

2019 Annual Report

About Dover

Dover is a diversified global manufacturer and solutions provider with annual revenue of over \$7 billion. We deliver innovative equipment and components, consumable supplies, aftermarket parts, software and digital solutions and support services through five operating segments: Engineered Products, Fueling Solutions, Imaging & Identification, Pumps & Process Solutions, and Refrigeration & Food Equipment. Dover leverages global scale, operational agility, world-class engineering capability and customer intimacy to lead in the markets we serve. Recognized for our entrepreneurial approach for over 60 years, our team of approximately 24,000 employees takes an ownership mindset, collaborating with customers to redefine what's possible. Headquartered in Downers Grove, Illinois, Dover trades on the New York Stock Exchange under "DOV." Additional information is available at dovercorporation.com.

Financial Highlights

(dollars in thousands, except per share figures)	2019	2018	2017
Revenue	\$ 7,136,397	\$ 6,992,118	\$ 6,820,886
Earnings before taxes	\$ 843,009	\$ 725,378	\$ 875,815
Earnings from continuing operations	\$ 677,918	\$ 591,145	\$ 746,663
Earnings per diluted share from continuing operations	\$ 4.61	\$ 3.89	\$ 4.73
Adjusted earnings from continuing operations (1)	\$ 872,176	\$ 755,906	\$ 654,847
Adjusted earnings per diluted share from continuing operations (1)	\$ 5.93	\$ 4.97	\$ 4.15
Dividends per common share	\$ 1.94	\$ 1.90	\$ 1.82
Capital expenditures	\$ 186,804	\$ 170,994	\$ 170,068
Acquisitions (net assets acquired)	\$ 215,687	\$ 68,557	\$ 27,188
Cash flows from operations	\$ 945,306	\$ 789,193	\$ 739,409
Return on average equity(2)	23.4%	16.5%	18.2%
Adjusted return on average equity (2)	30.1%	21.1%	16.0%

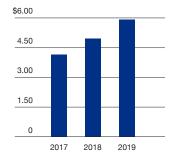
Revenue & Adjusted Earnings from Continuing Operations⁽¹⁾

(\$ in millions)

Revenue (Left Axis)Adjusted Earnings from Continuing Operations (Right Axis)



Adjusted EPS(1)



Free Cash Flow(3)

(\$ in millions)

- Free Cash Flow (Left Axis)Free Cash Flow as a % of
- Free Cash Flow as a % of Revenue (Right Axis)



⁽¹⁾ Earnings from continuing operations are adjusted by the effect of acquisition-related amortization, rightsizing and other costs, loss on extinguishment of debt, loss on assets held for sale, the Tax Cuts and Jobs Act, gains on disposition of businesses, disposition costs, and a product recall reversal to derive 1) adjusted earnings from operations and 2) adjusted earnings per diluted share from continuing operations (both non-GAAP measures).

Forward-Looking Statements and Non-GAAP Measures:

This Annual Report contains forward-looking statements that are inherently subject to uncertainties and risks. We caution investors to be guided in their analysis of Dover by referring to the documents we file with the SEC, including our Form 10-K for 2019, for a list of factors that could cause our results to differ from those anticipated in any such forward-looking statements.

This Annual Report contains non-GAAP financial information. Reconciliations of non-GAAP measures are included in this report or are available on the Investor Relations section of our website under Annual Reports.

Return on average equity is calculated by dividing earnings from continuing operations by average stockholders' equity (the sum of the stockholders' equity at the beginning and end of the year, divided by 2). Adjusted return on average equity (a non-GAAP measure) is calculated by dividing adjusted earnings from continuing operations by average stockholders' equity (the sum of the stockholders' equity at the beginning and end of the year, divided by 2).

⁽³⁾ Free cash flow (a non-GAAP measure) represents net cash provided by operating activities minus capital expenditures.

A Message from the President and Chief Executive Officer

Dear Fellow Shareholders,

Dover Corporation enters the new decade with pride in our record of accomplishments, and confidence in our future prospects. I am pleased to report that, through the dedication and focus of our employees and with the support of our suppliers and customers, we successfully achieved the bold objectives we set for 2019. Consistent with our culture of continuous improvement, we have set ambitious goals for 2020 and beyond. Achieving these goals will require the collective talents and passion of the Dover team, and I am confident that our organization will rise to the occasion.

