total
Balance at December 31, 2018	\$ (95.6)	\$ —	\$ 0.3	\$ (95.3)
Other comprehensive (loss) income before reclassifications and income taxes	(19.9)	92.7	1.2	74.0
Amounts reclassified from accumulated other comprehensive (loss) income, before income tax	—	(3.6)	(3.8)	(7.4)
Income tax (expense) benefit	—	(22.2)	0.6	(21.6)
Net current period other comprehensive (loss) income, net of income taxes	(19.9)	66.9	(2.0)	45.0
Noncontrolling interest	0.2	—	—	0.2
Net current period comprehensive (loss) income, net of income taxes and noncontrolling interest	(19.7)	66.9	(2.0)	45.2
Balance at December 31, 2019	\$ (115.3)	\$ 66.9	\$ (1.7)	\$ (50.1)

	Foreign currency translation adjustments	Pension and postretirement liability adjustments	Change in fair value of derivative financial instruments	Total
Balance at December 31, 2017	\$ (35.1)	\$ (0.3)	\$ (2.9)	\$ (38.3)
Cumulative effect of ASU 2018-02	—	(0.1)	(0.6)	(0.7)
Balance at January 1, 2018	(35.1)	(0.4)	(3.5)	(39.0)
Other comprehensive (loss) income before reclassifications and income taxes	(67.4)	0.8	6.4	(60.2)
Amounts reclassified from accumulated other comprehensive (loss) income, before income tax	—	0.1	(1.3)	(1.2)
Income tax expense	—	(0.5)	(1.3)	(1.8)
Net current period other comprehensive (loss) income, net of income taxes	(67.4)	0.4	3.8	(63.2)
Noncontrolling interest	6.9	—	—	6.9
Net current period comprehensive (loss) income, net of income taxes, noncontrolling interest and cumulative effect of accounting change	(60.5)	0.3	3.2	(57.0)
Balance at December 31, 2018	\$ (95.6)	\$ —	\$ 0.3	\$ (95.3)

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

Note 17 - 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, 2019 and 2018:

	December 31, 2019			
	Total	Level 1	Level 2	Level 3
Assets:				
Cash and cash equivalents	\$ 160.7	\$ 158.2	\$ 2.5	\$ —
Cash and cash equivalents measured at net asset value	48.8			
Restricted cash	6.7	6.7	—	—
Short-term investments	25.7	—	25.7	—
Short-term investments measured at net asset value	0.1			
Foreign currency hedges	7.6	—	7.6	—
Total Assets	\$ 249.6	\$ 164.9	\$ 35.8	\$ —
Liabilities:				
Foreign currency hedges	\$ 1.4	\$ —	\$ 1.4	\$ —
Total Liabilities	\$ 1.4	\$ —	\$ 1.4	\$ —

	December 31, 2018			
	Total	Level 1	Level 2	Level 3
Assets:				
Cash and cash equivalents	\$ 105.9	\$ 104.4	\$ 1.5	\$ —
Cash and cash equivalents measured at net asset value	26.6			
Restricted cash	0.6	0.6	—	—
Short-term investments	21.8	—	21.8	—
Short-term investments measured at net asset value	—			
Foreign currency hedges	4.6	—	4.6	—
Total Assets	\$ 159.5	\$ 105.0	\$ 27.9	\$ —
Liabilities:				
Foreign currency hedges	\$ 0.7	\$ —	\$ 0.7	\$ —
Total Liabilities	\$ 0.7	\$ —	\$ 0.7	\$ —

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. See Note 2 - Acquisitions and Divestitures for further discussion.

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

No material assets were measured at fair value on a nonrecurring basis during the years ended December 31, 2019 and 2018.

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 \$1,185.8 million and \$1,077.5 million at December 31, 2019 and 2018, respectively. The carrying value of this debt was \$1,086.5 million and \$1,070.7 million at December 31, 2019 and 2018, respectively. The fair value of long-term fixed-rate debt was measured using Level 2 inputs.

Note 18 - 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.

The Company does not purchase or hold any derivative financial instruments for trading purposes. As of December 31, 2019 and 2018, the Company had \$295.7 million and \$218.8 million, respectively, of outstanding foreign currency forward contracts at notional value. Refer to *Note 17 - 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, 2019 and 2018, the Company had \$87.9 million and \$102.9 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.

