2018

We see the world's most critical issues being addressed.

Emerson's Automation Solutions business enables the greatest use of the world's most valuable resources, and helps ensure the performance and safety of industries that are the backbone of daily life.

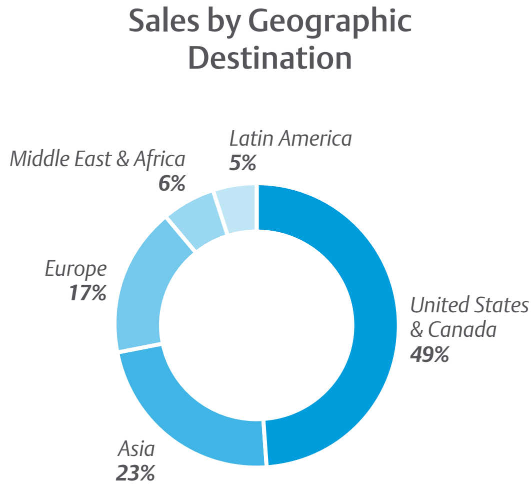
Emerson's Commercial & Residential Solutions business helps ensure human comfort and health by protecting food quality, creating sustainable infrastructure and advancing energy efficiency.

EMERSON. CONSIDER IT SOLVED.™

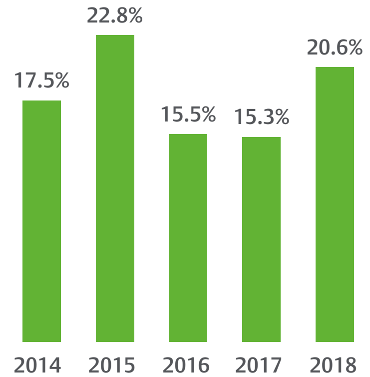
EMERSON 2018 FINANCIAL HIGHLIGHTS

$17.4B Net Sales

Sales by Geographic Destination



Return on Total Capital
(After Tax)



$2.9B Operating Cash Flow

62 Years of Increased Dividends

Emerson's people, processes and investments are focused on building sustainable long-term value for shareholders – 62 years and counting.

Empowering Digit

At Emerson, we leverage our domain expertise
to help customers digitally transform th
improve reliability, enhance safe

CLOUD APPLICATIONS & CONNECTED SERVICES

Emerson's Plantweb™ digital ecosystem, combined with our industry expertise and consulting methodologies transform business objectives into practical, scalable strategies that enable companies to achieve Top Quartile performance in projects and operations. Our customers move from a reactive to predictive way of managing key assets like pumps, valves, heat exchangers and piping.

CONTROL SYSTEMS & SOFTWARE

Combined with field device data, systems and software provide actionable information to optimize operations. Customers can predict and detect issues from corrosion to mechanical wear and automatically route this information for corrective action, while optimizing production to extend asset performance and meet business targets.

FIELD DEVICES & SENSORS

Pervasive sensing applications, deployed across a customer's assets and infrastructure, capture real-time data in dangerous or remote environments, such as offshore rigs, pipelines and chemical plants.

Automation Solutions

Oil & Gas, Chemical, Power, Refining, Life Sciences, Hybrid and Discrete Customers

tal Transformation

and broad foundation of devices and software
heir operations to optimize production,
ety and minimize energy usage.

CLOUD APPLICATIONS & CONNECTED SERVICES

By combining the latest technologies with air conditioning, heating and refrigeration expertise, advanced platforms like ProAct™ offer enterprise connectivity, software and service management. Turning data into operational insights makes it possible to reach top performance.

CONTROL SYSTEMS & SOFTWARE

Field device data informs operations, empowering customers to realize energy and cost savings. Customers use smart technologies to maintain fresh food in refrigerated cases, predict and prevent heating, ventilation and cooling (HVAC) failures, or utilize professional tools to collaborate and report remotely from a job site.

FIELD DEVICES & SENSORS

Sensors and data loggers gather critical insights, such as energy efficiency in HVAC systems or temperatures in perishable food containers, providing customers with a comprehensive view into their products' lifecycles.

Commercial & Residential Solutions

Residential, Commercial and Cold Chain Customers

‘As a more focused and unified company, we are unleashing new possibilities.’

David N. Farr
Chairman and Chief Executive Officer

Dear Shareholders,

As we prepare to welcome a new year, we have much to celebrate – and strong momentum for the years ahead.

Three years ago, we introduced a bold, new vision for the future of Emerson: two complementary platforms to focus our expertise around our core strengths – Automation Solutions and Commercial & Residential Solutions. As a unified company, we are seeing that vision come to life and celebrating the strategic wins our repositioning has made possible.

Over the past year, Emerson experienced strong growth in sales, earnings and cash flow that reinforced our market leadership position. Our growth was led by U.S. markets, and we continue to experience strong performance in Asia, particularly in China. We are also growing in Europe, where we have made acquisitions that will give us a stronger presence in key markets like Germany.

In 2018, we continued to invest for growth, enhance critical capabilities for our customers and increase shareholder value. We deployed $2.2 billion for bolt-on acquisitions to drive future sales, earnings and cash flow growth, and we repurchased $1 billion in shares. At the same time, we increased our bolt-on acquisition and share repurchase targets through 2021, and enabled the business to continue to deliver on dividend growth, as we have done for 62 years. This strategic, balanced approach to long-term value creating capital deployment is shaping a bright future and positioning the next generation of leadership for continued success.

We are enhancing our technology, software and services capabilities as we leverage our expertise to deliver practical, industrial digital transformation solutions to help our customers achieve their business goals. The benefits of digital transformation are

14%
Net Sales Growth

36%
Earnings Per Share Growth

16.6%
Operating Cash Flow as a Percent of Sales

Letter to Shareholders *(continued)*

real – improved safety, reliability, productivity and energy efficiency, as well as lower costs. Through advanced software, our Plantweb digital ecosystem and ProAct services, Emerson-wide solutions are making an impact on significant projects across the globe: lowering costs and increasing innovation in areas like the energy-rich Permian Basin and helping ensure quality and food safety through the critical cold chain infrastructure.

We are ahead of schedule with the integration of Valves & Controls, the largest acquisition in Emerson's history, into our Final Control business, and we continue to identify new growth opportunities as we provide our customers with an unmatched technology portfolio. We are driving differentiation in connected valve offerings and leveraging additive manufacturing technology to create innovative, never-been-done-before valve designs and solutions. Our unique position enables us to drive our Main Valve Partner approach, providing customers with complete lifecycle management of their valve assets. With the added strength of Valves & Controls, we expect the total Final Control business to add $1 billion of growth over the next few years.

I am proud of Emerson's legacy as an American manufacturing company and our role in advocating to create an environment in the U.S. that supports manufacturers. After years of operating at a disadvantage as a country, tax reform efforts – driven in part by the advocacy efforts of all manufacturers – have reinforced the United States' position as a global leader. At the same time, the country experienced a resurgence of support for the critical role of manufacturing, and construction increased amid an upswing in economic optimism and investment.

The global economic picture is shifting as we see continued regulation changes in key industries. We are anticipating a strong investment climate in global energy, chemical and power generation markets.

ONE-YEAR PERFORMANCE

Years ended September 30 Dollars in millions, except per share amounts	2017	**2018**	PERCENT CHANGE
Sales	$15,264	**$17,408**	14%
Gross profit	$ 6,404	**$ 7,460**	16%
Earnings before interest and taxes	$ 2,500	**$ 2,826**	13%
Earnings from continuing operations	$ 1,643	**$ 2,203**	34%
Earnings per share from continuing operations	$ 2.54	**$ 3.46**	36%
Dividends per share	$ 1.92	**$ 1.94**	1%
Operating cash flow from continuing operations	$ 2,690	**$ 2,892**	8%
Dividends as a percent of free cash flow from continuing operations	56%	**54%**	

FIVE-YEAR PERFORMANCE

Years ended September 30 Dollars in millions, except per share amounts	2013	**2018**	FIVE-YEAR CAGR
Sales	$17,935	**$17,408**	(1)%
Gross profit	$ 7,565	**$ 7,460**	– %
Earnings before interest and taxes	$ 2,710	**$ 2,826**	1 %
Earnings from continuing operations	$ 1,506	**$ 2,203**	8 %
Earnings per share from continuing operations	$ 2.08	**$ 3.46**	11 %
Adjusted earnings per share from continuing operations*	$ 2.86	**$ 3.46**	4 %
Dividends per share	$ 1.64	**$ 1.94**	3 %
Operating cash flow from continuing operations	$ 2,877	**$ 2,892**	– %
Dividends as a percent of free cash flow from continuing operations	51%	**54%**	

**Adjusted earnings per share exclude goodwill impairment charges of $496 after-tax, $0.68 per share and income tax charges of $70, $0.10 per share, in 2013.*

We believe our broad global markets are poised to support our growth plans in 2019 and 2020.

Across the globe, consumers are no longer selecting companies simply by what they make or do; they are choosing companies that align with their core values. We are seeing the same trend with our customers. As a unified company, we worked with thousands of employees worldwide to articulate our global values that have grounded Emerson for 128 years. Emerson's foundational values inform everything we do as a company.

We also know diverse employee perspectives and experience bring fresh thinking that drives deeper innovation, and we are continuing our emphasis on inclusion. We created a key new position, the officer of diversity and inclusion, who is responsible for overseeing our efforts to enhance diversity. Last year, I had the opportunity to join the "CEO Action for Diversity & Inclusion" initiative, and we continue to drive focus on this issue with our industry peers for a stronger manufacturing industry.

We are leading sustainability efforts that make a positive impact for our employees and in our communities. We continue energy conservation and efficiency improvements at our facilities worldwide. We worked with retailers to help make the switch from harmful hydrofluorocarbons to environmentally responsible refrigerants while lowering maintenance costs, simplifying installation and reducing energy consumption. Our technologies help bring life-saving medicines to market safer and faster. These are only a few of many achievements we are excited to share; I invite you to read more in our full Corporate Social Responsibility Report on Emerson.com – we are making real progress.

Over the past two years, I have been privileged to chair the board of the National Association of Manufacturers (NAM). This experience has given me an opportunity

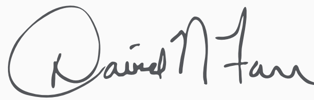
Letter to Shareholders *(continued)*

to advocate on behalf of manufacturing, influence policy and continue learning as I met fellow manufacturing leaders from across the country. In partnership with NAM leaders, we pushed for tax reform, appearing before Congress to help lawmakers understand our complex industry. While my term ends this year, I am grateful for the opportunity to serve and eager to keep Emerson engaged in this national conversation for a stronger America.

I would like to thank Emerson's Board of Directors for their ready guidance and wise counsel, and welcome new director Lori Lee. The Board is an active voice at Emerson, and their leadership and perspective are invaluable to this organization. I would also like to thank our employees for their continued commitment, hard work and tremendous support to make Emerson a better company.

On behalf of the Board of Directors and all of us at Emerson, we thank our shareholders for your continued trust and support. Together, we will help ensure the business – and industry – continue thriving for decades to come.

Thank you, and best wishes for a healthy and prosperous 2019.



David N. Farr
Chairman and Chief Executive Officer

THE OFFICE OF THE CHIEF EXECUTIVE

The Office of the Chief Executive (from left): Steven J. Pelch, Michael H. Train, David N. Farr, Frank J. Dellaquila, Sara Yang Bosco, Mark J. Bulanda, Edward L. Monser, Robert T. Sharp, Katherine Button Bell, S. Lal Karsanbhai.

Q&A

Lead Independent Director Dr. Clemens A.H. Boersig shares his perspective on Emerson's commitment to shareholders.

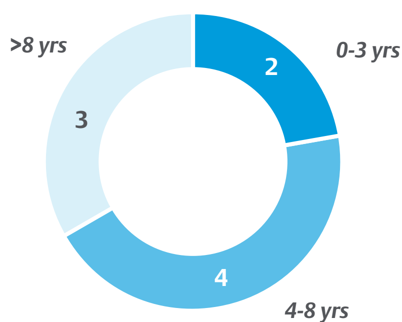
Q: Why does Emerson's Board have a lead independent director, and what are the responsibilities of the role?

A: Independence is a critical tenet of strong governance that ensures the voice and interests of shareholders drive decisions around strategy, capital allocation, compensation and succession planning. The lead director strengthens the independent leadership of the Board, acts as the Board's liaison with the chairman and consults with the chairman regularly on company issues.

Q: Why does having Emerson's CEO serve as chairman work in the best interests of shareholders?

A: Emerson has a strong culture of performance, and those roots run deep throughout the company. Having David Farr serve as both chairman and CEO drives long-term value creation for shareholders. It ensures management and the Board are aligned in our view of opportunities and risks, and gives Emerson a consistent strategic focus and execution that support the company's role as a technology leader and industry steward.

Balanced Director Tenure



Q: How are the lead independent director responsibilities balanced against those of the chairman?

A: The chairman and lead independent director serve as a check and balance to one another, building important controls into the governance process. I've known Emerson for 30 years and see my role as both supporting and challenging David. The CEO as chair can direct focus on the most impactful areas of

the company and promote responsible Board decision-making, due to his knowledge of the daily business. One of David's strengths is that he listens to others and encourages critical questions around the company's top threats and opportunities. Together, David and I drive a highly engaged Board culture.

Q: How do you view the role of Emerson's Board in informing strategy and evaluating risks?

A: Consistent with Emerson's DNA, the Board employs a thorough annual planning cycle to set strategy and evaluate risk. This process includes a multi-day strategy workshop and rigorous process overseen by the audit committee to identify and prioritize the most important financial and operational threats facing the company. Through this engaged approach, the Board is informed and prepared to respond to new information and guide the company's direction.

Board diversity and experience are critical to our effectiveness. Our Board – with women making up one-third of our members – has a wealth of experience across strategy-critical domains, including manufacturing, finance and international business. With these unique perspectives, the Board brings a balanced approach to strategy evaluation and important investment decisions – a crucial function for success.

Dr. Clemens A. H. Boersig
Lead Independent Director

Our Global Footprint

With a reach that spans continents and hemispheres, Emerson is helping customers tackle the complex, profound challenges facing the world in the process, industrial, commercial and residential markets. Our global innovation network is paving the path to digitally transformed operations – and higher levels of performance for the customers we serve.

U.S. & Canada

$8.6B SALES | 10% GROWTH

2018 Global Totals

$17.4B
Net Sales

18K
Active Patents at Year-End

21
Innovation, Solutions and Engineering Centers

Latin America

$0.9B SALES | 11% GROWTH

Regionally Sourced Supply Chain

~85%
Americas for Americas

~75%
Europe/Middle East for Europe/Middle East

~90%
Asia for Asia

Diversity (Fiscal 2017)

31%
Women

27%
Minorities*

*Includes Asian, American Indian or Alaska Native, Black or African-American, Hispanic, Native Hawaiian or Other Pacific Islander

Europe

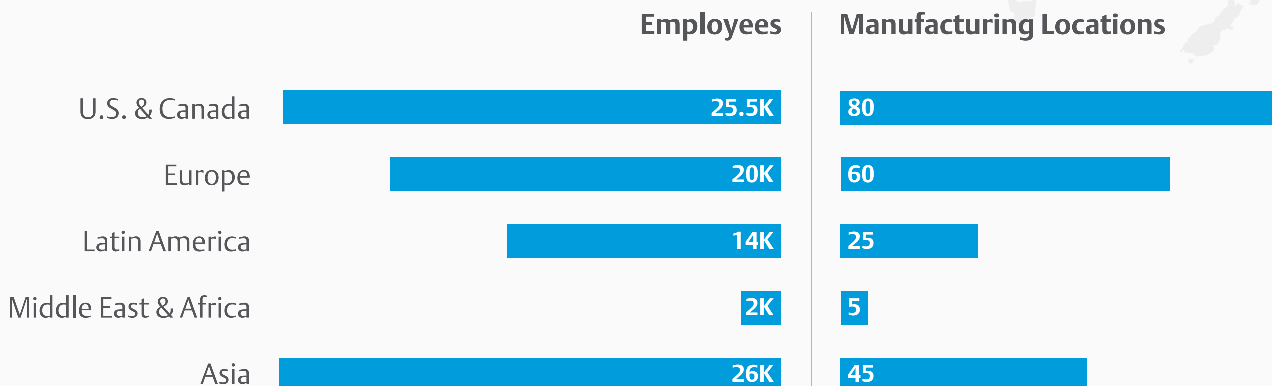
$2.9B SALES | 19% GROWTH

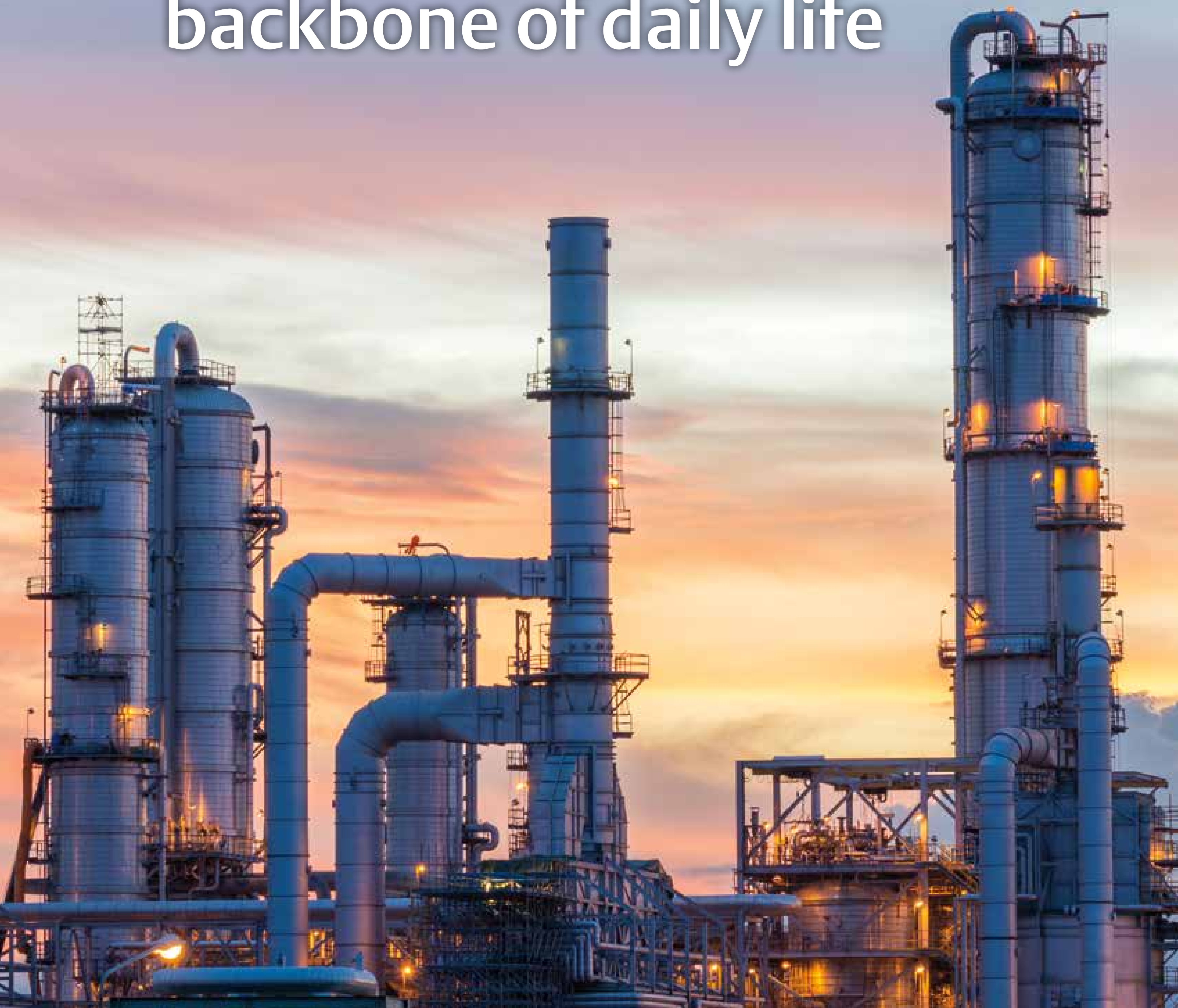
Asia

$3.9B SALES | 21% GROWTH

Middle East & Africa

$1.1B SALES | 16% GROWTH





Advancing the industries that are the backbone of daily life

Automation Solutions

Through our deep expertise and leading technology capabilities, Emerson's Automation Solutions business is enabling the performance and safety of industry when it matters most.

Guiding Customers through Digital Transformation
The benefits of digital transformation are real, but few companies are finding ways to make it relevant to their operations. Emerson's Automation Solutions business is a trusted partner, helping customers and the industry navigate the evolution. Through our advanced software and leading industry expertise, we are guiding customers from a traditional, siloed approach to practical, scalable technology solutions that enable them to reach Top Quartile performance.

Combining Global Expertise with the Latest Software
Emerson is helping process, hybrid and discrete customers embrace digital transformation to realize game-changing improvements in safety and reliability, energy and emissions, and production.

Our unique position enables us to combine industry expertise, leading automation technology, operational know-how and innovative digital transformation programs – like integrating reliability, advanced control and optimization into our world-class control software platforms – to help companies successfully leverage these technologies.

$11.4B
Global Sales

$200B+
Market Size

58K+
Global Employees

Automation, and the advanced technologies that power it, is a strategic lever whose value far outweighs its cost. Typically accounting for 3 to 4 percent of a project's total spend, automation can impact 10 percent of total project costs and significantly reduce project timelines.