2019 Results

In 2019, Dover delivered solid operating performance with \$7.1 billion of revenue, pre-tax income from continuing operations of \$678 million, and an operating margin increase of 160 basis points from the 2018 level. This performance drove an increase in earnings per share of 19% over the prior year, a top-quartile performance among our multi-industrial peers. The company delivered these results through a combination of improved conversion of sales growth into profits across a significant portion of our portfolio, and continuous improvement and productivity actions undertaken through the year.

As a result of the company's revenue growth and margin improvements, Dover delivered a 20% increase in cash flow from operating activities. This provided us with the flexibility to both continue investing in our businesses through organic capital expenditures and inorganic portfolio additions, and to continue returning capital to our shareholders through dividend increases and share repurchases.

Segment Performance

Our Engineered Products segment delivered total revenue of \$1.7 billion, reflecting organic growth of 5%, with a significant improvement in operating margin for the year. Our Environmental Services Group (ESG) was the key driver of this strong performance, as management executed on its strategy to transform this business from primarily an equipment supplier into a provider of connected total solutions that include equipment, services and software. Consistent with that strategy, in January 2020, ESG closed the acquisition of Soft-Pak, a leading provider of tailored software solutions to waste and recycling fleets. Our Vehicle Services Group grew its revenue due to a sizable organic investment in new product development undertaken in 2018 and the benefits from the consolidation of prior period acquisitions.

Our Fueling Solutions segment had an outstanding year with total revenue of \$1.6 billion, reflecting organic growth of 11%, as both our above ground and below ground retail fueling operations executed on a global scale to meet our customers' demand for capacity expansion and regulatory-driven upgrades. Our operating margin improved significantly due to volume leverage and productivity gains, which allowed us to exceed the margin targets that we set for the business in 2018.

Our Imaging & Identification segment posted total revenue of \$1 billion for the year and delivered a significant improvement in operating margin performance despite a slower demand environment in Asia in the second half of the year. In January 2020, Markem-Imaje closed the acquisition of Systech Solutions, Inc., a provider of traceability and brand-protection software solutions primarily in the pharmaceutical industry. We believe we now have a real growth opportunity in the high-value consumer goods industry, where we already have a large presence.

Our Pumps & Process Solutions segment posted total revenue of \$1.4 billion, reflecting organic growth of 4%, with all of the operating companies delivering top-line growth and margin expansion during the year. In May 2019, PSG closed the acquisition of All-Flo Pump Company, successfully expanding its portfolio of air-operated double-diaphragm pumps. In addition, we broke ground on a significant organic investment in capacity and capability in our CPC (Colder Products Company) business, which is expected to become operational in mid-2020.

Our Refrigeration & Food Equipment segment posted total revenue of \$1.4 billion for 2019, an organic decline of 3%, as end-market demand was muted in our food retail and canmaking equipment businesses. We expect these demand headwinds to subside in the near-term and have embarked on transformational capital projects to address the business's cost structure, operational performance, and production capabilities. We have significant investments under-way to automate the case and door assembly lines in our largest facility in Richmond, Virginia. We are also consolidating three manufacturing sites into one in our foodservice equipment business, and are making a material investment in our can-making equipment business to widen its technical capabilities.

New Dover Organizational and Segment Structure

As we announced last year during our third quarter Investor Meeting, Dover transitioned from a three-segment to a new five-segment operating and reporting structure, which became effective at the start of the fourth quarter. The benefits of our new structure are two-fold. From an operating perspective, we have aligned the businesses with significant commonality of operating model and end-market exposure. This allows our management teams to extract synergies from commonality in sales and services networks, back-office operations and increased capital assets utilization, which will be the main driver of improved operational productivity and capital deployment effectiveness. The new structure also provides our investors a more granular view of the inherent strengths of the individual businesses, their growth prospects, and the market structure in which they participate.

During the year, we continued to invest in our common operating platforms, their management teams, and capabilities. These platforms are initiatives led by the corporate center and provide technical resources, world-class capabilities and enterprise scale to be utilized by our portfolio companies in their drive for year-over-year continuous improvement and productivity.