As of December 31, 2019 and 2018, the Company had \$207.8 million and \$115.9 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, 2019, 2018, and 2017, and the related location within the Consolidated Statements of Income.

		Amount of gain or (loss) recognized in income		
		Year Ended December 31,		
Derivatives not designated as hedging instruments	Location of gain or (loss) recognized in income	2019	2018	2017
Foreign currency forward contracts	Other income (expense), net	\$ 5.9	\$ 5.1	\$ (10.2)

Note 19 - Research and Development

The Company performs research and development under Company-funded programs and under contracts with the federal government and others. Expenditures committed to research and development amounted to \$41.4 million, \$37.3 million and \$35.3 million in 2019, 2018 and 2017, respectively. Expenditures may fluctuate from year-to-year depending on special projects and needs.

Note 20 - Quarterly Financial Data

(Unaudited)

	2019				
	1st	2nd	3rd	4th	Total
Net sales	\$ 979.7	\$ 1,000.0	\$ 914.0	\$ 896.2	\$ 3,789.9
Gross profit	302.6	305.7	277.5	256.0	1,141.8
Selling, general and administrative expenses	152.7	158.7	148.0	159.2	618.6
Impairment and restructuring charges	—	1.9	1.6	3.3	6.8
Net income ⁽¹⁾	95.3	94.9	66.7	117.8	374.7
Net income attributable to noncontrolling interests	3.4	2.4	2.5	4.3	12.6
Net income attributable to The Timken Company	91.9	92.5	64.2	113.5	362.1
Net income per share - Basic:	\$ 1.21	\$ 1.22	\$ 0.85	\$ 1.51	\$ 4.78
Net income per share - Diluted:	\$ 1.19	\$ 1.20	\$ 0.84	\$ 1.48	\$ 4.71
Dividends per share	\$ 0.28	\$ 0.28	\$ 0.28	\$ 0.28	\$ 1.12

	2018				
	1st	2nd	3rd	4th	Total
Net sales	\$ 883.1	\$ 906.3	\$ 881.3	\$ 910.1	\$ 3,580.8
Gross profit	264.9	267.4	253.3	254.5	1,040.1
Selling, general and administrative expenses	148.6	141.8	142.0	148.3	580.7
Impairment and restructuring charges	0.2	0.3	2.6	1.8	4.9
Net income ⁽²⁾	80.5	91.9	72.3	60.8	305.5
Net income attributable to noncontrolling interests	0.3	0.9	0.7	0.8	2.7
Net income attributable to The Timken Company	80.2	91.0	71.6	60.0	302.8
Net income per share - Basic:	\$ 1.03	\$ 1.18	\$ 0.93	\$ 0.78	\$ 3.93
Net income per share - Diluted:	\$ 1.02	\$ 1.16	\$ 0.91	\$ 0.77	\$ 3.86
Dividends per share	\$ 0.27	\$ 0.28	\$ 0.28	\$ 0.28	\$ 1.11

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 third quarter of 2019 included net actuarial losses of \$16.9 million. Net income for the fourth quarter of 2019 included the reversal of tax valuation allowances of \$44.5 million and net actuarial gains of \$21.1 million.
- (2) Net income for the fourth quarter of 2018 included net actuarial losses of \$19.7 million, partially offset by curtailment gains of \$10.2 million.

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, 2019 and 2018, and 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, 2019, 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, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, 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, 2019, 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 14, 2020 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 and other postretirement benefit obligations

Description of the Matter

At December 31, 2019, the Company's aggregate defined benefit pension and other postretirement benefit obligation was \$1,026.9 million and exceeded the fair value of defined benefit pension and other postretirement plan assets of \$859.3 million, resulting in an unfunded defined benefit pension and other postretirement benefit obligation of \$167.6 million. As explained in Note 1, *Significant Accounting Policies*, Note 14, *Retirement Benefit Plans*, and Note 15, *Postretirement 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 defined benefit pension and other postretirement benefit obligation and plan assets to reflect the actual return on plan assets and updated actuarial assumptions.

