



2019 BADGER METER  
**ANNUAL REPORT**





# OUR COMPANY

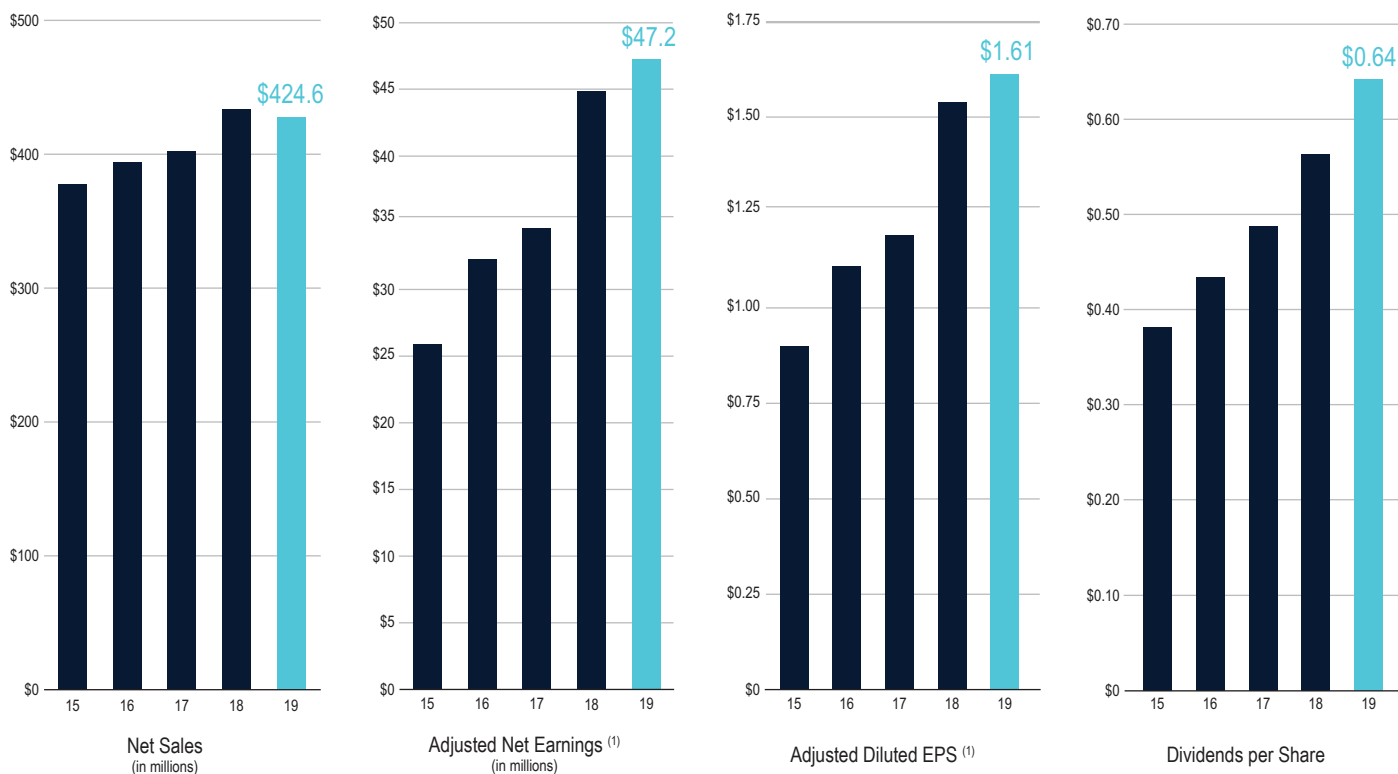
Badger Meter (NYSE:BMI) is an innovator in flow measurement, control and communications solutions, serving water utilities, municipalities, and commercial and industrial customers worldwide. Our products measure water, wastewater, oil, chemicals, and other fluids, and are known for accuracy, long-lasting durability and for providing valuable and timely measurement data. Our smart solutions allow users to optimize, use and minimize waste of one of the world's most precious resources.

# PERFORMANCE DATA

December 31,	2018	2019	% Change
<b>Operations (dollars in thousands)</b>			
Net Sales	\$ 433,732	\$ 424,625	(2.1)
Adjusted Operating Earnings <sup>(1)</sup>	\$ 59,444	\$ 62,148	4.5
Adjusted Net Earnings <sup>(1)</sup>	\$ 44,933	\$ 47,177	5.0
<b>Diluted per Common Share Amounts</b>			
Adjusted Diluted Earnings <sup>(1)</sup>	\$ 1.54	\$ 1.61	4.5
Cash Dividends	\$ 0.56	\$ 0.64	14.3
<b>Year-End Financial Position (dollars in thousands)</b>			
Total Assets	\$ 392,691	\$ 421,893	
Net Cash (Debt) <sup>(2)</sup>	\$ (4,974)	\$ 44,391	
Shareholders' Equity	\$ 303,503	\$ 331,068	
<b>Other</b>			
Free Cash Flow <sup>(1)</sup>	\$ 51,707	\$ 73,218	41.6
Number of Employees	1,531	1,567	
Shares Outstanding at December 31	29,118,571	29,118,532	

<sup>(1)</sup> See last page for reconciliation of GAAP to non-GAAP measures, including adjusted operating earnings, net earnings, diluted earnings per share and free cash flow.

<sup>(2)</sup> Net cash (debt) equals cash and cash equivalents less short term debt and any long term debt.





# OUR PRODUCTS

## MUNICIPAL WATER

Badger Meter is a market leading manufacturer setting the standard for flow measurement technology products for nearly 115 years. Our wide range of smart metering solutions are used to measure and control the flow of liquids in a diverse array of applications. We serve municipalities, water utilities, and residential, commercial and industrial customers worldwide.

Badger Meter works with municipalities to help increase operational efficiency, effectiveness and responsiveness. Our end-to-end solutions provide actionable information through data analytics from an interconnected and interoperable network of sensors and devices that empower people and organizations to efficiently use and conserve water.

Utilities are leveraging highly reliable and secure infrastructure-free cellular networks to make their meter reading more efficient, scalable and interoperable for the long term. We offer fully integrated smart water solutions to utilities that provide real-time access to detailed water usage data and leak detection so they can improve efficiency and reduce water loss.

At Badger Meter we believe choice matters. We offer a comprehensive product line for residential, commercial and fire service applications. Our meter families, Recordall®, E-Series® and ModMAG®, are available in a range of metering technologies, materials and sizes. We have the right product for the application and all our meters are designed for accuracy and long service life.



Badger Meter high resolution LCD Encoders are fully electronic, solid-state, field programmable and use industry standard ASCII communication protocols to provide high resolution encoded output. Tamper-resistant features such as magnetic sensors and tamper indicators provide utilities with increased security.

The newest member of the time-tested ORION® family of products, our ORION Cellular LTE-M endpoints utilize the existing Internet of Things (IoT) cellular infrastructure to efficiently and securely deliver meter reading data to the utility. This innovative technology eliminates the need for standard utility-owned fixed network Advanced

Metering Infrastructure (AMI), allows for rapid deployment and decreases ongoing maintenance (part of our BEACON® Advanced Metering Analytics (AMA) solution).

Our smart water solutions work in tandem with BEACON AMA. A cloud-based software suite that offers a wide choice of managed, traditional fixed network, mobile, and consumer engagement solutions to meet any meter reading and reporting needs. Integrated EyeOnWater® consumer engagement tools provide utility customers with access to their consumption data, allowing them to view their usage activity and gain a greater understanding and control of the water they consume.

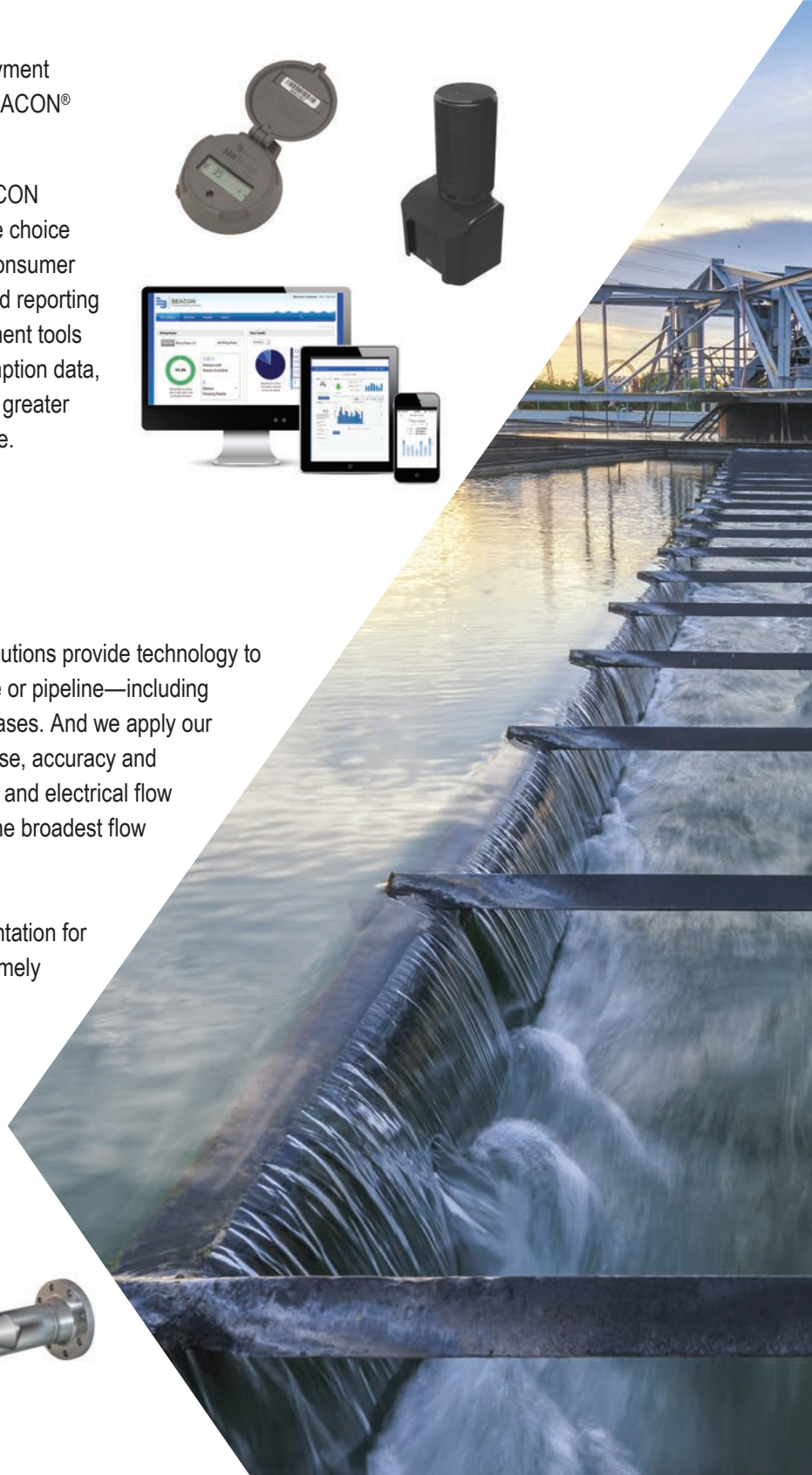
Badger Meter. We help protect the world's most precious resources.



## FLOW INSTRUMENTATION

Badger Meter Flow Instrumentation products and solutions provide technology to measure and control whatever moves through a pipe or pipeline—including water, wastewater, air, steam, oil, other liquids and gases. And we apply our expertise to further enhance our products' ease-of-use, accuracy and effectiveness. An industry leader in both mechanical and electrical flow metering technologies, Badger Meter offers one of the broadest flow control and measurement portfolios in the industry.

Customers can rely on Badger Meter Flow Instrumentation for application-specific solutions that deliver accurate, timely and dependable flow data and control essential for product quality, cost management, safer and more sustainable operations, and regulatory compliance.





# A MESSAGE TO OUR SHAREHOLDERS



Kenneth C. Bockhorst  
Chairman, President and Chief Executive Officer

## TO MY FELLOW SHAREHOLDERS

*I am pleased with our accomplishments and results for 2019, my first full year at the helm of the tremendous Badger Meter organization. An imperative for me during this first year was to preserve the legacy of trusted solutions, broad offerings and innovation earned since Badger Meter's founding in 1905. As we embark on this, our 115<sup>th</sup> year in business, I am proud of the adaptability and enthusiasm of my colleagues—from the most seasoned to newest—that have kept to that imperative and produced the solid progress we made on our strategies in 2019.*

While we hold leading positions in our core markets, I have challenged our teams to remain steadfast with our culture of innovation. When it comes to new products, we are accelerating development with new engineering resources along with software and analytics capabilities. In 2019, we launched several key new products including the ORION Cellular LTE-M endpoint, which provides increased reads, two-way communication and unparalleled coverage, all while maintaining robust battery life. This infrastructure free and scalable technology is advancing the way utilities operate and providing ultimate flexibility for our customers.

Our product portfolio has been further energized by the introduction of our first series of meters utilizing our industry leading D-Flow ultrasonic technology. In 2019, we launched the three- and four-inch commercial size meters with superior low-flow accuracy along with pressure and temperature sensing capability. These features enhance our ability to detect conditions associated with water loss and leak conditions that are critical for utilities to manage.

Our investment in software technology produced enhancements to BEACON Advanced Metering Analytics, the integrated technology platform for smart water monitoring, which leverages our growing portfolio of smart products and solutions.

These products and technologies will support our diverse customers, as many of them begin their transformational journeys into

leveraging real-time data analytics to help manage their utility operations. We believe our broad combination of solutions and capabilities has positioned us to thrive on that journey.

As our customers address these critically important water challenges, we recognize our responsibility to become more efficient as we manufacture the products they need. Our approach to sustainability is centered around minimizing our water and energy footprint and making smart products that enable efficiency and positively impact the environment. In 2019, we established an Environmental, Social & Governance (ESG) Steering Committee to prioritize, drive and monitor our efforts to help preserve the world’s most precious resources. A few of our critical accomplishments include:

- Establishing an Environmental Policy – with a goal to reduce waste and emissions, minimize adverse environmental impacts and promote resource conservation at all of our operations worldwide.
- Formalizing a Human Rights Policy – to affirm our commitment to respect and support internationally recognized human rights and freedoms and not be complicit in human rights abuses.
- Creating a Supplier Code of Conduct and scorecard – that outlines the expectations of our suppliers to fully comply with applicable laws and regulations and to adhere to internationally recognized environmental, social and corporate governance standards.




## FINANCIAL RESULTS

From a financial perspective, 2019 was characterized by the unevenness often experienced in our industry. Our total sales declined 2% from the prior year as the launch of new products led to an “innovation pause” in the first half of the year and tepid global industrial demand negatively impacted our flow instrumentation sales. However, customer acceptance of our newly launched products, combined with a backdrop of steady municipal spending led to a 1% increase in domestic water utility sales for the year, with accelerating growth experienced in the second half of the year. We continue to see the migration to “smart” meters that include radio technology, and have experienced above average growth in our newer technologies in the ultrasonic meter and cellular radio categories.

Our adjusted earnings per share improved 5% year-over-year to \$1.61 from \$1.54 in the prior year (excluding the impact of non-recurring pension settlement and executive transition charges in the prior year). This was largely due to improved gross margins associated with favorable product and software service mix, positive price/cost dynamics and early benefits of our continuous improvement activities.





We generated exceptional free cash flow of \$73 million representing a free cash flow to adjusted net earnings conversion ratio of 155%. Setting a goal and establishing processes to reduce primary working capital as a percent of sales—by tighter management of our receivable collections, inventory requirements and accounts payable—was a critical factor in this impressive cash conversion outcome. We remain focused on these same items as we move into 2020 and beyond.

As a result, our balance sheet is strong, with ample financial flexibility to invest in both organic and acquisition growth opportunities while delivering a steady, growing dividend to our shareholders.

The accelerating growth in the back half of 2019 is expected to continue, with solid momentum building into 2020. Municipal spending, recent order rates and backlog remain conducive to growth, and we see continued acceptance of our newer technologies in meters, radios and software.

## LOOKING AHEAD

We have multiple avenues for growth as we look ahead to 2020 and beyond. Our North American market growth is supported by a solid base of municipal spending and the continuing conversion to smart meters. Badger Meter is well positioned to benefit from the advancement of smart water applications that provide actionable information through data analytics from an interconnected and interoperable network of sensors and devices. Smart water applications help actively monitor and dynamically optimize a customers' operations. By leveraging our participation in AT&T's Smart City Alliance, we extend our credibility in cellular technology and can demonstrate the benefits of our broad, smart water solutions to decision makers throughout the municipal channel and their consultants. We will also further leverage our cellular and analytics solutions to drive sustainable Software as a Service (SaaS) revenues. Finally, selectively investing in the talent and structure to support attractive international markets, such as the Middle East, is another laneway for growth.

Creating a culture of continuous improvement - from the shop floor to all our processes - serves to make us more efficient and fuels savings to invest in growth. For example, we are working to improve our SQDC—or safety, quality, delivery and cost—metrics. We have improved execution across our operating environments, in our R&D projects and within our working capital management. These efforts will continue to be a differentiator and value driver for Badger Meter. Establishing metrics and targets, driving accountability and providing the training and resources to move the needle are part of a cultural change that is well underway.



Finally, we continue to build relationships and have dialogue with potential tuck-in acquisition candidates. We have a variety of interesting product extensions and software enhancements that help to collect and transform reliable and robust data into insights that can be used by our customers to more effectively run their operations. While it is impossible to predict the timing of these types of transactions, our teams and capital are at the ready.

## FINAL THOUGHTS

As we begin this 115th year of our operations, it is evident that our strong position and the abundant opportunities ahead of us are only possible due to the energy and commitment of our management and employee teams. I want to express my appreciation for your dedication and hard work.

Last, but certainly not least, I want to thank our customers, suppliers and shareholders for their support, confidence and commitment to Badger Meter.

Sincerely –



Ken Bockhorst  
Chairman, President and  
Chief Executive Officer



Every drop counts.

# CORPORATE INFORMATION

## BOARD OF DIRECTORS

### Todd A. Adams <sup>1</sup>

President and Chief Executive Officer,  
Rexnord Corporation

### Kenneth C. Bockhorst

Chairman, President and Chief Executive  
Officer, Badger Meter, Inc.

### Thomas J. Fischer <sup>1,3</sup>

President, Fischer Financial Consulting LLC  
and Retired Managing Partner,  
Arthur Andersen LLP

### Gale E. Klappa <sup>2,3</sup>

Executive Chairman, WEC Energy Group

### Gail A. Lione <sup>2,3</sup>

Senior Counsel, Dentons; Adjunct Professor,  
Georgetown University School of Law;  
Retired President, The Harley-Davidson  
Foundation; and former Executive Vice  
President, General Counsel and Secretary,  
Harley-Davidson, Inc.

### James W. McGill <sup>2</sup>

Retired Executive, Eaton Corporation

### Tessa M. Meyers <sup>3</sup>

Regional President – North America,  
Rockwell Automation

### James F. Stern <sup>1,2</sup>

Executive Vice President, General Counsel  
and Secretary, A. O. Smith Corporation

### Glen E. Tellock <sup>1</sup>

President and Chief Executive Officer,  
Lakeside Foods

### Todd J. Teske (Lead Director) <sup>2,3</sup>

Chairman, President and Chief Executive  
Officer, Briggs & Stratton Corporation

Committees of the Board:

1. Audit and Compliance
2. Compensation
3. Corporate Governance

## EXECUTIVE OFFICERS

### Kenneth C. Bockhorst

Chairman, President and  
Chief Executive Officer

### Fred J. Begale

Vice President – Engineering

### William R.A. Bergum

Vice President – General Counsel  
and Secretary

### Karen Bauer

Vice President – Investor Relations,  
Corporate Strategy and Treasurer

### Gregory M. Gomez

Vice President – Global Flow Instrumentation  
and International Utility

### Trina L. Jashinsky

Vice President – Human Resources

### William J. Parisen

Vice President – Global Operations

### Kimberly K. Stoll

Vice President – Sales and Marketing

### Daniel R. Weltzien

Vice President – Controller

### Robert A. Wrocklage

Senior Vice President – Chief Financial  
Officer

## OTHER

### Badger Meter, Inc. Headquarters

4545 West Brown Deer Road  
P.O. Box 245036  
Milwaukee, Wisconsin 53224-9536  
(414) 355-0400  
[www.badgermeter.com](http://www.badgermeter.com)

### Independent Registered Public Accounting Firm

Ernst & Young, LLP, Milwaukee, Wisconsin

### Transfer Agent

American Stock Transfer & Trust Company, LLC  
New York, New York  
(877) 248-6415  
[www.amstock.com](http://www.amstock.com)

### Listing of Common Stock

New York Stock Exchange; Symbol – BMI



### Form 10-K Report/Shareholder Information

The 2019 Form 10-K annual report (without exhibits) as filed with the Securities and Exchange Commission, is included in this report. Shareholder information, including news releases and Form 10-K, are available on the company's website:  
[www.badgermeter.com](http://www.badgermeter.com).