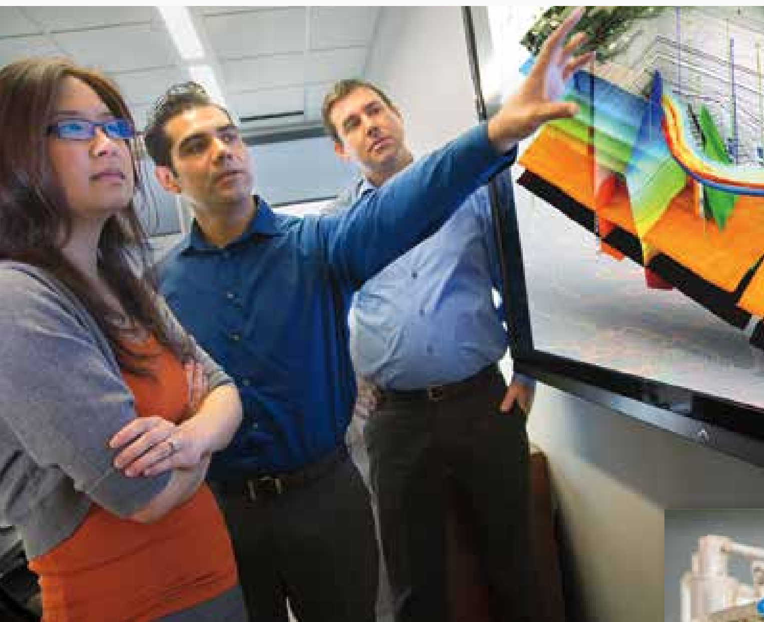
Automation Solutions *(continued)*

We have built and continue to enhance a robust global Industrial Internet of Things (IIoT) installed base through the work of thousands of industry, software and project management experts worldwide. Supported by our Plantweb digital ecosystem, we help customers ensure project and operational certainty – bringing an industry-leading scope and depth to lifecycle management that enables customers to optimize their valuable assets.

Thoughtful Approach to Smart Solutions
Our Internet of Things strategy includes a strong foundation of smart instrumentation and valves combined with leading control software, cloud applications and connected services. We've grown our global installed base to 32,000 wireless networks and 26,000 asset management systems, monitoring 10 million devices worldwide. This broad portfolio and years of experience support our innovation as we introduce creative technology like location awareness to enhance safety, and paves the path for new solutions, such as digital twin technologies to optimize processes and enhance reliability.

Our portfolio and approach bridge the gap between information technology and operational technology, and facilitate personnel effectiveness and collaboration across functions. This combination of expertise and technology improves our customers' project and operational performance, empowering them to become top performers.

Expanding Industrial Automation Capabilities
Our acquisition of Aventics significantly expands our reach in the growing $13 billion fluid automation market and helps solidify our automation technology presence in Europe, a key market. In addition, bringing Aventics into the Emerson family will create one of the broadest portfolios of fluid control and pneumatic devices that incorporate sensing and monitoring capabilities to improve system uptime and performance, enhance safety and optimize energy usage.



Our broad portfolio of automation technologies and digital capabilities improve safety, energy efficiency and reliability in critical end markets.

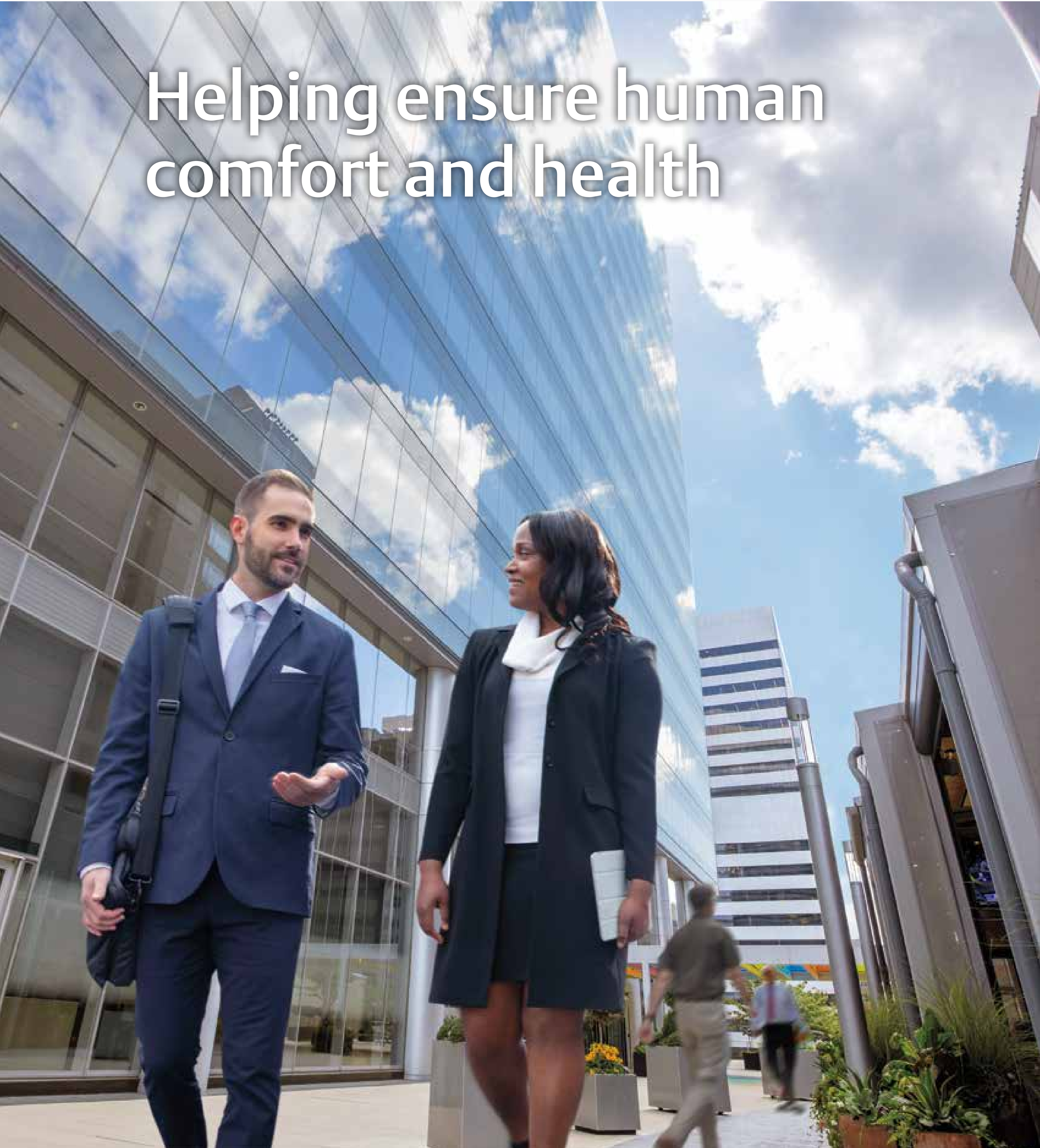
Leading

IIoT

Installed Base

Over the last decade, we have built a leading global IIoT installed base, consisting of wireless networks, smart sensors, asset management solutions and analytics that serve as the foundation for digital transformation.

Helping ensure human comfort and health



Commercial & Residential Solutions

Emerson's Commercial & Residential Solutions business is always focused on the next industry-leading innovation, from protecting human comfort and health to advancing energy efficiency and developing cutting-edge tools to support trade professionals.

Transforming Our Industries

Our customers operate in increasingly regulated industries, such as refrigeration and food service. We take our industry steward role seriously, helping customers address evolving needs and leverage the latest technologies to realize energy and cost efficiencies.

We continue to develop and acquire a spectrum of technologies to expand our relevance for end users across three key applications – residential home comfort, commercial building efficiency and cold chain.

Our integrated solutions help customers on their digital transformation journeys. Through connected technologies that provide real-time, actionable data on vital statistics like temperature and asset performance, Emerson gives customers constant access to the information they need to optimize their operations.

Serving Critical Markets Worldwide

We provide energy-efficient heating and cooling solutions and world-class compressor technologies that support environmentally responsible refrigerants.

We are an innovator in this space, investing $100 million in a leading-edge heating and cooling headquarters in Sidney, Ohio, and nearly $18 million in a research center in Suzhou that will develop technology and compressors to support the refrigerants of tomorrow.

$6.0B	$39B	27K+
Global Sales	Addressable Market	Global Employees

Our Tools & Home Products business engages industries through customer-centric product innovations that support our best-in-class professional tools channel.

Commercial & Residential Solutions *(continued)*

Our advanced technology helps decrease energy consumption from HVAC systems in commercial buildings by 36 percent while maintaining consistent comfort through advanced modulating technology. We're also building engagement across domains, working in partnership with original equipment manufacturers, channel teams, contractors and end users.

Our advances have a global reach. We recently introduced Sensi Hydro, a residential variable water volume heating and air conditioning system to address increasing demand for high-quality home comfort in China. The innovative solution will maintain year-round comfort with greater energy efficiency.

As we work with the commercial and residential markets, we're also innovating for the people building these facilities. Our recent acquisitions of Textron's Tools and Test business, combined with our legacy RIDGID® brand, create a world-class professional tools portfolio with advanced capabilities such as crimping and pressing technologies for joining applications.

Food Quality and Safety

Emerson is growing connected technology solutions and capabilities to help safeguard the world's food supply. Our cold chain business, which we expect to grow to $1.6 billion by 2021, is making an impact on food safety across the globe. Food-borne illnesses, which impact 48 million people each year, are both a health and economic concern: A Johns Hopkins study found a restaurant can expect to spend $1.9 million for a single outbreak.

Consumers also want fresh food in more places than ever before. As demand grows, so does the globalization of the supply chain – and the need to protect food across greater distances. Our monitoring technologies help ensure correct temperature across the cold chain, lowering maintenance costs and empowering customers to comply with regulatory standards.

We are addressing "cold-as-a-service" food-delivery trends for leading online retailers, offering turnkey installations to protect their products while helping them deliver on their customer promises.

The benefits of our cold chain business stretch beyond food. Through the recent acquisition of Cooper-Atkins, for example, we are helping keep sensitive medications at a precise temperature, providing quality assurance and pharmaceutical peace of mind.

Protecting food quality and sustainability

80M

Tons of Food Waste

Through state-of-the-art laboratories and innovation space at our new $34 million InSinkErator® world headquarters, our researchers are developing the food waste solutions of tomorrow.

Financial Review

Report of Management

The Company's management is responsible for the integrity and accuracy of the financial statements. Management believes that the financial statements for the three years ended September 30, 2018 have been prepared in conformity with U.S. generally accepted accounting principles appropriate in the circumstances. In preparing the financial statements, management makes informed judgments and estimates where necessary to reflect the expected effects of events and transactions that have not been completed. The Company's disclosure controls and procedures ensure that material information required to be disclosed is recorded, processed, summarized and communicated to management and reported within the required time periods.

In meeting its responsibility for the reliability of the financial statements, management relies on a system of internal accounting control. This system is designed to provide reasonable assurance that assets are safeguarded and transactions are executed in accordance with management's authorization and recorded properly to permit the preparation of financial statements in accordance with U.S. generally accepted accounting principles. The design of this system recognizes that errors or irregularities may occur and that estimates and judgments are required to assess the relative cost and expected benefits of the controls. Management believes that the Company's internal accounting controls provide reasonable assurance that errors or irregularities that could be material to the financial statements are prevented or would be detected within a timely period.

The Audit Committee of the Board of Directors, which is composed solely of independent directors, is responsible for overseeing the Company's financial reporting process. The Audit Committee meets with management and the Company's internal auditors periodically to review the work of each and to monitor the discharge by each of its responsibilities. The Audit Committee also meets periodically with the independent auditors, who have free access to the Audit Committee and the Board of Directors, to discuss the quality and acceptability of the Company's financial reporting and internal controls, as well as nonaudit-related services.

The independent auditors are engaged to express an opinion on the Company's consolidated financial statements and on the Company's internal control over financial reporting. Their opinions are based on procedures that they believe to be sufficient to provide reasonable assurance that the financial statements contain no material errors and that the Company's internal controls are effective.

Management's Report on Internal Control Over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. With the participation of the Chief Executive Officer and the Chief Financial Officer, management conducted an evaluation of the effectiveness of internal control over financial reporting based on the framework and the criteria established in *Internal Control - Integrated Framework* (2013), issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, management has concluded that internal control over financial reporting was effective as of September 30, 2018.

The tools and test equipment business and Aventics were acquired in the fourth quarter of fiscal 2018. Management has excluded these businesses from its assessment of internal control over financial reporting as of September 30, 2018. Total assets and revenues of these businesses excluded from the assessment represented approximately 9 percent and 1 percent, respectively, of the Company's related consolidated financial statement amounts as of and for the year ended September 30, 2018.

The Company's auditor, KPMG LLP, an independent registered public accounting firm, has issued an audit report on the effectiveness of the Company's internal control over financial reporting.

David N. Farr
Chairman of the Board
and Chief Executive Officer

Frank J. Dellaquila
Senior Executive Vice President
and Chief Financial Officer

Results of Operations

Years ended September 30 | Dollars in millions, except per share amounts

	2016	2017	**2018**	17 vs. 16	**18 vs. 17**
Net sales	$14,522	15,264	**17,408**	5 %	**14%**
Gross profit	$ 6,262	6,404	**7,460**	2 %	**16%**
Percent of sales	*43.1%*	*42.0%*	***42.9%***		
SG&A	$ 3,464	3,618	**4,258**		
Percent of sales	*23.8%*	*23.7%*	***24.5%***		
Other deductions, net	$ 294	286	**376**		
Interest expense, net	$ 188	165	**159**		
Earnings from continuing operations before income taxes	$ 2,316	2,335	**2,667**	1 %	**14%**
Percent of sales	*16.0%*	*15.3%*	***15.3%***		
Earnings from continuing operations common stockholders	$ 1,590	1,643	**2,203**	3 %	**34%**
Net earnings common stockholders	$ 1,635	1,518	**2,203**	(7)%	**45%**
Percent of sales	*11.3%*	*9.9%*	***12.7%***		
Diluted EPS – Earnings from continuing operations	$ 2.45	2.54	**3.46**	4 %	**36%**
Diluted EPS – Net earnings	$ 2.52	2.35	**3.46**	(7)%	**47%**
Return on common stockholders' equity	20.9%	18.6%	**24.9%**		
Return on total capital	15.5%	15.3%	**20.6%**		

OVERVIEW

Sales from continuing operations for 2018 were $17.4 billion, an increase of $2.1 billion, or 14 percent. The Company funded $2.2 billion in acquisitions, which added 7 percent, while the divestiture of the residential storage business subtracted 2 percent and foreign currency translation added 1 percent. Underlying sales were up 8 percent compared with the prior year.

Sales increased in both businesses. Automation Solutions sales were up 21 percent, reflecting broad-based demand across energy-related and general industrial markets, and the impact of acquisitions. Commercial & Residential Solutions sales increased 2 percent as favorable demand in global HVAC and refrigeration markets and the impact of acquisitions were partially offset by the divestiture of the residential storage business.

Earnings from continuing operations common stockholders were $2.2 billion in 2018, up 34 percent compared with prior year earnings of $1.6 billion. Diluted earnings per share from continuing operations were $3.46, up 36 percent versus $2.54 per share in 2017, due to strong sales growth and operational performance, as well as an income tax benefit of $189 million ($0.30 per share) from the impacts of U.S. tax reform and an $0.18 per share benefit from the lower tax rate on 2018 earnings.

Net earnings common stockholders were $2.2 billion in 2018, up 45 percent compared with prior year earnings of $1.5 billion, which included the impact of discontinued operations. Diluted earnings per share were $3.46, up 47 percent versus $2.35 per share in 2017.

The Company generated operating cash flow from continuing operations of $2.9 billion in 2018, an increase of $202 million, or 8 percent.

NET SALES

Net sales for 2018 were $17.4 billion, an increase of $2.1 billion, or 14 percent compared with 2017. Sales increased $2.0 billion in Automation Solutions and $125 million in Commercial & Residential Solutions. Underlying sales, which exclude foreign currency translation, acquisitions and divestitures, increased 8 percent ($1.1 billion) on higher volume. Acquisitions, net of the divestiture of the residential storage business, added 5 percent ($819 million) and foreign currency translation added 1 percent ($181 million). Underlying sales increased 9 percent in the U.S. and 7 percent internationally.

Net sales for 2017 were $15.3 billion, an increase of $742 million, or 5 percent compared with 2016. Sales increased $441 million in Automation Solutions and $302 million in Commercial & Residential Solutions. Underlying sales increased 1 percent ($168 million) on higher volume and slightly lower price. Acquisitions added 4 percent ($628 million) while foreign currency translation subtracted $54 million. Underlying sales increased 2 percent in the U.S. and were flat internationally.

INTERNATIONAL SALES

Emerson is a global business with international sales representing 54 percent of total sales, including U.S. exports. The Company generally expects faster economic growth in emerging markets in Asia, Latin America, Eastern Europe and Middle East/Africa.

International destination sales, including U.S. exports, increased 18 percent, to $9.5 billion in 2018, reflecting increases in both the Automation Solutions and Commercial & Residential Solutions businesses. U.S. exports of $1.1 billion were up 19 percent compared with 2017, reflecting increases in both Automation Solutions and Commercial & Residential Solutions which benefited from acquisitions. Underlying international destination sales were up 7 percent, as foreign currency translation had a 2 percent favorable impact, while acquisitions, net of the divestiture of the residential storage business, had a 9 percent favorable impact on the comparison. Underlying sales increased 2 percent in Europe and 10 percent in Asia (China up 17 percent). Underlying sales increased 4 percent in Latin America, 12 percent in Canada and 6 percent in Middle East/Africa. Origin sales by international subsidiaries, including shipments to the U.S., totaled $8.5 billion in 2018, up 19 percent compared with 2017, primarily reflecting acquisitions.

International destination sales, including U.S. exports, increased 5 percent, to $8.0 billion in 2017, reflecting increases in both the Automation Solutions and Commercial & Residential Solutions businesses. U.S. exports of $927 million were up 4 percent compared with 2016, reflecting increases in both Automation Solutions, which benefited from the valves & controls acquisition, and Commercial & Residential Solutions. Underlying international destination sales were flat, as foreign currency translation had a 1 percent unfavorable impact, while acquisitions had a 6 percent favorable impact on the comparison. Underlying sales were down 1 percent in Europe and up 6 percent in Asia (China up 15 percent). Underlying sales decreased 12 percent in Latin America, 3 percent in Canada and 6 percent in Middle East/Africa. Origin sales by international subsidiaries, including shipments to the U.S., totaled $7.2 billion in 2017, up 6 percent compared with 2016, primarily reflecting the valves & controls acquisition.

ACQUISITIONS AND DIVESTITURES

On July 17, 2018, the Company completed the acquisition of Aventics, a global provider of smart pneumatics technologies that power machine and factory automation applications, for $622 million, net of cash acquired. This business, which has annual sales of approximately $425 million, is included in the Industrial Solutions product offering within the Automation Solutions segment.

On July 2, 2018, the Company completed the acquisition of Textron's tools and test equipment business for $810 million, net of cash acquired. This business, with annual sales of approximately $470 million, is a manufacturer of electrical and utility tools, diagnostics, and test and measurement instruments, and is reported in the Tools & Home products segment.

On December 1, 2017, the Company acquired Paradigm, a provider of software solutions for the oil and gas industry, for $505 million, net of cash acquired. This business had annual sales of approximately $140 million and is included in the Measurement & Analytical Instrumentation product offering within Automation Solutions.

In fiscal 2018, the Company also acquired four smaller businesses, two in the Automation Solutions segment and two in the Climate Technologies segment.

On October 2, 2017, the Company sold its residential storage business for $200 million in cash, and recognized a small pretax gain and an after-tax loss of $24 million ($0.04 per share) in the first quarter of 2018 due to income taxes resulting from nondeductible goodwill. The Company realized approximately $150 million in after-tax cash proceeds from the sale. Assets and liabilities for this business were classified as held-for-sale in the consolidated balance sheet at September 30, 2017. This business had sales of $298 million and pretax earnings of $15 million in 2017, and was previously reported within the Tools & Home Products segment.

On April 28, 2017, the Company completed the acquisition of Pentair's valves & controls business for $2.96 billion, net of cash acquired of $207 million, subject to certain post-closing adjustments. This business, with annualized sales of approximately $1.4 billion, is a manufacturer of control, isolation and pressure relief valves and actuators, and complements the Valves, Actuators & Regulators product offering within Automation Solutions. The Company also acquired two smaller businesses in the Automation Solutions segment. Total cash paid for all businesses in 2017 was $3.0 billion, net of cash acquired.

The Company acquired six businesses in 2016, four in Automation Solutions and two in Climate Technologies. Total cash paid for these businesses was $132 million, net of cash acquired. Annualized sales for these businesses were approximately $51 million in 2016.

See Note 3 for further information on acquisitions and divestitures, including pro forma financial information. See information under "Discontinued Operations" for a discussion of the Company's divestitures related to its portfolio repositioning actions.

COST OF SALES

Cost of sales for 2018 were $9.9 billion, an increase of $1.1 billion compared with $8.9 billion in 2017. The increase is primarily due to acquisitions, higher volume and the impact of foreign currency translation. Gross profit was $7.5 billion in 2018 compared to $6.4 billion in 2017. Gross margin increased

0.9 percentage points to 42.9 percent, reflecting leverage on higher volume and savings from cost reduction actions, partially offset by the impact of acquisitions. Gross profit margin was 42.0 percent in 2017.

Cost of sales for 2017 were $8.9 billion, an increase of $600 million compared with $8.3 billion in 2016. The increase reflects the acquisition of the valves & controls business and higher volume, partially offset by cost reduction actions and the impact of foreign currency translation. Gross profit was $6.4 billion in 2017 compared with $6.3 billion in 2016. Gross margin of 42.0 percent reflected dilution of 1.2 percentage points due to the valves & controls operations and first year acquisition accounting charges of $74 million related to inventory. Slightly lower price also contributed to the decline, while savings from cost reduction actions partially offset these decreases. Gross margin was 43.1 percent in 2016.

SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

Selling, general and administrative (SG&A) expenses of $4.3 billion in 2018 increased $640 million compared with 2017 due to acquisitions and an increase in volume. SG&A as a percent of sales of 24.5 percent increased 0.8 percentage points due to higher incentive stock compensation of $106 million, reflecting an increase in the Company's stock price and progress toward achieving its performance objectives, the impact of acquisitions, and higher investment spending in Automation Solutions, partially offset by leverage on higher volume.