Auditing the pension and other postretirement benefit obligations is complex and required the involvement of specialists due to the highly judgmental nature of certain of the actuarial assumptions (e.g., discount rate and health care cost trend rates) 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 pension and other postretirement obligations. For example, we tested controls over management's review of the defined benefit pension and other postretirement benefit obligation calculations, the relevant data inputs and the significant actuarial assumptions used in the calculations.

To test the defined benefit pension and other postretirement 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 defined benefit pension and other postretirement benefit obligation from prior year due to the change in service cost, interest cost, plan amendments, actuarial losses (gains), benefits paid and other activities. In addition, we involved an actuarial specialist to assist with our procedures. For example, we evaluated management's methodology for determining the discount rate that reflects the maturity and duration of the benefit payments and is used to measure the defined benefit pension and other postretirement benefit 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. To evaluate the health care cost trend rates, we assessed whether the information is consistent with publicly available information, and whether any market data adjusted for entity-specific adjustments were applied. We also tested the completeness and accuracy of the underlying data, including the participant data used in the determination of the projected benefit obligation.

Accounting for Acquisitions - BEKA

Description of the Matter

As described in Note 2, *Acquisitions and Divestitures*, to the consolidated financial statements, during 2019 the Company completed two acquisitions for net cash consideration of \$228.4 million. The most significant acquisition was the acquisition of all the outstanding stock of BEKA Lubrication (“BEKA”). As part of the allocation of the purchase price under ASC 805, this acquisition resulted in the identification and recognition of \$55.1 million of intangible assets, which consisted principally of a trade name, customer relationships, and technology and know-how (collectively “the identifiable intangible assets”), with the remainder allocated to goodwill.

Auditing the Company’s accounting for the 2019 acquisition of BEKA was complex because the identifiable intangible assets recognized were material to the consolidated financial statements and the estimates of fair value involved a high degree of subjectivity. The high degree of 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 a discounted cash flow model to measure the trade name, customer relationships, and technology and know-how-related intangible assets. The significant assumptions used to estimate the fair value of the identifiable intangible assets included discount rates and certain assumptions that form the basis of the future net cash flows (e.g., revenue and EBITDA growth rates and royalty rates). These significant assumptions are forward looking and consider anticipated market conditions.

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 acquisition, including recognition and measurement of the identifiable intangible assets acquired. For example, we tested controls over the recognition and measurement of the trade name, customer relationships, and technology and know-how-related intangible assets, including the valuation models and underlying assumptions used to develop such estimates.

Our audit procedures included, among others, reading the executed purchase agreement, evaluating the significant assumptions and methods used in developing fair value estimates, and testing the recognition of (1) the net assets acquired at fair value; (2) the identifiable acquired intangible assets at fair value; and (3) goodwill measured as a residual.

To test the estimated fair value of the trade name, customer relationships and technology and know-how-related 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 (including revenue and EBITDA growth rates and royalty rates), used by the Company, and evaluating the completeness and accuracy of the underlying data supporting the significant assumptions and estimates. We involved our valuation specialists to assist with our evaluation of the methodology used by the Company and significant assumptions included in the fair value estimates. For example, when evaluating the assumptions related to the revenue and EBITDA growth rates, we compared the assumptions to the past performance of BEKA, peer companies within the industry, similar acquisitions made by the Company and expected industry trends and considered whether they were consistent with evidence obtained in other areas of the audit. Additionally, when evaluating the assumptions related to discount and royalty rates, we compared the significant assumptions to current industry, market and economic trends, to the assumptions used to value similar assets in other acquisitions, to the historical results of the acquired business and to other guidelines used by companies within the same industry. Furthermore, we assessed the appropriateness of the disclosures in the consolidated financial statements regarding the acquisition.

Income taxes - Timken Germany valuation allowance

Description of the Matter

As more fully described in Note 5, *Income taxes*, to the consolidated financial statements, the Company released \$40.7 million of valuation allowances recorded against German indefinite-lived loss carryforwards and pension deferred tax assets. Deferred tax assets are reduced by a valuation allowance if, based on the weight of all available evidence, in management's judgment it is more likely than not that some portion, or all, of the deferred tax assets will not be realized. Once established, the 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. As a result of the execution of a tax planning strategy in the fourth quarter 2019, management reached this conclusion and accordingly released the valuation allowance. Because the Germany entity is treated as a branch under U.S. tax law, the valuation allowance was partially offset by income tax expense of \$5.3 million related to a U.S. deferred tax liability.