### Forward Looking Statements

Any forward looking statements contained in this document are subject to various risks and uncertainties, the most important of which are outlined in the Form 10-K.

### Automatic Dividend Reinvestment and Stock Purchase Plan

Badger Meter's Dividend Reinvestment and Stock Purchase Plan is a convenient way to acquire shares of company stock. To receive a prospectus describing the plan and an enrollment card, please contact our plan administrator, American Stock Transfer, at (877) 248-6415, or visit their website at [www.amstock.com](http://www.amstock.com).

### Trademarks

Trademarks appearing in this document are the property of their respective entities.

### Investor Relations

Financial analysts and investors should direct inquiries to:

Karen Bauer

Vice President – Investor Relations, Corporate Strategy and Treasurer

[kbauer@badgermeter.com](mailto:kbauer@badgermeter.com)

(414) 371-7276



**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, DC 20549

**FORM 10-K**

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

**For the fiscal year ended December 31, 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 No. 001-06706

**BADGER METER, INC.**

(Exact name of registrant as specified in its charter)

**Wisconsin**

(State or other jurisdiction  
of incorporation or organization)

**4545 W. Brown Deer Road  
Milwaukee, Wisconsin**

(Address of principal executive offices)

**39-0143280**

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

**53233**

(Zip code)

**(414) 355-0400**

(Registrant's telephone number, including area code)

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

Common Stock

(Title of each class)

BMI

(Trading Symbol)

New York Stock Exchange

(Name of each exchange on which registered)

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 15(d) of the Act. Yes  No

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such 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

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity: As of June 30, 2019, the aggregate market value of the shares of Common Stock held by non-affiliates of the Registrant was approximately \$1.72 billion. For purposes of this calculation only, (i) shares of Common Stock are deemed to have a market value of \$59.69 per share, the closing price of the Common Stock as reported on the New York Stock Exchange on June 28, 2019, and (ii) each of the Company's executive officers and directors is deemed to be an affiliate of the Company.

As of February 4, 2020, there were 29,113,242 shares of Common Stock outstanding with a par value of \$1 per share.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the Company's Proxy Statement for the 2020 Annual Meeting of Shareholders, which will be filed with the Securities and Exchange Commission under Regulation 14A within 120 days after the end of the registrant's fiscal year, are incorporated by reference from the definitive Proxy Statement into Part III of this Annual Report on Form 10-K.

## Special Note Regarding Forward Looking Statements

Certain statements contained in this Annual Report on Form 10-K, as well as other information provided from time to time by Badger Meter, Inc. (the “Company”) or its employees, may contain forward looking statements that involve risks and uncertainties that could cause actual results to differ materially from those in the forward looking statements. The words “anticipate,” “believe,” “estimate,” “expect,” “think,” “should,” “could” and “objective” or similar expressions are intended to identify forward looking statements. All such forward looking statements are based on the Company’s then current views and assumptions and involve risks and uncertainties. Some risks and uncertainties that could cause actual results to differ materially from those expressed or implied in forward looking statements include those described in Item 1A of this Annual Report on Form 10-K for the year ended December 31, 2019.

## PART I

### ITEM 1. BUSINESS

Badger Meter, Inc. (the “Company”) is a leading innovator, manufacturer and marketer of products incorporating flow measurement, control and communication solutions serving markets worldwide. The Company was incorporated in 1905.

Throughout this 2019 Annual Report on Form 10-K, the words “we,” “us” and “our” refer to the Company.

#### Available Information

The Company's internet address is <http://www.badgermeter.com>. The Company makes available free of charge through its website its Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports, on the same day they are electronically filed with, or furnished to, the Securities and Exchange Commission. The Company is not including the information contained on or available through its website as a part of, or incorporating such information by reference into, this Annual Report on Form 10-K.

#### Market Overview, Products, Systems and Solutions

Badger Meter is an innovator in flow measurement, control and related communication solutions, serving water utilities, municipalities, and commercial and industrial customers worldwide. The Company’s products measure water, oil, chemicals and other fluids, and are known for accuracy, long-lasting durability and for providing valuable and timely measurement data through various methods. The Company’s product lines fall into two categories: sales of water meters, radios and related technologies to municipal water utilities (municipal water) and sales of meters, valves and other products for industrial applications in water, wastewater, and other industries (flow instrumentation). The Company estimates that nearly 90% of its products are used in water related applications.

Municipal water, the largest sales category, is comprised of either mechanical or static (ultrasonic) water meters along with the related radio and software technologies and services used by municipal water utilities as the basis for generating their water and wastewater revenues. The largest geographic market for the Company’s municipal water products is North America, primarily the United States, because most of the Company's meters are designed and manufactured to conform to standards promulgated by the American Water Works Association. The majority of water meters sold by the Company continue to be mechanical in nature; however, ultrasonic meters are an increasing percentage of the water meters sold by the Company and in the industry, due to a variety of factors, including their ability to maintain measurement accuracy over their useful life. Providing ultrasonic water meter technology, combined with advanced radio technology, provides the Company with the opportunity to sell into other geographical markets, for example the Middle East and Europe.

The flow instrumentation product line includes meters and valves sold worldwide to measure and control fluids going through a pipe or pipeline including water, air, steam, oil, and other liquids and gases. These products are used in a variety of industries and applications, with the Company’s primary market focus being water/wastewater; heating, ventilating and air conditioning (HVAC); oil and gas; and chemical and petrochemical. Flow instrumentation products are generally sold to original equipment manufacturers as the primary flow measurement device within a product or system, as well as through manufacturers’ representatives.

Municipal water meters (both residential and commercial) are generally classified as either manually read meters or remotely read meters via radio technology. A manually read meter consists of a water meter and a register that provides a visual totalized meter reading. Meters equipped with radio technology (endpoints) receive flow measurement data from battery-powered encoder registers attached to the water meter, which is encrypted and transmitted via radio frequency to a receiver that collects and formats the data appropriately for water utility usage and billing systems. These remotely read systems are classified as either automatic meter reading (AMR) systems, where a vehicle equipped for meter reading purposes, including a radio receiver, computer and reading software,



collects the data from utilities' meters; or advanced metering infrastructure (AMI) systems, where data is gathered utilizing a network (either fixed or cellular) of data collectors or gateway receivers that are able to receive radio data transmission from the utilities' meters. AMI systems eliminate the need for utility personnel to drive through service territories to collect data from the meters. These systems provide utilities with more frequent and diverse data from their meters at specified intervals.

The ORION® branded family of radio endpoints provides water utilities with a range of industry-leading options for meter reading. These include ORION Migratable (ME) for AMR meter reading, ORION (SE) for traditional fixed network applications, and ORION Cellular for an infrastructure-free meter reading solution. ORION Migratable makes the migration to fixed network easier for utilities that prefer to start with mobile reading and later adopt fixed network communications, allowing utilities to choose a solution for their current needs and be positioned for their future operational changes. ORION Cellular eliminates the need for utility-owned fixed network infrastructure, allows for gradual or full deployment, and decreases ongoing maintenance.

Critical to the water metering ecosystem is information and analytics. The Company's BEACON® Advanced Metering Analytics (AMA) software suite improves the utilities' visibility of their water and water usage. BEACON AMA is a secure, cloud-hosted software suite that includes a customizable dashboard, and has the ability to establish alerts for specific conditions. It also allows for consumer engagement tools that permit end water users (such as homeowners) to view and manage their water usage activity. Benefits to the utility include improved customer service, increased visibility through faster leak detection, the ability to promote and quantify the effects of its water conservation efforts, and easier compliance reporting.

Water meter replacement and the adoption and deployment of new technology comprise the majority of water meter product sales, including radio products. To a much lesser extent, housing starts also contribute to the new product sales base. Over the last decade, there has been a growing trend in the conversion from manually read water meters to meters with radio technology. This conversion rate is accelerating, with the Company estimating that approximately 60% of water meters installed in the United States have been converted to a radio solution technology.

The Company's net sales and corresponding net earnings depend on unit volume and product mix, with the Company generally earning higher average selling prices and margins on meters equipped with radio technology, and higher margins on ultrasonic compared to mechanical meters. The Company's proprietary radio products (i.e. ORION) generally result in higher margins than remarketed, non-proprietary technology products. The Company also sells registers and endpoints separately to customers who wish to upgrade their existing meters in the field.

Flow instrumentation products are used in flow measurement and control applications across a broad industrial spectrum, occasionally leveraging the same technologies used in the municipal water category. Specialized communication protocols that control the entire flow measurement process and mandatory certifications drive these markets. The Company provides both standard and customized flow instrumentation solutions.

The industries served by the Company's flow instrumentation products face accelerating demands to contain costs, reduce product variability, and meet ever-changing safety, regulatory and sustainability requirements. To address these challenges, customers must reap more value from every component in their systems. This system-wide scrutiny has heightened the focus on flow instrumentation in industrial process, manufacturing, commercial fluid, building automation and precision engineering applications where flow measurement and control are critical.

A leader in both mechanical and static (ultrasonic) flow metering technologies for industrial markets, the Company offers one of the broadest flow measurement, control and communication portfolios in the market. This portfolio carries respected brand names including Recordall®, Hedland®, Dynasonics®, Blancett®, and Research Control®, and includes eight of the ten major flow meter technologies. Customers rely on the Company for application-specific solutions that deliver accurate, timely and dependable flow data and control essential for product quality, cost control, safer operations, regulatory compliance and more sustainable operations.

The Company's products are sold throughout the world through employees, resellers and representatives. Depending on the customer mix, there can be a moderate seasonal impact on sales, primarily relating to higher sales of certain municipal water products during the spring and summer months. No single customer accounts for more than 10% of the Company's sales.

## **Competition**

The Company faces competition for both its municipal water and flow instrumentation product lines. The competition varies from moderate to strong depending upon the products involved and the markets served. Major competitors for municipal water meters include Xylem, Inc. ("Sensus"), Roper Technologies, Inc. ("Neptune"), Master Meter, Inc. and Mueller Water Products, Inc. Together with Badger Meter, it is estimated that these companies sell in excess of 90% of the water meters in the North American market, which has historically been somewhat insulated from penetration by other competitors due to the nature of the mechanical technology used.

As static metering technology continues to gain traction in the North American market, additional competitors include firms such as Kamstrup A/S, Diehl Metering GmbH and Itron, Inc., although these competitors lack brand recognition and product breadth and do not have extensive water utility channel distribution to effectively reach the more than 50,000 water utilities in the United States, which impedes their ability to compete. In addition, as previously noted, the technology acceptance overall also provides competitive opportunities for Badger Meter outside North America.

The Company's primary competitors for municipal water radio products in North America are Itron, Inc., Hubbel, Inc. (Aclara Technologies), Neptune and Sensus. The vast majority of the Company's radio sales are of its own proprietary radio systems (ORION and GALAXY®); however, the Company may also resell other radio products as part of an overall smart meter solution (e.g. Aclara, Itron®).

A number of the Company's competitors in certain markets have greater financial resources than the Company. The Company, however, believes it currently provides the leading technologies in water meters and water-dedicated radio solutions and analytics. As a result of significant research and development activities, the Company enjoys favorable patent positions and trade secret protections for several of its technologies, products and processes.

There are many competitors in the flow instrumentation markets due to the various end markets and applications served. They include, among others, Emerson Electric Company, Krohne Messtechnik GmbH, Endress+Hauser AG, Yokogawa Electric Corporation and Cameron International. With a broad portfolio consisting of products utilizing eight of the ten major flow meter technologies, the Company is well positioned to compete in niche, specialized applications within these markets, primarily focused on the water/wastewater, HVAC, oil & gas and chemical/petrochemical end markets.

## **Backlog**

The Company's total backlog of unshipped orders at December 31, 2019 and 2018 was \$27.2 million and \$29.9 million, respectively. The backlog is comprised of firm orders and signed contractual commitments, or portions of such commitments that call for shipment within 12 months. Backlog can be significantly affected by the timing of orders for large projects and the amounts can vary due to the timing of work performed.

## **Raw Materials and Components**

Raw materials used in the manufacture of the Company's products include purchased castings made of metal or alloys (such as brass, which uses copper as its main component, aluminum, stainless steel and cast iron), plastic resins, glass, microprocessors and other electronic subassemblies, and components. There are multiple sources for these raw materials and components, but the Company relies on single suppliers for certain brass castings, resins and electronic subassemblies. The Company believes these items would be available from other sources, but that the loss of certain suppliers may result in a higher cost of materials, delivery delays, short-term increases in inventory and higher quality control costs in the short term. The Company carries business interruption insurance on key suppliers. The Company's purchases of raw materials are based on production schedules, and as a result, inventory on hand is generally not exposed to price fluctuations. World commodity markets and currency exchange rates may also affect the prices of material purchased in the future. The Company does not hold significant amounts of precious metals.

## **Research and Development**

Expenditures for research and development activities related to the development of new products, the improvement of existing products and manufacturing process improvements were \$11.9 million in 2019, \$11.1 million in 2018 and \$10.6 million in 2017. Research and development activities are primarily sponsored by the Company. The Company also engages from time to time in joint research and development with other companies and organizations.

## **Intangible Assets**

The Company owns or controls several trade secrets and many patents, trademarks and trade names in the United States and other countries that relate to its products and technologies. No single patent, trademark, trade name or trade secret is material to the Company's business as a whole.



## Environmental Protection

The Company is subject to contingencies related to environmental laws and regulations. A future change in circumstances with respect to these specific matters or with respect to sites formerly or currently owned or operated by the Company, off-site disposal locations used by the Company, and property owned by third parties that is near such sites, could result in future costs to the Company and such amounts could be material. Expenditures for compliance control provisions and regulations during 2019, 2018 and 2017 were not material.

## Employees

The Company and its subsidiaries employed 1,567 persons at December 31, 2019. Approximately 108 of these employees are covered by a collective bargaining agreement with District 10 of the International Association of Machinists. The Company is currently operating under a three-year contract with the union, which expires on October 31, 2022. The Company believes it has good relations with the union and all of its employees.

## Information about the Company's Executive Officers

The following table sets forth certain information regarding the Executive Officers of the Registrant.

Name	Position	Age at 2/28/2020
Kenneth C. Bockhorst	Chairman, President and Chief Executive Officer	47
Robert A. Wrocklage	Senior Vice President — Chief Financial Officer	41
Karen M. Bauer	Vice President — Investor Relations, Corporate Strategy and Treasurer	52
Fred J. Begale	Vice President — Engineering	55
William R. A. Bergum	Vice President — General Counsel and Secretary	55
Gregory M. Gomez	Vice President — Global Flow Instrumentation and International Utility	55
Trina L. Jashinsky	Vice President — Human Resources	57
William J. Parisen	Vice President — Global Operations	53
Kimberly K. Stoll	Vice President — Sales and Marketing	53
Daniel R. Weltzien	Vice President — Controller	41

There are no family relationships between any of the executive officers. Officers are elected annually at the first meeting of the Board of Directors held after each annual meeting of the shareholders. Each officer holds office until his or her successor has been elected or until his or her death, resignation or removal. There is no arrangement or understanding between any executive officer and any other person pursuant to which he or she was elected as an officer.

Mr. Bockhorst was elected President in April 2018, Chief Executive Officer in January 2019 and Chairman in January 2020 after serving as Senior Vice President - Chief Operating Officer for the Company from October 2017 to April 2018. Prior to joining the Company, Mr. Bockhorst was Executive Vice President of the Energy segment, preceded by President of Hydratight and Global Vice President Operations of Enerpac, all within Actuant Corporation (now Enerpac Tool Group) from March 2011 to October 2017.

Mr. Wrocklage was elected Vice President – Chief Financial Officer and Treasurer in 2019 and Senior Vice President – Chief Financial Officer in January 2020 after serving as Vice President - Finance for the Company from August 2018 to December 2018. Prior to joining the Company, Mr. Wrocklage spent ten years with Actuant Corporation (now Enerpac Tool Group), holding various corporate and business unit financial leadership roles, most recently as Vice President - Corporate Controller and Chief Accounting Officer.

Ms. Bauer was elected Vice President - Investor Relations, Corporate Strategy and Treasurer effective June 2019. She joined Badger Meter in July 2018 as Director, Investor Relations and Corporate Strategy. In her role she also oversees the Company's ESG (Environmental, Social & Governance) initiatives. Prior to joining Badger Meter, she served at Actuant Corporation (now Enerpac Tool Group), most recently as Director, Investor Relations & Communications.

Mr. Begale has served as Vice President - Engineering for more than five years.

Mr. Bergum has served as Vice President - General Counsel and Secretary for more than five years.

Mr. Gomez was elected Vice President – Flow Instrumentation and International Utility in March 2019. Mr. Gomez served as Vice President - Business Development and Flow Instrumentation from April 2017 to March 2019, Vice President - Flow Instrumentation from September 2014 to April 2017, and Vice President - Business Development from December 2010 to September 2014.

Ms. Jashinsky was elected Vice President - Human Resources in October 2016. Prior to joining the Company, Ms. Jashinsky was Vice President of Human Resources at Gannett Company, Inc. from February 2015 to July 2016, Senior Vice President Human Resources at Fiserv, Inc. from March 2014 to February 2015, and Vice President - Global Corporate Human Resources at Johnson Controls, Inc. from May 2010 to February 2014.

Mr. Parisen was elected Vice President - Global Operations in June 2019. He joined Badger Meter in August 2018 as Senior Director, Global Supply Chain. Prior to joining Badger Meter, he was employed at Actuant Corporation (now Enerpac Tool Group) where he most recently held the position of Vice President - Global Operations for the Industrial and Energy segments.

Ms. Stoll has served as Vice President - Sales and Marketing for more than five years.

Mr. Weltzien was elected Vice President – Controller in March 2019. Prior to joining the Company, Mr. Weltzien spent eight years with Actuant Corporation (now Enerpac Tool Group), holding various corporate and business unit financial leadership roles, most recently as Senior Director of Finance for its Hydratight business unit.

### **Foreign Operations and Export Sales**

The Company sells its products through employees, resellers and representatives throughout the world. Additionally, the Company has a sales, distribution and manufacturing facility in Neuffen, Germany; sales and customer service offices in Mexico, Singapore, China, United Arab Emirates and Slovakia; manufacturing facilities in Nogales, Mexico, Brno, Czech Republic and Bern, Switzerland; and a development facility in Luleå, Sweden. The Company exports products from the United States that are manufactured in Milwaukee, Wisconsin; Racine, Wisconsin and Tulsa, Oklahoma.

Information about the Company's foreign operations and export sales is included in Note 9 “Industry Segment and Geographic Areas” in the Notes to Consolidated Financial Statements in Part II, Item 8 of this 2019 Annual Report on Form 10-K.

### **Financial Information about Industry Segments**

The Company operates in one industry segment as an innovator, manufacturer and marketer of products incorporating flow measurement, control and communication solutions. Information about the Company's sales, operating earnings and assets is included in the Consolidated Financial Statements and in Note 9 “Industry Segment and Geographic Areas” in the Notes to Consolidated Financial Statements in Part II, Item 8 of this 2019 Annual Report on Form 10-K.

## **ITEM 1A. RISK FACTORS**

Shareholders, potential investors and other readers are urged to consider the significant business risks described below in addition to the other information set forth or incorporated by reference in this 2019 Annual Report on Form 10-K, including the “Special Note Regarding Forward Looking Statements” at the front of this 2019 Annual Report on Form 10-K. If any of the events contemplated by the following risks actually occur, our financial condition or results of operations could be materially adversely affected. The following list of risk factors may not be exhaustive. We operate in a continually changing business, economic and geopolitical environment, and new risk factors may emerge from time to time. We can neither predict these new risk factors with certainty nor assess the precise impact, if any, on our business, or the extent to which any factor, or combination of factors, may adversely impact our results of operations. While there is much uncertainty, we do analyze the risks we face, perform a probability assessment of their impacts and attempt to soften their potential impact when and if possible.