SG&A expenses of $3.6 billion in 2017 increased $154 million compared with 2016, primarily due to the valves & controls acquisition. Savings from cost reduction actions and lower incentive stock compensation of $35 million, reflecting the impact of changes in the stock price, were partially offset by higher other costs. SG&A as a percent of sales of 23.7 percent decreased 0.1 percentage points in 2017 compared with 2016.

OTHER DEDUCTIONS, NET

Other deductions, net were $376 million in 2018, an increase of $90 million compared with 2017. The increase primarily reflects higher intangibles amortization of $75 million due to acquisitions and higher acquisition/divestiture costs of $18 million, partially offset by lower restructuring expense of $13 million. See Note 5.

Other deductions, net were $286 million in 2017, a decrease of $8 million compared with 2016. The decrease primarily reflects favorable foreign currency transactions comparisons of $78 million (unfavorable in the prior year) and lower restructuring expense of $18 million, These decreases were substantially offset by intangibles and backlog amortization related to the valves & controls acquisition of $29 million and $19 million, respectively, and higher acquisition/divestiture costs of $24 million. Additionally, 2016 results included a $21 million gain from payments received related to dumping duties.

INTEREST EXPENSE, NET

Interest expense, net was $159 million, $165 million and $188 million in 2018, 2017 and 2016, respectively. The decreases in 2018 and 2017 reflect the maturity of long-term debt with relatively higher interest rates and higher interest income.

INCOME TAXES

On December 22, 2017, the U.S. government enacted tax reform, the Tax Cuts and Jobs Act (the "Act"), which made comprehensive changes to U.S. federal income tax laws by moving from a global to a modified territorial tax regime. The Act includes a reduction of the U.S. corporate income tax rate from 35 percent to 21 percent in calendar year 2018 along with the elimination of certain deductions and credits, and a one-time "deemed repatriation" of accumulated foreign earnings. During 2018, the Company recognized a net tax benefit of $189 million ($0.30 per share) due to impacts of the Act, consisting of a $94 million benefit on revaluation of net deferred income tax liabilities to the lower tax rate, $35 million of expense for the tax on deemed repatriation of accumulated foreign earnings and withholding taxes, and the reversal of $130 million accrued in previous periods for the planned repatriation of non-U.S. cash.

On August 1, 2018, the U.S. Treasury and Internal Revenue Service released proposed regulations relating to the one-time tax on deemed repatriation of accumulated foreign earnings. The proposed regulations were subject to a 60-day comment period and final regulations are expected to be issued after consideration of comments received. The Company is currently evaluating the impact of the proposed regulations and anticipates finalizing its provisional estimates after fully evaluating the final regulations.

The changes made by the Act are broad and complex. As such, the final one-time deemed repatriation tax may differ materially from these provisional amounts due to additional regulatory guidance expected to be issued, changes in interpretations, or any legislative actions to address questions arising from the Act, as well as further evaluation of the Company's actions, assumptions and interpretations.

Income taxes were $443 million, $660 million and $697 million for 2018, 2017 and 2016, respectively, resulting in effective tax rates of 17 percent, 28 percent and 30 percent in 2018, 2017 and 2016, respectively. The 11 percentage point decrease in 2018 versus the prior year is due to the impacts of the Act, which include the net tax benefit described above and the lower tax rate on 2018 earnings. The 2018 and 2017 rates also include benefits from restructuring of subsidiaries of $53 million ($0.08 per share) and $47 million ($0.07 per share), respectively.

EARNINGS FROM CONTINUING OPERATIONS

Earnings from continuing operations attributable to common stockholders in 2018 were $2.2 billion, up 34 percent compared with 2017, and diluted earnings per share were $3.46 in 2018, up 36 percent. Earnings per share included the net tax benefit due to impacts of the Act of $0.30 per share discussed above. Results also included an $0.18 per share benefit from the lower tax rate on 2018 earnings, partially offset by a $0.04 per share loss on the residential storage business. Earnings increased $364 million in the Automation Solutions segment in 2018 and decreased $6 million in Commercial & Residential Solutions. See the Business discussion that follows and Note 18.

Earnings from continuing operations attributable to common stockholders in 2017 were $1.6 billion, up 3 percent compared with 2016, and diluted earnings per share were $2.54, up 4 percent. Valves & controls reduced both comparisons by 6 percentage points, or $97 million, $0.15 per share, including restructuring expense, intangibles amortization, and first year pretax acquisition accounting charges related to inventory and backlog of $93 million ($65 million after-tax, $0.10 per share) which are reported in Corporate and other. Earnings increased $66 million in the Automation Solutions segment in 2017 and $72 million in Commercial & Residential Solutions.

DISCONTINUED OPERATIONS

On November 30, 2016, the Company completed the sale of its network power systems business for $4.0 billion in cash and retained a subordinated interest in distributions, contingent upon the equity holders first receiving a threshold return on their initial investment. Additionally, on January 31, 2017, the Company completed the sale of its power generation, motors and drives business for approximately $1.2 billion. Discontinued operations was a net loss of $125 million, $0.19 per share, in 2017 and income of $45 million, $0.07 per share, in 2016. Operating cash flow used by discontinued operations was $778 million for 2017 and capital expenditures were $20 million. In 2016, operating cash flow from discontinued operations was $382 million and capital expenditures were $76 million. The results of operations for these businesses were reported in discontinued operations until disposal. See Note 4.

NET EARNINGS AND EARNINGS PER SHARE; RETURNS ON EQUITY AND TOTAL CAPITAL

Net earnings attributable to common stockholders in 2018 were $2.2 billion, up 45 percent compared with 2017, and diluted earnings per share were $3.46, up 47 percent. The 2017 results included a net loss from discontinued operations of $125 million which benefited net earnings and earnings per share comparisons 11 percentage points.

Net earnings attributable to common stockholders in 2017 were $1.5 billion, down 7 percent compared with 2016, and diluted earnings per share were $2.35, down 7 percent. These results include the impact of discontinued operations discussed above which negatively impacted net earnings and earnings per share comparisons 10 and 11 percentage points, respectively.

Return on common stockholders' equity (net earnings attributable to common stockholders divided by average common stockholders' equity) was 24.9 percent in 2018 compared with 18.6 percent in 2017 and 20.9 percent in 2016. Return on total capital was 20.6 percent in 2018 compared with 15.3 percent in 2017 and 15.5 percent in 2016 (computed as net earnings attributable to common stockholders excluding after-tax net interest expense, divided by average common stockholders' equity plus short- and long-term debt less cash and short-term investments). The impacts of U.S. tax reform discussed above benefited the 2018 return on common stockholders' equity and return on total capital, while the acquisition of the valves & controls business reduced the 2017 returns. Discontinued operations reduced returns in both 2017 and 2016.

Business Segments

Following is an analysis of segment results for 2018 compared with 2017, and 2017 compared with 2016. The Company defines segment earnings as earnings before interest and income taxes. In connection with the strategic portfolio repositioning actions completed in fiscal 2017, the Company began reporting three segments: Automation Solutions, and Climate Technologies and Tools & Home Products which together comprise the Commercial & Residential Solutions business. See Note 18.

AUTOMATION SOLUTIONS

(DOLLARS IN MILLIONS)	2016	2017	**2018**	17 vs. 16	**18 vs. 17**
Sales	$8,977	9,418	**11,441**	5 %	**21 %**
Earnings	$1,456	1,522	**1,886**	5 %	**24 %**
Margin	16.2%	16.2%	**16.5%**		
Sales by Major Product Offering					
Measurement & Analytical Instrumentation	$3,137	3,070	**3,604**	(2)%	**17 %**
Valves, Actuators & Regulators	2,137	2,668	**3,769**	25 %	**41 %**
Industrial Solutions	1,621	1,680	**1,947**	4 %	**16 %**
Process Control Systems & Solutions	2,082	2,000	**2,121**	(4)%	**6 %**
Total	$8,977	9,418	**11,441**	5 %	**21 %**

2018 vs. 2017 – Automation Solutions reported sales of $11.4 billion in 2018, an increase of $2.0 billion, or 21 percent. Underlying sales increased 10 percent ($922 million) on higher volume. Acquisitions added 10 percent ($978 million) and foreign currency translation added 1 percent ($123 million). Sales for Measurement & Analytical Instrumentation increased $534 million, or 17 percent, and Process Control Systems & Solutions increased $121 million, or 6 percent, due to increased spending by global oil and gas customers, strong MRO demand and growth of small and mid-sized projects focused on facility expansion and optimization. The acquisition of Paradigm

($113 million) also supported Measurement & Analytical Instrumentation sales. Valves, Actuators & Regulators increased $1.1 billion, or 41 percent, led by the valves & controls acquisition ($771 million) and broad-based demand across end markets, including energy, power and life sciences. Industrial Solutions sales increased $267 million, or 16 percent, driven by favorable global trends in general industrial end markets. Underlying sales increased 14 percent in the U.S., 1 percent in Europe and 11 percent in Asia (China up 21 percent). Latin America increased 4 percent, Canada increased 14 percent and Middle East/Africa was up 9 percent. Earnings of $1.9 billion increased $364 million from the prior year on higher volume and leverage, cost reduction savings and lower restructuring expense of $22 million, partially offset by higher investment spending. Margin increased 0.3 percentage points to 16.5 percent. These results reflect a dilutive impact on comparisons from the valves & controls acquisition of 1.2 percentage points, which included an impact from higher intangibles amortization of 0.4 percentage points, or $45 million. In 2019, growth in Automation Solutions will continue to be driven by MRO activity, as well as brownfield capital investments in existing assets to expand capacity or to improve the efficiency, safety and uptime of those facilities. Steady progress in greenfield capital projects across upstream, midstream infrastructure, natural gas, chemical and hybrid markets, including life sciences and food and beverage, is also expected with orders weighted toward the second half of 2019.

2017 vs. 2016 – Automation Solutions reported sales of $9.4 billion in 2017, an increase of $441 million or 5 percent. Underlying sales decreased 1 percent ($128 million) on lower volume and slightly lower price. The valves & controls acquisition added 7 percent ($603 million), while foreign currency translation subtracted 1 percent ($34 million). Sales for Measurement & Analytical Instrumentation decreased 2 percent and Process Control Systems & Solutions decreased 4 percent due to weakness in energy-related markets, but began to improve in the second half of the year as oil prices stabilized. Valves, Actuators & Regulators increased $531 million, or 25 percent, due to the valves & controls acquisition. Industrial Solutions sales increased $59 million, or 4 percent, on improving economic conditions and industrial end markets, especially automotive. Chemical, power and life sciences were favorable. Underlying sales increased 1 percent in the U.S., were down 2 percent in Europe and increased 1 percent in Asia (China up 9 percent). Latin America decreased 20 percent, Canada decreased 6 percent and Middle East/Africa was down 6 percent. Earnings of $1.5 billion increased $66 million from the prior year. Savings from cost reduction actions and favorable foreign currency transactions comparisons of $64 million (unfavorable in the prior year) were partially offset by lower volume, and $25 million of restructuring expense and $29 million of intangibles amortization related to the valves & controls acquisition. Materials cost containment offset lower price. Margin was flat, primarily reflecting the benefit from cost reduction actions offset by dilution from the valves & controls acquisition of 1.5 percentage points.

COMMERCIAL & RESIDENTIAL SOLUTIONS

(DOLLARS IN MILLIONS)	2016	2017	**2018**	17 vs. 16	**18 vs. 17**
Sales:					
Climate Technologies	$3,944	4,212	**4,454**	7 %	**6 %**
Tools & Home Products	1,611	1,645	**1,528**	2 %	**(7)%**
Total	$5,555	5,857	**5,982**	5 %	**2 %**
Earnings:					
Climate Technologies	$ 902	975	**972**	8 %	**— %**
Tools & Home Products	384	383	**380**	— %	**(1)%**
Total	$1,286	1,358	**1,352**	6 %	**— %**
Margin	23.2%	23.2%	**22.6%**		

2018 vs. 2017 – Commercial & Residential Solutions sales were $6.0 billion in 2018, an increase of $125 million, or 2 percent. Underlying sales increased 4 percent ($226 million) on higher volume and slightly higher price. Foreign currency translation added 1 percent ($58 million) while the divestiture of the residential storage business, net of acquisitions, subtracted 3 percent ($159 million). Climate Technologies sales were $4.5 billion in 2018, an increase of $242 million, or 6 percent. Global HVAC sales were up moderately, reflecting robust growth in China, while sales were up moderately in Europe and modestly in the U.S. Cold chain sales were strong, led by robust growth in China and solid growth in Europe, while sales in the U.S. were up slightly. Sensors had strong growth, while temperature controls was flat. Tools & Home Products sales were $1.5 billion in 2018, down $117 million or 7 percent compared to the prior year, reflecting the impact of the residential storage divestiture ($298 million). Sales for professional tools were strong on favorable demand in oil and gas and construction-related markets, and the tools and test acquisition added $106 million. Wet/dry vacuums had solid growth and food waste disposers were up slightly. Overall, underlying sales increased 3 percent in the U.S., 4 percent in Europe and 9 percent in Asia (China up 11 percent). Sales increased 4 percent in both Latin America and Canada, while sales decreased 8 percent in Middle East/Africa. Earnings were $1.4 billion, a decrease of $6 million and margin was down 0.6 percentage points. Higher materials costs, the impact of acquisitions, unfavorable mix and increased restructuring expense of $11 million were partially offset by leverage on higher volume, favorable price and savings from cost reduction actions. In addition, the residential storage divestiture reduced earnings by $16 million, but benefited margin comparisons 1.0 percentage points, while higher warranty costs of $10 million associated with a specific product issue in Climate Technologies partially offset this benefit. Commercial & Residential Solutions growth in 2019 will be supported by continued strong demand in residential and commercial air conditioning markets in the U.S., as well as cold chain and professional tools demand in the U.S., Asia and Europe.

2017 vs. 2016 – Commercial & Residential Solutions sales were $5.9 billion in 2017, an increase of $302 million, or 5 percent, reflecting favorable conditions in HVAC and refrigeration markets in the U.S., Asia and Europe, as well as U.S. and Asian construction markets. Underlying sales increased 5 percent ($297 million) on 6 percent higher volume, partially offset by 1 percent lower price. Foreign currency translation deducted $20 million and acquisitions added $25 million. Climate Technologies sales were $4.2 billion in 2017, an increase of $268 million, or 7 percent. Global air conditioning sales were solid, led by strength in the U.S. and Asia and robust growth in China partially due to easier comparisons, while sales were up modestly in Europe and declined moderately in Middle East/Africa. Global refrigeration sales were strong, reflecting robust growth in China on increased adoption of energy-efficient solutions and slight growth in the U.S. Sensors and solutions had strong growth, while temperature controls was up modestly. Tools & Home Products sales were $1.6 billion in 2017, up $34 million compared to the prior year. Professional tools had strong growth on favorable demand from oil and gas customers and in other construction-related markets. Wet/dry vacuums sales were up moderately as favorable conditions continued in U.S. construction markets. Food waste disposers increased slightly, while the storage business declined moderately. Overall, underlying sales increased 3 percent in the U.S., 4 percent in Europe and 17 percent in Asia (China up 27 percent). Sales increased 3 percent in Latin America and 4 percent in Canada, while sales decreased 5 percent in Middle East/Africa. Earnings were $1.4 billion, an increase of $72 million driven by Climate Technologies, while margin was flat. Increased volume and resulting leverage, savings from cost reduction actions, and lower customer accommodation costs of $16 million were largely offset by higher materials costs, lower price and unfavorable product mix.

Financial Position, Capital Resources and Liquidity

The Company continues to generate substantial cash from operations and has the resources available to reinvest for growth in existing businesses, pursue strategic acquisitions and manage its capital structure on a short- and long-term basis.

CASH FLOW FROM CONTINUING OPERATIONS

(DOLLARS IN MILLIONS)	2016	2017	**2018**
Operating Cash Flow	$2,499	2,690	**2,892**
Percent of sales	*17.2%*	*17.6%*	***16.6%***
Capital Expenditures	$ 447	476	**617**
Percent of sales	*3.1%*	*3.1%*	***3.5%***
Free Cash Flow (Operating Cash Flow less Capital Expenditures)	$2,052	2,214	**2,275**
Percent of sales	*14.1%*	*14.5%*	***13.1%***
Operating Working Capital	$ 755	1,007	**985**
Percent of sales	*5.2%*	*6.6%*	***5.7%***

Operating cash flow from continuing operations for 2018 was $2.9 billion, a $202 million, or 8 percent increase compared with 2017, primarily due to higher earnings, partially offset by an increase in working capital investment to support higher levels of sales activity and income taxes paid on the residential storage divestiture. Operating cash flow from continuing operations of $2.7 billion in 2017 increased 8 percent compared to $2.5 billion in 2016, reflecting higher earnings and favorable changes in working capital. At September 30, 2018, operating working capital as a percent of sales was 5.7 percent compared with 6.6 percent in 2017 and 5.2 percent in 2016. The increase in 2017 was due to higher levels of working capital in the acquired valves & controls business. Operating cash flow from continuing operations funded capital expenditures of $617 million, dividends of $1.2 billion, and common stock purchases of $1.0 billion. In 2018, the Company repatriated $1.4 billion of cash held by non-U.S. subsidiaries, which was part of the Company's previously announced plans. These funds along with increased short-term borrowings and divestiture proceeds supported acquisitions of $2.2 billion. Contributions to pension plans were $61 million in 2018, $45 million in 2017 and $66 million in 2016.

Capital expenditures related to continuing operations were $617 million, $476 million and $447 million in 2018, 2017 and 2016, respectively. Free cash flow from continuing operations (operating cash flow less capital expenditures) was $2.3 billion in 2018, up 3 percent. Free cash flow was $2.2 billion in 2017, compared with $2.1 billion in 2016. The Company is targeting capital spending of approximately $650 million in 2019. Net cash paid in connection with acquisitions was $2.2 billion, $3.0 billion and $132 million in 2018, 2017 and 2016, respectively. Proceeds from divestitures not classified as discontinued operations were $201 million and $39 million in 2018 and 2017, respectively.

Dividends were $1.2 billion ($1.94 per share) in 2018, compared with $1.2 billion ($1.92 per share) in 2017 and $1.2 billion ($1.90 per share) in 2016. In November 2018, the Board of Directors voted to increase the quarterly cash dividend 1 percent, to an annualized rate of $1.96 per share.

Purchases of Emerson common stock totaled $1.0 billion, $400 million and $601 million in 2018, 2017 and 2016, respectively, at average per share prices of $66.25, $60.51 and $48.11.

The Board of Directors authorized the purchase of up to 70 million common shares in November 2015, and 41.8 million shares remain available for purchase under this authorization. The Company purchased 15.1 million shares in 2018, 6.6 million shares in 2017, and 12.5 million shares in 2016 under this authorization and the remainder of the May 2013 authorization.

LEVERAGE/CAPITALIZATION

(DOLLARS IN MILLIONS)	2016	2017	2018
Total Assets	$21,732	19,589	**20,390**
Long-term Debt	$ 4,051	3,794	**3,137**
Common Stockholders' Equity	$ 7,568	8,718	**8,947**
Total Debt-to-Total Capital Ratio	46.7%	34.8%	**34.7%**
Net Debt-to-Net Capital Ratio	31.3%	15.4%	**29.1%**
Operating Cash Flow-to-Debt Ratio	37.7%	57.8%	**60.7%**
Interest Coverage Ratio	11.8X	12.6X	**14.2X**

Total debt, which includes long-term debt, current maturities of long-term debt, commercial paper and other short-term borrowings, was $4.8 billion, $4.7 billion and $6.6 billion for 2018, 2017 and 2016, respectively. During the year, the Company repaid $250 million of 5.375% notes that matured in October 2017. In 2017 and 2016 respectively, the Company repaid $250 million of 5.125% notes that matured in December 2016 and $250 million of 4.75% notes which matured in October 2015.

The net debt-to-net capital ratio (less cash and short-term investments) increased in 2018 due to a decrease in cash which was used for acquisitions during the year. In 2017 the total debt-to-capital ratio and the net debt-to-net capital ratio (less cash and short-term investments) decreased due to lower total debt outstanding and higher common stockholders' equity from changes in other comprehensive income. The operating cash flow from continuing operations-to-debt ratio increased in 2018 primarily due to higher cash flow in the current year. The operating cash flow from continuing operations-to-debt ratio increased in 2017 primarily due to lower total debt outstanding. The interest coverage ratio is computed as earnings from continuing operations before income taxes plus interest expense, divided by interest expense. The increase in interest coverage in 2018 reflects higher earnings in the current year. The increase in interest coverage in 2017 reflects lower interest expense.

In May 2018, the Company entered into a $3.5 billion five-year revolving backup credit facility with various banks, which replaced the April 2014 $3.5 billion facility. The credit facility is maintained to support general corporate purposes, including commercial paper borrowings. The Company has not incurred any borrowings under this or previous facilities. The credit facility contains no financial covenants and is not subject to termination based on a change of credit rating or material adverse changes. The facility is unsecured and may be accessed under various interest rate and currency denomination alternatives at the Company's option. Fees to maintain the facility are immaterial. The Company also maintains a universal shelf registration statement on file with the SEC under which it can issue debt securities, preferred stock, common stock, warrants, share purchase contracts or share purchase units without a predetermined limit. Securities can be sold in one or more separate offerings with the size, price and terms to be determined at the time of sale.

Emerson's financial structure provides the flexibility necessary to achieve its strategic objectives. The Company has been successful in efficiently deploying cash where needed worldwide to fund operations, complete acquisitions and sustain long-term growth. At September 30, 2018, approximately $1.1 billion of the Company's cash was held outside the U.S. (primarily in Europe and Asia). The Company routinely repatriates a portion of its non-U.S. cash from earnings each year, or otherwise when it can be accomplished tax efficiently, and provides for foreign withholding taxes and any applicable U.S. income taxes as appropriate. The Company has been able to readily meet all its funding requirements and currently believes that sufficient funds will be available to meet the Company's needs in the foreseeable future through operating cash flow, existing resources, short- and long-term debt capacity or backup credit lines.