How We Addressed the Matter in Our Audit

Auditing management's assessment of the realizability of deferred tax assets recorded in Germany was complex due to the judgment to analyze, interpret and apply complex tax laws and regulations, including the implementation of a prudent and feasible tax planning strategy.

We obtained an understanding, evaluated the design, and tested the operating effectiveness of controls that address the risks of material misstatement relating to the realizability of deferred tax assets. This included controls over management's identification and use of available tax planning strategies, projections of future taxable income, and application of the technical tax guidance.

Our audit procedures included, among others, evaluating the tax planning strategy to assess the appropriateness of the application of the technical tax guidance. We involved multiple tax professionals, including those with jurisdictional expertise. In addition, we performed audit procedures on the projections of future taxable income in Germany and tested the completeness and accuracy of the underlying data used in the projections. For example, we compared the projections of future taxable income with the actual results of prior periods and historical forecasts as available as well as management's consideration of current industry and economic trends. We also compared the projections of future taxable income with other forecasted financial information prepared by the Company.

/s/ Ernst & Young LLP

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

Cleveland, Ohio
February 14, 2020

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 2019 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, 2019. 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, 2019, Timken's internal control over financial reporting is effective.

On April 1, 2019, the Company completed the acquisition of Diamond Chain. On November 1, 2019, the Company completed the acquisition of BEKA. As permitted by SEC guidance, the scope of Timken's evaluation of internal control over financial reporting as of December 31, 2019 did not include the internal control over financial reporting of Diamond Chain or BEKA. The results of Diamond Chain and BEKA are included in the Company's consolidated financial statements beginning April 1, 2019 and November 1, 2019, respectively. The combined total assets of Diamond Chain and BEKA represented 6% and 12% of the Company's total and net assets, respectively, at December 31, 2019. The combined net sales of Diamond Chain and BEKA represented 2% of the Company's consolidated net sales for 2019 and the combined net income of Diamond Chain and BEKA represented less than 1% of the Company's net income for 2019. The Company will include Diamond Chain and BEKA in the Company's internal control over financial reporting assessment as of December 31, 2020.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2019 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, 2019, 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, 2019, 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 Diamond Chain Company ("Diamond Chain") and BEKA Lubrication ("BEKA"), which are included in the 2019 consolidated financial statements of the Company and constituted 6% and 12% of total and net assets, respectively, as of December 31, 2019 and 2% and less than 1% of revenues and net income, respectively, for the year then ended. 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 Diamond Chain and BEKA.

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, 2019 and 2018, and 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, 2019, 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 14, 2020 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 14, 2020

Item 9B. Other Information

Not applicable.

PART III.

Item 10. Directors, Executive Officers and Corporate Governance

Required information is set forth under the captions "Nominees" and "Delinquent Section 16(a) Reports" in the proxy statement filed in connection with the annual meeting of shareholders to be held on or about May 8, 2020 (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 www.timken.com/about/governance-documents 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 www.timken.com/about/governance-documents. 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," "2019 Summary Compensation Table," "2019 Grants of Plan-Based Awards," "Outstanding Equity Awards at 2019 Year-End," "2019 Option Exercises and Stock Vested," "2019 Pension Benefits Table," "2019 Nonqualified Deferred Compensation," "Potential Payments Upon Termination or Change in Control," "Director Compensation," "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, 2019 and 2018 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