### **Competitive pressures in the marketplace could decrease our revenues and profits.**

Competitive pressures in the marketplace for our products could adversely affect our competitive position, leading to a possible loss of market share or a decrease in prices, either of which could result in decreased revenues and profits. We operate in an environment where competition varies from moderate to strong and a number of our competitors have greater financial resources. Our competitors also include alliance partners that sell products that do or may compete with our products. The principal elements of competition for our most significant product applications, residential and commercial water meters for the municipal water utility market (with various radio technology systems), are price, product technology, quality and service. The competitive environment is also affected by the movement toward radio technologies and away from manually read meters, the demand for replacement units and, to some extent, such things as global economic conditions, the timing and size of governmental programs such as stimulus fund

programs, the ability of municipal water utility customers to authorize and finance purchases of our products, our ability to obtain financing, housing starts in the United States, and overall economic activity. For our flow instrumentation products, the competitive environment is affected by the general economic health of various industrial sectors particularly in the United States and Europe.

**The inability to develop technologically advanced products could harm our future success.**

We believe that our future success depends, in part, on our ability to develop technologically advanced products that meet or exceed appropriate industry standards. Although we believe that we currently have a competitive advantage in this area, maintaining such advantage will require continued investment in research and development, sales, marketing and manufacturing capabilities. There can be no assurance that we will have sufficient resources to make such investments or that we will be able to make the technological advances necessary to maintain such competitive advantage. If we are unable to maintain our competitive advantage, our future financial performance may be adversely affected. We are not currently aware of any emerging standards, technologies or new products that could render our existing products obsolete in the near term. The municipal water industry is continuing to see the adoption of static water meters. Static water metering has lower barriers to entry that could affect the competitive landscape in North America. We believe we have a competitive product, if the adoption rate for static meters were to accelerate, we believe competitors lack brand recognition and product breadth and do not have extensive water utility channel distribution to effectively reach the more than 50,000 water utilities in the United States.

**The inability to obtain adequate supplies of raw materials and component parts at favorable prices could decrease our profit margins and negatively impact timely delivery to customers.**

We are affected by the availability and prices for raw materials and component parts, including purchased castings made of metal or alloys (such as brass, which uses copper as its main component, aluminum, stainless steel and cast iron), plastic resins, glass, microprocessors and other electronic subassemblies, and components that are used in the manufacturing process. The inability to obtain adequate supplies of raw materials and component parts for our products at favorable prices could have a material adverse effect on our business, financial condition or results of operations by decreasing profit margins and by negatively impacting timely deliveries to customers. In the past, we have been able to offset price increases in raw materials and component parts by increased sales prices, active materials management, product engineering programs and the diversity of materials used in the production processes. However, we cannot be certain that we will be able to accomplish this in the future. Since we do not control the actual production of these raw materials and component parts, there may be delays caused by an interruption in the production or transportation of these materials for reasons that are beyond our control. World commodity markets and inflation may also affect raw material and component part prices.

**Economic conditions could cause a material adverse impact on our sales and operating results.**

As a supplier of products and software, the majority of which are to water utilities, we may be adversely affected by global economic conditions, delays in governmental programs created to stimulate the economy, and the impact of government budget cuts or partial shutdowns of governmental operations that affect our customers, including independent distributors, large city utilities, public and private water companies and numerous smaller municipal water utilities. These customers may delay capital projects, including non-critical maintenance and upgrades, or may not have the ability to authorize and finance purchases during economic downturns or instability in world markets. We also sell products for other applications to reduce our dependency on the municipal water market. A significant downturn in this market could cause a material adverse impact on sales and operating results. Therefore, a downturn in general economic conditions, as well as in the municipal water market, and delays in the timing or amounts of possible economic stimulus fund programs, government budget cuts or partial shutdowns of governmental operations, or the availability of funds to municipalities could result in a reduction in demand for our products and services and could harm the business.

**Economic impacts due to leadership or policy changes in the countries where we do business could negatively affect our profitability.**

We may be affected by adjustments to economic and trade policies, such as taxation, changes to or withdrawal from international trade agreements, or the like, when countries where we produce or sell our products change leadership or economic policies. These types of changes, as well as any related regulatory changes, could significantly increase our costs and adversely affect our profitability and financial condition.

**Global and regional economic and political conditions could adversely affect our business.**

In June 2016, voters in the United Kingdom approved the United Kingdom's exit from the European Union ("Brexit"), and on January 31, 2020, the United Kingdom withdrew from the European Union. There is now a transition period during which businesses and others prepare for the new post-Brexit rules to take effect on January 1, 2021. The ongoing negotiations of the future trading relationship between the United Kingdom and the European Union during the transition period have yet to provide clarity on



what the outcome will be for the United Kingdom or Europe. As a result, Brexit continues to be the source of significant economic uncertainty in the United Kingdom and in Europe, the Middle East, and Asia, which may negatively impact our business results in those regions. In addition, changes related to Brexit could result in disruptions to trade and free movement of goods, services and people to and from the United Kingdom, increased foreign exchange volatility with respect to the British pound and additional legal, political and economic uncertainty, all of which could potentially disrupt the markets we serve, the tax jurisdictions in which we operate, adversely change tax benefits or liabilities in these or other jurisdictions and may cause us to lose customers, suppliers and employees. In addition, Brexit could lead to legal uncertainty and potentially divergent national laws and regulations as the United Kingdom determines which European Union laws to replace or replicate. Any of these effects could adversely affect our business and results of operations.

**Climate change, unusual weather and other natural phenomena could adversely affect our business.**

Climate changes and weather conditions may affect, or cause volatility in, our financial results. Drought conditions could drive higher demand for smart water solutions that advance conservation efforts in residential and commercial applications. Our sales also may be adversely affected by unusual weather, weather patterns or other natural phenomena that could have an impact on the timing of orders in given periods, depending on the particular mix of customers being served by us at the time. The unpredictable nature of weather conditions and climate change therefore may result in volatility for certain portions of our business, as well as the operations of certain of our customers and suppliers.

**Geopolitical crisis, including terrorism or pandemics, could adversely affect our business.**

Our operations are susceptible to global events, including acts or threats of war or terrorism, international conflicts, political instability, and widespread outbreak of an illness or other health issue. The occurrence of any of these events could have an adverse effect on our business results and financial condition.

**Failure to manufacture quality products could have a material adverse effect on our business.**

If we fail to maintain and enforce quality control and testing procedures, our products will not meet required performance standards. Product quality and performance are a priority for us since our products are used in various applications where precise control of fluids is essential. Although we believe our products are perceived as high quality, any future production and/or sale of substandard products could seriously harm our reputation, resulting in both a loss of current customers to competitors and damage to our ability to attract new customers. In addition, if any of our products prove to be defective, we may be required to participate in a recall involving such products or incur warranty related expenses. A successful claim brought against us with respect to a defective product in excess of available insurance coverage, if any, or a requirement to participate in a major product recall, could have a material adverse effect on our business, results of operations or financial condition.

**Litigation against us could be costly, time consuming to defend and could adversely affect our profitability.**

From time to time, we are subject to legal proceedings and claims that arise in the ordinary course of business. For example, we may be subject to workers' compensation claims, employment/labor disputes, customer and supplier disputes, product liability claims, intellectual property disputes and contractual disputes related to warranties arising out of the conduct of our business. Litigation may result in substantial costs and may divert management's attention and resources, which could adversely affect our profitability or financial condition.

**If our technology products do not operate as intended, our business could be materially and adversely affected.**

We sell and install software products, including some that are provided in "the cloud," that may contain unexpected design defects or may encounter unexpected complications during installation or when used with other technologies utilized by the customer. A failure of our technology products to operate as intended and in a seamless fashion with other products or a failure or breach of a cloud network could materially and adversely affect our results of operations, financial position and cash flows.

**Our expanded role as a prime contractor brings certain risks that could have a material adverse effect to our business.**

The Company periodically assumes the role of prime contractor for providing complete technology systems, installation and project management to governmental entities, which brings with it added risks, including but not limited to, our responsibility for managing subcontractor performance and project timelines and the potential for expanded warranty and performance obligations. While we have managed a number of these types of arrangements, it is possible to encounter a situation where we may not be able to perform to the expectations of the governmental entity, and thus incur additional costs that could affect our profitability or harm our reputation.

**Disruptions and other damages to our information technology and other networks and operations, and breaches in data security or cybersecurity attacks could have a negative financial impact and damage our reputation.**

Our ability to serve customers, as well as increase revenues and control costs, depends in part on the reliability of our sophisticated technologies, system networks and cloud-based software. We use information technology and other systems to manage our business in order to maximize our revenue, effectiveness and efficiency. Unauthorized parties gaining access to digital systems and networks for purposes of misappropriating assets or sensitive financial, personal or business information, corrupting data, causing operational disruptions and other cyber-related risks could adversely impact our customer relationships, business plans and our reputation. In some cases, we are dependent on third-party technologies and service providers for which there is no certainty of uninterrupted availability or through which hackers could gain access to sensitive and/or personal information. These potential disruptions and cyber-attacks could negatively affect revenues, costs, customer demand, system availability and our reputation.

Further, as the Company pursues its strategy to grow through acquisitions and to pursue newer technologies that improve our operations and cost structure, the Company is also expanding and improving its information technologies, resulting in a larger technological presence and corresponding exposure to cybersecurity risk. Certain new technologies present new and significant cybersecurity safety risks that must be analyzed and addressed before implementation. If we fail to assess and identify cybersecurity risks associated with acquisitions and new initiatives, we may become increasingly vulnerable to such risks.

**If we are not able to protect our proprietary rights to our software and related products, our ability to market our software products could be hindered and our results of operations, financial position and cash flows could be materially and adversely affected.**

We rely on our agreements with customers, confidentiality agreements with employees, and our trademarks, trade secrets, copyrights and patents to protect our proprietary rights. These legal protections and precautions may not prevent misappropriation of our proprietary information. In addition, substantial litigation regarding intellectual property rights exists in the software industry, and software products may increasingly be subject to third-party infringement claims. Such litigation and misappropriation of our proprietary information could hinder our ability to market and sell products and services and our results of operations, financial position and cash flows could be materially and adversely affected.

**Changes in environmental or regulatory requirements could entail additional expenses that could decrease our profitability.**

We are subject to a variety of laws in various countries and markets, such as those regulating lead or other material content in certain of our products, the handling and disposal of certain electronic materials, the use and/or licensing of radio frequencies necessary for radio products, data privacy and protection, as well as customs and trade practices. We cannot predict the nature, scope or effect of future environmental or regulatory requirements to which our operations might be subject or the manner in which existing or future laws will be administered or interpreted. Currently, the cost of complying with existing laws is included as part of our on-going expenses and does not have a material effect on our business or financial position, but a change in the future could adversely affect our profitability.

**Risks related to foreign markets could decrease our profitability.**

Since we sell products worldwide as well as manufacture products in several countries, we are subject to risks associated with doing business internationally. These risks include such things as changes in foreign currency exchange rates, changes in political or economic conditions of specific countries or regions, potentially negative consequences from changes in tax laws or regulatory requirements, differing labor regulations, and the difficulty of managing widespread operations.

**An inability to attract and retain skilled employees could negatively impact our growth and decrease our profitability.**

Our success depends on our continued ability to identify, attract, develop and retain skilled personnel throughout our organization. Current and future compensation arrangements, including benefits, may not be sufficient to attract new employees or retain existing employees, which may hinder our growth.

**Violations or alleged violations of laws that impose requirements for the conduct of the Company's overseas operations, including the Foreign Corrupt Practices Act (FCPA) or other anti-corruption laws, trade sanctions and sanctioned parties restrictions could adversely affect our business.**

In foreign countries where we operate, a risk exists that our employees, third party partners or agents could engage in business practices prohibited by applicable laws and regulations, such as the FCPA. Such anti-corruption laws generally prohibit companies from making improper payments to foreign officials, require companies to keep accurate books and records, and maintain appropriate internal controls. Our policies mandate strict compliance with such laws and we devote resources to ensure compliance.

However, we operate in some parts of the world that have experienced governmental corruption, and, in certain circumstances, local customs and practice might not be consistent with the requirements of anti-corruption laws. We remain subject to the risk that our employees, third party partners or agents will engage in business practices that are prohibited by our policies and violate such laws and regulations. Violations by us or a third party acting on our behalf could result in significant internal investigation costs and legal fees, civil and criminal penalties, including prohibitions on the conduct of our business and reputational harm.

We may also be subject to legal liability and reputational damage if we violate U.S. trade sanctions administered by the U.S. Treasury Department's Office of Foreign Assets Control (OFAC), the European Union, the United Nations and trade sanction laws, such as the Iran Threat Reduction and Syria Human Rights Act of 2012. Our policies mandate strict compliance with such laws and we devote resources to ensure compliance.

**Failure to successfully identify, complete and integrate acquired businesses or products could adversely affect our operations.**

As part of our business strategy, we continue to evaluate and may pursue selected business or product acquisition opportunities that we believe may provide us with certain operating and financial benefits. There can be no assurance that we will identify or complete transactions with suitable acquisition candidates in the future. If we complete any such acquisitions, they may require integration into our existing business with respect to administrative, financial, sales, marketing, manufacturing and other functions to realize these anticipated benefits. If we are unable to successfully integrate a business or product acquisition, we may not realize the benefits identified in our due diligence process, and our financial results may be negatively impacted. Additionally, significant unexpected liabilities may arise during or after completion of an acquisition.



## ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

## ITEM 2. PROPERTIES

The principal facilities utilized by the Company at December 31, 2019 are listed below. The Company owns all such facilities except as noted. The Company believes that its facilities are generally well maintained and have sufficient capacity for its current needs.

<b>Location</b>	<b>Principal use</b>	<b>Approximate area (square feet)</b>
Los Gatos, California, USA	Software development	3,600 (1)
Centennial, Colorado, USA	Distribution	12,000
Nashville, Tennessee, USA	Distribution	8,400 (2)
West Sacramento, California, USA	Distribution	11,400 (3)
San Marcos, Texas, USA	Distribution	14,800 (4)
Tulsa, Oklahoma, USA	Manufacturing	59,500
Milwaukee, Wisconsin, USA	Manufacturing and offices	324,200
Racine, Wisconsin, USA	Manufacturing and offices	134,300 (5)
Brno, Czech Republic	Manufacturing	27,800
Neuffen, Germany	Manufacturing and offices	24,700
Nogales, Mexico	Manufacturing	181,300
Luleå, Sweden	Electronic development	7,000 (6)
Bern, Switzerland	Manufacturing	16,800 (7)

(1) Leased facility. Lease term expires November 30, 2021.

(2) Leased facility. Lease term expires June 30, 2022.

(3) Leased facility. Lease term expires October 31, 2024.

(4) Leased facility. Lease term expires November 30, 2021.

(5) Leased facility. Lease term expires December 31, 2025.

(6) Leased facility. Lease term expires June 30, 2025.

(7) Building is owned, but land is leased from the government, as required. Lease term expires October 18, 2021.

## ITEM 3. LEGAL PROCEEDINGS

In the normal course of business, the Company is named in legal proceedings from time to time. There are currently no material legal proceedings pending with respect to the Company.

The Company is subject to contingencies related to environmental laws and regulations. Information about the Company's compliance with environmental regulations is included in Part I, Item 1 of this 2019 Annual Report on Form 10-K under the heading "Environmental Protection."

## ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

## PART II

### ITEM 5. MARKET FOR THE REGISTRANT'S COMMON STOCK, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

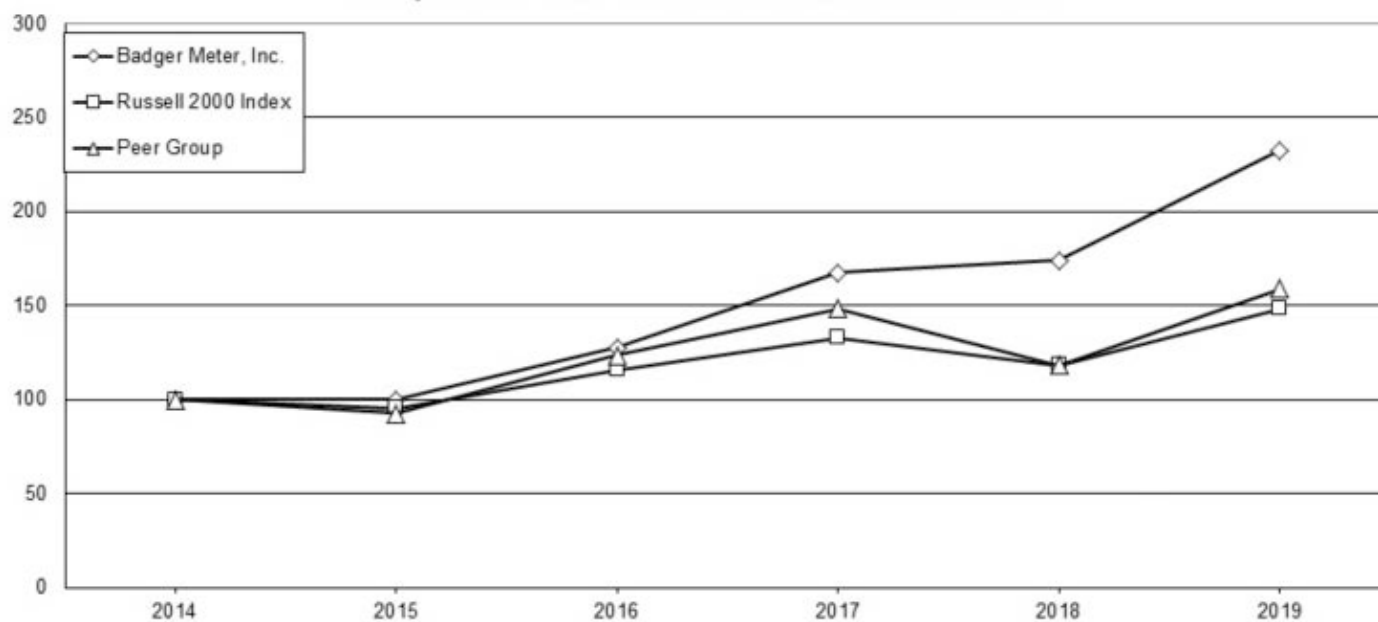
The Company's Common Stock is traded on the New York Stock Exchange (NYSE Trading Symbol: BMI). At February 3, 2020, there were approximately 788 holders of the Company's Common Stock. Other information required by this Item is set forth in Note 2 "Common Stock" and Note 10 "Unaudited: Quarterly Results of Operations, Common Stock Price and Dividends" in the Notes to Consolidated Financial Statements in Part II, Item 8 of this 2019 Annual Report on Form 10-K.

The following information in Item 5 of this Annual Report on Form 10-K is not deemed to be "soliciting material" or to be "filed" with the Securities and Exchange Commission or subject to Regulation 14A or 14C under the Securities Exchange Act of 1934, as amended, or to the liabilities of Section 18 of the Securities Exchange Act of 1934, as amended, and will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except to the extent the Company specifically incorporates it by reference into such a filing.

The following graph compares on a cumulative basis the yearly percentage change since January 1, 2015 in (a) the total shareholder return on the Company's Common Stock with (b) the total return on the Russell 2000® Index, and (c) the total return of the peer group made up of 14 companies, including the Company, in similar industries and with similar market capitalization. The Russell 2000® Index is a trademark of the Frank Russell Company, and is used herein for comparative purposes in accordance with Securities and Exchange Commission regulations.

The graph assumes \$100 invested on December 31, 2014. It further assumes the reinvestment of dividends. The returns of each component company in the peer groups have been weighted based on such company's relative market capitalization.

#### Comparison of 5 Year Cumulative Total Return



December 31		2014	2015	2016	2017	2018	2019
Badger Meter, Inc.	Return %		0.03%	27.71%	30.94%	4.10%	33.45%
	Cumulative \$	\$ 100.00	\$ 100.03	\$ 127.75	\$ 167.28	\$ 174.14	\$ 232.39
Russell 2000 Index	Return %		-4.41%	21.31%	14.65%	-11.01%	25.52%
	Cumulative \$	\$ 100.00	\$ 95.59	\$ 115.95	\$ 132.94	\$ 118.30	\$ 148.49
Peer Group	Return %		-7.30%	33.10%	20.10%	-20.18%	34.49%
	Cumulative \$	\$ 100.00	\$ 92.70	\$ 123.38	\$ 148.19	\$ 118.28	\$ 159.07

The Peer Group consists of A. O. Smith Corp. (AOS), Badger Meter, Inc. (BMI), CIRCOR International, Inc. (CIR), ESCO Technologies Inc. (ESE), Franklin Electric Co, Inc. (FELE), Gorman-Rupp Company (GRC), Itron, Inc. (ITRI), Lindsay Corporation (LNN), Perma-Pipe International Holdings, Inc. (PIIH), Mueller Water Products (MWA), Northwest Pipe Company (NWPX), Rexnord Corporation (RXN), Helios Technologies (SNHY) and Watts Water Technologies, Inc. (WTS).

In February 2017, the Board of Directors authorized the repurchase of up to 400,000 shares of the Company's Common Stock through February 2020. The following table provides information about the Company's purchases during the quarter ended December 31, 2019 of equity securities that are registered by the Company pursuant to Section 12 of the Exchange Act.