CONTRACTUAL OBLIGATIONS

At September 30, 2018, the Company's contractual obligations, including estimated payments, are as follows:

	AMOUNTS DUE BY PERIOD				
(DOLLARS IN MILLIONS)	TOTAL	LESS THAN 1 YEAR	1 – 3 YEARS	3 – 5 YEARS	MORE THAN 5 YEARS
Long-term Debt (including Interest)	$5,177	847	1,068	1,170	2,092
Operating Leases	661	204	243	107	107
Purchase Obligations	924	768	132	16	8
Total	$6,762	1,819	1,443	1,293	2,207

Purchase obligations consist primarily of inventory purchases made in the normal course of business to meet operational requirements. The table above does not include $2.1 billion of other noncurrent liabilities recorded in the balance sheet and summarized in Note 19, which consist primarily of pension and postretirement plan liabilities, deferred income taxes and unrecognized tax benefits, because it is not certain when these amounts will become due. See Notes 11 and 12 for estimated future benefit payments and Note 14 for additional information on deferred income taxes.

FINANCIAL INSTRUMENTS

The Company is exposed to market risk related to changes in interest rates, foreign currency exchange rates and commodity prices, and selectively uses derivative financial instruments, including forwards, swaps and purchased options to manage these risks. The Company does not hold derivatives for trading or speculative purposes. The value of derivatives and other financial instruments is subject to change as a result of market movements in rates and prices. Sensitivity analysis is one technique used to forecast the impact of these movements. Based on a hypothetical 10 percent increase in interest rates, a 10 percent decrease in commodity prices or a 10 percent weakening in the U.S. dollar across all currencies, the potential losses in future earnings, fair value or cash flows are not

material. Sensitivity analysis has limitations; for example, a weaker U.S. dollar would benefit future earnings through favorable translation of non-U.S. operating results, and lower commodity prices would benefit future earnings through lower cost of sales. See Notes 1, and 8 through 10.

Critical Accounting Policies

Preparation of the Company's financial statements requires management to make judgments, assumptions and estimates regarding uncertainties that could affect reported revenue, expenses, assets, liabilities and equity. Note 1 describes the significant accounting policies used in preparation of the consolidated financial statements. The most significant areas where management judgments and estimates impact the primary financial statements are described below. Actual results in these areas could differ materially from management's estimates under different assumptions or conditions.

REVENUE RECOGNITION

The Company recognizes a large majority of its revenue through the sale of manufactured products and records the sale when products are shipped or delivered, title and risk of loss pass to the customer, and collection is reasonably assured. In certain circumstances, revenue is recognized using the percentage-of-completion method, as performance occurs, or in accordance with ASC 985-605 related to software. Sales arrangements sometimes involve delivering multiple elements, which requires management judgment that affects the amount and timing of revenue recognized. In these instances, the revenue assigned to each element is based on vendor-specific objective evidence, third-party evidence or a management estimate of the relative selling price. Revenue is recognized for delivered elements if they have value to the customer on a stand-alone basis and performance related to the undelivered items is probable and substantially in the Company's control, or the undelivered elements are inconsequential or perfunctory and there are no unsatisfied contingencies related to payment. The vast majority of deliverables are tangible products, with a smaller portion attributable to installation, service or maintenance. Management believes that all relevant criteria and conditions are considered when recognizing revenue.

LONG-LIVED ASSETS

Long-lived assets, which include property, plant and equipment, goodwill and identifiable intangible assets, are reviewed for impairment whenever events or changes in business circumstances indicate impairment may exist. If the Company determines that the carrying value of a long-lived asset may not be recoverable, a permanent impairment charge is recorded for the amount by which the carrying value of the long-lived asset exceeds its estimated fair value. Reporting units are also reviewed for possible goodwill impairment at least annually, in the fourth quarter. If an initial assessment indicates it is more likely than not an impairment may exist, it is evaluated by comparing the unit's estimated fair value to its carrying value. Fair value is generally estimated using an income approach that discounts estimated future cash flows using discount rates judged by management to be commensurate with the applicable risk. Estimates of future sales, operating results, cash flows and discount rates are subject to changes in the economic environment, including such factors as the general level of market interest rates, expected equity market returns and the volatility of markets served, particularly when recessionary economic circumstances continue for an extended period of time. Management believes the estimates of future cash flows and fair values are reasonable; however, changes in estimates due to variance from assumptions could materially affect the evaluations.

RETIREMENT PLANS

The Company maintains a prudent long-term investment strategy consistent with the duration of pension obligations. The determination of defined benefit plan expense and liabilities is dependent on various assumptions, including the expected annual rate of return on plan assets, the discount rate and the rate of annual compensation increases. Management believes the assumptions used are appropriate; however, actual experience may differ. In accordance with U.S. generally accepted accounting principles, actual results that differ from the Company's assumptions are accumulated as deferred actuarial gains or losses and amortized to expense in future periods. The Company transitioned from defined benefit to defined contribution retirement plans in 2016. The principal U.S. defined benefit plan is closed to employees hired after January 1, 2016 while shorter-tenured current employees ceased accruing benefits effective October 1, 2016. Affected employees transitioned to an enhanced defined contribution plan. See Notes 11 and 12.

During 2018, the funded status of the Company's pension plans improved by $407 million. As of September 30, 2018, the U.S. pension plans were overfunded by $276 million in total, including unfunded plans totaling $182 million. The non-U.S. plans were underfunded by $199 million, including unfunded plans totaling $270 million. The Company contributed a total of $61 million to defined benefit plans in 2018 and expects to contribute approximately $60 million in 2019. At year-end 2018, the discount rate for U.S. plans was 4.26 percent, and was 3.76 percent in 2017. The assumed investment return on plan assets was 7.00 percent in 2018, 7.25 percent in 2017 and 7.50 percent in 2016, and is expected to be 7.00 percent for 2019. Deferred actuarial losses to be amortized to expense in future years were $712 million ($531 million after-tax) as of September 30, 2018.

CONTINGENT LIABILITIES

The Company is a party to a number of pending legal proceedings and claims, including those involving general and product liability (including asbestos) and other matters, several of which claim substantial amounts of damages. The Company accrues for such liabilities when it is probable that future costs (including legal fees and expenses) will be incurred and such costs can be reasonably estimated. Accruals are

based on developments to date; management's estimates of the outcomes of these matters; the Company's experience in contesting, litigating and settling similar matters; and any related insurance coverage. Although it is not possible to predict the ultimate outcome of these matters, the Company historically has been largely successful in defending itself against claims and suits that have been brought against it, and will continue to defend itself vigorously in all such matters. While the Company believes a material adverse impact is unlikely, given the inherent uncertainty of litigation, a remote possibility exists that a future development could have a material adverse impact on the Company. See Note 13.

INCOME TAXES

Income tax expense and tax assets and liabilities reflect management's assessment of taxes paid or expected to be paid (received) on items included in the financial statements. Deferred tax assets and liabilities arise from temporary differences between the consolidated financial statement carrying amounts of existing assets and liabilities and their respective tax bases, and consideration of operating loss and tax credit carryforwards. Deferred income taxes are measured using enacted tax rates in effect for the year in which the temporary differences are expected to be recovered or settled. The impact on deferred tax assets and liabilities of a change in tax rates is recognized in the period that includes the enactment date. Valuation allowances are provided to reduce deferred tax assets to the amount that will more likely than not be realized. This requires management to make judgments and estimates regarding the amount and timing of the reversal of taxable temporary differences, expected future taxable income, and the impact of tax planning strategies.

Uncertainty exists regarding tax positions taken in previously filed tax returns which remain subject to examination, along with positions expected to be taken in future returns. The Company provides for unrecognized tax benefits, based on the technical merits, when it is more likely than not that an uncertain tax position will not be sustained upon examination. Adjustments are made to the uncertain tax positions when facts and circumstances change, such as the closing of a tax audit; changes in applicable tax laws, including tax case rulings and legislative guidance; or expiration of the applicable statute of limitations.

On December 22, 2017, the U.S. government enacted the Tax Cuts and Jobs Act, which made comprehensive changes to U.S. federal income tax laws by moving from a global to a modified territorial tax regime. As a result, cash repatriated to the U.S. is generally no longer subject to U.S. federal income taxes. No provision is made for foreign withholding taxes and any applicable U.S. income taxes on the undistributed earnings of non-U.S. subsidiaries where these earnings are considered indefinitely invested or otherwise retained for continuing international operations. Determination of the amount of taxes that might be paid on these undistributed earnings if eventually remitted is not practicable. See Notes 1 and 14.

Other Items

LEGAL MATTERS

At September 30, 2018, there were no known contingent liabilities (including guarantees, pending litigation, taxes and other claims) that management believes will be material in relation to the Company's financial statements, nor were there any material commitments outside the normal course of business.

NEW ACCOUNTING PRONOUNCEMENTS

In May 2014, the FASB issued ASC 606, *Revenue from Contracts with Customers*, to update and consolidate revenue recognition guidance from multiple sources into a single, comprehensive standard to be applied for all contracts with customers. The fundamental principle of the revised standard is to recognize revenue based on the transfer of goods and services to customers at an amount that the Company expects to be entitled to in exchange for those goods and services. Also required are additional disclosures regarding the nature, extent, timing and uncertainty of revenues and associated cash flows. The Company adopted the new standard as of October 1, 2018 using the modified retrospective transition method. The cumulative effect of adoption to be recognized in the first quarter of fiscal 2019 is expected to result in an immaterial increase to retained earnings. Further, the updates are not expected to materially impact the Company's financial statements in fiscal 2019. The Company is in the process of finalizing changes to its business processes, systems, controls and accounting policies to support recognition and disclosure under the new guidance.

In February 2016, the FASB issued ASC 842, *Leases*, to require recognition on the balance sheet of assets and liabilities related to the rights and obligations associated with all lease arrangements. Currently, obligations classified as operating leases are not recorded on the balance sheet but must be disclosed. The new standard is effective for the Company in the first quarter of fiscal 2020. The Company expects the revised standard to have a material impact on its balance sheet due to the recognition of right-of-use assets and lease liabilities related to operating leases. Contractual obligations related to operating leases totaled $661 million at September 30, 2018. The Company does not expect the new standard will materially impact its results of operations.

In February 2018, the FASB issued updates to ASC 220, *Comprehensive Income*, which permit reclassification of stranded tax effects resulting from U.S. tax reform from accumulated other comprehensive income to retained earnings. The Company adopted these updates in the fourth quarter of fiscal 2018 and reclassified $100 million of stranded tax effects from accumulated other comprehensive income to retained earnings. See Note 17.

In March 2017, the FASB issued updates to ASC 715, *Compensation - Retirement Benefits*, which only permit the service cost component of net periodic pension and postretirement expense to be reported with other compensation costs, while all other components are required to be reported separately in other deductions. These updates are effective in the first quarter of fiscal 2019, with early adoption permitted, and must be adopted on a retrospective basis. The updates will result in the reclassification of $40 million of income and $38 million of expense in 2018 and 2017, respectively, from cost of sales and SG&A to other deductions, net.

In August 2017, the FASB issued updates to ASC 815, *Derivatives and Hedging*, which permit hedging contractually specified risk components. The updates also eliminate the requirement to separately measure and report hedge ineffectiveness and simplify hedge documentation and effectiveness assessment requirements. These updates are effective for the Company in the first quarter of fiscal 2020, with early adoption permitted, and must be adopted using a modified retrospective approach. The Company is in the process of evaluating the impact of the revised standard on its financial statements.

In January 2017, the FASB issued updates to ASC 350, *Intangibles - Goodwill and Other*, eliminating the requirement to measure impairment based on the implied fair value of goodwill compared to the carrying amount of a reporting unit's goodwill. Instead, goodwill impairment will be measured as the excess of a reporting unit's carrying amount over its estimated fair value. These updates are effective prospectively for impairment tests beginning in fiscal 2021, with early adoption permitted.

In August 2018, the FASB issued updates to ASC 715, *Compensation - Retirement Benefits*, which modify the disclosure requirements for employers that sponsor defined benefit plans or other postretirement plans. These updates are effective in fiscal 2021, with early adoption permitted, and must be adopted on a retrospective basis. The updates change disclosures only and will not impact the Company's results of operations.

In August 2018, the FASB issued updates to ASC 350, *Intangibles - Goodwill and Other*, which aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement with the requirements for costs incurred to develop or obtain internal-use software. These updates are effective either prospectively or retrospectively in the first quarter of fiscal 2021, with early adoption permitted, and are not expected to materially impact the Company's results of operations.

Fiscal 2019 Outlook

The Company's strong performance in fiscal 2018 provides momentum heading into 2019, with demand expected to continue in both mature and emerging markets and across industries. Automation Solutions net sales are expected to be up 6 to 9 percent, with underlying sales up 5 to 8 percent excluding a positive impact from acquisitions of approximately 3 percent and unfavorable currency translation of 2 percent. Commercial & Residential Solutions net sales are expected to be up 8 to 10 percent, with underlying sales up 3 to 5 percent excluding a positive impact from acquisitions of approximately 6 percent and unfavorable currency translation of 1 percent. Consolidated net sales are expected to be up 6 to 9 percent, with underlying sales up 4 to 7 percent excluding a positive impact from acquisitions of approximately 4 percent and unfavorable currency translation of 2 percent. Reported earnings per share are expected to be $3.55 to $3.70, while operating cash flow is expected to be approximately $3.2 billion and free cash flow, which excludes targeted capital spending of $650 million, is expected to be approximately $2.5 billion.

Consolidated Statements of Earnings

EMERSON ELECTRIC CO. & SUBSIDIARIES

Years ended September 30 | Dollars in millions, except per share amounts

	2016	2017	2018
Net sales	$14,522	15,264	**17,408**
Costs and expenses:			
Cost of sales	8,260	8,860	**9,948**
Selling, general and administrative expenses	3,464	3,618	**4,258**
Other deductions, net	294	286	**376**
Interest expense, net of interest income of: 2016, $27; 2017, $36; 2018, $43	188	165	**159**
Earnings from continuing operations before income taxes	2,316	2,335	**2,667**
Income taxes	697	660	**443**
Earnings from continuing operations	1,619	1,675	**2,224**
Discontinued operations, net of tax: 2016, $269; 2017, $671; 2018, $0	45	(125)	**—**
Net earnings	1,664	1,550	**2,224**
Less: Noncontrolling interests in earnings of subsidiaries	29	32	**21**
Net earnings common stockholders	$ 1,635	1,518	**2,203**
Earnings common stockholders:			
Earnings from continuing operations	$ 1,590	1,643	**2,203**
Discontinued operations, net of tax	45	(125)	**—**
Net earnings common stockholders	$ 1,635	1,518	**2,203**
Basic earnings per share common stockholders:			
Earnings from continuing operations	$ 2.46	2.54	**3.48**
Discontinued operations	0.07	(0.19)	**—**
Basic earnings per common share	$ 2.53	2.35	**3.48**
Diluted earnings per share common stockholders:			
Earnings from continuing operations	$ 2.45	2.54	**3.46**
Discontinued operations	0.07	(0.19)	**—**
Diluted earnings per common share	$ 2.52	2.35	**3.46**

See accompanying Notes to Consolidated Financial Statements.

Consolidated Statements of Comprehensive Income

EMERSON ELECTRIC CO. & SUBSIDIARIES

Years ended September 30 | Dollars in millions

	2016	2017	2018
Net earnings	$1,664	1,550	**2,224**
Other comprehensive income (loss), net of tax:			
Foreign currency translation	(188)	441	**(231)**
Pension and postretirement	(210)	500	**242**
Cash flow hedges	18	37	**(7)**
Total other comprehensive income (loss)	(380)	978	**4**
Comprehensive income	1,284	2,528	**2,228**
Less: Noncontrolling interests in comprehensive income of subsidiaries	31	30	**21**
Comprehensive income common stockholders	$1,253	2,498	**2,207**

See accompanying Notes to Consolidated Financial Statements.

Consolidated Balance Sheets

EMERSON ELECTRIC CO. & SUBSIDIARIES

September 30 | Dollars and shares in millions, except per share amounts

	2017	2018
ASSETS		
Current assets		
Cash and equivalents	$ 3,062	**1,093**
Receivables, less allowances of $91 in 2017 and $113 in 2018	3,072	**3,344**
Inventories	1,696	**1,813**
Other current assets	422	**369**
Total current assets	8,252	**6,619**
Property, plant and equipment, net	3,321	**3,562**
Other assets		
Goodwill	5,316	**6,455**
Other intangible assets	1,890	**2,751**
Other	810	**1,003**
Total other assets	8,016	**10,209**
Total assets	$19,589	**20,390**
LIABILITIES AND EQUITY		
Current liabilities		
Short-term borrowings and current maturities of long-term debt	$ 862	**1,623**
Accounts payable	1,776	**1,943**
Accrued expenses	2,342	**2,534**
Income taxes	65	**64**
Total current liabilities	5,045	**6,164**
Long-term debt	3,794	**3,137**
Other liabilities	1,980	**2,099**
Equity		
Common stock, $0.50 par value; authorized, 1,200.0 shares; issued, 953.4 shares; outstanding, 641.7 shares in 2017; 629.2 shares in 2018	477	**477**
Additional paid-in-capital	297	**348**
Retained earnings	21,995	**23,072**
Accumulated other comprehensive income (loss)	(1,019)	**(1,015)**
	21,750	**22,882**
Less: Cost of common stock in treasury, 311.7 shares in 2017; 324.2 shares in 2018	13,032	**13,935**
Common stockholders' equity	8,718	**8,947**
Noncontrolling interests in subsidiaries	52	**43**
Total equity	8,770	**8,990**
Total liabilities and equity	$19,589	**20,390**

See accompanying Notes to Consolidated Financial Statements.

Consolidated Statements of Equity

EMERSON ELECTRIC CO. & SUBSIDIARIES

Years ended September 30 | Dollars in millions, except per share amounts

	2016	2017	2018
Common stock	$ 477	477	**477**
Additional paid-in-capital			
Beginning balance	170	205	**297**
Stock plans	35	92	**51**
Ending balance	205	297	**348**
Retained earnings			
Beginning balance	21,308	21,716	**21,995**
Net earnings common stockholders	1,635	1,518	**2,203**
Dividends paid (per share: 2016, $1.90; 2017, $1.92; 2018, $1.94)	(1,227)	(1,239)	**(1,229)**
Adoption of accounting standard updates	—	—	**103**
Ending balance	21,716	21,995	**23,072**
Accumulated other comprehensive income (loss)			
Beginning balance	(1,617)	(1,999)	**(1,019)**
Foreign currency translation	(190)	443	**(231)**
Pension and postretirement	(210)	500	**242**
Cash flow hedges	18	37	**(7)**
Ending balance	(1,999)	(1,019)	**(1,015)**
Treasury stock			
Beginning balance	(12,257)	(12,831)	**(13,032)**
Purchases	(601)	(400)	**(1,000)**
Issued under stock plans	27	199	**97**
Ending balance	(12,831)	(13,032)	**(13,935)**
Common stockholders' equity	7,568	8,718	**8,947**
Noncontrolling interests in subsidiaries			
Beginning balance	47	50	**52**
Net earnings	29	32	**21**
Other comprehensive income (loss)	2	(2)	**—**
Dividends paid	(28)	(28)	**(30)**
Ending balance	50	52	**43**
Total equity	$ 7,618	8,770	**8,990**

See accompanying Notes to Consolidated Financial Statements.

Consolidated Statements of Cash Flows

EMERSON ELECTRIC CO. & SUBSIDIARIES

Years ended September 30 | Dollars in millions

	2016	2017	2018
Operating activities			
Net earnings	$ 1,664	1,550	**2,224**
(Earnings) Loss from discontinued operations, net of tax	(45)	125	**—**
Adjustments to reconcile net earnings to net cash provided by operating activities:			
Depreciation and amortization	568	636	**758**
Changes in operating working capital	93	160	**(83)**
Pension funding	(66)	(45)	**(61)**
Other, net	285	264	**54**
Cash from continuing operations	2,499	2,690	**2,892**
Cash from discontinued operations	382	(778)	**—**
Cash provided by operating activities	2,881	1,912	**2,892**
Investing activities			
Capital expenditures	(447)	(476)	**(617)**
Purchases of businesses, net of cash and equivalents acquired	(132)	(2,990)	**(2,203)**
Divestitures of businesses	—	39	**201**
Other, net	30	(106)	**(101)**
Cash from continuing operations	(549)	(3,533)	**(2,720)**
Cash from discontinued operations	(77)	5,047	**—**
Cash provided by (used in) investing activities	(626)	1,514	**(2,720)**
Financing activities			
Net increase (decrease) in short-term borrowings	(34)	(1,635)	**343**
Proceeds from short-term borrowings greater than three months	1,264	—	**—**
Payments of short-term borrowings greater than three months	(1,174)	(90)	**—**
Payments of long-term debt	(254)	(254)	**(241)**
Dividends paid	(1,227)	(1,239)	**(1,229)**
Purchases of common stock	(601)	(400)	**(1,000)**
Other, net	(19)	27	**35**
Cash used in financing activities	(2,045)	(3,591)	**(2,092)**
Effect of exchange rate changes on cash and equivalents	(82)	45	**(49)**
Increase (Decrease) in cash and equivalents	128	(120)	**(1,969)**
Beginning cash and equivalents	3,054	3,182	**3,062**
Ending cash and equivalents	$ 3,182	3,062	**1,093**
Changes in operating working capital			
Receivables	$ 162	(25)	**(189)**
Inventories	58	32	**17**
Other current assets	(4)	(12)	**(28)**
Accounts payable	(22)	135	**115**
Accrued expenses	(57)	74	**17**
Income taxes	(44)	(44)	**(15)**
Total changes in operating working capital	$ 93	160	**(83)**

See accompanying Notes to Consolidated Financial Statements.

Notes to Consolidated Financial Statements

EMERSON ELECTRIC CO. & SUBSIDIARIES

Years ended September 30 | Dollars in millions, except per share amounts or where noted

(1) Summary of Significant Accounting Policies

FINANCIAL STATEMENT PRESENTATION

The preparation of the financial statements in conformity with U.S. generally accepted accounting principles (U.S. GAAP) requires management to make estimates and assumptions that affect reported amounts and related disclosures. Actual results could differ from these estimates. Certain prior year amounts have been reclassified to conform with current year presentation.