We have also continued to invest materially in our digital and software capabilities and technical talent at our Boston-based Dover Digital Labs, and we are encouraged by the progress we have made in the development of common infrastructure for our customer-facing sales and service digital platforms.

In 2019, we made significant progress in building our operational excellence team. This team will be tasked with delivering common systems for productivity measurement and safety assurance to our operating companies and will supervise large capital projects and grow the utilization of our capital equipment base and production technology roadmaps.

In addition, we have made considerable progress developing the capabilities within our India Innovation Center, as many of our operating companies are now using this common resource for engineering services, product testing capabilities and intellectual property management. Our ability to manage research and development projects and provide 24/7 technical monitoring is expected to drive a significant step forward in R&D speed-to-market.

Lastly, our Dover Business Services team continued to scale during the year with our operations in the Philippines adding over 50 employees to their back-office execution team. By managing common transactional functions in finance, payroll, and service delivery through a single global scalable platform, we have been able to deliver tangible improvements in service level, quality and cost per transaction.

Commitment to ESG

In 2020, Dover Corporation will begin implementing a three-year plan to expand the scope and robustness of our environmental, social and governance practices and disclosures, some of which are highlighted in our Proxy Statement for our 2020 Annual Meeting of Shareholders. We embark on this journey after extensive dialog with all of our stakeholders and in collaboration with our Board of Directors. For us, this is part and parcel of our long-standing commitment to being a good corporate citizen in the communities where we operate. In addition to focusing on "how" we operate, we will focus on ensuring that our products and services are designed to contribute to the sustainability of our customers' businesses. We believe our dedication to this initiative will enable us to continue to attract the best and brightest employees. We look forward to sharing more details with you on our website in the coming months.

Closing

In closing, as I write this letter it is increasingly clear that 2020 will challenge Dover as a result of the spread of the novel Coronavirus (Covid-19) and its many emerging economic ramifications. During this time, I want to reiterate our commitment to ensuring the health and safety of our employees while continuing to support our customers, business partners and broader communities. We have an excellent team at Dover and an outstanding portfolio of products and services on which our customers rely daily to support crucial societal functions, such as, providing access to fuel, manufacturing packaged food and providing retail food refrigeration, removing solid municipal waste, manufacturing biopharmaceuticals, and many other areas of need. We will remain focused on providing our full support to our customers, employees and communities while we all navigate the present challenge.

The Dover Board of Directors and I would like to thank you, our shareholders, customers and employees for the support and trust you have placed in us. We are confident that Dover is well-positioned for continued success in the future, and that through our collective efforts, we have the capability to execute toward our objectives.

We look forward to our journey into this new decade.

Sincerely,

Richard J. Tobin
President and Chief Executive Officer
March 21, 2020

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

FORM 10-K

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

For fiscal year ended December 31, 2019

Commission File Number: 1-4018 **Dover Corporation**

(Exact name of registrant as specified in its charter)

Delaware 53-0257888
(State or other jurisdiction of incorporation or organization) (I.R.S. Employer Identification No.)

3005 Highland Parkway Downers Grove, Illinois 60515

(Address of principal executive offices)

Registrant's telephone number: (630) 541-1540

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

Title of Each Class	Trading Symbol(s)	Name of Each Exchange on Which Registered
Common Stock, par value \$1	DOV	New York Stock Exchange
1.250% Notes due 2026	DOV 26	New York Stock Exchange
0.750% Notes due 2027	DOV 27	New York Stock Exchange

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

None

Indicate by check mark if the regis	trant is a well-known seasone	ed issuer, as defined in Rule 405 of	the Securities Act. Yes ☑	No □
Indicate by check mark if the regis	trant is not required to file rep	ports pursuant to Section 13 or Sect	tion 15(d) of the Act. Yes □	No ☑
•	2 months (or for such shorter	eports required to be filed by Section period that the registrant was reques ☑ No □	. /	_
•	.405 of this chapter) during tl	ctronically every Interactive Data F he preceding 12 months (or for such		
3	the definitions of "large acce	ated filer, an accelerated filer, a non elerated filer," "accelerated filer," "s t. (Check one):	· · · · · · · · · · · · · · · · · · ·	1 0,
Large accelerated filer ☑	Accelerated filer □	Non-accelerated filer □	Smaller reporting comp Emerging growth comp	-
	•	the registrant has elected not to ds provided pursuant to Section 13		period for

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

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant as of the close of business on June 30, 2019 was \$14,526,718,145. The registrant's closing price as reported on the New York Stock Exchange-Composite Transactions for June 30, 2019 was \$100.20 per share. The number of outstanding shares of the registrant's common stock as of February 4, 2020 was 144,328,014.