	Total number of shares purchased	Average price paid per share	Total number of shares purchased as part of a publicly announced program	Maximum number of shares that may yet be purchased under the program
October 1, 2019 - October 31, 2019	—	\$ —	267,221	132,779
November 1, 2019 - November 30, 2019	—	—	267,221	132,779
December 1, 2019 - December 31, 2019	29,297	63.09	296,518	103,482
Total as of December 31, 2019	<u>29,297</u>		296,518	103,482

On February 14, 2020, the Board of Directors approved a new share repurchase authorization of up to 400,000 shares of the Company's Common Stock through February 2023.



**ITEM 6. SELECTED FINANCIAL DATA**

**BADGER METER, INC.**

	Years ended December 31,									
(In thousands except per share data)	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
<b>Operating results</b>										
Net sales	\$ 424,625	433,732	402,440	393,761	377,698	364,768	334,122	319,660	262,915	276,634
Research and development	\$ 11,930	11,095	10,596	10,597	10,645	9,496	10,504	9,567	8,086	7,164
Earnings before income taxes	\$ 61,607	35,852	54,833	49,844	41,152	44,912	38,009	43,471	27,349	44,438
Net earnings	\$ 47,177	27,790	34,571	32,295	25,938	29,678	24,617	28,032	19,161	28,662
Net earnings to sales	11.1%	6.4%	8.6%	8.2%	6.9%	8.1%	7.4%	8.8%	7.3%	10.4%
<b>Per Common share (1)</b>										
Basic earnings per share	\$ 1.63	0.96	1.20	1.12	0.90	1.04	0.86	0.98	0.64	0.96
Diluted earnings per share	\$ 1.61	0.95	1.19	1.11	0.90	1.03	0.85	0.98	0.64	0.96
Cash dividends declared:										
Common Stock	\$ 0.64	0.56	0.49	0.43	0.39	0.37	0.35	0.33	0.30	0.26
Price range - high	\$ 66.64	57.12	52.10	39.36	32.94	30.46	28.18	24.30	22.74	22.75
Price range - low	\$ 47.59	41.00	34.40	26.40	25.82	23.24	20.94	14.65	13.43	16.29
Closing price	\$ 64.93	49.21	47.80	36.95	29.30	29.68	27.25	23.71	14.72	22.11
Book value *	\$ 11.37	10.42	9.53	8.80	8.00	7.41	6.82	5.98	5.93	5.60
<b>Shares outstanding at year-end (1)</b>										
Common Stock	29,119	29,119	29,119	29,119	29,050	28,922	28,824	28,628	30,246	30,096
<b>Financial position</b>										
Primary working capital *	\$ 111,790	124,635	114,781	119,169	116,084	109,682	92,518	91,030	79,239	77,586
Primary working capital as a percent of net sales *	26.4%	28.7%	28.5%	30.3%	30.7%	30.1%	27.7%	28.5%	30.1%	28.0%
Net cash provided by operations	\$ 80,714	60,350	49,751	56,185	35,831	35,735	34,818	34,802	31,317	18,396
Capital expenditures	\$ 7,496	8,643	15,069	10,596	19,766	12,332	14,311	8,202	5,336	9,238
Total assets	\$ 421,893	392,691	391,727	349,699	355,480	341,158	316,058	290,453	218,910	215,864
Short-term and current portion of long-term debt										
	\$ 4,480	18,060	44,550	37,950	71,360	75,927	70,045	66,730	1,790	12,878
Long-term debt	\$ n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Shareholders' equity	\$ 331,068	303,503	277,452	256,209	232,275	214,331	196,563	171,247	179,281	168,383
Debt as a percent of total debt and equity *	1.3%	5.6%	13.8%	12.9%	23.5%	26.2%	26.3%	28.0%	1.0%	7.1%
Return on shareholders' equity *	14.2%	9.2%	12.5%	12.6%	11.2%	13.8%	12.5%	16.4%	10.7%	17.0%
Price/earnings ratio *	40.3	51.8	40.2	33.3	32.6	28.8	32.1	24.3	23.2	23.2

(1) All per share amounts and number of shares outstanding have been restated to reflect the 2016 2-for-1 stock split for the periods presented.

\* Description of calculations as of the applicable year end:

Book value per share equals total shareholders' equity at year-end divided by the number of common shares outstanding.

Primary working capital equals receivables plus inventories minus payables.

Primary working capital as a percent of net sales equals receivables plus inventories minus payables, divided by net sales.

Debt as a percent of total debt and equity equals total debt (the sum of short-term debt, current portion of long-term debt and long-term debt) divided by the sum of total debt and total shareholders' equity at year-end.

Return on shareholders' equity equals net earnings divided by total shareholders' equity at year-end.

Price/earnings ratio equals the year-end closing stock price for common stock divided by diluted earnings per share.

## **ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

### **BUSINESS DESCRIPTION AND OVERVIEW**

Badger Meter is an innovator in flow measurement, control and related communication solutions, serving water utilities, municipalities, and commercial and industrial customers worldwide. The Company's products measure water, oil, chemicals and other fluids, and are known for accuracy, long-lasting durability and for providing valuable and timely measurement data through various methods. The Company's product lines fall into two categories: sales of water meters, radios and related technologies to municipal water utilities (municipal water) and sales of meters, valves and other products for industrial applications in water, wastewater, and other industries (flow instrumentation). The Company estimates that nearly 90% of its products are used in water related applications.

Municipal water, the largest sales category, is comprised of either mechanical or static (ultrasonic) water meters along with the related radio and software technologies and services used by municipal water utilities as the basis for generating their water and wastewater revenues. The largest geographic market for the Company's municipal water products is North America, primarily the United States, because most of the Company's meters are designed and manufactured to conform to standards promulgated by the American Water Works Association. The majority of water meters sold by the Company continue to be mechanical in nature; however, ultrasonic meters are an increasing portion of the water meters sold by the Company and in the industry due to a variety of factors, including their ability to maintain a high level of measurement accuracy over their useful life. Providing ultrasonic water meter technology, combined with advanced radio technology, provides the Company with the opportunity to sell into other geographical markets, for example the Middle East and Europe.

The flow instrumentation product line includes meters and valves sold worldwide to measure and control fluids going through a pipe or pipeline including water, air, steam, oil, and other liquids and gases. These products are used in a variety of industries and applications, with the Company's primary market focus being water/wastewater; heating, ventilating and air conditioning (HVAC); oil and gas, and chemical and petrochemical. Flow instrumentation products are generally sold to original equipment manufacturers as the primary flow measurement device within a product or system, as well as through manufacturers' representatives.

Municipal water meters (both residential and commercial) are generally classified as either manually read meters or remotely read meters via radio technology. A manually read meter consists of a water meter and a register that provides a visual totalized meter reading. Meters equipped with radio technology (endpoints) receive flow measurement data from battery-powered encoder registers attached to the water meter, which is encrypted and transmitted via radio frequency to a receiver that collects and formats the data appropriately for water utility usage and billing systems. These remotely read systems are classified as either automatic meter reading (AMR) systems, where a vehicle equipped for meter reading purposes, including a radio receiver, computer and reading software, collects the data from utilities' meters; or advanced metering infrastructure (AMI) systems, where data is gathered utilizing a network (either fixed or cellular) of data collectors or gateway receivers that are able to receive radio data transmission from the utilities' meters. AMI systems eliminate the need for utility personnel to drive through service territories to collect data from the meters. These systems provide the utilities with more frequent and diverse data from their meters at specified intervals.

The ORION branded family of radio endpoints provides water utilities with a range of industry-leading options for meter reading. These include ORION Migratable (ME) for AMR meter reading, ORION (SE) for traditional fixed network applications, and ORION Cellular for an infrastructure-free meter reading solution. ORION Migratable makes the migration to fixed network easier for utilities that prefer to start with mobile reading and later adopt fixed network communications, allowing utilities to choose a solution for their current needs and be positioned for their future operational changes. ORION Cellular eliminates the need for utility-owned fixed network infrastructure, allows for gradual or full deployment, and decreases ongoing maintenance.

Critical to the water metering ecosystem is information and analytics. The Company's BEACON Advanced Metering Analytics (AMA) software suite improves the utilities' visibility of their water and water usage. BEACON AMA is a secure, cloud-hosted software suite that includes a customizable dashboard, and has the ability to establish alerts for specific conditions. It also allows for consumer engagement tools that permit end water users (such as homeowners) to view and manage their water usage activity. Benefits to the utility include improved customer service, increased visibility through faster leak detection, the ability to promote and quantify the effects of its water conservation efforts, and easier compliance reporting.

Water meter replacement and the adoption and deployment of new technology comprise the majority of water meter product sales, including radio products. To a much lesser extent, housing starts also contribute to the new product sales base. Over the last decade, there has been a growing trend in the conversion from manually read water meters to meters with radio technology. This

conversion rate is accelerating, with the Company estimating that approximately just over 60% of water meters installed in the United States have been converted to a radio solution technology.

The Company's net sales and corresponding net earnings depend on unit volume and product mix, with the Company generally earning higher average selling prices and margins on meters equipped with radio technology, and higher margins on ultrasonic compared to mechanical meters. The Company's proprietary radio products (i.e. ORION), which comprise the majority of its radio sales, generally result in higher margins than remarketed, non-proprietary technology products. The Company also sells registers and endpoints separately to customers who wish to upgrade their existing meters in the field.

Flow instrumentation products are used in flow measurement and control applications across a broad industrial spectrum, occasionally leveraging the same technologies used in the municipal water category. Specialized communication protocols that control the entire flow measurement process and mandatory certifications drive these markets. The Company provides both standard and customized flow instrumentation solutions.

The industries served by the Company's flow instrumentation products face accelerating demands to contain costs, reduce product variability, and meet ever-changing safety, regulatory and sustainability requirements. To address these challenges, customers must reap more value from every component in their systems. This system-wide scrutiny has heightened the focus on flow instrumentation in industrial process, manufacturing, commercial fluid, building automation and precision engineering applications where flow measurement and control are critical.

A leader in both mechanical and static (ultrasonic) flow metering technologies for industrial markets, the Company offers one of the broadest flow measurement, control and communication portfolios in the market. This portfolio carries respected brand names including Recordall®, Hedland®, Dynasonics®, Blancett®, and Research Control®, and includes eight of the ten major flow meter technologies. Customers rely on the Company for application-specific solutions that deliver accurate, timely and dependable flow data and control essential for product quality, cost control, safer operations, regulatory compliance and more sustainable operations.

The Company's products are sold throughout the world through employees, resellers and representatives. Depending on the customer mix, there can be a moderate seasonal impact on sales, primarily relating to higher sales of certain municipal water products during the spring and summer months. No single customer accounts for more than 10% of the Company's sales.

## **Business Trends**

Across the globe, increasing regulations and a focus on sustainability are driving companies and utilities to better manage critical resources like water, monitor their use of hazardous materials and reduce exhaust gases. Some customers measure fluids to identify leaks and/or misappropriation for cost control or add measurement points to help automate manufacturing. Other customers employ measurement to comply with government mandates and laws. The Company provides flow measurement technology to measure water, oil, chemicals and other fluids, gases and steams. This technology is critical to provide baseline usage data and to quantify reductions as customers attempt to reduce consumption. For example, once water usage metrics are better understood, a strategy for water-use reduction can be developed with specific water-reduction initiatives targeted to those areas where it is most viable. With the Company's technology, customers have found costly leaks, pinpointed equipment in need of repair, and identified areas for process improvements.

Increasingly, customers in the municipal water market are interested in more frequent and diverse data collection and the use of water metering analytics to evaluate water use. Specifically, AMI technology enables water utilities to capture readings from each meter at more frequent and variable intervals. There are more than 50,000 water utilities in the United States and the Company estimates that approximately 60% of them have converted to a radio solution. The Company believes it is well positioned to meet this continuing conversion trend with its comprehensive radio and software solutions.

In addition, certain water utilities are converting from mechanical to static meters. Ultrasonic water metering maintains a high level of measurement accuracy over the life of the meter, reducing a utility's non-revenue water. The Company has a decade of proven reliability in the market with its ultrasonic meters and is on a path to launching its next generation of ultrasonic metering with its D-Flow technology, which the Company believes increases its competitive differentiation. While the introduction of ultrasonic technology into North America may increase competition, it also opens up further geographic penetration opportunities for the Company as previously described.

Finally, the concept of "Smart Cities" is beginning to take hold as one avenue to affect efficient city operations, conserve resources and improve service and delivery. Smart water solutions ("Smart Water") are those that provide actionable information through data analytics from an interconnected and interoperable network of sensors and devices that help people and organizations efficiently use and conserve one of the world's most precious resources. Badger Meter is well positioned to benefit from the

advancement of Smart Water applications within the Smart Cities framework. Cities have a keen interest in Smart Water as it provides both a revenue base and conservation outcome. Badger Meter is one of approximately a dozen firms, and the only water metering company, that participates in the AT&T Smart City Alliance. By leveraging this alliance, the Company has been able to gain access and sell its broad smart water solutions to higher level decision makers within a city such as the mayor's office. In addition, it allows Badger Meter to keep abreast of emerging cellular technology changes which the Company believes is the premier infrastructure-free AMI solution.

## **Acquisitions**

On April 2, 2018, the Company acquired 100% of the outstanding stock of Innovative Metering Solutions, Inc. ("IMS") of Odessa, Florida, which was one of the Company's distributors serving Florida.

The total purchase consideration was approximately \$12.0 million, which included \$7.7 million in cash, a \$0.3 million working capital adjustment, a balance sheet holdback of \$0.7 million and a \$3.3 million settlement of pre-existing Company receivables. The working capital adjustment was settled in the second quarter of 2018 and the balance sheet holdback was paid in the second quarter of 2019. As of March 31, 2019, the Company had completed its analysis for estimating the fair value of the assets acquired with no additional adjustments. This acquisition is further described in Note 3 "Acquisitions" in the Notes to Consolidated Financial Statements.

On November 1, 2017, the Company acquired certain assets of Utility Metering Services, Inc.'s business Carolina Meter & Supply ("Carolina Meter") of Wilmington, North Carolina, which was one of the Company's distributors serving North Carolina, South Carolina and Virginia.

The total purchase consideration for the Carolina Meter assets was \$6.3 million, which included \$2.1 million in cash and settlement of \$4.2 million of pre-existing Company receivables. As of December 31, 2018, the Company completed its analysis for estimating the fair value of the assets acquired with no additional adjustments. This acquisition is further described in Note 3 "Acquisitions" in the Notes to Consolidated Financial Statements.

On May 1, 2017, the Company acquired 100% of the outstanding common stock of D-Flow Technology AB ("D-Flow") of Luleå, Sweden. The D-Flow acquisition facilitates the continued advancement of the existing E-Series® ultrasonic product line while also adding a technology center for the Company.

The purchase price was approximately \$23.2 million in cash, plus a small working capital adjustment. The purchase price included \$2.0 million in payments that were made in 2018, \$2.0 million in payments that were made in 2019 and \$1.0 million in payments that are anticipated to be made in 2020 and are recorded in payables on the Consolidated Balance Sheets at December 31, 2019. As of March 31, 2018, the Company completed its analysis for estimating the fair value of the assets acquired and liabilities assumed with no additional adjustments. This acquisition is further described in Note 3 "Acquisitions" in the Notes to Consolidated Financial Statements.

## **Revenue and Product Mix**

As the industry continues to evolve, the Company has been at the forefront of innovation across metering, radio and software technologies in order to meet its customers' increasing expectations for accurate and actionable data. As technologies such as ORION Cellular and BEACON AMA managed solutions have become more readily adopted, the Company's revenue from Software as a Service (SaaS) has increased significantly, albeit from a small base, and is margin accretive.

The Company also seeks opportunities for additional revenue enhancement. For instance, the Company has made inroads into the Middle East market with its ultrasonic meter technology and is pursuing other geographic expansion opportunities. Additionally, the Company is periodically asked to oversee and perform field installation of its products for certain customers. In these cases, the Company assumes the role of general contractor and either performs the installation or hires installation subcontractors and supervises their work.

## **RESULTS OF OPERATIONS**

### **Net Sales**

Net sales in 2019 decreased \$9.1 million, or -2%, to \$424.6 million from \$433.7 million in 2018. Sales into the municipal water market were \$330.7 million, a decrease of 1% compared to the prior year's \$334.7 million, while sales into the flow instrumentation end markets were \$93.9 million, a 5% decrease from 2018 sales of \$99.0 million. Municipal water sales benefitted from higher sales of smart water solutions in North America where sales increased 1% year-over-year, however, sales into

international markets, primarily the Middle East, declined significantly as a \$5.5 million sale from 2018 did not repeat. While the Company continued to benefit from favorable market demand, it experienced a mid-year pause in certain order activity as a result of new product launches, most notably commercial ultrasonic meters and next generation cellular radio offerings. Sales of products into the global flow instrumentation end markets declined due to sluggish global industrial activity across multiple end markets served.

Net sales in 2018 increased \$31.3 million, or 8%, to \$433.7 million from \$402.4 million in 2017. Sales into the municipal water market were \$334.7 million, an increase of 9% over the prior year's \$306.9 million, while sales into the flow instrumentation end markets were \$99.0 million, a 4% increase from 2017 sales of \$95.9 million. Municipal water sales benefitted from higher volumes in both the residential and commercial markets in the U.S. as well as further penetration into international markets, primarily in the Middle East. In addition to the higher volumes, the Company benefitted from favorable sales mix reflecting a higher percentage of meters with radios, ultrasonic metering technology and SaaS revenue associated with the data collection and software analytics deployed by certain water utility customers. Sales of products into the global flow instrumentation end markets increased 4% benefitting from the overall solid global industrial landscape. Sales were particularly strong into the water/wastewater and oil and gas markets, which have been a focus area for the Company. This growth was partially offset by lower sales into de-emphasized end markets such as automotive.

### **Operating Earnings**

Operating earnings in 2019 were \$62.1 million or 14.6% of sales, compared to \$56.9 million, or 13.1% of sales, in 2018. Gross profit increased \$1.2 million, despite lower sales volumes, and increased as a percent of sales from 37.4% in 2018 to 38.5% in 2019. This was largely the result of improved utility sales mix attributed to selling more meters with radios, SaaS revenues, and favorable regional sales mix. In addition, gross margins benefitted from positive price/cost dynamics due primarily to lower commodity costs in 2019, particularly brass. Selling, engineering and administration ("SEA") expenses declined \$4.1 million year-over-year, which included \$2.6 million of executive retirement charges incurred in the prior year which did not repeat. The remaining decrease in SEA was associated with tighter discretionary spending controls that more than offset normal inflation for employee salaries and benefits as well as higher engineering expenses to support product innovation and development.

Operating earnings in 2018 were \$56.9 million, or 13.1% of sales, compared to \$56.6 million, or 14.1% of sales, in 2017. Gross profit increased \$6.6 million on higher sales volumes, but declined as a percent of sales from 38.7% in 2017 to 37.4% in 2018. This was largely the result of the higher sales and improved utility sales mix, partially offset by higher commodity cost increases in the first half of the year that were not fully offset by pricing until the latter half. Selling, engineering and administration ("SEA") expenses increased \$6.3 million year-over-year, which included the \$2.6 million of executive retirement charges incurred for the vesting of certain equity and cash awards for the retiring chief executive officer, chief financial officer and chief accounting officer. The remaining increase in SEA was associated with normal inflation for employee salaries and benefits, duplicative executive expenses associated with the CEO and CFO transitions, as well as higher engineering expenses to support product innovation and development.

### **Other Pension and Postretirement Costs**

Other pension and postretirement costs were \$0.3 million in 2019 compared to \$19.9 million in 2018 and \$1.0 million in 2017. The significant costs in 2018 were associated with the Company's termination of its defined benefit pension plan. Following the pension termination charges taken in 2018, the pension termination was complete.

### **Interest Expense, Net**

Net interest expense was \$0.3 million in 2019 compared to \$1.2 million in 2018 and \$0.8 million in 2017. The decrease from 2018 to 2019 was due to the repayment of US commercial paper borrowings using cash from operations. The increase in 2018 from 2017 was due to higher interest rates.

### **Income Taxes**

Income taxes as a percentage of earnings before income taxes were 23.4%, 22.5% and 37.0% for 2019, 2018 and 2017, respectively. The decrease beginning in 2018 was due primarily to the lower U.S. Federal tax rate, which declined from 35% in 2017 to 21% in 2018 and 2019.

### **Earnings and Diluted Earnings per Share**

For 2019, the increase in operating earnings and lower interest expense, along with the non-recurring pension termination charges in 2018, resulted in net earnings of \$47.2 million in 2019 compared to \$27.8 million in 2018. On a diluted basis, earnings per share were \$1.61 in 2019 compared to \$0.95 in 2018.