In the fourth quarter of 2018, the Company adopted updates to ASC 220, *Comprehensive Income*, which permit reclassification of stranded tax effects resulting from U.S. tax reform from accumulated other comprehensive income to retained earnings. The Company reclassified $100 of stranded tax effects from accumulated other comprehensive income to retained earnings upon adoption of these updates. See Note 17.

In the first quarter of 2018, the Company adopted updates to ASC 740, *Income Taxes*, which require recognition of the income tax effects of intra-entity transfers of assets other than inventory when the transfer occurs, on a modified retrospective basis. The adoption of these updates resulted in an increase of $3 to retained earnings.

In the first quarter of 2018, the Company adopted updates to ASC 330, *Inventory*, which changed the measurement principle for inventory from the lower of cost or market to the lower of cost and net realizable value. These updates were adopted prospectively and did not materially impact the Company's financial statements.

In the fourth quarter of 2017, the Company adopted updates to ASC 718, *Compensation - Stock Compensation*, which require all excess tax benefits and deficiencies related to share-based payments to be recognized in income tax expense rather than through additional paid-in-capital, and to be presented as operating cash flows instead of financing. These updates did not materially impact the Company's financial statements.

In the fourth quarter of 2017, the Company adopted updates to ASC 740, *Income Taxes*, which require noncurrent presentation of all deferred tax assets and liabilities on the balance sheet. These updates were adopted on a prospective basis and resulted in the reclassification of current deferred tax assets and liabilities to noncurrent presentation.

In the fourth quarter of 2017, the Company adopted updates to ASC 820, *Fair Value Measurement*, which require investments measured using the net asset value per share practical expedient to be removed from the fair value hierarchy and separately reported when making disclosures. These updates did not change the determination of fair value for any investments. Adoption affected disclosure presentation only; there was no impact on the Company's financial results.

In the first quarter of 2017, the Company adopted updates to ASC Subtopic 835-30, *Interest-Imputation of Interest*, which require presentation of debt issuance costs as a deduction from the related debt liability rather than within other assets. These updates were adopted on a retrospective basis and did not materially impact the Company's financial statements.

PRINCIPLES OF CONSOLIDATION

The consolidated financial statements include the accounts of the Company and its controlled affiliates. Intercompany transactions, profits and balances are eliminated in consolidation. Investments of 20 percent to 50 percent of the voting shares of other entities are accounted for by the equity method. Investments in publicly traded companies of less than 20 percent are carried at fair value, with changes in fair value reflected in accumulated other comprehensive income. Investments in nonpublicly traded companies of less than 20 percent are carried at cost.

FOREIGN CURRENCY TRANSLATION

The functional currency for most of the Company's non-U.S. subsidiaries is the local currency. Adjustments resulting from translating local currency financial statements into U.S. dollars are reflected in accumulated other comprehensive income.

CASH EQUIVALENTS

Cash equivalents consist of highly liquid investments with original maturities of three months or less.

INVENTORIES

Inventories are stated at the lower of cost and net realizable value. The majority of inventory is valued based on standard costs, which approximate average costs, while the remainder is principally valued on a first-in, first-out basis. Cost standards are revised

at the beginning of each year. The annual effect of resetting standards plus any operating variances incurred during each period are allocated to inventories and recognized in cost of sales as product is sold. Following are the components of inventory as of September 30:

	2017	2018
Finished products	$ 560	592
Raw materials and work in process	1,136	1,221
Total inventories	$1,696	1,813

FAIR VALUE MEASUREMENT

ASC 820, *Fair Value Measurement*, establishes a formal hierarchy and framework for measuring certain financial statement items at fair value, and requires disclosures about fair value measurements and the reliability of valuation inputs. Under ASC 820, measurement assumes the transaction to sell an asset or transfer a liability occurs in the principal or at least the most advantageous market for that asset or liability. Within the hierarchy, Level 1 instruments use observable market prices for an identical item in active markets and have the most reliable valuations. Level 2 instruments are valued through broker/dealer quotation or other approaches using market-observable inputs for similar items in active markets, including forward and spot prices, interest rates and volatilities. Level 3 instruments are valued using inputs not observable in an active market, such as company developed future cash flow estimates, and are considered the least reliable. Valuations for all of the Company's financial instruments fall within Level 2. The fair value of the Company's long-term debt is Level 2, estimated using current interest rates and pricing from financial institutions and other market sources for debt with similar maturities and characteristics.

PROPERTY, PLANT AND EQUIPMENT

The Company records investments in land, buildings, and machinery and equipment at cost. Depreciation is computed principally using the straight-line method over estimated service lives, which for principal assets are 30 to 40 years for buildings and 8 to 12 years for machinery and equipment. Long-lived tangible assets are reviewed for impairment whenever events or changes in business circumstances indicate the carrying value of the assets may not be recoverable. Impairment losses are recognized based on estimated fair values if the sum of estimated future undiscounted cash flows of the related assets is less than the carrying values. The components of property, plant and equipment as of September 30 follow:

	2017	2018
Land	$ 295	316
Buildings	2,043	2,145
Machinery and equipment	5,175	5,470
Construction in progress	360	439
Property, plant and equipment, at cost	7,873	8,370
Less: Accumulated depreciation	4,552	4,808
Property, plant and equipment, net	$3,321	3,562

GOODWILL AND OTHER INTANGIBLE ASSETS

Assets and liabilities acquired in business combinations are accounted for using the acquisition method and recorded at their respective fair values. Substantially all goodwill is assigned to the reporting unit that acquires a business. A reporting unit is an operating segment as defined in ASC 280, Segment Reporting, or a business one level below an operating segment if discrete financial information for that business unit is prepared and regularly reviewed by the segment manager. The Company conducts annual impairment tests of goodwill in the fourth quarter. If an initial assessment indicates it is more likely than not goodwill might be impaired, it is evaluated by comparing the reporting unit's estimated fair value to its carrying value. Goodwill is also tested for impairment between annual tests if events or circumstances indicate the fair value of a unit may be less than its carrying value. If the carrying amount exceeds the estimated fair value, impairment is recognized to the extent that recorded goodwill exceeds the implied fair value of that goodwill. Estimated fair values of reporting units are Level 3 measures and are developed generally under an income approach that discounts estimated future cash flows using risk-adjusted interest rates.

All of the Company's identifiable intangible assets are subject to amortization on a straight-line basis over their estimated useful lives. Identifiable intangibles consist of intellectual property such as patents and trademarks, customer relationships and capitalized software. Identifiable intangibles are also subject to evaluation for potential impairment if events or circumstances indicate the carrying amount may not be recoverable. See Note 7.

PRODUCT WARRANTY

Warranties vary by product line and are competitive for the markets in which the Company operates. Warranties generally extend for a period of one to two years from the date of sale or installation. Provisions for warranty are determined primarily based on historical warranty cost as a percentage of sales or a fixed amount per unit sold based on failure rates, adjusted for specific problems that may arise. Product warranty expense is less than one percent of sales.

REVENUE RECOGNITION

The Company recognizes a large majority of its revenues through the sale of manufactured products and records the sale when products are shipped or delivered, title and risk of loss pass to the customer, and collection is reasonably assured. Less than ten percent of the Company's revenues are recognized using the percentage-of completion method as performance occurs, and revenue from software sales is recognized in accordance with ASC 985-605. Management believes that all relevant criteria and conditions are considered when recognizing revenue.

Sales arrangements sometimes involve delivering multiple elements. In these instances, the revenue assigned to each element is based on vendor-specific objective evidence, third-party evidence or a management estimate of the relative selling price. Revenue is recognized for delivered elements if they have value to the customer on a stand-alone basis and performance related to the undelivered items is probable and substantially in the Company's control, or the undelivered elements are inconsequential or perfunctory and there are no unsatisfied contingencies related to payment. Approximately five percent of the Company's revenues from continuing operations arise from qualifying sales arrangements that include the delivery of multiple elements, principally in the Automation Solutions segment. The vast majority of these deliverables are tangible products, with a smaller portion attributable to installation, service or maintenance. Generally, contract duration is short term, and cancellation, termination or refund provisions apply only in the event of contract breach and have historically not been invoked.

DERIVATIVES AND HEDGING

In the normal course of business, the Company is exposed to changes in interest rates, foreign currency exchange rates and commodity prices due to its worldwide presence and diverse business profile. The Company's foreign currency exposures relate to transactions denominated in currencies that differ from the functional currencies of its business units, primarily in euros, Mexican pesos and Singapore dollars. Primary commodity exposures are price fluctuations on forecasted purchases of copper and aluminum and related products. As part of the Company's risk management strategy, derivative instruments are selectively used in an effort to minimize the impact of these exposures. Foreign exchange forwards and options are utilized to hedge foreign currency exposures impacting sales or cost of sales transactions, firm commitments and the fair value of assets and liabilities, while swap and option contracts may be used to minimize the effect of commodity price fluctuations on the cost of sales. All derivatives are associated with specific underlying exposures and the Company does not hold derivatives for trading or speculative purposes. The duration of hedge positions is generally two years or less.

All derivatives are accounted for under ASC 815, *Derivatives and Hedging*, and recognized at fair value. For derivatives hedging variability in future cash flows, the effective portion of any gain or loss is deferred in stockholders' equity and recognized when the underlying hedged transaction impacts earnings. The majority of the Company's derivatives that are designated as hedges and qualify for deferral accounting are cash flow hedges. For derivatives hedging the fair value of existing assets or liabilities, both the gain or loss on the derivative and the offsetting loss or gain on the hedged item are recognized in earnings each period. Currency fluctuations on non- U.S. dollar obligations that have been designated as hedges of non-U.S. dollar net asset exposures are reported in equity. To the extent that any hedge is not fully effective at offsetting changes in the underlying hedged item, there could be a net earnings impact. The Company also uses derivatives to hedge economic exposures that do not receive deferral accounting under ASC 815. The underlying exposures for these hedges relate primarily to purchases of commodity-based components used in the Company's manufacturing processes, and the revaluation of certain foreign-currency-denominated assets and liabilities. Gains or losses from the ineffective portion of any hedge, as well as any gains or losses on derivative instruments not designated as hedges, are recognized in the income statement immediately.

Counterparties to derivative arrangements are companies with high credit ratings, and the Company has bilateral collateral arrangements with them for which credit rating-based posting thresholds vary depending on the arrangement. If credit ratings on the Company's debt fall below preestablished levels, counterparties can require immediate full collateralization on all instruments in net liability positions. No collateral was posted with counterparties and none was held by the Company at year end. If contractual thresholds had been exceeded, the maximum collateral the Company could have been required to post was $11. The Company can also demand full collateralization of instruments in net asset positions should any of the Company's counterparties' credit ratings fall below certain thresholds. Risk from credit loss when derivatives are in asset positions is not considered material. The Company has master netting arrangements in place with its counterparties that allow the offsetting of certain derivative-related amounts receivable and payable when settlement occurs in the same period. Accordingly, counterparty balances are netted in the consolidated balance sheet and are reported in other current assets or accrued expenses as appropriate, depending on positions with counterparties as of the balance sheet date. See Note 8.

INCOME TAXES

The provision for income taxes is based on pretax income reported in the consolidated statements of earnings and tax rates currently enacted in each jurisdiction. Certain income and expense items are recognized in different time periods for financial reporting and income tax filing purposes, and deferred income taxes are provided for the effect of temporary differences. The Company also provides for foreign withholding taxes and any applicable U.S. income taxes on earnings intended to be repatriated from non-U.S. locations. No provision has been made for these taxes on approximately $3.4 billion of undistributed earnings of non-U.S. subsidiaries as of September 30, 2018, as these earnings are considered indefinitely invested or otherwise retained for continuing international operations. Recognition of foreign withholding taxes and any applicable U.S. income taxes on undistributed non-U.S. earnings would be triggered by a management decision to repatriate those earnings. Determination of the amount of taxes that might be paid on these undistributed earnings if eventually remitted is not practicable. See Note 14.

(2) Weighted-Average Common Shares

Basic earnings per common share consider only the weighted-average of common shares outstanding while diluted earnings per common share also consider the dilutive effects of stock options and incentive shares. An inconsequential number of shares of common stock were excluded from the computation of dilutive earnings per in 2018 as the effect would have been antidilutive, while 4.5 million and 13.3 million shares of common stock were excluded in 2017 and 2016, respectively. Earnings allocated to participating securities were inconsequential for all years presented. Reconciliations of weighted-average shares for basic and diluted earnings per common share follow (shares in millions):

	2016	2017	**2018**
Basic shares outstanding	644.0	642.1	**632.0**
Dilutive shares	2.8	1.3	**3.3**
Diluted shares outstanding	646.8	643.4	**635.3**

(3) Acquisitions and Divestitures

On July 17, 2018, the Company completed the acquisition of Aventics, a global provider of smart pneumatics technologies that power machine and factory automation applications, for $622, net of cash acquired. This business, which has annual sales of approximately $425, is reported in the Industrial Solutions product offering in the Automation Solutions segment. The Company recognized goodwill of $358 ($20 of which is expected to be tax deductible), and identifiable intangible assets of $278, primarily intellectual property and customer relationships with a weighted-average useful life of approximately 12 years.

On July 2, 2018, the Company completed the acquisition of Textron's tools and test equipment business for $810, net of cash acquired. This business, with annual sales of approximately $470, is a manufacturer of electrical and utility tools, diagnostics, and test and measurement instruments, and is reported in the Tools & Home products segment. The Company recognized goodwill of $374 ($17 of which is expected to be tax deductible), and identifiable intangible assets of $358, primarily intellectual property and customer relationships with a weighted-average useful life of approximately 14 years.

On December 1, 2017, the Company acquired Paradigm, a provider of software solutions for the oil and gas industry, for $505, net of cash acquired. This business had annual sales of approximately $140 and is included in the Measurement & Analytical Instrumentation product offering within Automation Solutions. The Company recognized goodwill of $328 ($160 of which is expected to be tax deductible), and identifiable intangible assets of $238, primarily intellectual property and customer relationships with a weighted-average useful life of approximately 11 years.

During 2018, the Company also acquired four smaller businesses, two in the Automation Solutions segment and two in the Climate Technologies segment.

Total cash paid for all businesses for the fiscal year ended 2018 was $2.2 billion, net of cash acquired. The purchase price of the 2018 acquisitions was preliminarily allocated to assets and liabilities as follows. Valuations of acquired assets and liabilities are in process and subject to refinement.

Accounts receivable	$ 154
Inventory	196
Property, plant and equipment	129
Goodwill	1,188
Intangibles	1,012
Other assets	45
Total assets	2,724
Accounts payable	73
Other current liabilities	112
Deferred taxes and other liabilities	320
Cash paid, net of cash acquired	$2,219

Results of operations for the 2018 acquisitions included sales of $365 and a net loss of $3, including intangibles amortization of $40 and restructuring expense of $3. These results also included first year pretax acquisition accounting charges related to inventory and deferred revenue of $39 and $11, respectively, which are reported in Corporate and other. See Note 18.

On April 28, 2017, the Company completed the acquisition of Pentair's valves & controls business for $2.96 billion, net of cash acquired of $207, subject to certain post-closing adjustments. This business, with annualized sales of approximately $1.4 billion, is a manufacturer of control, isolation and pressure relief valves and actuators, and complements the Valves, Actuators & Regulators product offering within Automation Solutions. The Company recognized goodwill of $1.5 billion (none of which is expected to be tax deductible), and other identifiable intangible assets of $1.1 billion, primarily customer relationships and intellectual property with a weighted-average life of approximately 14 years. The Company also acquired two smaller businesses in the Automation Solutions segment. Total cash paid for all businesses was $3.0 billion, net of cash acquired.

The purchase price of the valves & controls business was allocated to assets and liabilities as follows.

Accounts receivable	$ 349
Inventory	516
Property, plant and equipment	339
Goodwill	1,476
Intangibles	1,076
Other assets	282
Total assets	4,038
Accounts payable	119
Other current liabilities	306
Deferred taxes and other liabilities	671
Cash paid, net of cash acquired	$2,942

Results of operations for 2017 included sales of $600 and a net loss of $97, $0.15 per share, including restructuring expense of $25 and intangibles amortization of $29. These results also included first year pretax acquisition accounting charges related to inventory of $74 and backlog of $19, or a total of $93 ($65 after-tax, $0.10 per share), which are reported in Corporate and other in 2017. See Note 18.

On October 2, 2017, the Company sold its residential storage business for $200 in cash, and recognized a small pretax gain and an after-tax loss of $24 ($0.04 per share) in the first quarter of 2018 due to income taxes resulting from nondeductible goodwill. The Company realized $150 in after-tax cash proceeds from the sale. This business, with sales of $298 and pretax earnings of $15 in 2017, is a leader in home organization and storage systems, and was reported within the Tools & Home Products segment. Assets and liabilities for this business were classified as held-for-sale in the consolidated balance sheet at September 30, 2017 as follows: current assets, $73; other assets, $176; and accrued expenses and other liabilities, $61.

The Company acquired six businesses in 2016, four in Automation Solutions and two in Climate Technologies. Total cash paid for these businesses was $132, net of cash acquired. Annualized sales for these businesses were approximately $51 in 2016. The Company recognized goodwill of $83 ($27 of which is expected to be tax deductible) and other identifiable intangible assets of $50, primarily customer relationships and intellectual property with a weighted-average life of approximately nine years.

The results of operations of the acquired businesses discussed above have been included in the Company's consolidated results of operations since the respective dates of acquisition.

PRO FORMA FINANCIAL INFORMATION (UNAUDITED)

The following pro forma consolidated condensed financial results of operations are presented as if the 2018 acquisitions occurred on October 1, 2016 and the acquisition of the valves & controls business occurred on October 1, 2015. The pro forma information is presented for informational purposes only and is not indicative of the results of operations that would have been achieved had the acquisitions occurred as of that time.

	2017	**2018**
Net sales	$17,148	**18,186**
Net earnings from continuing operations common stockholders	$ 1,638	**2,269**
Diluted earnings per share from continuing operations	$ 2.53	**3.56**

The 2018 pro forma results exclude acquisition costs and first year acquisition accounting charges related to inventory, backlog and deferred revenue of $102. Of these charges, $73 related to businesses acquired in 2018 and $29 related to the valves & controls acquisition. The 2017 pro forma results include the charges related to the 2018 acquisitions. The 2017 pro forma results exclude first year acquisition accounting charges related to the valves & controls business of $93 and acquisition costs of $52.

(4) Discontinued Operations

In 2017, the Company completed the previously announced strategic actions to streamline its portfolio and drive growth in its core businesses. On November 30, 2016, the Company completed the sale of its network power systems business for $4.0 billion in cash and retained a subordinated interest in distributions, contingent upon the equity holders first receiving a threshold return on their initial investment. This business comprised the former Network Power segment. Additionally, on January 31, 2017, the Company completed the sale of its power generation, motors and drives business for approximately $1.2 billion, subject to post-closing adjustments. This business was previously reported in the former Industrial Automation segment. The results of operations for these businesses were reported within discontinued operations and the assets and liabilities were reflected as held-for-sale for periods presented until disposal.

The financial results of the network power systems business and power generation, motors and drives business reported as discontinued operations for the years ending September 30, 2017 and 2016, were as follows:

	NETWORK POWER SYSTEMS		POWER GENERATION, MOTORS AND DRIVES		TOTAL	
	2016	2017	2016	2017	2016	2017
Net sales	$4,378	630	1,368	407	5,746	1,037
Cost of sales	2,708	394	1,033	307	3,741	701
SG&A	1,101	180	269	83	1,370	263
Other deductions, net	172	(515)	149	42	321	(473)
Earnings (Loss) before income taxes	397	571	(83)	(25)	314	546
Income taxes	218	577	51	94	269	671
Earnings (Loss), net of tax	$ 179	(6)	(134)	(119)	45	(125)

In 2017, the net loss from discontinued operations of $125, $0.19 per share, included an after-tax gain on the divestiture of the network power systems business of $125 ($519 pretax), a $173 after-tax loss ($36 pretax loss) on the divestiture of the power generation, motors and drives business, income tax expense of $109 for repatriation of sales proceeds, and lower expense of $32 primarily due to ceasing depreciation and amortization for the discontinued businesses held-for-sale.

Discontinued operations income of $45, $0.07 per share, in 2016 included earnings from operations of $344 and costs to execute the portfolio repositioning of $299. These costs are comprised of income tax expense of $143 for repatriation of cash from these businesses, reorganization of their legal structures prior to sale, and basis differences for book and tax, as well as costs for legal, consulting, investment banking and other expenses of $77. In addition, net earnings for 2016 included a loss of $103 to write down the power generation, motors and drives business to the sales price less costs to sell, and lower expense of $24 due to ceasing depreciation and amortization for the discontinued businesses held-for-sale.

Net cash from operating activities and from investing activities for the network power systems business and the power generation, motors and drives business for the years ending September 30, 2017 and 2016, were as follows:

	NETWORK POWER SYSTEMS		POWER GENERATION, MOTORS AND DRIVES		TOTAL	
	2016	2017	2016	2017	2016	2017
Cash from operating activities	$343	(615)	39	(163)	382	(778)
Cash from investing activities	$ (33)	3,952	(44)	1,095	(77)	5,047

Operating cash flow used by discontinued operations was $778 for 2017, which primarily included payments of approximately $700 for income taxes on completion of the divestitures and repatriation of cash, cash used by operations and other costs. Operating cash flow from discontinued operations in 2016 was net of payments of $179 for separation costs.

(5) Other Deductions, Net

Other deductions, net are summarized as follows:

	2016	2017	2018
Amortization of intangibles (intellectual property and customer relationships)	$ 84	136	**211**
Restructuring costs	96	78	**65**
Other	114	72	**100**
Total	$294	286	**376**

The increase in amortization for 2018 is due to acquisitions. Other, which is composed of several items, including acquisition/divestiture costs, foreign currency transaction gains and losses, bad debt expense, litigation and other items, increased in 2018 primarily due to higher acquisition/divestiture costs of $18. The decrease in 2017 is primarily due to favorable foreign currency transactions comparisons of $78 (unfavorable in 2016), partially offset by higher acquisition/divestiture costs of $24 and the comparative impact of a $21 gain from payments received related to dumping duties in 2016.