- (2.1) Share Purchase Agreement Dated June 27, 2017, between Mr. H.J. Groeneveld and Timken Europe B.V., was filed on July 3, 2017 with Form 8-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (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) Fourth Amended and Restated Credit Agreement, dated as of June 25, 2019, among The Timken Company, Bank of America, N.A. and KeyBank National Association, as Co-Administrative Agent, and the Lenders party thereto, was filed on June 25, 2019 with Form 8-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (4.2) Credit Agreement, dated as of September 11, 2018, among The Timken Company, KeyBank National Association, as Administrative Agent, and the Lenders party thereto, was filed on September 14, 2018 with Form 8-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (4.3) First Amendment to Credit Agreement, dated as of July 12, 2019, among The Timken Company, KeyBank National Association, as Administrative Agent, and the Lenders party thereto was filed on July 12, 2019 with Form 8-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (4.4) First Supplemental Indenture, dated as of July 24, 1996, by and between The Timken Company and Mellon Bank, N.A. was filed on November 13, 1996 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (4.5) Indenture, dated as of February 18, 2003, between The Timken Company and The Bank of New York, as Trustee, providing for Issuance of Notes in Series was filed on March 27, 2003 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (4.6) 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.
- (4.7) 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.
- (4.8) 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.
- (4.9) 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.
- (4.10) Description of The Timken Company Common Shares is attached hereto as Exhibit 4.1.

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, 2019 was filed on May 1, 2019 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (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.

Management Contracts and Compensation Plans

- (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 Long-Term Incentive Plan for directors, officers and other key employees as amended and restated as of February 5, 2008 and approved by the shareholders on May 1, 2008 was filed on March 18, 2008 as Appendix A to the Registrant's Definitive Proxy Statement on Schedule 14A (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.6) 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.
- (10.7) 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.
- (10.8) 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.
- (10.9) 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) 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.
- (10.11) 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.
- (10.12) The Timken Company Senior Executive Management Performance Plan, as amended and restated as of February 13, 2015 and approved by 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.
- (10.13) 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.
- (10.14) 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.
- (10.15) Severance Agreement with Andreas Roellgen, dated as of July 18, 2016, was filed on July 31, 2019 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.16) Form of Indemnification Agreement for Directors is attached hereto as Exhibit 10.1.
- (10.17) Form of Indemnification Agreement for Executive Officers is attached hereto as Exhibit 10.2.
- (10.18) 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.
- (10.19) 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.
- (10.20) 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.
- (10.21) 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.
- (10.22) 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.

Management Contracts and Compensation Plans

- (10.23) 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.
- (10.24) 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.
- (10.25) 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
- (10.26) 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.
- (10.27) 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.
- (10.28) 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.
- (10.29) Form of Nonqualified Stock Option Agreement for Officers, as adopted on November 6, 2008, was filed on February 26, 2009 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.30) Form of Nonqualified Stock Option Agreement for Officers, as adopted on December 10, 2009, was filed on February 25, 2010 with Form 10-K (Commission File No. 1-1169), and is incorporated herein by reference.
- (10.31) Form of Nonqualified Stock Option Agreement for Non-Employee Directors, 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.
- (10.32) Form of Nonqualified Stock Option Agreement for transferable options for Officers, 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.
- (10.33) 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.
- (10.34) 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.
- (10.35) 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.
- (10.36) 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.
- (10.37) 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.
- (10.38) 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.
- (10.39) 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.
- (10.40) 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.
- (10.41) 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.
- (10.42) 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.

Management Contracts and Compensation Plans

- (10.43) 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.
- (10.44) 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.
- (10.45) 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.
- (10.46) Form of Restricted Share Agreement for Non-Employee Directors (one year vesting), as adopted on February 12, 2015, was filed on February 24, 2016 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.47) Form of Deferred Shares Agreement (five year cliff vesting) entered into with employees after January 1, 2012, 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.
- (10.48) 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.
- (10.49) Form of Deferred Shares Agreement (three year cliff vesting) entered into with employees 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.
- (10.50) Form of Deferred Shares Agreement (three 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.
- (10.51) 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.
- (10.52) 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.
- (10.53) 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.
- (10.54) 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.
- (10.55) 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.
- (10.56) 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.
- (10.57) 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.
- (10.58) Form of Deferred Share Equivalents 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.
- (10.59) Form of Deferred Share Equivalents 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.
- (10.60) Form of Deferred Share Equivalents 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.
- (10.61) Form of Deferred Share Equivalents 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.
- (10.62) Form of Deferred Shares Agreement (three year cliff vesting), 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.