For 2018, the increase in operating earnings and benefit of the lower effective tax rate was more than offset by the pension settlement charges resulting in net earnings of \$27.8 million in 2018 compared to \$34.6 million in 2017. On a diluted basis, earnings per share were \$0.95 in 2018 compared to \$1.19 in 2017.

## LIQUIDITY AND CAPITAL RESOURCES

The main sources of liquidity for the Company are cash from operations and borrowing capacity. In addition, depending on market conditions, the Company may access the capital markets to strengthen its capital position and to provide additional liquidity for general corporate purposes.

### Primary Working Capital

We use primary working capital (PWC) as a percentage of sales as a key metric for working capital efficiency. We define this metric as the sum of receivables and inventories less payables, divided by annual net sales. The following table shows the components of our PWC (in millions):

	12/31/2019		12/31/2018	
	\$	PWC%	\$	PWC%
Receivables	\$ 61,365	14.5%	\$ 66,300	15.3%
Inventories	81,948	19.3%	80,804	18.6%
Payables	(31,523)	-7.4%	(22,469)	-5.2%
Primary Working Capital	<u>\$ 111,790</u>	26.4%	<u>\$ 124,635</u>	28.7%

Overall PWC decreased \$12.8 million as the Company undertook several working capital improvement actions during the year. Receivables at December 31, 2019 were \$61.4 million compared to \$66.3 million at the end of 2018. The decrease was due to robust collection efforts and active monitoring processes instituted during the year. The Company believes its receivables balance is fully collectible. Inventories at December 31, 2019 were \$81.9 million, a modest increase from \$80.8 million at December 31, 2018, primarily to support the backlog of orders and new product launches. Payables at December 31, 2019 were \$31.5 million, up from \$22.5 million at the end of 2018 due to the negotiation of advantageous payment terms with suppliers.

### Cash Provided by Operations

Cash provided by operations in 2019 was \$80.7 million compared to \$60.4 million in 2018. The increase from 2018 was driven primarily by improved working capital management as well as higher operating earnings (excluding the non-cash pension termination settlement charges). Operating cash flow was more than adequate to fund capital expenditures of \$7.5 million along with dividends of \$18.6 million and \$5.2 million in share repurchases to offset equity compensation dilution. The remaining cash flow was used to reduce short term borrowings and add to cash balances.

Cash provided by operations in 2018 was \$60.4 million compared to \$49.8 million in 2017. The increase from 2017 was driven primarily by higher operating earnings (excluding the non-cash pension termination settlement charges), partially offset by higher primary working capital. The cash flow was more than adequate to fund capital expenditures of \$8.6 million along with dividends of \$16.3 million and \$10.0 million of acquisitions. The remaining cash flow was used to reduce short term borrowings

Capital expenditures were \$7.5 million, \$8.6 million and \$15.1 million in fiscal 2019, 2018 and 2017, respectively. Capital expenditures for fiscal 2020 are expected to be in the \$10-12 million range, but could vary depending on timing of R&D projects, growth opportunities and the amount of assets purchased.

Short-term debt decreased to \$4.5 million at December 31, 2019 from \$18.1 million at December 31, 2018 due to the strong cash flow from operations, partially offset by the payment of dividends. At the end of 2019, the Company is in a net cash (short-term debt less cash) position of \$44.4 million.

The Company's financial condition remains strong. In June 2018, the Company amended its May 2012 credit agreement with its primary lender and extended its term until September 2021. The credit agreement includes a \$125.0 million line of credit that supports commercial paper (up to \$70.0 million) and includes \$5.0 million of a Euro line of credit. While the facility is unsecured, there are a number of financial covenants with which the Company must comply, and the Company was in compliance as of December 31, 2019. The Company believes that its operating cash flows, available borrowing capacity, and its ability to raise capital provide adequate resources to fund ongoing operating requirements, future capital expenditures and the development of new products. The Company had \$128.3 million of unused credit lines available at December 31, 2019.

## OFF-BALANCE SHEET ARRANGEMENTS

The Company had no off-balance sheet arrangements at December 31, 2019.

## CONTRACTUAL OBLIGATIONS

The following table includes the Company's significant contractual obligations as of December 31, 2019. There are no material undisclosed guarantees.

	Total	Payments due by period			
		Less than 1 year	1-3 years (In thousands)	3-5 years	More than 5 years
Short-term debt	\$ 4,480	\$ 4,480	\$ —	\$ —	\$ —
Operating leases (undiscounted)	9,810	2,840	3,577	2,450	943
Total contractual obligations	<u>\$ 14,290</u>	<u>\$ 7,320</u>	<u>\$ 3,577</u>	<u>\$ 2,450</u>	<u>\$ 943</u>

Other than items included in the preceding table, as of December 31, 2019, the Company had no additional material purchase obligations other than those created in the ordinary course of business related to inventory and property, plant and equipment, which generally have terms of less than 90 days. The Company also has long-term obligations related to its postretirement plans which are discussed in detail in Note 7 “Employee Benefit Plans” in the Notes to Consolidated Financial Statements in Part II, Item 8 of this 2019 Annual Report on Form 10-K. Postretirement medical claims are paid by the Company as they are submitted, and they are anticipated to be \$0.4 million in 2020 based on actuarial estimates; however, these amounts can vary significantly from year to year because the Company is self-insured.

## CRITICAL ACCOUNTING POLICIES AND USE OF ESTIMATES

The Company's accounting policies are more fully described in Note 1 “Summary of Significant Accounting Policies” in the Notes to Consolidated Financial Statements in Part II, Item 8 of this 2019 Annual Report on Form 10-K. As discussed in Note 1, the preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. The Company's more significant estimates relate primarily to the following judgmental reserves: allowance for doubtful accounts, reserve for obsolete inventories, and warranty and after-sale costs reserve. Each of these reserves is evaluated quarterly and is reviewed with the Company's internal Disclosure Committee and the Audit and Compliance Committee of the Board of Directors. The basis for the reserve amounts is determined by analyzing the anticipated exposure for each account, and then selecting the most likely amount based upon historical experience and various other considerations that are believed to be reasonable under the circumstances. These methods have been used for all years in the presented financials and have been used consistently throughout each year. Actual results may differ from these estimates if actual experiences vary from the Company's assumptions.

The criteria used for calculating each of the reserve amounts vary by type of reserve. For the allowance for doubtful accounts reserve, significant past due balances are individually reviewed for collectability, while the balance of accounts is reviewed in conjunction with applying historical write-off ratios. The calculation for the obsolete and excess inventories reserve is determined by analyzing the relationship between the age and quantity of items on hand versus estimated usage to determine if excess quantities exist. The calculation for warranty and after-sale costs reserve uses criteria that include known potential problems on past sales as well as historical claim experience and current warranty trends. The changes in the balances of these reserves at December 31, 2019 compared to the prior year were due to normal business conditions and are not deemed to be significant. While the Company continually strives to improve its estimates, no significant changes in the underlying processes are expected for 2020.

The Company also uses estimates in three other significant areas: (i) stock-based compensation, (ii) income taxes, and (iii) evaluating goodwill, at least annually, for impairment.

The total cost of the Company's stock-based awards is equal to the grant date fair value per award multiplied by the number of awards granted, adjusted for forfeitures. Forfeitures are initially estimated based on historical Company information and subsequently updated over the life of the awards to ultimately reflect actual forfeitures, which could have an impact on the amount of stock compensation cost recognized from period to period. The grant date fair value of stock options relies on assumptions including the risk-free interest rate, dividend yield, market volatility and expected option life.

In calculating the provision for income taxes on an interim basis, the Company uses an estimate of the annual effective tax rate based upon the facts and circumstances known at each interim period. On a quarterly basis, the actual effective tax rate is adjusted as appropriate based upon the actual results compared to those forecasted at the beginning of the fiscal year. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The reserve for uncertain income tax positions is a matter of judgment based on an evaluation of the individual facts and circumstances of each tax position in light of all available evidence, including historic data and current trends. A tax benefit is recognized when it is “more likely than not” to be sustained based solely on the technical merits of each tax position. The Company evaluates and updates all of these assumptions quarterly.

Goodwill impairment, if any, is determined by comparing the fair value of the reporting unit with its carrying value and is reviewed at least annually. Actual results may differ from these estimates.

## **OTHER MATTERS**

The Company is subject to contingencies related to environmental laws and regulations. A future change in circumstances with respect to these specific matters or with respect to sites formerly or currently owned or operated by the Company, off-site disposal locations used by the Company, and property owned by third parties that is near such sites, could result in future costs to the Company and such amounts could be material. Expenditures for compliance with environmental control provisions and regulations during 2019, 2018 and 2017 were not material.

See the “Special Note Regarding Forward Looking Statements” at the front of this Annual Report on Form 10-K and Part I, Item 1A “Risk Factors” in this Annual Report on Form 10-K for the year ended December 31, 2019 for a discussion of risks and uncertainties that could impact the Company's financial performance and results of operations.

## **MARKET RISKS**

In the ordinary course of business, the Company is exposed to various market risks. The Company operates in an environment where competition varies from moderate to strong. The Company believes it currently provides the leading technology in water meters and radio systems for water utilities. A number of the Company's competitors in certain markets have greater financial resources. Competitors also include alliance partners that sell products that do or may compete with our products. As the global water metering market begins to shift to adopt static metering technology, the number of competitors may increase. We believe new static metering market entrants lack brand recognition and product breadth and do not have the appropriate utility sales channels to meaningfully compete in the North American market. In addition, the market's level of acceptance of the Company's newer product offerings, including the BEACON AMA system, may have a significant effect on the Company's results of operations. As a result of significant research and development activities, the Company enjoys favorable patent positions for several of its products.

The Company's ability to generate operating income and to increase profitability depends somewhat on the general conditions of the United States and foreign economies, including to some extent such things as the length and severity of global economic downturns; the timing and size of governmental programs such as stimulus fund programs, as well as the impact of government budget cuts or partial shutdowns of governmental operations; international or civil conflicts that affect international trade; the ability of municipal water utility customers to authorize and finance purchases of the Company's products; the Company's ability to obtain financing; housing starts in the United States; and overall industrial activity. In addition, changes in governmental laws and regulations, particularly laws dealing with the content or handling of materials, customs or trade practices, may impact the results of operations. These factors are largely beyond the Company's control and depend on the economic condition and regulatory environment of the geographic region of the Company's operations.

The Company relies on single suppliers for certain castings and components in several of its product lines. Although alternate sources of supply exist for these items, the loss of certain suppliers could temporarily disrupt operations in the short term. The Company attempts to mitigate these risks by working closely with key suppliers, purchasing minimal amounts from alternative suppliers and by purchasing business interruption insurance where appropriate.

Raw materials used in the manufacture of the Company's products include purchased castings made of metal or alloys (such as brass, which uses copper as its main component, aluminum, stainless steel and cast iron), plastic resins, glass, microprocessors and other electronic subassemblies, and components. The Company does not hold significant amounts of precious metals. The price and availability of raw materials is influenced by economic and industry conditions, including supply and demand factors that are difficult to anticipate and cannot be controlled by the Company. Commodity risk is managed by keeping abreast of economic conditions and locking in purchase prices for quantities that correspond to the Company's forecasted usage.

The Company's foreign currency risk relates to the sales of products to foreign customers and purchases of material from foreign vendors. The Company uses lines of credit with U.S. and European banks to offset currency exposure related to European receivables and other monetary assets. As of December 31, 2019 and 2018, the Company's foreign currency net monetary assets were partially offset by comparable debt resulting in no material exposure to the results of operations. The Company believes the effect of a change in foreign currency rates will not have a material adverse effect on the Company's financial position or results of operations, either from a cash flow perspective or on the financial statements as a whole.

The Company typically does not hold or issue derivative instruments and has a policy specifically prohibiting the use of such instruments for trading purposes.

The Company's short-term debt on December 31, 2019 was floating rate debt with market values approximating carrying value. Future annual interest costs for short-term debt fluctuate based upon short-term interest rates. For the short-term debt balance as of December 31, 2019, the effect of a 1% change in interest rates is less than \$0.1 million.

#### **ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

Information required by this Item is set forth in Part II, Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" under the heading "Market Risks" in this 2019 Annual Report on Form 10-K.

#### **ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTAL DATA**

##### **BADGER METER, INC.**

##### **Management's Annual Report on Internal Control over Financial Reporting**

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Securities Exchange Act of 1934. The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles.

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

The Company's management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2019 using the criteria set forth in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework). Based on this assessment, the Company's management believes that, as of December 31, 2019, the Company's internal control over financial reporting was effective based on those criteria.

Ernst & Young LLP, an independent registered public accounting firm, has audited the Consolidated Financial Statements included in this Annual Report on Form 10-K and, as part of its audit, has issued an attestation report, included herein, on the effectiveness of the Company's internal control over financial reporting.

## **BADGER METER, INC.**

### **Report of Independent Registered Public Accounting Firm**

To the Shareholders and the Board of Directors of Badger Meter, Inc.

#### **Opinion on Internal Control over Financial Reporting**

We have audited Badger Meter, Inc.'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) (the COSO criteria). In our opinion, Badger Meter, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2019 and 2018, and the related consolidated statements of operations, 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 our report dated February 21, 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 Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

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

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

#### **Definition and Limitations of Internal Control Over Financial Reporting**

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

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

/s/ Ernst & Young LLP

Milwaukee, Wisconsin  
February 21, 2020



## BADGER METER, INC.

### Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Badger Meter, Inc.

#### Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Badger Meter, Inc. (the Company) as of December 31, 2019 and 2018, the related consolidated statements of operations, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2019, and the related notes (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 21, 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 financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

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

#### Critical Audit Matter

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

##### *Warranty and After-Sale Costs Reserve*

##### *Description of the Matter*

As described in Note 1 to the consolidated financial statements, the Company estimates and records provisions for warranties and other after-sale costs. Warranty provisions are recorded in the period of sale, using historical claims data revised for recent trending and expectations to estimate future warranty costs. After-sale costs represent costs expected to be incurred related to activities outside the written warranty policy and are estimated by the Company based on the individual facts and circumstances. The Company's accrued liability was \$5.6 million as of December 31, 2019, representing its best estimate of the expected warranty and after-sale costs.

Auditing management's estimates for warranty and after-sale costs involved significant auditor judgment because the reserve for warranty and after-sale costs requires the Company to estimate future claims. The calculation to estimate future claims includes a number of inputs and assumptions, the most significant of which include the number and type of claims, an evaluation of warranty trends, consideration of product developments, and estimates of future costs to replace or repair specifically identified items.

*How We  
Addressed the  
Matter in Our  
Audit*

We evaluated the design and tested the operating effectiveness of internal controls over the Company's warranty and after-sale costs reserve process, including management's assessment of the assumptions and data underlying the projection of future warranty and after-sale costs.

Our substantive audit procedures included, among others, evaluating the significant assumptions discussed above and the accuracy and completeness of the underlying data used in management's warranty and after-sales costs reserve calculation. We evaluated the historical activity used to develop the lag calculation, including reviewing the data for any developing trends in the claims data, considered the impact of product developments on the calculation, and evaluated the cost build up for any specific reserve items, including procedures to support the completeness of the number and type of products impacted and the estimated future cost to repair or replace the products. We assessed the historical accuracy of management's estimates by comparing the warranty and after-sale costs reserve in prior years to the actual claims paid in the subsequent years. We assessed management's methodology and tested the valuation of the warranty and after-sale costs reserve by developing an independent expectation for the reserve based on the historical amounts recorded as a percentage of sales and compared our expectation to the amount recorded by management. We evaluated the completeness of the reserve estimate for known warranty claims or product issues based on our review of after sales costs and through inquiries of operational and executive management and evaluated whether specific product issues were appropriately considered in the determination of the warranty and after-sale costs reserve.

/s/ Ernst & Young LLP

We have served as Badger Meter, Inc.'s auditor since 1927.

Milwaukee, Wisconsin  
February 21, 2020

**BADGER METER, INC.**  
**Consolidated Balance Sheets**

	December 31,	
	2019	2018
(Dollars in thousands)		
<b>Assets</b>		
Current assets:		
Cash	\$ 48,871	\$ 13,086
Receivables	61,365	66,300
Inventories:		
Finished goods	22,946	23,476
Work in process	17,728	17,097
Raw materials	41,274	40,231
Total inventories	81,948	80,804
Prepaid expenses and other current assets	7,910	4,469
Total current assets	200,094	164,659
Property, plant and equipment, at cost:		
Land and improvements	9,056	9,066
Buildings and improvements	68,443	67,932
Machinery and equipment	132,326	136,724
	209,825	213,722
Less accumulated depreciation	(124,064)	(123,401)
Net property, plant and equipment	85,761	90,321
Intangible assets, at cost less accumulated amortization	48,163	55,418
Other assets	15,875	8,872
Deferred income taxes	742	2,163
Goodwill	71,258	71,258
Total assets	<u>\$ 421,893</u>	<u>\$ 392,691</u>
<b>Liabilities and Shareholders' Equity</b>		
Current liabilities:		
Short-term debt	\$ 4,480	\$ 18,060
Payables	31,523	22,469
Accrued compensation and employee benefits	12,754	13,768
Warranty and after-sale costs	5,583	4,206
Other current liabilities	2,907	1,512
Total current liabilities	57,247	60,015
Other long-term liabilities	22,980	13,972
Deferred income taxes	876	3,332
Accrued non-pension postretirement benefits	5,711	5,184
Other accrued employee benefits	4,011	6,685
Commitments and contingencies (Note 6)		
Shareholders' equity:		
Common Stock, \$1 par; authorized 40,000,000 shares; issued 37,200,698 shares in 2019 and 37,198,298 shares in 2018	37,200	37,198
Capital in excess of par value	41,956	38,082
Reinvested earnings	285,879	257,313
Accumulated other comprehensive income	425	580
Less: Employee benefit stock	(154)	(306)
Treasury stock, at cost; 8,082,166 shares in 2019 and 8,079,727 shares in 2018	(34,238)	(29,364)
Total shareholders' equity	331,068	303,503
Total liabilities and shareholders' equity	<u>\$ 421,893</u>	<u>\$ 392,691</u>

See accompanying notes.

**BADGER METER, INC.**

**Consolidated Statements of Operations**

	Years ended December 31,		
	2019	2018	2017
	(In thousands except per share amounts)		
Net sales	\$ 424,625	\$ 433,732	\$ 402,440
Cost of sales	261,097	271,383	246,694
Gross margin	163,528	162,349	155,746
Selling, engineering and administration	101,380	105,480	99,151
Operating earnings	62,148	56,869	56,595
Interest expense, net	253	1,157	789
Other pension and postretirement costs	288	19,860	973
Earnings before income taxes	61,607	35,852	54,833
Provision for income taxes	14,430	8,062	20,262
Net earnings	\$ 47,177	\$ 27,790	\$ 34,571
Earnings per share:			
Basic	\$ 1.63	\$ 0.96	\$ 1.20
Diluted	\$ 1.61	\$ 0.95	\$ 1.19
Shares used in computation of earnings per share:			
Basic	29,028	28,993	28,927
Impact of dilutive securities	192	196	184
Diluted	29,220	29,189	29,111

See accompanying notes.

**BADGER METER, INC.**

**Consolidated Statements of Comprehensive Income**

	Years ended December 31,		
	2019	2018	2017
	(Dollars in thousands)		
Net earnings	\$ 47,177	\$ 27,790	\$ 34,571
Other comprehensive income :			
Foreign currency translation adjustment	(58)	(484)	1,844
Pension and postretirement benefits, net of tax	(97)	13,657	(1,102)
Comprehensive income	<u>\$ 47,022</u>	<u>\$ 40,963</u>	<u>\$ 35,313</u>

See accompanying notes.