Documents Incorporated by Reference: Part III — Certain Portions of the Proxy Statement for Annual Meeting of Shareholders to be held on May 8, 2020 (the "2020 Proxy Statement").

Special Note Regarding Forward-Looking Statements

This Annual Report on Form 10-K, especially "Management's Discussion and Analysis of Financial Condition and Results of Operations," contains "forward-looking" statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. All statements in this document other than statements of historical fact are statements that are, or could be deemed, "forward-looking" statements. Some of these statements may be indicated by words such as "may", "anticipate", "expect", believe", "intend", "guidance", "estimates", "suggest", "will", "plan", "should", "would", "could", "forecast" and other words and terms that use the future tense or have a similar meaning. Forward-looking statements are based on current expectations and are subject to numerous important risks, uncertainties, assumptions and other factors, some of which are beyond the Company's control. Factors that could cause actual results to differ materially from current expectations include, among other things, general economic conditions and conditions in the particular markets in which we operate, changes in customer demand and capital spending, competitive factors and pricing pressures, our ability to develop and launch new products in a cost-effective manner, changes in law, including developments with respect to trade policy and tariffs, our ability to identify and complete acquisitions and integrate and realize synergies from newly acquired businesses, the impact of interest rate and currency exchange rate fluctuations, capital allocation plans and changes in those plans, including with respect to dividends, share repurchases, investments in research and development, capital expenditures and acquisitions, our ability to derive expected benefits from restructuring, productivity initiatives and other cost reduction actions, changes in material costs or the supply of input materials, the impact of legal compliance risks and litigation, including with respect to product quality and safety, cybersecurity and privacy, and our ability to capture and protect intellectual property rights. Certain of these risks and uncertainties are described in more detail in Item 1A. "Risk Factors" of this Annual Report on Form 10-K. The Company undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise.

In this Annual Report on Form 10-K, we refer to measures used by management to evaluate performance, including a number of financial measures that are not defined under accounting principles generally accepted in the United States of America ("GAAP"). We include reconciliations to provide more details on the use and derivation of these financial measures. Please see "Non-GAAP Disclosures" at the end of Item 7 for further detail.

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PART I

ITEM 1. BUSINESS

Overview

Dover Corporation is a diversified global manufacturer and solutions provider delivering innovative equipment and components, consumable supplies, aftermarket parts, software and digital solutions and support services through five operating segments: Engineered Products, Fueling Solutions, Imaging & Identification, Pumps & Process Solutions, and Refrigeration & Food Equipment. Unless the context indicates otherwise, references herein to "Dover," "the Company," and words such as "we," "us," or "our" include Dover Corporation and its consolidated subsidiaries. Dover was incorporated in 1947 in the State of Delaware and became a publicly traded company in 1955. Dover is headquartered in Downers Grove, Illinois and currently employs approximately 24,000 people worldwide.

Effective October 1, 2019, Dover transitioned from a three-segment to a five-segment structure as a result of a change to its management structure and operating model. Dover's five segments are structured around businesses with similar business models, go-to-market strategies and manufacturing practices. This structure increases management efficiency and better aligns Dover's operations with its strategic initiatives and capital allocation priorities, and provides greater transparency about our performance to external stakeholders. Dover's five operating and reportable segments are as follows:

- Our Engineered Products segment is a provider of a wide range of products, software and services that have broad customer applications across a number of markets, including aftermarket vehicle service, solid waste handling, industrial automation, aerospace and defense, industrial winch and hoist, and fluid dispensing.
- Our Fueling Solutions segment is focused on providing components, equipment and software and service solutions
 enabling safe transport of fuels and other hazardous fluids along the supply chain, as well as the safe and efficient
 operation of retail fueling and vehicle wash establishments.
- Our Imaging & Identification segment supplies precision marking and coding, product traceability and digital textile printing equipment, as well as related consumables, software and services.
- Our Pumps & Process Solutions segment manufactures specialty pumps, fluid handling components, plastics and polymer processing equipment, and highly engineered components for rotating and reciprocating machines.
- Our Refrigeration & Food Equipment segment is a provider of innovative and energy-efficient equipment and systems that serve the commercial refrigeration, heating and cooling and food equipment markets.