Management Contracts and Compensation Plans

- (10.63) Form of Deferred Shares Agreement (five year cliff vesting), 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.
- (10.64) Form of Deferred Shares Agreement (three year cliff vesting, 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.
- (10.65) Form of Deferred Shares Agreement (five year cliff vesting, 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.
- (10.66) Form of Deferred Share Equivalents Agreement (three year cliff vesting), 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.
- (10.67) Form of Deferred Share Equivalents Agreement (five year cliff vesting, 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.
- (10.68) Form of Deferred Share Equivalents Agreement (three year cliff vesting, 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.
- (10.69) Form of Deferred Share Equivalents Agreement (five year cliff vesting, 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.
- (10.70) Form of Performance-Based Restricted Stock Unit Agreement entered into with key employees was filed on May 2, 2012 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.71) Form of Performance-Based Restricted Stock Unit 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.
- (10.72) Form of Performance-Based Restricted Stock Unit Agreement, 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.
- (10.73) Form of Performance-Based Restricted Stock Unit Agreement (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.
- (10.74) Form of Performance-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.
- (10.75) Form of Performance-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.
- (10.76) Form of Time-Based Restricted Stock Unit Agreement entered into with key employees was filed on May 2, 2012 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.77) Form of Time-Based Restricted Stock Unit Agreement (Cliff Vesting) entered into with key employees was filed on February 28, 2014 with Form 10-K (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.78) Form of Time-Based Restricted Stock Unit 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.
- (10.79) Form of Time-Based Restricted Stock Unit Agreement for Nonemployee Directors (annual grant), as adopted February 8, 2018, was filed on May 1, 2018 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.80) Form of Time-Based Restricted Stock Unit Agreement for Nonemployee Directors (new member grant), as adopted February 8, 2018, was filed on May 1, 2018 with Form 10-Q (Commission File No. 1-1169) and is incorporated herein by reference.
- (10.81) Form of Time-Based Restricted Stock Unit Agreement, 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.
- (10.82) Form of Time-Based Restricted Stock Unit Agreement (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.

Management Contracts and Compensation Plans

- (10.83) 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.
- (10.84) 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.
- (10.85) 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.
- (10.86) 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.
- (10.87) 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.

Listing of Exhibits (continued)

- (4.1) Description of The Timken Company Common Shares.
- (10.1) Form of Indemnification Agreement entered into for Directors.
- (10.2) Form of Indemnification Agreement entered into for Executive Officers.
 - (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, 2019, 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).

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 14, 2020

By: /s/ Philip D. Fracassa

Philip D. Fracassa

Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

Date: February 14, 2020

By: /s/ Shelly M. Chadwick

Shelly M. Chadwick

Vice President - Finance and Chief
Accounting Officer
(Principal Accounting Officer)

Date: February 14, 2020

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 14, 2020

By: /s/ Frank C. Sullivan *

Frank C. Sullivan, Director

Date: February 14, 2020

By: /s/ Elizabeth A. Harrell *

Elizabeth A. Harrell

Date: February 14, 2020

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

John M. Timken, Jr., Director

Date: February 14, 2020

By: /s/ Richard G. Kyle *

Richard G. Kyle, Director

Date: February 14, 2020

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

Ward J. Timken, Jr., Director

Date: February 14, 2020

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

John A. Luke, Jr., Director

Date: February 14, 2020

By: /s/ Jacqueline F. Woods *

Jacqueline F. Woods, Director

Date: February 14, 2020

By: /s/ Christopher L. Mapes *

Christopher L. Mapes, Director

Date: February 14, 2020

* By: /s/ Philip D. Fracassa

Philip D. Fracassa, attorney-in-fact

By authority of Power of Attorney
filed as Exhibit 24 hereto

Date: February 14, 2020

By: /s/ James F. Palmer *

James F. Palmer, Director

Date: February 14, 2020

By: /s/ Ajita G. Rajendra *

Ajita G. Rajendra, Director

Date: February 14, 2020

Schedule II—Valuation and Qualifying Accounts

The Timken Company and Subsidiaries

Allowance for uncollectible accounts:	2019	2018	2017
Balance at beginning of period	\$ 21.9	\$ 20.3	\$ 20.2
Additions:			
Charged to costs and expenses ⁽¹⁾	1.8	3.1	3.8
Charged to other accounts ⁽²⁾	—	1.3	0.4
Deductions:			
Charged to costs and expenses ⁽³⁾	4.9	2.8	4.1
Charged to other accounts ⁽²⁾	0.7	—	—
Balance at end of period	\$ 18.1	\$ 21.9	\$ 20.3