**BADGER METER, INC.**

**Consolidated Statements of Cash Flows**

	Years ended December 31,		
	2019	2018	2017
	(Dollars in thousands)		
<b>Operating activities:</b>			
Net earnings	\$ 47,177	\$ 27,790	\$ 34,571
Adjustments to reconcile net earnings to net cash provided by operations:			
Depreciation	11,569	11,354	12,056
Amortization	12,577	12,961	12,342
Deferred income taxes	(1,524)	(5,269)	(4,100)
Pension termination settlement charges	—	19,900	—
Contributions to pension plan	—	(2,860)	(825)
Noncurrent employee benefits	(40)	464	714
Stock-based compensation expense	1,214	4,174	1,725
Changes in:			
Receivables	5,451	(7,999)	(967)
Inventories	(1,220)	4,859	(6,167)
Payables	11,642	(9,868)	5,141
Prepaid expenses and other current assets	(7,732)	(5,062)	(6,237)
Other liabilities	1,600	9,906	1,498
Total adjustments	<u>33,537</u>	<u>32,560</u>	<u>15,180</u>
Net cash provided by operations	<u>80,714</u>	<u>60,350</u>	<u>49,751</u>
<b>Investing activities:</b>			
Property, plant and equipment additions	(7,496)	(8,643)	(15,069)
Acquisitions, net of cash acquired	—	(8,048)	(20,376)
Net cash used for investing activities	<u>(7,496)</u>	<u>(16,691)</u>	<u>(35,445)</u>
<b>Financing activities:</b>			
Net (decrease) increase in short-term debt	(13,500)	(21,012)	6,376
Payment of contingent acquisition consideration	(2,555)	(2,034)	—
Dividends paid	(18,595)	(16,265)	(14,215)
Proceeds from exercise of stock options	1,961	1,443	1,215
Purchase of common stock for treasury stock	(5,207)	(4,795)	(4,402)
Issuance of treasury stock	187	523	600
Net cash used for financing activities	<u>(37,709)</u>	<u>(42,140)</u>	<u>(10,426)</u>
Effect of foreign exchange rates on cash	276	403	(54)
Increase in cash	35,785	1,922	3,826
Cash — beginning of year	13,086	11,164	7,338
Cash — end of year	<u>\$ 48,871</u>	<u>\$ 13,086</u>	<u>\$ 11,164</u>
<b>Supplemental disclosures of cash flow information:</b>			
Cash paid during the year for:			
Income taxes	\$ 13,066	\$ 12,503	\$ 17,912
Interest	\$ 268	\$ 1,175	\$ 867
<b>Non cash transactions:</b>			
Settlement of Innovative Metering Systems payables prior to the acquisition	\$ —	\$ 3,246	\$ —
Settlement of Carolina Meter & Supply payables prior to the acquisition	\$ —	\$ —	\$ 4,176

See accompanying notes.

**BADGER METER, INC.**

**Consolidated Statements of Shareholders' Equity**

	Years ended December 31,						
	Common Stock at \$1 par value*	Capital in excess of par value	Reinvested earnings	Accumulated other comprehensive income (loss)	Employee benefit stock	Treasury stock	Total
	(In thousands except per share amounts)						
Balance, December 31, 2016	\$ 37,122	\$ 28,022	\$ 223,876	\$ (11,635)	\$ (614)	\$ (20,562)	\$ 256,209
Net earnings	—	—	34,571	—	—	—	34,571
Pension and postretirement benefits (net of \$292 tax effect)	—	—	—	(1,102)	—	—	(1,102)
Foreign currency translation	—	—	—	1,844	—	—	1,844
Cash dividends of \$0.49 per share	—	—	(14,223)	—	—	—	(14,223)
Stock options exercised	43	1,798	—	—	—	30	1,871
ESSOP transactions	—	205	—	—	154	—	359
Stock-based compensation	—	1,725	—	—	—	—	1,725
Purchase of common stock for treasury stock	—	—	—	—	—	(4,402)	(4,402)
Issuance of treasury stock (61 shares)	—	432	—	—	—	168	600
Balance, December 31, 2017	37,165	32,182	244,224	(10,893)	(460)	(24,766)	277,452
Net earnings	—	—	27,790	—	—	—	27,790
Pension and postretirement benefits (net of \$5,127 tax effect)	—	—	—	13,657	—	—	13,657
Foreign currency translation	—	—	—	(484)	—	—	(484)
Cash dividends of \$0.56 per share	—	—	(16,273)	—	—	—	(16,273)
ASU 2014-09 adoption impact	—	—	(128)	—	—	—	(128)
ASU 2018-02 adoption impact	—	—	1,700	(1,700)	—	—	—
Stock options exercised	33	1,410	—	—	—	68	1,511
ESSOP transactions	—	(78)	—	—	154	—	76
Stock-based compensation	—	4,174	—	—	—	—	4,174
Purchase of common stock for treasury stock	—	—	—	—	—	(4,795)	(4,795)
Issuance of treasury stock (40 shares)	—	394	—	—	—	129	523
Balance, December 31, 2018	37,198	38,082	257,313	580	(306)	(29,364)	303,503
Net earnings	—	—	47,177	—	—	—	47,177
Pension and postretirement benefits (net of \$16 tax effect)	—	—	—	(97)	—	—	(97)
Foreign currency translation	—	—	—	(58)	—	—	(58)
Cash dividends of \$0.64 per share	—	—	(18,611)	—	—	—	(18,611)
Stock options exercised	2	1,708	—	—	—	251	1,961
ESSOP transactions	—	401	—	—	152	—	553
Stock-based compensation	—	1,214	—	—	—	—	1,214
Purchase of common stock for treasury stock	—	—	—	—	—	(5,207)	(5,207)
Issuance of treasury stock (72 shares)	—	551	—	—	—	82	633
Balance, December 31, 2019	\$ 37,200	\$ 41,956	\$ 285,879	\$ 425	\$ (154)	\$ (34,238)	\$ 331,068

\* Each common share of stock equals \$1 par value; therefore, the number of common shares is the same as the dollar value.

See accompanying notes.



## Inventories

Inventories are valued at the lower of cost or market. Cost is determined using the first-in, first-out method. The Company estimates and records provisions for obsolete and excess inventories. Changes to the Company's obsolete and excess inventories reserve are as follows:

	<u>Balance at beginning of year</u>	<u>Net additions charged to earnings</u>	<u>Disposals</u>	<u>Balance at end of year</u>
	(In thousands)			
2019	\$ 4,131	\$ 2,663	\$ (1,354)	\$ 5,440
2018	\$ 3,881	\$ 2,195	\$ (1,945)	\$ 4,131
2017	\$ 3,639	\$ 1,295	\$ (1,053)	\$ 3,881

## Property, Plant and Equipment

Property, plant and equipment are stated at cost. Depreciation is provided over the estimated useful lives of the respective assets by the straight-line method. The estimated useful lives of assets are: for land improvements, 15 years; for buildings and improvements, 10 to 39 years; and for machinery and equipment, 3 to 20 years.

## Capitalized Software and Hardware

Capitalized internal use software and hardware included in other assets in the Consolidated Balance Sheets were \$5.7 million and \$5.2 million at December 31, 2019 and 2018, respectively. These amounts are amortized on a straight-line basis over the estimated useful lives of the software and/or hardware, ranging from 1 to 5 years. Amortization expense recognized for the years ending December 31, 2019, 2018 and 2017 was \$3.1 million, \$3.2 million and \$2.8 million, respectively.

## Long-Lived Assets

Property, plant and equipment and identifiable intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If the sum of the expected undiscounted cash flows is less than the carrying value of the related asset or group of assets, a loss is recognized for the difference between the fair value and carrying value of the asset or group of assets.

## Intangible Assets

Intangible assets are amortized on a straight-line basis over their estimated useful lives, ranging from 5 to 20 years. The Company does not have any intangible assets deemed to have indefinite lives. Amortization expense recognized for 2019 was \$7.2 million compared to \$7.5 million in 2018 and \$6.8 million in 2017. Amortization expense expected to be recognized is \$7.0 million in 2020 and 2021, \$5.9 million in 2022, \$5.4 million in 2023, \$5.3 million in 2024 and \$17.6 million thereafter. The carrying value and accumulated amortization by major class of intangible assets are as follows:

	<u>December 31, 2019</u>		<u>December 31, 2018</u>	
	<u>Gross carrying amount</u>	<u>Accumulated amortization</u>	<u>Gross carrying amount</u>	<u>Accumulated amortization</u>
	(In thousands)			
Technologies	\$ 47,608	\$ 27,650	\$ 47,647	\$ 24,785
Intellectual property	10,000	1,333	10,000	833
Non-compete agreements	572	431	2,322	2,076
Licenses	650	509	650	492
Customer lists	8,023	3,234	8,023	2,623
Customer relationships	25,220	14,730	25,220	12,282
Trade names	9,203	5,226	9,595	4,948
Total intangibles	<u>\$ 101,276</u>	<u>\$ 53,113</u>	<u>\$ 103,457</u>	<u>\$ 48,039</u>

## Goodwill

Goodwill is tested for impairment annually during the fourth fiscal quarter or more frequently if an event indicates that the goodwill might be impaired. Potential impairment is identified by comparing the fair value of a reporting unit with its carrying value. No adjustments were recorded to goodwill as a result of these tests during 2019, 2018 and 2017. Goodwill was \$71.3 million at December 31, 2019 and 2018.

## Warranty and After-Sale Costs

The Company estimates and records provisions for warranties and other after-sale costs in the period in which the sale is recorded, based on a lag factor and historical warranty claim experience. After-sale costs represent a variety of activities outside of the written warranty policy, such as investigation of unanticipated problems after the customer has installed the product or analysis of water quality issues. Changes in the Company's warranty and after-sale costs reserve are as follows:

	<u>Balance at beginning of year</u>	<u>Net additions charged to earnings</u>	<u>Costs incurred</u>	<u>Balance at end of year</u>
	<u>(In thousands)</u>			
2019	\$ 4,206	\$ 6,616	\$ (5,239)	\$ 5,583
2018	\$ 3,367	\$ 3,274	\$ (2,435)	\$ 4,206
2017	\$ 2,779	\$ 4,081	\$ (3,493)	\$ 3,367

## Research and Development

Research and development costs are charged to expense as incurred and amounted to \$11.9 million in 2019, \$11.1 million in 2018 and \$10.6 million in 2017.

## Healthcare

The Company estimates and records provisions for healthcare claims incurred but not reported, based on medical cost trend analysis, reviews of subsequent payments made and estimates of unbilled amounts.

## Accumulated Other Comprehensive Income (Loss)

Components of accumulated other comprehensive income at December 31, 2019 are as follows:

	<u>Pension and postretirement benefits</u>	<u>Foreign currency (In thousands)</u>	<u>Total</u>
Balance at beginning of period	\$ 360	\$ 220	\$ 580
Other comprehensive loss before reclassifications	—	(58)	(58)
Amounts reclassified from accumulated other comprehensive income (loss), net of tax of \$16	(97)	—	(97)
Net current period other comprehensive loss, net	(97)	(58)	(155)
Accumulated other comprehensive income	<u>\$ 263</u>	<u>\$ 162</u>	<u>\$ 425</u>

Details of reclassifications out of accumulated other comprehensive income during 2019 are as follows:

	<b>Amount reclassified from accumulated other comprehensive income (loss) (In thousands)</b>
Amortization of employee benefit plan items:	
Actuarial gains and losses (1)	\$ (639)
Plan settlement (2)	526
Total before tax	(113)
Income tax impact	16
Amount reclassified out of accumulated other comprehensive income (loss)	<u>\$ (97)</u>

- (1) These accumulated other comprehensive loss components are included in the computation of benefit plan costs in Note 7 “Employee Benefit Plans.”
- (2) This accumulated other comprehensive income component resulted from an international pension plan settlement.

Components of accumulated other comprehensive (loss) income at December 31, 2018 are as follows:

	<b>Pension and postretirement benefits</b>	<b>Foreign currency (In thousands)</b>	<b>Total</b>
Balance at beginning of period	\$ (11,597)	\$ 704	\$ (10,893)
Other comprehensive income (loss) before reclassifications	—	(484)	(484)
Amounts reclassified from accumulated other comprehensive income, net of tax of \$(5.1 million)	13,657	—	13,657
Net current period other comprehensive income (loss), net	13,657	(484)	13,173
Cumulative impact of adopting ASU 2018-02	(1,700)	—	(1,700)
Accumulated other comprehensive income	<u>\$ 360</u>	<u>\$ 220</u>	<u>\$ 580</u>

Details of reclassifications out of accumulated other comprehensive income (loss) during 2018 are as follows:

	<b>Amount reclassified from accumulated other comprehensive income (In thousands)</b>
Amortization of employee benefit plan items:	
Prior service cost (1)	\$ (13)
Settlement expense (1)	19,900
Actuarial loss (1)	(1,103)
Total before tax	18,784
Income tax impact	(5,127)
Amount reclassified out of accumulated other comprehensive income	<u>\$ 13,657</u>

- (1) These accumulated other comprehensive loss components are included in the computation of benefit plan costs in Note 7 “Employee Benefit Plans.”

#### Use of Estimates

The preparation of financial statements in conformity with U.S. Generally Accepted Accounting Principles (“GAAP”) requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

## **Fair Value Measurements of Financial Instruments**

The carrying amounts of cash, receivables and payables in the financial statements approximate their fair values due to the short-term nature of these financial instruments. Short-term debt is comprised of notes payable drawn against the Company's lines of credit. Because of its short-term nature, the carrying amount of the short-term debt also approximates fair value. Included in other assets are insurance policies on various individuals who were associated with the Company. The carrying amounts of these insurance policies approximate their fair value.

## **Subsequent Events**

The Company evaluates subsequent events at the date of the balance sheet as well as conditions that arise after the balance sheet date but before the financial statements are issued. The effects of conditions that existed at the balance sheet date are recognized in the financial statements. Events and conditions arising after the balance sheet date but before the financial statements are issued are evaluated to determine if disclosure is required to keep the financial statements from being misleading. To the extent such events and conditions exist, if any, disclosures are made regarding the nature of events and the estimated financial effects for those events and conditions. For purposes of preparing the accompanying consolidated financial statements and the notes to these financial statements, the Company evaluated subsequent events through the date the accompanying financial statements were issued.

## **New Pronouncements**

In August 2018, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2018-14 "Compensation Retirement Benefits - Defined Benefit Plans - General (Subtopic 715-20)," which modifies the annual disclosure requirements for defined benefit pension and other postretirement benefit plans. This ASU, as modified, added and deleted specific disclosures in an effort to improve the usefulness for financial statement users while also reducing unnecessary costs for companies. The ASU is effective for annual periods beginning after December 15, 2020 with early adoption being permitted in any interim reporting period within the annual reporting period. The Company adopted ASU No. 2018-14 on December 31, 2019 and noted no significant changes.

In August 2018, the FASB issued ASU No. 2018-13 "Fair Value Measurement (Topic 820)," which is designed to improve the effectiveness of disclosures related to fair value measurements. This ASU is effective for annual periods beginning after December 15, 2019 and early adoption is allowed in any interim reporting period within the annual reporting period. The Company adopted ASU No. 2018-13 on December 31, 2019 and noted no significant changes.

In January 2017, the FASB issued ASU No. 2017-04 "Intangibles - Goodwill and Other (Topic 350)." The update requires a single-step quantitative test to measure potential impairment based on the excess of a reporting unit's carrying amount over its fair value. A qualitative assessment can still be completed first for an entity to determine if a quantitative impairment test is necessary. The ASU is effective on a prospective basis for annual periods beginning after December 15, 2019 and interim periods thereafter. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company adopted ASU No. 2017-04 on January 1, 2019. The adoption of this standard did not have any impact on the Company's financial statements.

In June 2016, the FASB issued ASU No. 2016-13 "Financial Instruments - Credit Losses (Topic 326)," which amends the accounting for credit losses on purchased financial assets and available-for-sale debt securities with credit deterioration. This ASU requires the measurement of all expected credit losses for financial assets, including accounts receivables, held at the reporting date based upon current conditions, historical experience and reasonable forecasts. This ASU is effective for annual reporting periods beginning after December 15, 2019, and early adoption is allowed in any interim reporting period within the annual reporting period. The Company completed an analysis of ASU No. 2016-13 and concluded that the adoption of the standard effective January 1, 2020, will not have a significant impact on the Company's financial statements.

In February 2016, the FASB issued ASU No. 2016-02 "Leases (Topic 842)," which requires lessees to record most leases on their balance sheets. Lessees initially recognize a lease liability (measured at the present value of the lease payments over the lease term) and a right-of-use asset (measured at the lease liability amount, adjusted for lease prepayments, lease incentives received and the lessee's initial direct costs). Lessees can make an accounting policy election not to recognize ROU assets and lease liabilities for leases with a lease term of 12 months or less as long as the leases do not include options to purchase the underlying assets that the lessee is reasonably certain to exercise. The standard includes the use of a modified retrospective approach for leases that exist or are entered into after the beginning of the earliest comparative period in the financial statements. Full retrospective application is prohibited. In July 2018, the FASB issued ASU No. 2018-11 "Targeted Improvements (Topic 842)." This ASU provides for an optional method of transition which allows companies to adopt the new



leasing standard with a cumulative effect adjustment to reinvested earnings. The Company adopted the new leasing standard with the optional transition methodology as of January 1, 2019. For a complete discussion of the adoption of ASU No. 2016-02 and ASU No. 2018-11, see Note 12 “Leases” in the Notes to Consolidated Financial Statements.

## **Note 2 Common Stock**

### **Common Stock**

The authorized common stock of the Company as of December 31, 2019 consisted of 40,000,000 shares of common stock, \$1 par value, of which 37,200,698 and 37,198,298 were issued and outstanding as of December 31, 2019 and 2018, respectively. The Company had a Common Share Purchase Rights plan that was in effect since February 15, 2008, but it expired on May 26, 2018 and the Board of Directors elected not to renew it.

### **Stock Options**

Stock options to purchase 54,139 shares of the Company's Stock in 2019, 21,887 shares in 2018 and 55,223 shares in 2017 were not included in the computation of dilutive securities because their inclusion would have been anti-dilutive.

## **Note 3 Acquisitions**

Acquisitions are accounted for under the purchase method, and accordingly, the results of operations were included in the Company's financial statements from the date of acquisition. The acquisitions did not have a material impact on the Company's consolidated financial statements or the notes thereto.

On April 2, 2018, the Company acquired 100% of the outstanding stock of Innovative Metering Solutions, Inc. (“IMS”) of Odessa, Florida, which was one of the Company's distributors serving Florida.

The total purchase consideration was approximately \$12.0 million, which included \$7.7 million in cash, a \$0.3 million working capital adjustment, a balance sheet holdback of \$0.7 million and a \$3.3 million settlement of pre-existing Company receivables. The working capital adjustment was settled in the second quarter of 2018 and the balance sheet holdback was paid in the second quarter of 2019. The Company's allocation of the purchase price at March 31, 2019 included \$3.8 million of receivables, \$0.8 million of inventories, \$0.1 million of machinery and equipment, \$3.6 million of intangibles and \$3.7 million of goodwill. The intangible assets acquired are customer relationships with an estimated average useful life of 10 years. As of March 31, 2019, the Company had completed its analysis for estimating the fair value of the assets acquired with no additional adjustments.

On November 1, 2017, the Company acquired certain assets of Utility Metering Services, Inc.'s business Carolina Meter & Supply (“Carolina Meter”) of Wilmington, North Carolina, which was one of the Company's distributors serving North Carolina, South Carolina and Virginia.

The total purchase consideration for the Carolina Meter assets was \$6.3 million, which included \$2.1 million in cash and settlement of \$4.2 million of pre-existing Company receivables. The Company's allocation of the purchase price included \$0.6 million of receivables, \$0.2 million of inventory, \$3.3 million of intangibles and \$2.2 million of goodwill. The intangible assets acquired are primarily customer relationships with an estimated average useful life of 12 years. The allocation of the purchase price to the assets acquired was based upon the estimated fair values at the date of acquisition. As of December 31, 2018, the Company completed its analysis for estimating the fair value of the assets acquired with no additional adjustments.

On May 1, 2017, the Company acquired 100% of the outstanding common stock of D-Flow Technology AB (“D-Flow”) of Luleå, Sweden. The D-Flow acquisition facilitates the continued advancement of the existing E-Series® ultrasonic product line while also adding a technology center for the Company.

The purchase price was approximately \$23.2 million in cash, plus a small working capital adjustment. The purchase price included \$2.0 million in payments that were made in 2018, \$2.0 million in payments that were made in 2019 and \$1.0 million in payments that are anticipated to be made in 2020 and is recorded in payables on the Consolidated Balance Sheets at December 31, 2019. The Company's allocation of the purchase price included approximately \$0.3 million of receivables, \$0.6 million of inventory, \$0.2 million of property, plant and equipment, \$10.9 million of intangibles and \$16.1 million of goodwill. The majority of the intangible assets acquired related to ultrasonic technology. The Company also assumed \$4.9 million of liabilities as part of the acquisition. As of March 31, 2018, the Company completed its analysis for estimating the fair value of the assets acquired and liabilities assumed with no additional adjustments.

#### Note 4 Short-term Debt and Credit Lines

Short-term debt at December 31, 2019 and 2018 consisted of:

	<u>2019</u>	<u>2018</u>
	(In thousands)	
Notes payable to banks	\$ 4,480	\$ 4,560
Commercial paper	—	13,500
Total short-term debt	<u>\$ 4,480</u>	<u>\$ 18,060</u>

Included in notes payable to banks at December 31, 2019 was \$4.5 million outstanding under a 4.0 million Euro-based revolving loan facility that does not expire, and which bore interest at 1.50%. Included in notes payable to banks at December 31, 2018 was \$4.6 million outstanding under a 4.0 million Euro-based revolving loan facility that does not expire, and which bore interest at 1.14%.