Spin-off of Energy Businesses

On May 9, 2018, we completed the spin-off of Apergy Corporation ("Apergy") to our shareholders. Apergy consists of our former upstream energy businesses previously included in our former Energy segment. The transaction was completed through the pro rata distribution of 100% of the common stock of Apergy to Dover's shareholders of record as of the close of business on April 30, 2018. Each Dover shareholder received one share of Apergy common stock for every two shares of Dover common stock held as of the record date. For more details, see Note 2 — Spin-off of Apergy Corporation in the Consolidated Financial Statements in Item 8 of this Form 10-K.

Management Philosophy

Dover is committed to increasing shareholder value through a combination of sustained long-term profitable growth, operational excellence and superior free cash flow generation with productive re-deployment while adhering to a conservative financial policy. Dover seeks to be a leader in a diverse set of growing markets where customers are loyal to established brands and value product performance and differentiation evidenced by superior engineering, manufacturing precision, total solution development and excellent supply chain performance. Our businesses are long-time leaders in their respective markets and are known for their innovation, engineering capability and customer service excellence. We aim to continue growing our businesses from this strong foundation. Our operating structure of five business segments allows for increased differentiated acquisition focus consistent with our portfolio and capital allocation priorities. We believe our five business segment structure also accelerates opportunities to identify and capture operating synergies, such as global sourcing and supply chain integration, shared services, and manufacturing practices, and further advances the development of our executive talent. Our executive management team sets strategic direction, initiatives and goals, provides oversight of strategy execution and achievement of these goals for our operating companies, and with oversight from our Board of Directors, makes capital allocation decisions, including with respect to organic investment initiatives, major capital projects, acquisitions and the return of capital to our shareholders.

We foster an operating culture with high ethical and performance standards that values accountability, rigor, trust, respect and open communications, designed to allow individual growth and operational effectiveness. We are also committed to creating sustainable business practices that protect the environment, and through the development of products that help our customers meet their sustainability goals.

Company Goals

We are committed to driving superior shareholder returns through three key tenets of our corporate strategy. First, we are committed to achieving organic sales growth above that of gross domestic product (GDP+ or 3% to 5% annually on average) over a long-term business cycle, absent prolonged adverse economic conditions, complemented by growth through strategic acquisitions. Second, we continue to focus on improving returns on capital and segment and corporate earnings margins by enhancing our capabilities and making investments across the organization in software and digital applications, operations management, information technology ("IT") and talent. We also focus on continuous, effective cost management and productivity initiatives, including automation and digitally-supported manufacturing, supply chain activities, restructuring activities, improved footprint utilization, strategic pricing and portfolio management. Third, we aim to generate strong free cash flow as a percentage of revenue of approximately 8-12% through strong earnings performance, productivity improvements and active working capital management. Dover prioritizes deploying free cash flow towards high-return and high-confidence organic reinvestments aimed at growing, improving and strengthening our businesses, as well as through inorganic investments that synergistically enhance the quality of our portfolio. Dover's value creation strategy is supported by a financial policy that includes a prudent approach to financial leverage, and a disciplined approach to capital allocation that allows for a balance between reinvestment and return of capital to shareholders through growing dividends and opportunistic share repurchases. We support achievement of these goals by (1) aligning management compensation with strategic and financial objectives, (2) executing on well-defined and actively managed merger and acquisition processes and (3) investing in talent development programs.

Characteristics of a Dover Business

Our businesses have consistently enjoyed a loyal customer base that chooses products primarily based on performance. In many instances, our businesses produce critical equipment or components to a larger system, where value-in-use and costs and risks of switching far exceed the cost of the product itself. Our products tend to have meaningful replacement, consumable or aftermarket demand due, in part, to a large installed base with loyal customers because they play a specialized role in customer applications. Recurring demand, which includes parts, consumables, services and software, represents approximately 30% of our revenue. Our businesses increasingly complement our component or equipment offerings with digital solutions (such as connected products, sensors and software) that create new sources of value to our customers and allow Dover businesses to drive growth and increase relevance with our customers. Our focus in shaping Dover's portfolio is aimed at building an enterprise with a large and stable cash flow, low capital intensity, and sustainable returns on invested capital well in excess of our cost of capital.