Allowance for surplus and obsolete inventory:	2019	2018	2017
Balance at beginning of period	\$ 39.5	\$ 30.0	\$ 21.1
Additions:			
Charged to costs and expenses ⁽⁴⁾	5.2	16.1	10.3
Charged to other accounts ⁽²⁾	1.9	2.3	6.0
Deductions ⁽⁵⁾	10.8	8.9	7.4
Balance at end of period	\$ 35.8	\$ 39.5	\$ 30.0

Valuation allowance on deferred tax assets:	2019	2018	2017
Balance at beginning of period	\$ 77.5	\$ 79.4	\$ 85.5
Additions			
Charged to costs and expenses ⁽⁶⁾	—	—	6.5
Charged to other accounts ⁽⁷⁾	2.3	—	—
Deductions ⁽⁸⁾	46.1	1.9	12.6
Balance at end of period	\$ 33.7	\$ 77.5	\$ 79.4

- (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) Includes valuation allowance adjustment recorded against goodwill.
- (8) Amount primarily relates to the reversal of valuation allowances due to the realization of net operating loss carryforwards. The Company released \$44.5 million of foreign valuation allowances for the year ended December 31, 2019, \$40.7 million of which relates to the valuation allowance that was recorded against German indefinite-lived loss carryforwards and pension deferred tax assets. 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 quarterly 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 14, 2020

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 quarterly 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 14, 2020

By: /s/ Philip D. Fracassa

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

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

In connection with the quarterly report of The Timken Company (the "Company") on Form 10-K for the period ended December 31, 2019, 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 14, 2020

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)

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.

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APPENDIX: RECONCILIATION OF GAAP TO NON-GAAP MEASURES

RECONCILIATION OF NET INCOME TO ADJUSTED NET INCOME, EBITDA AND MARGIN¹	2019	2018	2017	2016	2015
Net Sales	\$3,789.9	\$3,580.8	\$3,003.8	\$2,669.8	\$2,872.3
Net Income Attributable to The Timken Company	362.1	302.8	203.4	140.8	188.6
Acquisition related charges	15.5	20.6	9.0	4.2	5.7
Corporate pension and other postretirement benefit related charges ⁵	(4.1)	12.8	18.1	67.0	100.0
Impairment, restructuring and reorganization charges ⁶	9.8	7.1	13.1	28.0	15.9
(Gain) loss on divestitures and sale of real estate	(4.5)	0.8	(3.6)	(0.5)	(28.7)
Property loss and related expenses ⁷	7.6	-	-	-	-
Brazil legal matter	1.8	-	-	-	-
Tax Indemnification and related items	0.7	1.5	(1.0)	-	-
Health care plan modification costs	-	-	(0.7)	2.9	-
CDSOA income, net of expense	-	-	-	(59.6)	-
Fixed asset write-off	-	-	-	-	9.7
Noncontrolling interest	(0.5)	(1.3)	-	-	-
Provision for income taxes	(34.6)	(16.8)	(30.8)	(13.8)	(74.6)
Adjusted Net Income	\$353.8	\$327.5	\$207.5	\$169.0	\$216.6
Net income (loss) attributable to noncontrolling interest	12.6	2.7	(1.1)	0.3	2.8
Provision for income taxes (as reported)	97.7	102.6	57.6	60.5	26.3
Interest expense	72.1	51.7	37.1	33.5	33.4
Interest income	(4.9)	(2.1)	(2.9)	(1.9)	(2.7)
Depreciation and amortization expense ⁸	159.9	146.0	135.8	130.2	130.2
Less: Noncontrolling interest	(0.5)	(1.3)	-	-	-
Less: Provision for income taxes	(34.6)	(16.8)	(30.8)	(13.8)	(74.6)
Adjusted EBITDA	\$726.3	\$646.5	\$464.8	\$405.4	\$481.2
Adjusted EBITDA Margin (% of net sales)	19.2%	18.1%	15.5%	15.2%	16.8%