(6) Restructuring Costs

Each year the Company incurs costs to size its businesses to levels appropriate for current economic conditions and to continually improve its cost structure and operational efficiency, deploy assets globally, and remain competitive on a worldwide basis. Costs result from numerous individual actions implemented across the Company's various operating units on an ongoing basis and can include costs for moving facilities to best-cost locations, restarting plants after relocation or geographic expansion to better serve local markets, reducing forcecount or the number of facilities, exiting certain product lines, and other costs resulting from asset deployment decisions. By category, shutdown costs include severance and benefits, stay bonuses, lease and other contract termination costs and asset write-downs. Vacant facility costs include security, maintenance, utilities and other costs. Start-up and moving costs include the costs of relocating fixed assets and employee training and relocation.

Restructuring expenses were $65, $78 and $96, respectively, for 2018, 2017 and 2016. The 2018 and 2017 restructuring expense included $19 and $25 related to acquisitions, respectively.

Restructuring costs by business segment follows:

	2016	2017	2018
Automation Solutions	$80	63	**41**
Climate Technologies	5	10	**20**
Tools & Home Products	2	2	**3**
Commercial & Residential Solutions	7	12	**23**
Corporate	9	3	**1**
Total	$96	78	**65**

Costs incurred in 2018 and 2017 primarily related to the deployment of resources to better serve local markets and higher growth areas, and the integration of acquisitions. In 2016 costs primarily related to the reduction and selective repositioning of the Company's cost structure to address global economic weakness and in connection with the portfolio repositioning through

facilities and forcecount rationalization in Europe and North America, primarily in Automation Solutions. In 2018, restructuring activities included actions to exit six production or office facilities worldwide and eliminate approximately 1,200 positions. Expenses incurred in 2017 and 2016 included actions to exit 10 and 19 facilities, and eliminate approximately 1,200 and 1,900 positions, respectively.

The change in the liability for restructuring costs during the years ended September 30 follows:

	2017	EXPENSE	UTILIZED/PAID	2018
Severance and benefits	$60	**43**	**57**	**46**
Lease and other contract terminations	4	**3**	**4**	**3**
Asset write-downs	—	**4**	**4**	**—**
Vacant facility and other shutdown costs	1	**6**	**4**	**3**
Start-up and moving costs	—	**9**	**9**	**—**
Total	$65	**65**	**78**	**52**

	2016	EXPENSE	UTILIZED/PAID	2017
Severance and benefits	$44	49	33	60
Lease and other contract terminations	5	4	5	4
Asset write-downs	—	7	7	—
Vacant facility and other shutdown costs	3	5	7	1
Start-up and moving costs	2	13	15	—
Total	$54	78	67	65

(7) Goodwill and Other Intangibles

Purchases of businesses are accounted for under the acquisition method, with substantially all goodwill assigned to the reporting unit that acquires the business. Under an impairment test performed annually, if the carrying amount of a reporting unit exceeds its estimated fair value, impairment is recognized to the extent that the carrying amount of the unit's goodwill exceeds the implied fair value of the goodwill. Fair values of reporting units are Level 3 measures which are estimated generally using an income approach that discounts future cash flows using risk-adjusted interest rates, as well as earnings multiples or other techniques as warranted. Fair values are subject to changes in underlying economic conditions.

The change in the carrying value of goodwill by business segment follows:

	AUTOMATION SOLUTIONS	CLIMATE TECHNOLOGIES	TOOLS & HOME PRODUCTS	COMMERCIAL & RESIDENTIAL SOLUTIONS	TOTAL
Balance, September 30, 2016	$3,160	553	196	749	3,909
Acquisitions	1,486				1,486
Divestitures			(142)	(142)	(142)
Foreign currency translation and other	58	2	3	5	63
Balance, September 30, 2017	4,704	555	57	612	5,316
Acquisitions	**696**	**118**	**374**	**492**	**1,188**
Foreign currency translation and other	**(45)**	**(3)**	**(1)**	**(4)**	**(49)**
Balance, September 30, 2018	**$5,355**	**670**	**430**	**1,100**	**6,455**

The gross carrying amount and accumulated amortization of identifiable intangible assets by major class follow:

	CUSTOMER RELATIONSHIPS		INTELLECTUAL PROPERTY		CAPITALIZED SOFTWARE		TOTAL	
	2017	2018	2017	2018	2017	2018	2017	2018
Gross carrying amount	$1,392	**1,968**	1,012	**1,469**	1,137	**1,230**	3,541	**4,667**
Less: Accumulated amortization	361	**451**	435	**544**	855	**921**	1,651	**1,916**
Net carrying amount	$1,031	**1,517**	577	**925**	282	**309**	1,890	**2,751**

Intangible asset amortization expense for the major classes included above for 2018, 2017 and 2016 was $314, $222 and $177, respectively. Based on intangible asset balances as of September 30, 2018, amortization expense is expected to approximate $338 in 2019, $308 in 2020, $280 in 2021, $235 in 2022 and $222 in 2023.

The increase in goodwill and intangibles is primarily due to acquisitions. See Note 3.

(8) Financial Instruments

HEDGING ACTIVITIES

As of September 30, 2018, the notional amount of foreign currency hedge positions was approximately $1.9 billion, while commodity hedge contracts totaled approximately $140 (primarily 52 million pounds of copper and aluminum). All derivatives receiving deferral accounting are cash flow hedges. The majority of hedging gains and losses deferred as of September 30, 2018 are expected to be recognized over the next 12 months as the underlying forecasted transactions occur. Gains and losses on foreign currency derivatives reported in other deductions, net reflect hedges of balance sheet exposures that do not receive deferral accounting.

Amounts included in earnings and other comprehensive income follow:

		GAIN (LOSS) TO EARNINGS			GAIN (LOSS) TO OCI		
		2016	2017	**2018**	2016	2017	**2018**
	Location						
Commodity	Cost of sales	$ (35)	10	**13**	(9)	25	**(7)**
Foreign currency	Sales, cost of sales	(41)	(15)	**2**	(38)	30	**9**
Foreign currency	Other deductions, net	(27)	(39)	**(15)**			
Total		$(103)	(44)	**—**	(47)	55	**2**

Regardless of whether derivatives receive deferral accounting, the Company expects hedging gains or losses to be essentially offset by losses or gains on the related underlying exposures. The amounts ultimately recognized will differ from those presented above for open positions, which remain subject to ongoing market price fluctuations until settlement. Derivatives receiving deferral accounting are highly effective and no amounts were excluded from the assessment of hedge effectiveness. Hedge ineffectiveness was immaterial in all years shown.

FAIR VALUE MEASUREMENT

The estimated fair value of long-term debt was $4.0 billion and $4.4 billion, respectively, as of September 30, 2018 and 2017, which exceeded the carrying value by $135 and $321, respectively. As of September 30, 2018, the fair value of commodity contracts and foreign currency contracts was reported in other current assets and accrued expenses. Valuations of derivative contract positions as of September 30 follow:

	2017		**2018**	
	ASSETS	LIABILITIES	**ASSETS**	**LIABILITIES**
Foreign currency	$26	18	**35**	**11**
Commodity	$12	—	**1**	**10**

(9) Short-Term Borrowings and Lines of Credit

Short-term borrowings and current maturities of long-term debt are as follows:

	2017	**2018**
Current maturities of long-term debt	$270	**688**
Commercial paper	592	**935**
Total	$862	**1,623**
Interest rate for weighted-average short-term borrowings at year end	1.1%	**2.1%**

In May 2018, the Company entered into a $3.5 billion five-year revolving backup credit facility with various banks, which replaced the April 2014 $3.5 billion facility. The credit facility is maintained to support general corporate purposes, including commercial paper borrowings. The Company has not incurred any borrowings under this or previous facilities. The credit facility contains no financial covenants and is not subject to termination based on a change of credit rating or material adverse changes. The facility is unsecured and may be accessed under various interest rate and currency denomination alternatives at the Company's option. Fees to maintain the facility are immaterial.

(10) Long-Term Debt

The details of long-term debt follow:

	2017	2018
5.375% notes due October 2017	$ 250	—
5.25% notes due October 2018	400	400
5.0% notes due April 2019	250	250
4.875% notes due October 2019	500	500
4.25% notes due November 2020	300	300
2.625% notes due December 2021	500	500
2.625% notes due February 2023	500	500
3.15% notes due June 2025	500	500
6.0% notes due August 2032	250	250
6.125% notes due April 2039	250	250
5.25% notes due November 2039	300	300
Other	64	75
Long-term debt	4,064	3,825
Less: Current maturities	270	688
Total, net	$3,794	3,137

Long-term debt maturing during each of the four years after 2019 is $512, $319, $500 and $501, respectively. Total interest paid on all debt was approximately $193, $192 and $209 in 2018, 2017 and 2016, respectively. During the year, the Company repaid $250 of 5.375% notes that matured in October 2017. In 2017, the Company repaid $250 of 5.125% notes that matured in December 2016.

The Company maintains a universal shelf registration statement on file with the SEC under which it can issue debt securities, preferred stock, common stock, warrants, share purchase contracts or share purchase units without a predetermined limit. Securities can be sold in one or more separate offerings with the size, price and terms to be determined at the time of sale.

(11) Retirement Plans

Retirement plans expense includes the following components:

	U.S. PLANS			NON-U.S. PLANS		
	2016	2017	2018	2016	2017	2018
Defined benefit plans:						
Service cost (benefits earned during the period)	$ 59	60	52	26	19	24
Interest cost	148	134	141	39	30	39
Expected return on plan assets	(296)	(290)	(283)	(52)	(56)	(67)
Net amortization and other	166	211	129	17	22	14
Net periodic pension expense	77	115	39	30	15	10
Defined contribution plans	104	96	132	56	47	52
Total retirement plans expense	$ 181	211	171	86	62	62

The decrease in net periodic pension expense in 2018 is primarily attributable to lower amortization expense compared to the prior year. Net periodic pension expense includes $3 and $12 and defined contribution expense includes $6 and $34, for 2017 and 2016, respectively, related to discontinued operations. For defined contribution plans, the Company makes cash contributions based on plan requirements, which are expensed as incurred.

The Company transitioned from defined benefit to defined contribution retirement plans in 2016. The principal U.S. defined benefit pension plan is closed to employees hired after January 1, 2016, and current employees not meeting combined age and years of service criteria ceased accruing benefits effective October 1, 2016. Affected employees were enrolled in an enhanced defined contribution plan. The impact of these actions had an inconsequential impact on the Company's financial statements for all years presented. Over time, defined benefit plan expense will decline while defined contribution plan expense will increase, with an expectation of reduced earnings volatility.

All of the following tables include defined benefit plans related to continuing and discontinued operations.

Details of the changes in the actuarial present value of the projected benefit obligation and the fair value of plan assets for defined benefit pension plans follow:

	U.S. PLANS		NON-U.S. PLANS	
	2017	**2018**	2017	**2018**
Projected benefit obligation, beginning	$4,696	**4,369**	1,320	**1,489**
Service cost	60	**52**	19	**24**
Interest cost	134	**141**	30	**39**
Actuarial (gain) loss	(144)	**(262)**	(83)	**(51)**
Benefits paid	(201)	**(205)**	(29)	**(36)**
Settlements	(125)	**(152)**	(25)	**(49)**
Acquisitions (Divestitures), net	(55)	**13**	163	**54**
Foreign currency translation and other	4	**1**	94	**(28)**
Projected benefit obligation, ending	$4,369	**3,957**	1,489	**1,442**
Fair value of plan assets, beginning	$4,110	**4,292**	909	**1,236**
Actual return on plan assets	516	**265**	61	**69**
Employer contributions	20	**20**	25	**41**
Benefits paid	(201)	**(205)**	(29)	**(36)**
Settlements	(125)	**(152)**	(25)	**(49)**
Acquisitions (Divestitures), net	(30)	**12**	232	**10**
Foreign currency translation and other	2	**1**	63	**(28)**
Fair value of plan assets, ending	$4,292	**4,233**	1,236	**1,243**
Net amount recognized in the balance sheet	$ (77)	**276**	(253)	**(199)**
Location of net amount recognized in the balance sheet:				
Noncurrent asset	$ 154	**465**	43	**126**
Current liability	(11)	**(10)**	(11)	**(13)**
Noncurrent liability	(220)	**(179)**	(285)	**(312)**
Net amount recognized in the balance sheet	(77)	**276**	(253)	**(199)**
Pretax accumulated other comprehensive loss	$ (923)	**(548)**	(238)	**(164)**

Approximately $85 of the $712 of pretax losses deferred in accumulated other comprehensive income (loss) at September 30, 2018 will be amortized to expense in 2019. As of September 30, 2018, U.S. pension plans were overfunded by $276 in total, including unfunded plans totaling $182. The non-U.S. plans were underfunded by $199, including unfunded plans totaling $270.

As of the September 30, 2018 and 2017 measurement dates, the plans' total accumulated benefit obligation was $5,154 and $5,607, respectively. The total projected benefit obligation, accumulated benefit obligation and fair value of plan assets for individual plans with accumulated benefit obligations in excess of plan assets were $585, $508 and $87, respectively, for 2018, and $1,182, $1,088 and $663, respectively, for 2017.

Future benefit payments by U.S. plans are estimated to be $214 in 2019, $221 in 2020, $228 in 2021, $234 in 2022, $239 in 2023 and $1,252 in total over the five years 2024 through 2028. Based on foreign currency exchange rates as of September 30, 2018, future benefit payments by non-U.S. plans are estimated to be $83 in both 2019 and 2020, $88 in 2021, $95 in 2022, $99 in 2023 and $569 in total over the five years 2024 through 2028. The Company expects to contribute approximately $60 to its retirement plans in 2019.

The weighted-average assumptions used in the valuation of pension benefits follow:

	U.S. PLANS			NON-U.S. PLANS		
	2016	2017	**2018**	2016	2017	**2018**
Net pension expense:						
Discount rate used to determine service cost	4.60%	3.75%	**3.95%**	3.3%	2.3%	**2.6%**
Discount rate used to determine interest cost	3.50%	2.90%	**3.25%**	3.3%	2.3%	**2.6%**
Expected return on plan assets	7.50%	7.25%	**7.00%**	6.4%	6.2%	**5.7%**
Rate of compensation increase	3.25%	3.25%	**3.25%**	3.4%	3.2%	**3.4%**
Benefit obligations:						
Discount rate	3.50%	3.76%	**4.26%**	2.3%	2.6%	**2.7%**
Rate of compensation increase	3.25%	3.25%	**3.25%**	3.2%	3.4%	**3.5%**

The discount rate for the U.S. retirement plans was 4.26 percent as of September 30, 2018. An actuarially developed, company-specific yield curve is used to determine the discount rate. To determine the service and interest cost components of pension expense for its U.S. retirement plans, the Company applies the specific spot rates along the yield curve, rather than the single weighted-average rate, to the projected cash flows to provide more precise measurement of these costs. The expected return on plan assets assumption is determined by reviewing the investment returns of the plans for the past 10 years plus longer-term historical returns of an asset mix approximating the Company's asset allocation targets, and periodically comparing these returns to expectations of investment advisors and actuaries to determine whether long-term future returns are expected to differ significantly from the past.

The Company's asset allocations at September 30, 2018 and 2017, and weighted-average target allocations follow:

	U.S. PLANS			NON-U.S. PLANS		
	2017	**2018**	TARGET	2017	**2018**	TARGET
Equity securities	67%	**62%**	60-70%	52%	**52%**	45-55%
Debt securities	28	**34**	25-35	38	**38**	35-45
Other	5	**4**	3-10	10	**10**	5-15
Total	100%	**100%**	100%	100%	**100%**	100%

The primary objective for the investment of pension assets is to secure participant retirement benefits by earning a reasonable rate of return. Plan assets are invested consistent with the provisions of the prudence and diversification rules of ERISA and with a long-term investment horizon. The Company continuously monitors the value of assets by class and routinely rebalances to remain within target allocations. The equity strategy is to minimize concentrations of risk by investing primarily in a mix of companies that are diversified across geographies, market capitalization, style, sectors and industries worldwide. The approach for bonds emphasizes investment-grade corporate and government debt with maturities matching a portion of the longer duration pension liabilities. The bonds strategy also includes a high-yield element which is generally shorter in duration. For diversification, a small portion of U.S. plan assets is allocated to private equity partnerships and real asset fund investments, providing opportunities for above market returns. Leveraging techniques are not used and the use of derivatives in any fund is limited and inconsequential.

The fair values of defined benefit pension assets as of September 30, organized by asset class and by the fair value hierarchy of ASC 820, *Fair Value Measurement*, follow. Investments valued based on the net asset value (NAV) of fund units held, as derived from the fair value of the underlying assets, are excluded from the fair value hierarchy.

	LEVEL 1	LEVEL 2	LEVEL 3	MEASURED AT NAV	TOTAL	PERCENTAGE
2018						
U.S. equities	**$ 968**	**5**	**350**	**320**	**1,643**	**30%**
International equities	**595**	**21**		**745**	**1,361**	**25%**
Emerging market equities				**243**	**243**	**5%**
Corporate bonds		**696**		**423**	**1,119**	**20%**
Government bonds		**350**		**438**	**788**	**14%**
High-yield bonds				**10**	**10**	**—%**
Other	**107**	**6**	**121**	**78**	**312**	**6%**
Total	**$1,670**	**1,078**	**471**	**2,257**	**5,476**	**100%**
2017						
U.S. equities	$1,059	5	338	357	1,759	32%
International equities	724	6		739	1,469	27%
Emerging market equities				276	276	5%
Corporate bonds		514		283	797	14%
Government bonds	3	369		399	771	14%
High-yield bonds				132	132	2%
Other	132	6	113	73	324	6%
Total	$1,918	900	451	2,259	5,528	100%

Asset Classes

U.S. equities reflect companies domiciled in the U.S., including multinational companies. International equities are comprised of companies domiciled in developed nations outside the U.S. Emerging market equities are comprised of companies domiciled in portions of Asia, Eastern Europe and Latin America. Corporate bonds represent investment-grade debt of issuers primarily from the U.S. Government bonds include investment-grade instruments issued by federal, state and local governments, primarily in the U.S. High-yield bonds include noninvestment-grade debt from a diverse group of developed market issuers. Other includes cash, interests in mixed asset funds investing in commodities, natural resources, agriculture, real estate and infrastructure funds, life insurance contracts (U.S.), and shares in certain general investment funds of financial institutions or insurance arrangements (non-U.S.) that typically ensure no market losses or provide for a small minimum return guarantee.

Fair Value Hierarchy Categories

Valuations of Level 1 assets for all classes are based on quoted closing market prices from the principal exchanges where the individual securities are traded. Cash is valued at cost, which approximates fair value. Debt securities categorized as Level 2 assets are generally valued based on independent broker/dealer bids or by comparison to other debt securities having similar durations, yields and credit ratings. U.S. equity securities classified as Level 3 are fund investments in private companies. Valuation techniques and inputs for these assets include discounted cash flow analysis, earnings multiple approaches, recent transactions, transfer restrictions, prevailing discount rates, volatilities, credit ratings and other factors. In the Other class, interests in mixed asset funds are Level 2, and U.S. life insurance contracts and non-U.S. general fund investments and insurance arrangements are Level 3. Investments measured at net asset value are primarily nonexchange-traded commingled or collective funds where the underlying securities have observable prices available from active markets.

Details of the changes in value for Level 3 assets follow:

	2017	**2018**
Level 3, beginning	$405	**451**
Gains (Losses) on assets held	49	**1**
Gains (Losses) on assets sold	(28)	**37**
Purchases, sales and settlements, net	25	**(18)**
Level 3, ending	$451	**471**

(12) Postretirement Plans

The Company sponsors unfunded postretirement benefit plans (primarily health care) for certain U.S. retirees and their dependents. The components of net postretirement benefits expense for the years ended September 30 follow:

	2016	2017	**2018**
Service cost	$ 1	1	**1**
Interest cost	8	6	**6**
Net amortization	(21)	(19)	**(19)**
Net postretirement expense	$(12)	(12)	**(12)**

Details of the changes in actuarial present value of accumulated postretirement benefit obligations follow:

	2017	**2018**
Benefit obligation, beginning	$206	**174**
Service cost	1	**1**
Interest cost	6	**6**
Actuarial (gain) loss	(24)	**(19)**
Benefits paid	(13)	**(13)**
Divestitures	(2)	**—**
Benefit obligation, ending (recognized in balance sheet)	$174	**149**

As of September 30, 2018 there were $141 of deferred actuarial gains in accumulated other comprehensive income, of which approximately $18 will be amortized into earnings in 2019. The discount rates used to measure the benefit obligation as of September 30, 2018, 2017 and 2016 were 4.08 percent, 3.45 percent and 3.10 percent, respectively. The health care cost trend rate used for 2019 is assumed to be 7.2 percent initially and was assumed to be 7.5 percent in 2018, declining to 5.0 percent over the subsequent 10 years. A one percentage point increase or decrease in the health care cost trend rate assumption for either year would have an inconsequential impact on postretirement benefits expense and the benefit obligation. The Company estimates that future health care benefit payments will be approximately $13 per year for 2019 through 2023, and $54 in total over the five years 2024 through 2028.

(13) Contingent Liabilities and Commitments

The Company is a party to a number of pending legal proceedings and claims, including those involving general and product liability (including asbestos) and other matters, several of which claim substantial amounts of damages. The Company accrues for such liabilities when it is probable that future costs (including legal fees and expenses) will be incurred and such costs can be reasonably estimated. Accruals are based on developments to date; management's estimates of the outcomes of these matters; the Company's experience in contesting, litigating and settling similar matters; and any related insurance coverage. Although it is not possible to predict the ultimate outcome of these matters, the Company historically has been largely successful in defending itself against claims and suits that have been brought against it, and will continue to defend itself vigorously in all such matters. While the Company believes a material adverse impact is unlikely, given the inherent uncertainty of litigation, a remote possibility exists that a future development could have a material adverse impact on the Company. The Company enters into certain indemnification agreements in the ordinary course of business in which the indemnified party is held harmless and is reimbursed for losses incurred from claims by third parties, usually up to a prespecified limit. In connection with divestitures of certain assets or businesses, the Company often provides indemnities to the buyer with respect to certain matters including, for example, environmental or unidentified tax liabilities related to periods prior to the disposition. Because of the uncertain nature of the indemnities, the maximum liability cannot be quantified. As such, contingent liabilities are recorded when they are both probable and reasonably estimable. Historically, payments under indemnity arrangements have been inconsequential.