In June 2018, the Company amended its May 2012 credit agreement with its primary lender and extended its term until September 2021. The credit agreement includes a \$125.0 million line of credit that supports commercial paper (up to \$70.0 million) and includes \$5.0 million of a Euro line of credit. Borrowings of commercial paper bore interest at 3.11% in 2018. Under the principal line of credit, the Company had \$125.0 million of unused credit lines available out of the total of \$128.3 million available short-term credit lines at December 31, 2019. While the facility is unsecured, there are a number of financial covenants with which the Company must comply, and the Company was in compliance as of December 31, 2019.

## Note 5 Stock Compensation

As of December 31, 2019, the Company has an Omnibus Incentive Plan under which 1,400,000 shares are reserved for restricted stock and stock options grants for employees, as well as stock grants for directors. The plan was originally approved in 2011 and replaced all prior stock-based plans except for shares and options previously issued under those plans. As of December 31, 2019 and 2018, there were 502,839 shares and 548,653 shares, respectively, of the Company's Common Stock available for grant under the 2011 Omnibus Incentive Plan. The Company recognizes the cost of stock-based awards in net earnings for all of its stock-based compensation plans on a straight-line basis over the service period of the awards. The following sections describe the three types of grants in more detail.

### Stock Options

The Company estimates the fair value of its option awards using the Black-Scholes option-pricing formula, and records compensation expense for stock options ratably over the stock option grant's vesting period. Stock option compensation expense recognized by the Company for the year ended December 31, 2019 related to stock options was \$0.3 million compared to \$2.1 million in 2018 and \$0.7 million in 2017.

The following table summarizes the transactions of the Company's stock option plans for the three-year period ended December 31, 2019:

	Number of shares	Weighted-average exercise price
Options outstanding - December 31, 2016	384,258	\$ 23.75
Options granted	55,223	\$ 36.75
Options exercised	(53,198)	\$ 22.83
Options forfeited	—	n/a
Options outstanding - December 31, 2017	<u>386,283</u>	<u>\$ 25.74</u>
Options granted	43,778	\$ 48.20
Options modified	80,642	\$ 52.44
Options exercised	(53,161)	\$ 21.47
Options canceled	(80,642)	\$ 37.04
Options forfeited	—	n/a
Options outstanding - December 31, 2018	<u>376,900</u>	<u>\$ 28.95</u>
Options granted	34,926	\$ 59.44
Options exercised	(66,969)	\$ 29.29
Options forfeited	(7,525)	\$ 38.81
Options outstanding - December 31, 2019	<u>337,332</u>	<u>\$ 31.82</u>
Price range \$ 18.08 — \$ 19.21 (weighted-average contractual life of 1.7 years)	102,900	\$ 18.36
Price range \$ 25.65 — \$ 33.98 (weighted-average contractual life of 4.7 years)	121,093	\$ 28.76
Price range \$ 33.98 — \$ 59.85 (weighted-average contractual life of 5.3 years)	<u>113,339</u>	<u>\$ 46.11</u>
Options outstanding - December 31, 2019	<u>337,332</u>	
Exercisable options —		
December 31, 2017	239,043	\$ 21.59
December 31, 2018	321,122	\$ 27.16
December 31, 2019	271,252	\$ 27.17

The following assumptions were used for valuing options granted in the years ended December 31:

	2019	2018
Per share fair value of options granted during the period	\$ 18.20	\$ 18.50
Risk-free interest rate	2.52%	2.59%
Dividend yield	0.97%	1.05%
Volatility factor	32.4%	43.2%
Weighted-average expected life in years	5.3	5.3

The expected life is based on historical exercise behavior and the projected exercise of unexercised stock options. The risk-free interest rate is based on the U.S. Treasury yield curve in effect on the date of grant for the respective expected life of the option. The expected dividend yield is based on the expected annual dividends divided by the grant date market value of the Company's Common Stock. The expected volatility is based on the historical volatility of the Company's Common Stock.

The following table summarizes the aggregate intrinsic value related to options exercised, outstanding and exercisable as of and for the years ended December 31:

	2019	2018
	(In thousands)	
Exercised	\$ 1,870	\$ 1,590
Outstanding	\$ 11,170	\$ 8,390
Exercisable	\$ 10,243	\$ 7,722

As of December 31, 2019, the unrecognized compensation cost related to stock options was approximately \$0.9 million, which will be recognized over a weighted average period of 2.5 years.

#### Director Stock Grant

Non-employee directors receive an annual award of \$57,000 worth of restricted shares of the Company's Common Stock under the shareholder-approved 2011 Omnibus Incentive Plan. The Company values stock grants for directors at the closing price of the Company's stock on the day the grant was awarded. The Company records compensation expense for this plan ratably over the annual service period beginning May 1. Director stock compensation expense recognized by the Company for the years ended December 31, 2019 was \$0.3 million compared to \$0.5 million in 2018 and 2017. As of December 31, 2019, the unrecognized compensation cost related to the director stock award that is expected to be recognized over the remaining three months is estimated to be approximately \$0.1 million.

#### Restricted Stock

The Company periodically issues nonvested shares of the Company's Common Stock to certain eligible employees. The Company values restricted stock on the closing price of the Company's stock on the day the grant was awarded. The Company records compensation expense for this plan ratably over the vesting periods. Restricted stock compensation expense recognized by the Company for the year ended December 31, 2019 was \$0.9 million compared to \$2.1 million in 2018 and \$1.1 million in 2017.

The fair value of nonvested shares is determined based on the market price of the shares on the grant date.

	Shares	Fair value per share
Nonvested at December 31, 2016	105,316	\$ 29.41
Granted	50,519	\$ 40.69
Vested	(40,762)	\$ 27.18
Forfeited	(3,600)	\$ 33.37
Nonvested at December 31, 2017	111,473	\$ 35.21
Granted	32,268	\$ 49.10
Modified	30,488	\$ 52.47
Vested	(68,289)	\$ 40.16
Canceled	(30,488)	\$ 38.62
Forfeited	(2,650)	\$ 36.83
Nonvested at December 31, 2018	72,802	\$ 42.58
Granted	16,034	\$ 59.42
Vested	(19,227)	\$ 30.08
Forfeited	(5,129)	\$ 41.31
Nonvested at December 31, 2019	<u>64,480</u>	<u>\$ 48.21</u>

As of December 31, 2019, there was \$1.7 million of unrecognized compensation cost related to nonvested restricted stock that is expected to be recognized over a weighted average period of 1.7 years.

## Note 6 Commitments and Contingencies

### Commitments

The Company makes commitments in the normal course of business. The Company rents equipment, vehicles and facilities under operating leases, some of which contain renewal options. Total rental expense charged to operations under all operating leases was \$3.4 million, \$3.7 million and \$3.6 million in 2019, 2018 and 2017, respectively. The Company's lease commitments and future minimum lease payments are discussed in Note 12 "Leases."

### Contingencies

In the normal course of business, the Company is named in legal proceedings. There are currently no material legal proceedings pending with respect to the Company.

The Company is subject to contingencies related to environmental laws and regulations. A future change in circumstances with respect to specific matters or with respect to sites formerly or currently owned or operated by the Company, off-site disposal locations used by the Company, and property owned by third parties that is near such sites, could result in future costs to the Company and such amounts could be material. Expenditures for compliance with environmental control provisions and regulations during 2019, 2018 and 2017 were not material.

The Company relies on single suppliers for most brass castings and certain resin and electronic subassemblies in several of its product lines. The Company believes these items would be available from other sources, but that the loss of certain suppliers could result in a higher cost of materials, delivery delays, short-term increases in inventory and higher quality control costs in the short term. The Company attempts to mitigate these risks by working closely with key suppliers, purchasing minimal amounts from alternative suppliers and by purchasing business interruption insurance where appropriate.

The Company reevaluates its exposures on a periodic basis and makes adjustments to reserves as appropriate.

## Note 7 Employee Benefit Plans

Historically, the Company maintained a non-contributory defined benefit pension plan that covered substantially all U.S. employees who were employed at December 31, 2011. After that date, no further benefits were accrued in the plan. For the frozen pension plan, benefits were based primarily on years of service and, for certain employees, levels of compensation. In 2018, the Company completed the termination of the non-contributory defined benefit pension plan.

The Company maintains supplemental non-qualified plans for certain officers and other key employees, and an Employee Savings and Stock Option Plan (“ESSOP”) for the majority of the U.S. employees.

The Company also has a postretirement healthcare benefit plan that provides medical benefits for certain U.S. retirees and eligible dependents hired prior to November 1, 2004. Employees are eligible to receive postretirement healthcare benefits upon meeting certain age and service requirements. No employees hired after October 31, 2004 are eligible to receive these benefits. This plan requires employee contributions to offset benefit costs.

Amounts included in accumulated other comprehensive income (loss), net of tax, at December 31, 2019 that have not yet been recognized in net periodic benefit cost are as follows:

	Pension plans	Other postretirement benefits
	(In thousands)	
Net actuarial loss (gain)	\$ 28	\$ (289)

Amounts included in accumulated other comprehensive income (loss), net of tax, at December 31, 2019 expected to be recognized in net periodic benefit cost during the fiscal year ending December 31, 2020 are not expected to be material.

### Qualified Pension Plan

The Company completed the termination of the non-contributory defined benefit pension plan in 2018 and therefore the tables below show no activity or actuarial assumptions for the year ended December 31, 2019.

The following table sets forth the components of net periodic pension cost for the years ended December 31, 2018 and 2017 based on a December 31 measurement date:

	2018	2017
	(In thousands)	
Service cost - benefits earned during the year	\$ —	\$ 2
Interest cost on projected benefit obligations	305	1,228
Expected return on plan assets	(835)	(1,596)
Amortization of net loss	262	525
Settlement expense	19,900	641
Net periodic pension cost	<u>\$ 19,632</u>	<u>\$ 800</u>

Actuarial assumptions used in the determination of the net periodic pension cost are:

	2018	2017
Discount rate	2.00%	3.90%
Expected long-term return on plan assets	3.00%	4.00%
Rate of compensation increase	n/a	n/a

The Company's discount rate assumptions for the qualified pension plan are based on the average yield of a hypothetical high quality bond portfolio with maturities that approximately match the estimated cash flow needs of the plan. The assumptions for expected long-term rates of return on assets are based on historical experience and estimated future investment returns, taking into consideration anticipated asset allocations, investment strategies and the views of various investment professionals. The use of these assumptions can cause volatility if actual results differ from expected results.

The following table provides a reconciliation of benefit obligations, plan assets and funded status based on a December 31 measurement date:

	2018 (In thousands)
<b>Change in benefit obligation:</b>	
Benefit obligation at beginning of plan year	\$ 42,898
Service cost	—
Interest cost	305
Actuarial loss	(198)
Benefits paid	(43,005)
Projected benefit obligation at measurement date	\$ —
<b>Change in plan assets:</b>	
Fair value of plan assets at beginning of plan year	\$ 41,517
Actual return on plan assets	(1,375)
Company contribution	2,860
Benefits paid	(43,002)
Fair value of plan assets at measurement date	\$ —
<b>Funded status of the plan:</b>	
Benefit obligation in excess of plan assets	\$ —
Benefit plan assets in excess of benefit obligation	—
Pension liability	\$ —

The fair value of the qualified pension plan assets was \$0 at December 31, 2019 and 2018.

### Supplemental Non-qualified Unfunded Plans

The Company also maintains supplemental non-qualified unfunded plans for certain officers and other key employees. The expense for these plans was not material for 2019, 2018 or 2017. The discount rate used to measure the net periodic pension cost was 2.86% for 2019, 2.16% for 2018 and 1.91% for 2017. The amount accrued was \$0.5 million and \$2.3 million as of December 31, 2019 and 2018, respectively.

### Other Postretirement Benefits

The Company has a postretirement plan that provides medical benefits for certain U.S. retirees and eligible dependents hired prior to November 1, 2004. The following table sets forth the components of net periodic postretirement benefit cost for the years ended December 31, 2019, 2018 and 2017:

	2019	2018 (In thousands)	2017
Service cost, benefits attributed for service of active employees for the period	\$ 103	\$ 124	\$ 121
Interest cost on the accumulated postretirement benefit obligation	210	189	195
Amortization of actuarial gain	(117)	(30)	(49)
Amortization of prior service credit	—	(13)	(25)
Net periodic postretirement benefit cost	<u>\$ 196</u>	<u>\$ 270</u>	<u>\$ 242</u>



The discount rate used to measure the net periodic postretirement benefit cost was 4.33% for 2019, 3.65% for 2018 and 4.16% for 2017. It is the Company's policy to fund healthcare benefits on a cash basis. Because the plan is unfunded, there are no plan assets. The following table provides a reconciliation of the projected benefit obligation at the Company's December 31 measurement date:

	2019	2018
	(In thousands)	
Benefit obligation at beginning of year	\$ 5,551	\$ 6,073
Service cost	103	124
Interest cost	210	189
Actuarial gain	657	(511)
Plan participants' contributions	532	547
Benefits paid	(978)	(871)
Benefit obligation and funded status at end of year	<u>\$ 6,075</u>	<u>\$ 5,551</u>

The amounts recognized in the Consolidated Balance Sheets at December 31 are:

	2019	2018
	(In thousands)	
Accrued compensation and employee benefits	\$ 364	\$ 367
Accrued non-pension postretirement benefits	5,711	5,184
Amounts recognized at December 31	<u>\$ 6,075</u>	<u>\$ 5,551</u>

The discount rate used to measure the accumulated postretirement benefit obligation was 3.19% for 2019 and 4.33% for 2018. The Company's discount rate assumptions for its postretirement benefit plan are based on the average yield of a hypothetical high quality bond portfolio with maturities that approximately match the estimated cash flow needs of the plan. Because the plan requires the Company to establish fixed Company contribution amounts for retiree healthcare benefits, future healthcare cost trends do not generally impact the Company's accruals or provisions.

Estimated future benefit payments of postretirement benefits, assuming increased cost sharing, expected to be paid in each of the next five years beginning with 2020 are \$0.4 million through 2024, with an aggregate of \$2.0 million for the five years thereafter. These amounts can vary significantly from year to year because the cost sharing estimates can vary from actual expenses as the Company is self-insured.

#### **Badger Meter Employee Savings and Stock Ownership Plan**

The ESSOP includes a voluntary 401(k) savings plan that allows certain employees to defer up to 20% of their income on a pretax basis subject to limits on maximum amounts. The Company matches 25% of each employee's contribution, with the match percentage applying to a maximum of 7% of each employee's salary. The match is paid using the Company's Common Stock released through the ESSOP loan payments. For ESSOP shares purchased prior to 1993, compensation expense is recognized based on the original purchase price of the shares released and dividends on unreleased shares are charged to compensation expense. For shares purchased in or after 1993, expense is based on the market value of the shares on the date released and dividends on unreleased shares are charged to compensation expense. Compensation expense of \$0.6 million in 2019 compared to \$0.5 million that was recognized for the match in 2018 and 2017.

On December 31, 2010, the Company froze the qualified pension plan for its non-union participants and formed a new defined contribution feature within the ESSOP plan in which each employee received a similar benefit. On December 31, 2011, the Company froze the qualified pension plan for its union participants and included them in the same defined contribution feature within the ESSOP. Compensation expense under the defined contribution feature was \$3.1 million in 2019 and \$3.0 million in 2018.

## Note 8 Income Taxes

The Company is subject to income taxes in the United States and numerous foreign jurisdictions. Significant judgment is required in determining the worldwide provision for income taxes and recording the related deferred tax assets and liabilities.

Details of earnings before income taxes are as follows:

	2019	2018 (In thousands)	2017
Domestic	\$ 62,639	\$ 31,584	\$ 52,745
Foreign	(1,032)	4,268	2,088
Total	<u>\$ 61,607</u>	<u>\$ 35,852</u>	<u>\$ 54,833</u>

The provision (benefit) for income taxes is as follows:

	2019	2018 (In thousands)	2017
Current:			
Federal	\$ 12,113	\$ 9,223	\$ 20,553
State	2,591	2,640	2,933
Foreign	1,250	1,468	876
Deferred:			
Federal	(1,066)	(2,890)	(3,051)
State	417	(1,765)	(915)
Foreign	(875)	(614)	(134)
Total	<u>\$ 14,430</u>	<u>\$ 8,062</u>	<u>\$ 20,262</u>

The provision for income tax differs from the amount that would be provided by applying the statutory U.S. corporate income tax rate in each year due to the following items:

	2019	2018 (In thousands)	2017
Provision at statutory rate	\$ 12,938	\$ 7,529	\$ 19,192
State income taxes, net of federal tax benefit	2,080	717	1,292
Valuation allowance	515	—	564
Foreign - tax rate differential and other	70	159	29
Domestic production activities deduction	—	—	(721)
Federal tax credits	(609)	(742)	(542)
Compensation subject to section 162(m)	66	562	—
Stock based compensation	(253)	(384)	—
Tax rate difference on temporary adjustments	—	(460)	—
Other	(377)	681	448
Actual provision	<u>\$ 14,430</u>	<u>\$ 8,062</u>	<u>\$ 20,262</u>

The components of deferred income taxes as of December 31 are as follows:

	2019	2018
	(In thousands)	
Deferred tax assets:		
Reserve for receivables and inventories	\$ 2,108	\$ 2,210
Accrued compensation	888	929
Payables	1,410	1,090
Non-pension postretirement benefits	1,505	1,110
Net operating loss and credit carryforwards	1,401	308
Accrued pension benefits	933	1,552
Accrued employee benefits	1,747	2,534
Deferred revenue	2,219	1,858
Operating lease liabilities	1,861	—
Other	497	—
Total gross deferred tax assets	14,569	11,591
Less: valuation allowance	(863)	(366)
Total net deferred tax assets	13,706	11,225
Deferred tax liabilities:		
Depreciation	4,673	4,679
Amortization	6,158	7,146
Prepays	529	517
Operating lease assets	1,850	—
Other	630	52
Total deferred tax liabilities	13,840	12,394
Net deferred tax liabilities	\$ (134)	\$ (1,169)

At December 31, 2019, the Company utilized all of the federal net operating losses. The Company's remaining tax credit carryforward of \$0.4 million relates to state specific tax credits that the Company expects to fully utilize in future tax periods. During 2019, the Company recorded a valuation allowance of \$0.5 million against a deferred tax asset related to a German net operating loss.

No provision for federal income taxes was made on the earnings of foreign subsidiaries that are considered indefinitely invested or that would be offset by foreign tax credits upon distribution. Such undistributed earnings at December 31, 2019 were \$22.1 million of which \$22.7 million was previously taxed in the U.S. under the transition tax provisions and other provisions of the Internal Revenue Code.

Changes in the Company's gross liability for unrecognized tax benefits, excluding interest and penalties, were as follows:

	2019	(In thousands)	2018
Balance at beginning of year	\$	1,121	\$ 998
Increases in unrecognized tax benefits as a result of positions taken during the prior year		88	127
Increases in unrecognized tax benefits as a result of positions taken during the current year		235	190
Reductions to unrecognized tax benefits as a result of a lapse of the applicable statute of limitations		(279)	(194)
Balance at end of year	\$	<u>1,165</u>	\$ <u>1,121</u>

The Company does not expect a significant increase or decrease to the total amounts of unrecognized tax benefits during the fiscal year ending December 31, 2020. To the extent these unrecognized tax benefits are ultimately recognized, they will impact the effective tax rate. The Company and its subsidiaries file income tax returns in the U.S. federal jurisdiction, and various state and foreign jurisdictions. The Company is no longer subject to U.S. federal income tax examinations by tax authorities for years prior to 2016, and, with few exceptions, state and local income tax examinations by tax authorities for years prior to 2015. The Company's policy is to recognize interest related to unrecognized tax benefits as interest expense and penalties as operating expenses. Accrued interest was approximately \$0.1 million at December 31, 2019 and 2018, respectively, and there were no penalties accrued in either year.

## Note 9 Industry Segment and Geographic Areas

The Company is an innovator, manufacturer, marketer and distributor of products incorporating flow measurement, control and communication solutions, which comprise one reportable segment. The Company manages and evaluates its operations as one segment primarily due to similarities in the nature of the products, production processes, customers and methods of distribution.