RECONCILIATION OF DILUTED EPS TO ADJUSTED EPS¹	2019	2018	2017	2016	2015
Diluted Earnings per Share (EPS)	\$4.71	\$3.86	\$2.58	\$1.78	\$2.21
Adjusted EPS	\$4.60	\$4.18	\$2.63	\$2.13	\$2.54
Diluted Shares	76,896,565	78,337,481	78,911,149	79,234,324	85,346,246

RECONCILIATION OF ADJUSTED NET OPERATING PROFIT AFTER TAXES	2019	2018	2017	2016	2015
Adjusted EBITDA	\$726.3	\$646.5	\$464.8	\$405.4	\$481.2
Less: depreciation and amortization expense ⁸	159.9	146.0	135.8	130.2	\$130.2
Adjusted EBIT	\$566.4	\$500.5	\$329.0	\$275.2	\$351.0
Adjusted tax rate	26.5%	26.5%	30.0%	30.5%	31.0%
Calculated income taxes	150.1	132.6	98.7	83.9	108.8
Adjusted net operating profit after taxes (ANOPAT)	\$416.3	\$367.9	\$230.3	\$191.3	\$242.2

RECONCILIATION OF ADJUSTED INVESTED CAPITAL	2019	2018	2017	2016	2015	2014
Total debt	\$1,730.1	\$1,681.6	\$962.3	\$659.2	\$656.5	\$526.4
Total equity	1,954.8	1,642.7	1,474.9	1,310.9	1,349.6	1,594.3
Invested capital (Total debt + Total equity)	3,684.9	3,324.3	2,437.2	1,970.1	2,006.1	2,120.7
Invested capital (two-point average)	\$3,504.6	\$2,880.8	\$2,203.7	\$1,988.1	\$2,063.4	

CALCULATION OF RETURN ON ADJUSTED INVESTED CAPITAL²	2019	2018	2017	2016	2015
ANOPAT	\$416.3	\$367.9	\$230.3	\$191.3	242.2
Invested capital (two-point average)	3,504.6	2,880.8	2,203.7	1,988.1	2,063.4
Return on invested capital	11.9%	12.8%	10.5%	9.6%	11.7%

RECONCILIATION OF FREE CASH FLOW³	2019	2018
Net cash provided from operating activities	\$550.1	\$332.5
Less: capital expenditures	140.6	112.6
Free cash flow	\$409.5	\$219.9

RECONCILIATION OF NET DEBT⁴	2019	2018
Short-term debt	\$82.0	\$43.0
Long-term debt	1,648.1	1,638.6
Total debt	1,730.1	1,681.6
Less: cash and cash equivalents	209.5	132.5
Net debt	\$1,520.6	\$1,549.1

CALCULATION OF NET DEBT TO CAPITAL⁴	2019	2018
Net debt	\$1,520.6	\$1,549.1
Total equity	1,954.8	1,642.7
Total capital	3,475.4	3,191.8
Net debt to capital	43.8%	48.5%

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 The Company uses ANOPAT/Average Invested Capital as a non-GAAP ratio that indicates return on invested capital, which is useful to investors as a measure of return on their investment.

³ Management believes that free cash flow is a non-GAAP measure that is useful to investors because it is a meaningful indicator of cash generated from operating activities available for the execution of its business strategy.

⁴ Management believes Net Debt and the ratio of Net Debt to Capital are important measures of the Company's financial position, due to the amount of cash and cash equivalents on hand. Capital, used for the ratio of net debt to capital, is a non-GAAP measure defined as total debt less cash and cash equivalents plus total shareholders' equity.

⁵ Corporate pension and other postretirement benefit related charges primarily represent actuarial (gains) and losses that resulted from the remeasurement of plan assets and obligations as a result of changes in assumptions. The Company recognizes actuarial (gains) and losses through earnings in connection with the annual remeasurement in the fourth quarter, or on an interim basis if specific events trigger a remeasurement. Corporate pensions and other postretirement benefit related charges also include curtailments.

⁶ 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.

⁷ Property loss and related expenses represent expenses during the year (net of insurance proceeds) 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 Depreciation and amortization shown excludes depreciation recognized in reorganization charges, if any.

2019 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 8, 2020, 10 a.m.
Timken World Headquarters

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