At September 30, 2018, there were no known contingent liabilities (including guarantees, pending litigation, taxes and other claims) that management believes will be material in relation to the Company's financial statements, nor were there any material commitments outside the normal course of business.

(14) Income Taxes

Pretax earnings from continuing operations consist of the following:

	2016	2017	2018
United States	$1,312	1,350	**1,652**
Non-U.S.	1,004	985	**1,015**
Total pretax earnings	$2,316	2,335	**2,667**

The principal components of income tax expense follow:

	2016	2017	2018
Current:			
U.S. federal	$394	351	**341**
State and local	11	40	**52**
Non-U.S.	305	311	**300**
Deferred:			
U.S. federal	2	7	**(224)**
State and local	4	4	**(11)**
Non-U.S.	(19)	(53)	**(15)**
Income tax expense	$697	660	**443**

Reconciliations of the U.S. federal statutory income tax rate to the Company's effective tax rate follow. For fiscal 2018, the U.S. federal statutory rate was 35 percent for one quarter and 21 percent for three quarters.

	2016	2017	2018
U.S. federal statutory rate	35.0%	35.0%	**24.5%**
State and local taxes, net of U.S. federal tax benefit	0.5	1.2	**1.2**
Non-U.S. rate differential	(2.9)	(3.6)	**0.8**
Non-U.S. tax holidays	(1.1)	(1.0)	**(0.8)**
U.S. manufacturing deduction	(1.8)	(1.7)	**(1.1)**
Gain on divestiture	—	—	**1.0**
Subsidiary restructuring	—	(1.8)	**(2.0)**
Transition impact of Tax Act	—	—	**(7.1)**
Other	0.4	0.2	**0.1**
Effective income tax rate	30.1%	28.3%	**16.6%**

On December 22, 2017, the U.S. government enacted tax reform, the Tax Cuts and Jobs Act (the "Act"), which made comprehensive changes to U.S. federal income tax laws by moving from a global to a modified territorial tax regime. The Act includes a reduction of the U.S. corporate income tax rate from 35 percent to 21 percent in calendar year 2018 along with the elimination of certain deductions and credits, and a one-time "deemed repatriation" of accumulated foreign earnings. During 2018, the Company recognized a net tax benefit of $189 ($0.30 per share) due to impacts of the Act, consisting of a $94 benefit on revaluation of net deferred income tax liabilities to the lower tax rate, $35 of expense for the tax on deemed repatriation of accumulated foreign earnings and withholding taxes, and the reversal of $130 accrued in previous periods for the planned repatriation of non-U.S. cash.

On August 1, 2018, the U.S. Treasury and Internal Revenue Service released proposed regulations relating to the one-time tax on deemed repatriation of accumulated foreign earnings. The proposed regulations were subject to a 60-day comment period and final regulations are expected to be issued after consideration of comments received. The Company is currently evaluating the impact of the proposed regulations and anticipates finalizing its provisional estimates after fully evaluating the final regulations.

The changes made by the Act are broad and complex. As such, the final one-time deemed repatriation tax may differ materially from these provisional amounts due to additional regulatory guidance expected to be issued, changes in interpretations, or any legislative actions to address questions arising from the Act, as well as further evaluation of the Company's actions, assumptions and interpretations.

Non-U.S. tax holidays reduce tax rates in certain foreign jurisdictions and are expected to expire over the next four years.

Following are changes in unrecognized tax benefits before considering recoverability of any cross-jurisdictional tax credits (U.S. federal, state and non-U.S.) and temporary differences. The amount of unrecognized tax benefits is not expected to change significantly within the next 12 months.

	2017	**2018**
Unrecognized tax benefits, beginning	$ 86	**132**
Additions for current year tax positions	54	**13**
Additions for prior year tax positions	4	**8**
Reductions for prior year tax positions	(6)	**(8)**
Acquisitions and divestitures	9	**21**
Reductions for settlements with tax authorities	(4)	**(3)**
Reductions for expiration of statutes of limitations	(11)	**(5)**
Unrecognized tax benefits, ending	$132	**158**

If none of the unrecognized tax benefits shown is ultimately paid, the tax provision and the calculation of the effective tax rate would be favorably impacted by $117, which is net of cross-jurisdictional tax credits and temporary differences. The Company accrues interest and penalties related to income taxes in income tax expense. Total interest and penalties recognized were $2, $(1) and $2 in 2018, 2017 and 2016, respectively. As of September 30, 2018 and 2017, total accrued interest and penalties were $23 and $16, respectively.

The U.S. is the major jurisdiction for which the Company files income tax returns. U.S. federal tax returns are closed through 2013. The status of state and non-U.S. tax examinations varies due to the numerous legal entities and jurisdictions in which the Company operates.

The principal items that gave rise to deferred income tax assets and liabilities follow:

	2017	**2018**
Deferred tax assets:		
Net operating losses and tax credits	$ 444	**396**
Accrued liabilities	319	**238**
Postretirement and postemployment benefits	70	**37**
Employee compensation and benefits	173	**119**
Pensions	72	**—**
Other	196	**151**
Total	$ 1,274	**941**
Valuation allowances	$ (309)	**(341)**
Deferred tax liabilities:		
Intangibles	$ (753)	**(693)**
Pensions	—	**(43)**
Property, plant and equipment	(265)	**(187)**
Undistributed non-U.S. earnings	(249)	**(52)**
Other	(37)	**(35)**
Total	$(1,304)	**(1,010)**
Net deferred income tax liability	$ (339)	**(410)**

As of September 30, 2017 and 2018, all deferred tax assets and liabilities were presented as noncurrent. Total income taxes paid were approximately $680, $1,420 and $950 in 2018, 2017 and 2016, respectively. More than half of the $396 of net operating losses and tax credits expire over varying periods within the next 20 years, while the remainder can be carried forward indefinitely.

(15) Stock-Based Compensation

The Company's stock-based compensation plans include stock options, performance shares, restricted stock and restricted stock units. Although the Company has discretion, shares distributed under these plans are issued from treasury stock.

STOCK OPTIONS

The Company's stock option plans permit key officers and employees to purchase common stock at specified prices, which are equal to 100 percent of the closing market price of the Company's stock on the date of grant. Options generally vest one-third in each of the three years subsequent to grant and expire 10 years from the date of grant. Compensation expense is recognized ratably over the vesting period based on the number of options expected to vest. As of September 30, 2018, 11.6 million options were available for grant under the plans.

Changes in shares subject to options during the year ended September 30, 2018 follow (shares in thousands):

	WEIGHTED-AVERAGE EXERCISE PRICE PER SHARE	SHARES	TOTAL INTRINSIC VALUE OF SHARES	AVERAGE REMAINING LIFE (YEARS)
Beginning of year	$55.49	10,759		
Options granted	$66.49	21		
Options exercised	$53.20	(2,869)		
Options canceled	$54.95	(110)		
End of year	$56.37	7,801	$160	5.1
Exercisable at end of year	$57.30	6,680	$131	4.8

The weighted-average grant date fair value per option was $12.13, $8.36 and $9.02 in 2018, 2017 and 2016, respectively. Cash received for option exercises was $143 in 2018, $148 in 2017 and $31 in 2016. The total intrinsic value of options exercised in 2018, 2017 and 2016 was $53, $36 and $9, while the tax benefit from tax deductions related to option exercises was $7, $2 and $2, respectively.

The grant date fair value of options is estimated using the Black-Scholes option-pricing model. The weighted average assumptions used in valuations for 2018, 2017 and 2016 are, respectively: risk-free interest rate, based on U.S. Treasury yields, 2.4 percent, 1.7 percent and 1.9 percent; dividend yield, 2.9 percent, 3.6 percent and 3.8 percent; and expected volatility, based on historical volatility, 23 percent, 24 percent and 27 percent. The expected life of each option awarded is seven years based on historical experience and expected future exercise patterns.

PERFORMANCE SHARES, RESTRICTED STOCK AND RESTRICTED STOCK UNITS

The Company's incentive shares plans include performance shares awards which distribute the value of common stock to key management employees subject to certain operating performance conditions and other restrictions. The form of distribution is primarily shares of common stock, with a portion in cash. Compensation expense for performance shares is recognized over the service period based on the number of shares ultimately expected to be earned. Performance shares awards are accounted for as liabilities in accordance with ASC 718, *Compensation - Stock Compensation*, with compensation expense adjusted at the end of each reporting period to reflect the change in fair value of the awards.

As of September 30, 2016, 4,944,575 performance shares awarded primarily in 2013 were outstanding, contingent on the Company achieving its performance objectives through 2016 and the provision of additional service by employees. The objectives for these shares were met at the 86 percent level at the end of 2016, or 4,252,335 shares. Of these, 2,549,083 shares were distributed in early 2017 as follows: 1,393,715 issued as shares, 944,002 withheld for income taxes, and the value of 211,366 paid in cash. An additional 1,691,986 shares were distributed at the end of 2017 to employees who provided one additional year of service as follows: 1,070,264 issued as shares, 616,734 withheld for income taxes, and the value of 4,988 paid in cash. There were 11,266 shares canceled and not distributed.

As of September 30, 2018, 1,874,750 shares awarded primarily in 2016 were outstanding, contingent on the Company achieving its performance objectives through 2018. The objectives for these shares were met at the 97 percent level at the end of 2018 and 1,818,508 shares will be distributed in early 2019. Additionally, the rights to receive a maximum of 2,261,700 and 2,375,313 common shares were awarded in 2018 and 2017, respectively, under the new performance shares program, and are outstanding and contingent upon the Company achieving its performance objectives through 2020 and 2019, respectively.

Incentive shares plans also include restricted stock awards which involve distribution of common stock to key management employees subject to cliff vesting at the end of service periods ranging from three to ten years. The fair value of restricted stock awards is determined based on the average of the high and low market prices of the Company's common stock on the date of grant, with compensation expense recognized ratably over the applicable service period. In 2018, 310,000 shares of restricted stock vested as a result of participants fulfilling the applicable service requirements. Consequently, 167,837 shares were issued while 142,163 shares were withheld for income taxes in accordance with minimum withholding requirements. As of September 30, 2018, there were 1,276,200 shares of unvested restricted stock outstanding.

The total fair value of shares distributed under incentive shares plans was $20, $245 and $11, respectively, in 2018, 2017 and 2016, of which $9, $101 and $4 was paid in cash, primarily for tax withholding. As of September 30, 2018, 10.3 million shares remained available for award under incentive shares plans.

Changes in shares outstanding but not yet earned under incentive shares plans during the year ended September 30, 2018 follow (shares in thousands; assumes 100 percent payout of unvested awards):

	SHARES	AVERAGE GRANT DATE FAIR VALUE PER SHARE
Beginning of year	**4,999**	**$50.33**
Granted	**2,295**	**$63.79**
Earned/vested	**(310)**	**$51.27**
Canceled	**(86)**	**$56.53**
End of year	**6,898**	**$54.69**

Total compensation expense for stock options and incentive shares was $216, $115 and $159 for 2018, 2017 and 2016, respectively, of which $5 and $14 was included in discontinued operations for 2017 and 2016, respectively. The increase in expense for 2018 reflects an increase in the Company's stock price and progress toward achieving its performance objectives. The decrease in expense for 2017 reflects the impact of changes in the stock price. Income tax benefits recognized in the income statement for these compensation arrangements during 2018, 2017 and 2016 were $42, $33 and $45, respectively. As of September 30, 2018, total unrecognized compensation expense related to unvested shares awarded under these plans was $182, which is expected to be recognized over a weighted-average period of 1.1 years.

In addition to the employee stock option and incentive shares plans, in 2018 the Company awarded 12,228 shares of restricted stock and 2,038 restricted stock units under the restricted stock plan for non-management directors. As of September 30, 2018, 159,965 shares were available for issuance under this plan.

(16) Common and Preferred Stock

At September 30, 2018, 37.0 million shares of common stock were reserved for issuance under the Company's stock-based compensation plans. During 2018, 15.1 million common shares were purchased and 2.6 million treasury shares were reissued. In 2017, 6.6 million common shares were purchased and 5.5 million treasury shares were reissued.

At September 30, 2018 and 2017, the Company had 5.4 million shares of $2.50 par value preferred stock authorized, with none issued.

(17) Accumulated Other Comprehensive Income (Loss)

Activity in accumulated other comprehensive income (loss) is shown below:

	2016	2017	2018
Foreign currency translation			
Beginning balance	$ (622)	(812)	**(369)**
Other comprehensive income (loss)	(190)	58	**(214)**
Reclassified to gain/loss on sale of businesses	—	385	**(17)**
Ending balance	(812)	(369)	**(600)**
Pension and postretirement			
Beginning balance	(952)	(1,162)	**(662)**
Actuarial gains (losses) deferred during the period	(310)	315	**250**
Amortization of deferred actuarial losses into earnings	100	135	**94**
Reclassified to gain/loss on sale of businesses	—	50	**—**
Adoption of accounting standard update	—	—	**(102)**
Ending balance	(1,162)	(662)	**(420)**
Cash flow hedges			
Beginning balance	(43)	(25)	**12**
Gains (Losses) deferred during the period	(30)	34	**2**
Reclassifications of realized (gains) losses to sales and cost of sales	48	3	**(11)**
Adoption of accounting standard update	—	—	**2**
Ending balance	(25)	12	**5**
Accumulated other comprehensive income (loss)	$(1,999)	(1,019)	**(1,015)**

Activity above is shown net of income taxes for 2018, 2017 and 2016, respectively, as follows: deferral of pension and postretirement actuarial gains (losses): $(76), $(170) and $159; amortization of pension and postretirement deferred actuarial losses: $(29), $(75) and $(59); deferral of cash flow hedging gains (losses): $0, $(21) and $17; reclassification of realized cash flow hedging (gains) losses: $4, $(2) and $(28).

(18) Business Segments Information

The Company designs and manufactures products and delivers services that bring technology and engineering together to provide innovative solutions for customers in a wide range of industrial, commercial and consumer markets around the world.

In connection with the strategic portfolio repositioning actions undertaken to transform the Company into a more focused enterprise, the Company realigned its businesses. Starting in fiscal 2017, the Company began reporting three segments: **Automation Solutions**, and **Climate Technologies** and **Tools & Home Products** which together comprise the **Commercial & Residential Solutions** business. Fiscal 2016 results were reclassified in the prior year to conform to the current presentation.

The **Automation Solutions** segment enables process, hybrid and discrete manufacturers to maximize production, protect personnel and the environment, reduce project costs, and optimize their energy efficiency and operating costs through a broad offering of integrated solutions and products, including measurement and analytical instrumentation, industrial valves and equipment, and process control systems. Significant markets served include oil and gas, refining, chemicals and power generation, as well as pharmaceuticals, food and beverage, automotive, pulp and paper, metals and mining, and municipal water supplies. The segment's major product offerings are described below.

- **Measurement & Analytical Instrumentation** products measure the physical properties of liquids or gases in a process stream and communicate this information to a process control system or other software applications, and analyze the chemical composition of process fluids and emissions to enhance quality and efficiency, as well as environmental compliance.
- **Valves, Actuators & Regulators** consists of control, isolation and pressure relief valves which respond to commands from a control system to continuously and precisely modulate the flow of process fluids, smart actuation and control technologies, pressure management products, and industrial and residential regulators that reduce the pressure of fluids moving from high-pressure supply lines into lower pressure systems.
- **Industrial Solutions** provides fluid control and pneumatic mechanisms, electrical distribution equipment, and materials joining and precision cleaning products which are used in a variety of manufacturing operations to provide integrated solutions to customers.

- **Process Control Systems & Solutions** provides a digital ecosystem that controls plant processes by communicating with and adjusting the "intelligent" plant devices described above to provide precision measurement, control, monitoring, asset optimization, and plant safety and reliability for plants that produce power, or process fluids or other items.

The **Commercial & Residential Solutions** business consists of the Climate Technologies and Tools & Home Products segments. This business provides products and solutions that promote energy efficiency, enhance household and commercial comfort, and protect food quality and sustainability through heating, air conditioning and refrigeration technology, as well as a broad range of tools and appliance solutions.

The **Climate Technologies** segment provides products, services and solutions for all areas of the climate control industry, including residential heating and cooling, commercial air conditioning, commercial and industrial refrigeration, and cold chain management. Products include compressors, temperature sensors and controls, thermostats, flow controls, and stationary and mobile remote monitoring technologies and services that enable homeowners and businesses to better manage their heating, air conditioning and refrigeration systems for improved control and comfort, and lower energy costs.

The **Tools & Home Products** segment offers tools for professionals and homeowners and appliance solutions. Products include professional pipe-working tools, electrical and utility tools, residential and commercial food waste disposers, and wet-dry vacuums.

The principal distribution method for each segment is direct sales forces, although the Company also uses independent sales representatives and distributors. Due to its global presence, certain of the Company's international operations are subject to risks including the stability of governments and business conditions in foreign countries which could result in adverse changes in exchange rates, changes in regulations or disruption of operations.

The primary income measure used for assessing segment performance and making operating decisions is earnings before interest and income taxes. Intersegment selling prices approximate market prices. Accounting method differences between segment reporting and the consolidated financial statements are primarily management fees allocated to segments based on a percentage of sales and the accounting for pension and other retirement plans. Corporate and other includes corporate operations, stock compensation expense, acquisition related costs and other items. Corporate assets are primarily comprised of cash and equivalents, investments and certain fixed assets. Summarized below is information about the Company's operations by business segment and by geography.

BUSINESS SEGMENTS

	SALES			EARNINGS			TOTAL ASSETS		
	2016	2017	**2018**	2016	2017	**2018**	2016	2017	**2018**
Automation Solutions	$ 8,977	9,418	**11,441**	$1,456	1,522	**1,886**	$ 8,759	12,581	**13,720**
Climate Technologies	3,944	4,212	**4,454**	902	975	**972**	2,489	2,547	**2,936**
Tools & Home Products	1,611	1,645	**1,528**	384	383	**380**	809	830	**1,560**
Commercial & Residential Solutions	5,555	5,857	**5,982**	1,286	1,358	**1,352**	3,298	3,377	**4,496**
Differences in accounting methods				189	148	**218**			
Corporate and other (a)				(427)	(528)	**(630)**	9,675	3,631	**2,174**
Eliminations/Interest	(10)	(11)	**(15)**	(188)	(165)	**(159)**			
Total	$14,522	15,264	**17,408**	$2,316	2,335	**2,667**	$21,732	19,589	**20,390**

(a) Corporate and other in 2018 includes higher stock compensation expense of $106 and first year pretax acquisition accounting charges of $79 ($58 after-tax, $0.09 per share). The increase in 2017 compared to 2016 was due to valves & controls first year pretax acquisition accounting charges related to inventory and backlog of $93 ($65 after-tax, $0.10 per share). See Note 3. Assets held-for-sale of $6,030 are included in Corporate and other for 2016. See Note 4.

Automation Solutions sales by major product offering are summarized below:

	2016	2017	**2018**
Measurement & Analytical Instrumentation	$3,137	3,070	**3,604**
Valves, Actuators & Regulators	2,137	2,668	**3,769**
Industrial Solutions	1,621	1,680	**1,947**
Process Control Systems & Solutions	2,082	2,000	**2,121**
Total	$8,977	9,418	**11,441**

	Depreciation and Amortization			Capital Expenditures		
	2016	2017	**2018**	2016	2017	**2018**
Automation Solutions	$330	400	**507**	$246	234	**295**
Climate Technologies	150	156	**171**	133	182	**209**
Tools & Home Products	44	45	**44**	44	45	**64**
Commercial & Residential Solutions	194	201	**215**	177	227	**273**
Corporate and other	44	35	**36**	24	15	**49**
Total	$568	636	**758**	$447	476	**617**

GEOGRAPHIC INFORMATION

	Sales by Destination			Property, Plant and Equipment		
	2016	2017	**2018**	2016	2017	**2018**
United States and Canada	$ 7,505	7,854	**8,620**	$1,780	1,852	**2,036**
Asia	2,926	3,253	**3,936**	459	525	**547**
Europe	2,300	2,434	**2,898**	435	626	**676**
Latin America	834	767	**849**	203	203	**198**
Middle East/Africa	957	956	**1,105**	54	115	**105**
Total	$14,522	15,264	**17,408**	$2,931	3,321	**3,562**

Sales in the U.S. were $7,939, $7,273 and $6,940 for 2018, 2017 and 2016, respectively, while Asia includes sales in China of $1,955, $1,540 and $1,320 in those years. Assets located in the U.S. were $2,027 in 2018, $1,840 in 2017 and $1,772 in 2016.

(19) Other Financial Data

Items reported in earnings from continuing operations during the years ended September 30 included the following:

	2016	2017	**2018**
Research and development expense	$320	340	**436**
Depreciation expense	$391	414	**444**
Rent expense	$273	289	**279**

The Company leases certain facilities, transportation and office equipment, and various other items under operating lease agreements. Minimum annual rentals under noncancelable long-term leases, exclusive of maintenance, taxes, insurance and other operating costs, will approximate $204 in 2019, $146 in 2020, $97 in 2021, $66 in 2022 and $41 in 2023.