Information regarding revenues by geographic area is as follows:

	<u>2019</u>	<u>2018</u>	<u>2017</u>
	(In thousands)		
Revenues:			
United States	\$ 369,163	\$ 374,650	\$ 355,768
Foreign:			
Asia	9,111	9,081	9,133
Canada	13,568	11,893	10,407
Europe	15,784	20,147	15,718
Mexico	5,791	3,603	3,601
Middle East	7,868	11,318	4,904
Other	3,340	3,040	2,909
Total	<u>\$ 424,625</u>	<u>\$ 433,732</u>	<u>\$ 402,440</u>

Information regarding assets by geographic area is as follows:

	<u>2019</u>	<u>2018</u>
	(In thousands)	
Long-lived assets:		
United States	\$ 51,539	\$ 54,904
Foreign:		
Europe	14,768	15,247
Mexico	19,454	20,170
Total	<u>\$ 85,761</u>	<u>\$ 90,321</u>

	<u>2019</u>	<u>2018</u>
	(In thousands)	
Total assets:		
United States	\$ 326,248	\$ 293,943
Foreign:		
Europe	72,296	74,707
Mexico	23,349	24,041
Total	<u>\$ 421,893</u>	<u>\$ 392,691</u>

**Note 10 Unaudited: Quarterly Results of Operations, Common Stock Price and Dividends**

	March 31	Quarter ended		December 31
		June 30	September 30	
(In thousands except per share data)				
<b>2019</b>				
Net sales	\$ 104,881	\$ 103,542	\$ 108,646	\$ 107,556
Gross margin	\$ 40,457	\$ 40,276	\$ 41,670	\$ 41,125
Net earnings	\$ 10,824	\$ 11,358	\$ 12,721	\$ 12,274
Earnings per share:				
Basic	\$ 0.37	\$ 0.39	\$ 0.44	\$ 0.42
Diluted	\$ 0.37	\$ 0.39	\$ 0.44	\$ 0.42
Dividends declared	\$ 0.15	\$ 0.15	\$ 0.17	\$ 0.17
Stock price:				
High	\$ 61.57	\$ 60.28	\$ 60.52	\$ 66.64
Low	\$ 47.59	\$ 51.56	\$ 49.66	\$ 50.67
Quarter-end close	\$ 55.64	\$ 59.69	\$ 53.70	\$ 64.93
<b>2018</b>				
Net sales	\$ 105,041	\$ 113,648	\$ 110,630	\$ 104,413
Gross margin	\$ 36,748	\$ 41,504	\$ 43,946	\$ 40,151
Net earnings	\$ 7,546	\$ 6,154	\$ 2,851	\$ 11,239
Earnings per share:				
Basic	\$ 0.26	\$ 0.21	\$ 0.10	\$ 0.39
Diluted	\$ 0.26	\$ 0.21	\$ 0.10	\$ 0.39
Dividends declared	\$ 0.13	\$ 0.13	\$ 0.15	\$ 0.15
Stock price:				
High	\$ 51.05	\$ 47.25	\$ 56.40	\$ 57.12
Low	\$ 45.45	\$ 41.00	\$ 50.75	\$ 46.70
Quarter-end close	\$ 47.15	\$ 44.70	\$ 52.95	\$ 49.21

The Company's Common Stock is listed on the New York Stock Exchange under the symbol BMI. Earnings per share are computed independently for each quarter. As such, the annual per share amount may not equal the sum of the quarterly amounts due to rounding. The Company currently anticipates continuing to pay cash dividends. Shareholders of record as of December 31, 2019 and 2018 totaled 790 and 906, respectively. Voting trusts and street name shareholders are counted as single shareholders for this purpose.

## Note 11 Revenue Recognition

Revenue for sales of products and services is derived from contracts with customers. The products and services promised in contracts include the sale of municipal water and flow instrumentation products, such as flow meters and radios, software access and other ancillary services. Contracts generally state the terms of sale, including the description, quantity and price of each product or service. Since the customer typically agrees to a stated rate and price in the contract that does not vary over the life of the contract, the majority of the Company's contracts do not contain variable consideration. The Company establishes a provision for estimated warranty and returns as well as certain after sale costs as discussed in Note 1 "Summary of Significant Accounting Policies."

In accordance with ASU No. 2016-10 "Revenue from Contracts with Customers" ("Topic 606"), the Company disaggregates revenue from contracts with customers into geographical regions and by the timing of when goods and services are transferred. The Company determined that disaggregating revenue into these categories meets the disclosure objective in Topic 606 which is to depict how the nature, amount, timing and uncertainty of revenue and cash flows are affected by regional economic factors. Information regarding revenues disaggregated by geographic area is disclosed in Note 9 "Industry Segment and Geographic Areas."

Information regarding revenues disaggregated by the timing of when goods and services are transferred is as follows:

<u>(In thousands)</u>	December 31,	
	2019	2018
Revenue recognized over time	\$ 16,146	\$ 12,943
Revenue recognized at a point in time	408,479	420,789
Total	<u>\$ 424,625</u>	<u>\$ 433,732</u>

The Company performs its obligations under a contract by shipping products or performing services in exchange for consideration. The Company typically invoices its customers as soon as control of an asset is transferred and a receivable to the Company is established. The Company, however, recognizes a contract liability when a customer prepays for goods or services and the Company has not transferred control of the goods or services.

The opening and closing balances of the Company's receivables and contract liabilities are as follows:

<u>(In thousands)</u>	December 31,	
	2019	2018
Receivables	\$ 61,365	\$ 66,300
Contract liabilities	20,143	15,793

Contract liabilities are included in payables and other-long term liabilities on the Company's Consolidated Balance Sheet. The balance of contract assets was immaterial as the Company did not have a significant amount of uninvoiced receivables at December 31, 2019. The difference between the opening and closing balances of the Company's contract liabilities was the result of a timing difference between the Company's performance and the customers' prepayments. The decreased receivables balance was due to robust collection efforts and active monitoring processes instituted during the year.

A performance obligation in a contract is a promise to transfer a distinct good or service to the customer, and is the unit of measurement in Topic 606. At contract inception, the Company assesses the products and services promised in its contracts with customers. The Company then identifies performance obligations to transfer distinct products or services to the customer. In order to identify performance obligations, the Company considers all of the products or services promised in the contract regardless of whether they are explicitly stated or are implied by customary business practices.

The Company's performance obligations are satisfied at a point in time or over time as work progresses. Revenue from products and services transferred to customers at a single point in time accounted for 96.2% and 97.0% of net sales for the years ended December 31, 2019 and 2018, respectively. The majority of the Company's revenue recognized at a point in time is for the sale of municipal and flow instrumentation products. Revenue from these contracts is recognized when the customer is able to direct the use of and obtain substantially all of the benefits from the product which generally coincides with title transfer during the shipping process.

Revenue from services transferred to customers over time accounted for 3.8% and 3.0% of net sales for the years ended December 31, 2019 and 2018, respectively. The majority of the Company's revenue that is recognized over time relates to the BEACON AMA software as a service.



As of December 31, 2019, the Company had certain contracts with unsatisfied performance obligations. For contracts recorded as long-term liabilities, \$20.1 million was the aggregate amount of the transaction price allocated to performance obligations that were unsatisfied or partially unsatisfied as of the end of the reporting period. The Company estimates that revenue recognized from satisfying those performance obligations will be approximately \$4.5 million in 2020 and \$2.0 million in each year from 2021 through 2024 and \$7.6 million thereafter.

The Company records revenue for BEACON AMA SaaS over time as the customer benefits from the use of the Company's software. Control of an asset is therefore transferred to the customer over time and the Company will recognize revenue for BEACON AMA SaaS as service units are used by the customer.

Revenue is recorded for various ancillary services, such as project management and training, over time as the customer benefits from the services provided. The majority of this revenue will be recognized equally throughout the contract period as the customer receives benefits from the Company's promise to provide such services. If the service is not provided evenly over the contract period, revenue will be recognized by the associated input/output method that best measures the progress towards contract completion.

The Company also has contracts that include both the sale and installation of flow meters as performance obligations. In those cases, the Company records revenue for installed flow meters at the point in time when the flow meters have been accepted by the customer. The customer cannot control the use of and obtain substantially all of the benefits from the equipment until the customer has accepted the installed product. Therefore, for both the flow meter and the related installation, the Company has concluded that control is transferred to the customer upon customer acceptance of the installed flow meter. In addition, the Company has a variety of ancillary revenue streams which are minor. The types and composition of the Company's revenue streams did not materially change during the year ended December 31, 2019.

Certain customers may receive cash-based incentives or credits, which are accounted for as variable consideration. Variable consideration in contracts for the year ended December 31, 2019 was insignificant.

The transaction price for a contract is allocated to each distinct performance obligation and recognized as revenue when, or as, each performance obligation is satisfied. For contracts with multiple performance obligations, the Company allocates the contract's transaction price to each performance obligation using the best estimate of the standalone selling price of each distinct good or service in a contract. The primary method used to estimate standalone selling price is the observable price when the good or service is sold separately in similar circumstances and to similar customers. If standalone selling price is not directly observable, it is estimated using either a market adjustment or cost plus margin approach.

The recording of assets recognized from the costs to obtain and fulfill customer contracts primarily relate to the deferral of sales commissions on the Company's BEACON AMA software arrangements. The Company's costs incurred to obtain or fulfill a contract with a customer are amortized over the period of benefit of the related revenue. The Company expenses any costs incurred immediately when the amortization period would be one year or less. These costs are recorded within selling, engineering and administration expenses.

For the year ended December 31, 2019, the Company elected the following practical expedients:

In accordance with Subtopic 340-40 "Other Assets and Deferred Costs - Contracts with Customers," the Company elected to expense the incremental costs of obtaining a contract when the amortization period for such contracts would have been one year or less. The Company does not disclose the value of unsatisfied performance obligations for contracts with an original expected length of one year or less, and contracts for which it has the right to invoice for services performed.

The Company has made an accounting policy election to exclude all taxes by governmental authorities from the measurement of the transaction price.

## **Note 12 Leases**

On January 1, 2019, the Company adopted ASU No. 2016-02 and ASU No. 2018-11 using the optional transition method. Under this transition method, comparative periods will continue to be reported in accordance with prior lease guidance under ASC 840 Leases. The Company has elected certain practical expedients permitted under the transition guidance, which, among other things, allows the Company to carry forward historical lease classifications.

The Company rents facilities, equipment and vehicles under operating leases, some of which contain renewal options. Upon inception of a rent agreement, the Company determines whether the arrangement contains a lease based on the unique conditions present. Leases that have a term over a year are recognized on the balance sheet as right-of-use assets and lease liabilities. Right-of-use assets are included in prepaid expenses and other current assets and other assets on the Company's Consolidated Balance Sheet. Lease liabilities are included in other current liabilities and other long-term liabilities on the Company's Consolidated Balance Sheet. Information regarding the Company's right-of-use assets and the corresponding lease liabilities are as follows:

	<u>December 31, 2019</u>	<u>January 1, 2019</u>
<b>(In thousands)</b>		
Right-of-use assets	\$ 8,411	\$ 10,745
Lease liabilities	8,792	11,087

The Company's operating lease agreements have lease and non-lease components that require payments for common area maintenance, property taxes and insurance. The Company has elected to account for both lease and non-lease components as one lease component. The fixed and in-substance fixed consideration in the Company's rent agreements constitute operating lease expense that is included in the capitalized right-of-use assets and lease liabilities. The variable and short-term lease expense payments are not included in the present value of the right-of-use-assets and lease liabilities on the Consolidated Balance Sheet. The Company's rent expense is as follows:

	<u>December 31, 2019</u>
<b>(In thousands)</b>	
Operating lease expense	\$ 3,095
Variable and short-term lease expense	270
Rent expense	<u>\$ 3,364</u>

The Company records right-of-use assets and lease liabilities based upon the present value of lease payments over the expected lease term. The Company's lease agreements typically do not have implicit interest rates that are readily determinable. As a result, the Company utilizes an incremental borrowing rate that would be incurred to borrow on a collateralized basis over a similar term in a comparable economic environment. As of December 31, 2019 and January 1, 2019, the remaining lease term on the Company's leases was 4.5 years and 5.3 years, respectively. As of December 31, 2019 and January 1, 2019, the discount rate was 5.0%. The future minimum lease payments to be paid under operating leases are as follows:

	<u>December 31, 2019</u>
	<b>(In thousands)</b>
2020	\$ 2,840
2021	2,279
2022	1,298
2023	1,205
2024	1,245
Thereafter	943
Total future lease payments	<u>9,810</u>
(Present value adjustment)	<u>(1,018)</u>
Present value of future lease payments	<u>\$ 8,792</u>

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

None.

**ITEM 9A. CONTROLS AND PROCEDURES**

**Evaluation of Disclosure Controls and Procedures**

In accordance with Rule 13a-15(b) of the Securities Exchange Act of 1934 (the “Exchange Act”), as amended, the Company's management evaluated, with the participation of the Company's Chairman, President and Chief Executive Officer and the Company's Senior Vice President - Chief Financial Officer, the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of the end of the year ended December 31, 2019. Based upon their evaluation of these disclosure controls and procedures, the Company's Chairman, President and Chief Executive Officer and the Company's Senior Vice President - Chief Financial Officer concluded that, as of the date of such evaluation, the Company's disclosure controls and procedures were effective.

**Changes in Internal Controls over Financial Reporting**

There was no change in the Company's internal control over financial reporting that occurred during the quarter ended December 31, 2019 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

**Management's Annual Report on Internal Control over Financial Reporting**

The report of management required under this Item 9A is contained in Item 8 of this 2019 Annual Report on Form 10-K under the heading “Management's Annual Report on Internal Control over Financial Reporting.”

**Report of Independent Registered Public Accounting Firm on Internal Control over Financial Reporting**

The attestation report required under this Item 9A is contained in Item 8 of this 2019 Annual Report on Form 10-K under the heading “Report of Independent Registered Public Accounting Firm.”

**ITEM 9B. OTHER INFORMATION**

None.

## PART III

### ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information required by this Item with respect to directors is included under the headings “Nomination and Election of Directors” and “Section 16(a) Beneficial Ownership Reporting Compliance” in the Company's definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 24, 2020 and is incorporated herein by reference.

Information concerning the executive officers of the Company is included in Part I, Item 1 of this 2019 Annual Report on Form 10-K under the heading “Business - Employees.”

The Company has adopted the Badger Meter, Inc. Code of Conduct for Financial Executives that applies to the Company's Chairman, President and Chief Executive Officer, the Company's Senior Vice President - Chief Financial Officer and other persons performing similar functions. A copy of the Badger Meter, Inc. Code of Conduct for Financial Executives is posted on the Company's website at [www.badgermeter.com](http://www.badgermeter.com). The Badger Meter, Inc. Code of Conduct for Financial Executives is also available in print to any shareholder who requests it in writing from the Secretary of the Company. The Company satisfies the disclosure requirements under Item 5.05 of Form 8-K regarding amendments to, or waivers from, the Badger Meter, Inc. Code of Conduct for Financial Executives by posting such information on the Company's website at [www.badgermeter.com](http://www.badgermeter.com).

The Company is not including the information contained on its website as part of, or incorporating it by reference into, this 2019 Annual Report on Form 10-K.

### ITEM 11. EXECUTIVE COMPENSATION

Information required by this Item is included under the headings “Executive Compensation,” “Compensation Committee Interlocks and Insider Participation” and “CEO Pay Ratio” in the Company's definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 24, 2020, and is incorporated herein by reference; provided, however, that the information under the subsection “Executive Compensation - Compensation Committee Report” is not deemed to be “soliciting material” or to be “filed” with the Securities and Exchange Commission or subject to Regulation 14A or 14C under the Exchange Act or to be the liabilities of Section 18 of the Exchange Act, and will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent it is specifically incorporated by reference into such a filing.

### ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information required by this Item is included under the headings “Stock Ownership of Beneficial Owners Holding More than Five Percent,” “Stock Ownership of Management” and “Equity Compensation Plan Information” in the Company's definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 24, 2020 and is incorporated herein by reference.

### ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information required by this Item is included under the headings “Related Person Transactions” and “Nomination and Election of Directors - Independence, Committees, Meetings and Attendance” in the Company's definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 24, 2020, and is incorporated herein by reference.

### ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information required by this Item is included under the heading “Principal Accounting Firm Fees” in the Company's definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 24, 2020, and is incorporated herein by reference.

## **PART IV**

### **ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES**

Documents filed as part of this Annual Report on Form 10-K:

1. Financial Statements. See the financial statements included in Part II, Item 8 “Financial Statements and Data” in this 2019 Annual Report on Form 10-K, under the headings “Consolidated Balance Sheets,” “Consolidated Statements of Operations,” “Consolidated Statements of Comprehensive Income,” “Consolidated Statements of Cash Flows” and “Consolidated Statements of Shareholders' Equity.”
2. Financial Statement Schedules. Financial statement schedules are omitted because the information required in these schedules is included in the Notes to Consolidated Financial Statements.
3. Exhibits. The exhibits listed in the following Exhibit Index are filed as part of this 2019 Annual Report on Form 10-K that is incorporated herein by reference.

### **ITEM 16. FORM 10-K SUMMARY**

None.

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on February 21, 2020.

BADGER METER, INC.

By: /s/ Kenneth C. Bockhorst  
Kenneth C. Bockhorst  
Chairman, President and Chief  
Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated on February 21, 2020.

<u>Name</u>	<u>Title</u>
<u>/s/ Kenneth C. Bockhorst</u> Kenneth C. Bockhorst	Chairman, President and Chief Executive Officer and Director (Principal executive officer)
<u>/s/ Robert A. Wrocklage</u> Robert A. Wrocklage	Senior Vice President — Chief Financial Officer (Principal financial officer)
<u>/s/ Daniel R. Weltzien</u> Daniel R. Weltzien	Vice President — Controller (Principal accounting officer)
<u>/s/ Todd A. Adams</u> Todd A. Adams	Director
<u>/s/ Thomas J. Fischer</u> Thomas J. Fischer	Director
<u>/s/ Gale E. Klappa</u> Gale E. Klappa	Director
<u>/s/ Gail A. Lione</u> Gail A. Lione	Director
<u>/s/ Tessa M. Myers</u> Tessa M. Myers	Director
<u>/s/ James F. Stern</u> James F. Stern	Director
<u>/s/ Glen E. Tellock</u> Glen E. Tellock	Director
<u>/s/ Todd J. Teske</u> Todd J. Teske	Director

BADGER METER, INC.

RECONCILIATION OF NON-GAAP PERFORMANCE MEASURES TO GAAP PERFORMANCE MEASURES  
(in thousands, except share and earnings per share data)

	2019	2018	2017	2016	2015
Operating earnings (GAAP measure)	\$62,148	\$56,869	\$56,595	\$52,672	\$43,791
Executive retirement charges	-	2,575	-	-	-
Adjusted operating earnings	\$62,148	\$59,444	\$56,595	\$52,672	\$43,791
Net earnings (GAAP measure)	\$47,177	\$27,790	\$34,571	\$32,295	\$25,938
Executive retirement charges, net of tax	-	2,357	-	-	-
Pension termination settlement charge, net of tax	-	14,786	-	-	-
Adjusted net earnings	\$47,177	\$44,933	\$34,571	\$32,295	\$25,938
Net earnings (GAAP measure)	\$47,177	\$27,790	\$34,571	\$32,295	\$25,938
Interest expense, net	253	1,157	789	921	1,217
Provision for income taxes	14,430	8,062	20,262	17,549	15,214
Depreciation	11,569	11,354	12,056	10,715	9,993
Amortization	12,577	12,961	12,342	11,727	10,606
Executive retirement charges	-	2,575	-	-	-
Pension termination settlement charge	-	19,900	-	-	-
Adjusted EBITDA	\$86,006	\$83,799	\$80,020	\$73,207	\$62,968
Net Sales	\$424,625	\$433,732	\$402,440	\$393,761	\$377,698
Adjusted EBITDA %	20.3%	19.3%	19.9%	18.6%	16.7%
Diluted earnings per share (GAAP measure)	\$1.61	\$0.95	\$1.19	\$1.11	\$0.90
Executive retirement charges, net of tax	-	0.09	-	-	-
Pension termination settlement charge, net of tax	-	0.50	-	-	-
Adjusted diluted earnings per share	\$1.61	\$1.54	\$1.19	\$1.11	\$0.90
Cash provided by operations (GAAP measure)	\$80,714	\$60,350	\$49,751	\$56,185	\$35,831
Capital expenditures	(7,496)	(8,643)	(15,069)	(10,596)	(19,766)
Free cash flow	\$73,218	\$51,707	\$34,682	\$45,589	\$16,065
Free cash flow	\$73,218	\$51,707	\$34,682	\$45,589	\$16,065
Adjusted net earnings	\$47,177	\$44,933	\$34,571	\$32,295	\$25,938
Free cash flow conversion	155%	115%	100%	141%	62%







**Badger Meter**

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