Items reported in other noncurrent assets included the following:

	2017	**2018**
Pension assets	$197	**591**
Asbestos-related insurance receivables	$133	**124**
Deferred income taxes	$ 86	**74**

Items reported in accrued expenses included the following:

	2017	**2018**
Employee compensation	$531	**629**
Customer advanced payments	$505	**453**
Product warranty	$120	**124**

Other liabilities are summarized as follows:

	2017	2018
Pension and postretirement liabilities	$ 664	625
Deferred income taxes	425	484
Asbestos litigation	340	334
Other	551	656
Total	$1,980	2,099

Other operating cash flow is comprised of the following:

	2016	2017	2018
Pension expense	$ 95	127	49
Stock compensation expense	145	110	216
Transition impact of Tax Act	–	–	(189)
Deferred income taxes and other	45	27	(22)
Total	$285	264	54

(20) Quarterly Financial Information (Unaudited)

	FIRST QUARTER		SECOND QUARTER		THIRD QUARTER		FOURTH QUARTER		FULL YEAR	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
Net sales	$3,216	3,816	3,574	4,248	4,039	4,456	4,435	4,888	15,264	17,408
Gross profit	$1,365	1,621	1,557	1,825	1,678	1,949	1,804	2,065	6,404	7,460
Earnings from continuing operations common stockholders	$ 364	392	376	482	407	712	496	617	1,643	2,203
Net earnings common stockholders	$ 309	392	292	482	413	712	504	617	1,518	2,203
Earnings per common share from continuing operations:										
Basic	$ 0.56	0.61	0.58	0.76	0.63	1.13	0.77	0.98	2.54	3.48
Diluted	$ 0.56	0.61	0.58	0.76	0.63	1.12	0.77	0.97	2.54	3.46
Net earnings per common share:										
Basic	$ 0.48	0.61	0.45	0.76	0.64	1.13	0.78	0.98	2.35	3.48
Diluted	$ 0.48	0.61	0.45	0.76	0.64	1.12	0.78	0.97	2.35	3.46
Dividends per common share	$ 0.48	0.485	0.48	0.485	0.48	0.485	0.48	0.485	1.92	1.94

Earnings per share are computed independently each period; as a result, the quarterly amounts may not sum to the calculated annual figure.

Emerson Electric Co. common stock (symbol EMR) is listed on the New York Stock Exchange and the Chicago Stock Exchange.

Earnings from continuing operations and diluted earnings per share include an income tax benefit of $43 ($0.07 per share) and $150 ($0.24 per share) in the first quarter and third quarter of 2018, respectively, from the impacts of U.S. tax reform. The full-year impact for fiscal 2018 was an income tax benefit of $189 ($0.30 per share). See Note 14.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Emerson Electric Co.:

Opinions on the Consolidated Financial Statements and Internal Control Over Financial Reporting
We have audited the accompanying consolidated balance sheets of Emerson Electric Co. and subsidiaries (the Company) as of September 30, 2018 and 2017, the related consolidated statements of earnings, comprehensive income, equity, and cash flows for each of the years in the three-year period ended September 30, 2018, and the related notes (collectively, the consolidated financial statements). We also have audited the Company's internal control over financial reporting as of September 30, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of September 30, 2018 and 2017, and the results of its operations and its cash flows for each of the years in the three-year period ended September 30, 2018, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of September 30, 2018, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

The Company acquired the tools and test equipment business and Aventics during 2018, and management excluded from its assessment of the effectiveness of the Company's internal control over financial reporting as of September 30, 2018, the tools and test equipment business' and Aventics' internal control over financial reporting associated with total assets and revenues of 9 percent and 1 percent, respectively, included in the consolidated financial statements of the Company as of and for the year ended September 30, 2018. Our audit of internal control over financial reporting of the Company also excluded an evaluation of the internal control over financial reporting of the tools and test equipment business and Aventics.

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

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

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

Definition and Limitations of Internal Control Over Financial Reporting
A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (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.

We or our predecessor firms have served as the Company's auditor since 1938.

St. Louis, Missouri
November 19, 2018

Five-Year Summary

EMERSON ELECTRIC CO. & SUBSIDIARIES

Years ended September 30 | Dollars in millions, except per share amounts or where noted

Results presented in accordance with U.S. GAAP

	2014	2015	2016	2017	**2018**
Summary of Operations					
Net sales	$ 17,733	16,249	14,522	15,264	**17,408**
Gross profit	$ 7,762	7,008	6,262	6,404	**7,460**
Interest expense, net	$ 196	175	188	165	**159**
Earnings from continuing operations common stockholders	$ 2,201	2,517	1,590	1,643	**2,203**
Percent of net sales	12.4%	15.5%	11.0%	10.8%	**12.7%**
Operating cash flow from continuing operations	$ 2,999	2,040	2,499	2,690	**2,892**
Return on common stockholders' equity	20.7%	29.8%	20.9%	18.6%	**24.9%**
Per Share of Common Stock					
Diluted EPS – Earnings from continuing operations	$ 3.11	3.71	2.45	2.54	**3.46**
Cash dividends	$ 1.72	1.88	1.90	1.92	**1.94**
Book value	$ 14.53	12.34	11.77	13.59	**14.22**
Year-End Financial Position					
Operating working capital	$ 1,729	1,748	1,354	1,007	**985**
Percent of net sales	7.0%	7.8%	6.7%	6.6%	**5.7%**
Property, plant and equipment, net	$ 3,802	3,585	3,542	3,321	**3,562**
Total assets	$ 24,177	22,088	21,732	19,589	**20,390**
Long-term debt	$ 3,559	4,289	4,051	3,794	**3,137**
Common stockholders' equity	$ 10,119	8,081	7,568	8,718	**8,947**
Total debt-to-total capital	37.3%	45.8%	46.7%	34.8%	**34.7%**
Net debt-to-net capital	22.1%	31.3%	31.3%	15.4%	**29.1%**
Other Data					
Capital expenditures	$ 767	685	523	476	**617**
Depreciation	$ 518	507	477	414	**444**
Total taxes, including income taxes	$ 1,856	2,056	1,554	1,748	**901**
Salaries and wages	$ 4,961	4,713	4,521	3,478	**3,907**
Number of employees	115,100	110,800	103,500	76,500	**87,500**
Approximate number of common stockholders of record at year end	20,901	20,130	19,724	19,066	**18,343**
Average common shares – diluted (in thousands)	704,071	676,450	646,837	643,351	**635,323**

See Notes 3, 4 and 14 in the Annual Report for information regarding the Company's acquisition and divestiture activities for the last three years and the effect of U.S. tax reform in 2018. Results for 2015 include gains on divestitures of $611 after-tax ($0.90 per share benefit).

Board of Directors

INDEPENDENT DIRECTORS

Clemens A.H. Boersig
Lead Independent Director
Frankfurt, Germany
Retired Chairman of the Supervisory Board, Deutsche Bank AG
Committees: CC, EC, FC*

Joshua B. Bolten
Washington, District of Columbia
President & CEO, Business Roundtable
*Committees: AC, EC, NC**

Gloria A. Flach
Marriottsville, Maryland
Retired Chief Operating Officer, Northrop Grumman Corporation
Committees: CC, FC

Arthur F. Golden
New York, New York
Partner, Davis Polk & Wardwell LLP
*Committees: EC, FC**

Candace Kendle
Boca Grande, Florida
Retired Chairman and Chief Executive Officer, Kendle International Inc.
Committees: AC, NC

Lori Lee
Dallas, Texas
Chief Executive Officer, AT&T Latin America & Global Marketing Officer, AT&T Inc.
Committees: AC, FC

Matthew S. Levatich
Milwaukee, Wisconsin
President and Chief Executive Officer, Harley-Davidson Inc.
Committees: AC, CC

James S. Turley
St. Louis, Missouri
Retired Chairman of the Board and Chief Executive Officer, Ernst & Young LLP
Committees: AC, EC, NC*

CHAIRMAN OF THE BOARD

David N. Farr
St. Louis, Missouri
Chairman and Chief Executive Officer, Emerson
*Committees: EC**

ADVISORY DIRECTORS

Frank J. Dellaquila
Senior Executive Vice President and Chief Financial Officer

Michael H. Train
President and Chairman Automation Solutions

Steven J. Pelch
Chief Operating Officer and Executive Vice President – Organization Planning and Development

Robert T. Sharp
Executive President, Commercial & Residential Solutions

S. Lal Karsanbhai
Executive President, Automation Solutions

COMMITTEES

AC Audit Committee

CC Compensation Committee

EC Executive Committee

FC Finance Committee

NC Corporate Governance and Nominating Committee

* *Indicates Committee Chair*

Management

SENIOR MANAGEMENT

David N. Farr
Chairman and Chief Executive Officer

Michael H. Train
President and Chairman Automation Solutions

Frank J. Dellaquila
Senior Executive Vice President and Chief Financial Officer

Steven J. Pelch
Chief Operating Officer and Executive Vice President – Organization Planning and Development

Robert T. Sharp
Executive President, Commercial & Residential Solutions

S. Lal Karsanbhai
Executive President, Automation Solutions

Sara Yang Bosco
Senior Vice President, Secretary and General Counsel

Mark J. Bulanda
Senior Vice President, Planning and Development

Katherine T. Button Bell
Senior Vice President and Chief Marketing Officer

Management *continued*

OPERATING MANAGEMENT

S. Lal Karsanbhai
Executive President,
Automation Solutions

Manish Bhandari
Group President,
Fluid and Motion Control

Larry W. Flatt
Group President,
Discrete & Industrial

Ram R. Krishnan
Group President,
Final Control

Ronald L. Martin
Group President,
Measurement & Analytical

Sabee Mitra
Group President,
Global Sales

Jim A. Nyquist
Group President,
Systems and Solutions

David A. Tredinnick
Group President,
Flow Solutions

Robert T. Sharp
Executive President,
Commercial &
Residential Solutions

J. Tim Ferry
Group President,
Tools & Home Products

John E. Rhodes
Group President,
Cold Chain

Brent A. Schroeder
Group President,
Heating & Air Conditioning

CORPORATE MANAGEMENT

Jan L. Bansch
Vice President, Benefits

Michael J. Baughman
Vice President, Controller
and Chief Accounting Officer

Edwin M. Boone
President,
Emerson Asia Pacific

James E. Carter
Vice President,
Government Affairs

David Chan
Vice President,
Development

Steve L. Clarke
Vice President,
Real Estate and
Environmental Affairs

T. Judson Duncan
Vice President,
Planning

Akberet Boykin Farr
Vice President,
Diversity and Inclusion

Lisa A. Flavin
Vice President,
Audit and Chief
Compliance Officer

Jake J. Fritz
Vice President and
Chief Information Officer

Greg A. Fromknecht
Vice President,
Global Supply Chain Systems
and Solutions

Ryan P. Garrah
President, Emerson Canada

John M. Groves
Vice President,
Intellectual Property

Clellen W. Ip
Vice President,
Development

Jean Janssen
President, Emerson Europe

James E. Jones
Vice President,
Human Resources

Michael J. Keating
Vice President,
Global Litigation
and Arbitration

Elizabeth Kovaly Willis
Vice President,
Executive Compensation

Victor A. Lazzaretti
Vice President and
Deputy General Counsel
and Assistant Secretary

Rob W. Lockwood
Vice President,
International Trade
Compliance

Vanessa R. McKenzie
Vice President and Counsel,
Mergers and Acquisitions

David A. Meade
Vice President,
Pension Investments

Catherine G. Merkel
Vice President,
Development

Alan D. Mielcuszny
Vice President,
Financial Planning
and Analysis

Alexander L. Peng
Vice President, Tax

Fred A. Perreand
Vice President, Global Supply
Chain Operations

David J. Rabe
Vice President,
Corporate Social
Responsibility

Timothy W. Reeves
Assistant Treasurer
and Director,
Investor Relations

James N. Rhodes
Vice President, Human
Resource Systems

George E. Robbins
Vice President,
Perfect Execution

John A. Sperino
Vice President,
Governance and Securities
and Assistant Secretary

Greg A. Shoemaker
Vice President, HR Americas,
Labor and Employment Law

James H. Thomasson
Vice President
and Treasurer

Tony Vermillion
Vice President

Steve E. Von Gruben
Vice President

Giovanni Zullo
President,
Emerson India,
Middle East and Africa

Reconciliation of Non-GAAP Measures

RECONCILIATION OF NON-GAAP MEASURES

Dollars in millions, except per share amounts

	2017	**2018**	CHANGE
Pretax earnings (GAAP)	$2,335	**$2,667**	14 %
Interest expense, net	165	**159**	(1)%
Earnings before interest and taxes (non-GAAP)	$2,500	**$2,826**	13 %

	2013	**2018**	CAGR '13 - '18
Pretax earnings (GAAP)	$2,491	**$2,667**	1 %
Interest expense, net	219	**159**	– %
Earnings before interest and taxes (non-GAAP)	$2,710	**$2,826**	1 %

	2013	**2018**	CAGR '13 - '18
Earnings per share from continuing operations (GAAP)	$ 2.08	**$ 3.46**	11 %
Goodwill impairment and income tax charges	0.78	**–**	(7)%
Adjusted earnings per share from continuing operations (non-GAAP)	$ 2.86	**$ 3.46**	4 %

	2013	2017	**2018**
Dividends as a percent of operating cash flow from continuing operations (GAAP)	41%	46%	**43%**
Capital expenditures	10%	10%	**11%**
Dividends as a percent of free cash flow from continuing operations (non-GAAP)	51%	56%	**54%**

Stockholders Infomation

REGISTRAR AND TRANSFER AGENT

By Mail:
Computershare, Inc.
Attention: Emerson Electric Co.
P.O. Box 505000
Louisville, KY 40233

By Phone:
Toll-Free: (888) 213-0970
TDD for Hearing Impaired: (800) 231-5469
Foreign Shareholders: (201) 680-6578
TDD Foreign Shareholders: (201) 680-6610

By Internet:
www.computershare.com/investor

All other inquiries should be addressed to:
Emerson Investor Relations Department
8000 W. Florissant Ave.
St. Louis, MO 63136-8506
Telephone: (314) 553-2197

STOCKHOLDER SERVICES

Inquiries regarding dividend payments, loss or nonreceipt of a stock certificate or dividend check, stock transfers (including name changes), tax information and address changes should be directed to Computershare.

DIVIDEND REINVESTMENT AND STOCK PURCHASE PLAN

The Plan is administered by Computershare, for individual investors who want a convenient way to purchase or sell Emerson Electric Co. stock (NYSE:EMR). Only registered holders of Emerson common stock can participate, however, an initial purchase can be made directly through the Plan. The Plan provides the opportunity to reinvest dividends and is an alternative to traditional methods of buying and selling Emerson common stock. The Plan is not sponsored or administered by Emerson. For further information and an authorization form, contact Computershare.

DIRECT DEPOSIT OF DIVIDENDS

Stockholders may elect to have dividends electronically deposited into a checking or savings account. For details, contact Computershare.

DUPLICATE MAILINGS

When stockholders own shares in more than one account or when several stockholders live at the same address, they may receive multiple copies of the annual report. To eliminate duplicate copies, contact Computershare.

INTERNET ACCESS

Corporate news releases, Forms 10-K, 10-Q and 8-K, the Annual Report, and other information about the Company are available at www.Emerson.com

ANNUAL MEETING

The annual meeting of stockholders will be held at 10 a.m. CST, Tuesday, February 5, 2019 in Emerson's World Headquarters Building, 8000 W. Florissant Ave., St. Louis, Missouri 63136. Notice of the meeting, proxy statement and proxy were sent or made available to stockholders with this annual report.

10-K REPORT

The Company's 2018 Annual Report on Form 10-K for the fiscal year ended September 30, 2018 filed with the U.S. Securities and Exchange Commission (the "Form 10-K") is available to stockholders without charge by contacting the Emerson Investor Relations Department or by accessing the investor section of our company's website at www.Emerson.com, Investors, or by going to the SEC's website at www.sec.gov. The Company's Chief Executive Officer and Chief Financial Officer have furnished the required Form 10-K certifications.

ENVIRONMENTAL PROGRAMS

Information on Emerson's environmental programs may be obtained by contacting:
Emerson Environmental Affairs Department
8000 W. Florissant Ave.
P.O. Box 4100
St. Louis, MO 63136-8506

ANNUAL REPORT

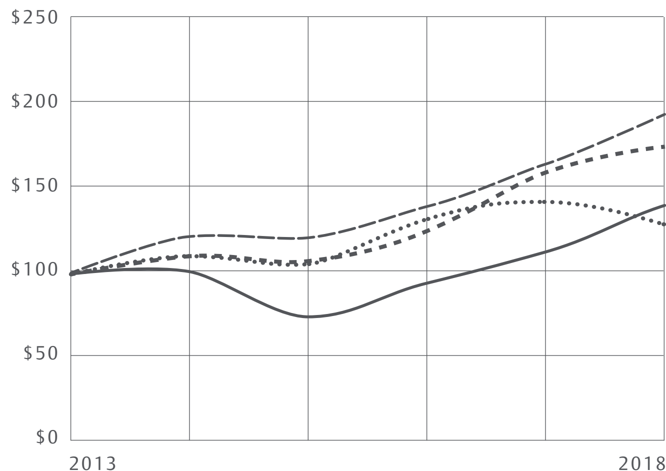
Included in this 2018 Annual Report are financial and operating highlights and summary financial information. Please refer to the Company's Form 10-K for important financial and business information, including Risk Factors, market risk, description of industry segments, and risks of foreign operations. You should read the Form 10-K in connection with this 2018 Annual Report.

SAFE HARBOR STATEMENT

This Annual Report contains various forward-looking statements and includes assumptions concerning Emerson's operations, future results and prospects. These forward-looking statements are based on current expectations and are subject to risks and uncertainties. Emerson undertakes no obligation to update any such statements to reflect later developments. In connection with the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, Emerson provides the following cautionary statements identifying important economic, political and technological factors, among others, changes in which could cause the actual results or events to differ materially from those set forth in or implied by the forward-looking statements and related assumptions.

Such factors include, but are not limited to, the following: (1) the current and future business environment, including capital and consumer spending, potential volatility of the end markets served, interest rates and currency exchange rates; (2) competitive factors and competitor responses to Emerson initiatives; (3) development and market introduction of anticipated new products; (4) the ability to defend and protect our intellectual property rights; (5) favorable environments for and execution of acquisitions and divestitures, domestic and foreign, including regulatory requirements and market values of candidates; (6) integration of acquisitions and separation of disposed businesses; (7) the availability of raw materials and purchased components; (8) stability of governments and business conditions in countries where we operate which could result in adverse changes in exchange rates, changes in regulations, tariffs or trade barriers, nationalization of facilities or disruption of operations; (9) changes in tax rates, laws or regulations and the resolution of tax disputes in U.S. and non-U.S. jurisdictions; (10) unrestricted access to capital markets; (11) our ability to attract, develop and retain key personnel; (12) ability to prevent security breaches or disruptions of our information technology systems; (13) impact of potential product failures or similar events caused by product defects, cybersecurity incidents or other intentional acts; and (14) the outcome of pending and future litigation, including environmental compliance.

COMPARISON OF FIVE-YEAR CUMULATIVE SHAREHOLDER RETURN



	2013	2014	2015	2016	2017	2018	CAGR
Emerson	**100**	**99**	**72**	**93**	**111**	**139**	**6.7%**
S&P 500	100	120	119	137	163	192	**13.9%**
DJ EC&E*	100	108	104	122	157	174	**11.8%**
Peer Index**	100	109	104	130	141	129	**5.3%**

$100 invested on September 30, 2013 in stock or index, including reinvestment of dividends. Fiscal year ending September 30.

* Dow Jones US Electrical Components & Equipment Index

** The Peer Index consists of companies with comparable businesses and/or end-markets. The company has chosen a new peer index consisting of eight companies. The Company believes this index is more appropriate than the Dow Jones US Electrical Components & Equipment Index ("DJ EC&E Index") which was used in prior years as the DJ EC&E Index includes certain industries that are not relevant comparators to Emerson. The DJ EC&E Index has been included in the performance graph for this one last year for comparison purposes. Companies included in Emerson's peer group are: ABB Ltd., General Electric, Honeywell, Rockwell Automation, Schneider Electric, Siemens, United Technologies and 3M. Returns of each company in the peer comparator group have been weighted according to that company's respective stock market capitalization at the beginning of each period for which a return is indicated.

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Thank You Ed Monser for Providing a Brighter Future at Emerson for 35+ Years

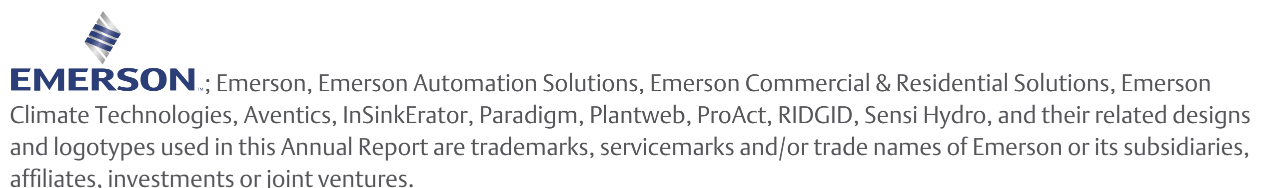
A longtime colleague and friend retired from Emerson this year after a successful career that called him to all corners of the world, leaving a global imprint on the organization.

Ed Monser's distinguished Emerson career began when he joined the Rosemount business unit as a senior engineer in 1981. He quickly rose through the ranks, and in 1996, became president of Rosemount. In 2001, he was named Emerson's chief operating officer, a role he held until his final appointment as president in 2010.

Throughout 37 years at Emerson, Ed was an exemplary leader, talented design engineer and storied world traveler. He led many operations to success, and helped drive the company's international growth and global shared service organizations – key to Emerson's global competitiveness.

Ed was also a teacher, mentor and role model to many. A former educator, Ed carried his passion for learning through his entire career. As a member of the Ranken Technical College board of trustees, Ed is a fierce proponent for science, technology, engineering and mathematics (STEM) education and the need to prepare the workforce of the future. He's also been a guiding voice within the Emerson Leadership Program, helping emerging leaders hone and develop the skills necessary to ensure our people and our business thrive today and for years to come.

As he enters retirement, Ed leaves behind a legacy of enduring quality, character and commitment. Thank you, Ed, for the tireless hours of work, unwavering leadership and countless lessons. Emerson's future is brighter because of your place in our history.



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Emerson

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