Business Strategy

To achieve our stated goals, we are focused on executing the following pillars of Dover's business strategy:

Capturing growth potential in our end-markets and adjacencies

Dover's five business segments are focused on building enduring competitive advantages and leadership positions in markets that we believe are positioned for sustained future growth. We believe that our businesses are among the top suppliers in most markets and niches that we serve (as defined by customer applications, geographies or products), which positions us well to capture future growth. We capitalize on our engineering, technology and design expertise and maintain an intense focus on meeting the needs of our customers and adding significant, and often new, value to their operations through superior product performance, safety and reliability and a commitment to aftermarket support. We cultivate and maintain an entrepreneurial culture and continuously innovate to address our customers' needs to help them win in the markets they serve.

In particular, our businesses are well-positioned to capitalize on growing industrial manufacturing and trade volumes, adoption of digital technologies, increasing requirements for sustainability, safety, energy efficiency and consumer product safety, and growth of the middle class and consumption in emerging economies. Our Engineered Products segment is capitalizing on secular growth in waste generation and increasing sophistication and automation of waste collection operations, increasing car parc, car age and miles driven, as well as increasing digitization and sensorization of modern vehicles. Our Fueling Solutions segment benefits from worldwide growth in safety and compliance regulations, new infrastructure build-out in emerging economies, increased sophistication and digitization of convenience and fuel retailing, as well as a secular growth in automated vehicle wash systems (over manual and do-it-yourself washing). Our Imaging & Identification segment leverages its unique product offering containing equipment, consumables, software and services to address market needs and requirements including conversion to digital textile printing, increased demand for product traceability and brand protection, and consumer product safety. Our Pumps & Process Solutions segment is focused on capturing growth in its installed base and growing sophistication of fluid transfer and rotating machinery components within the chemical, plastics and polymer, industrial, mid and downstream oil & gas, biopharma and hygienic markets as well as globalizing brands across geographies while expanding sales channels and engineering support. Our Refrigeration & Food Equipment segment is responding to our customers' demand for increased energy efficiency and sustainability in food retail merchandising solutions, as well as increasing demand for sustainable heating and cooling solutions and growing global demand for aluminum beverage cans.

We aim to grow by making organic investments in research and development, developing new products and technologies, improving digital capabilities, expanding our geographic coverage, and by pursuing disciplined strategic acquisitions that will enhance our portfolio and position Dover for long-term growth. We continually evaluate how our assets and capabilities can position Dover to grow in markets adjacent to our core businesses (for example, new applications, geographies, product segments or adjacent technologies) where Dover can be advantaged.

In addition to product innovation, we plan to grow by developing digital technologies. In 2018, we opened our new Digital Labs center in the greater Boston area and have continued to invest in this facility and our team of software developers, data scientists, and product managers to enhance our digital capability. The Digital Labs team is driving digital transformation across our businesses along the following three areas: (i) e-commerce – more efficient and streamlined digital customer interfaces that make it easy to do business with Dover companies; (ii) connected products – development of value-add connected, sensorized and software-augmented solutions built on top of Dover's core equipment and component offerings in our end-markets; and (iii) digital manufacturing – driving increased efficiency, safety and quality in our manufacturing operations by employing cutting-edge automation and "digital factory" solutions. We believe that the Digital Labs center will enhance the effectiveness of our products and fuel our commercial growth strategy. By leveraging a central resource for Industrial Internet of Things ("IIoT") and connected product initiatives, we are able to reduce redundancy of support infrastructure while managing the proliferation of common parts, such as sensors, to keep our projects cost-competitive.

Improving profitability and return on invested capital

We are committed to generating sustainable returns on invested capital well above the cost of capital across all of our businesses. We continually evaluate and pursue opportunities to improve efficiency, margin and return on capital. We are intensely focused on driving operational excellence across our businesses. Over several years, we have implemented numerous productivity initiatives, such as supply chain integration management, shared service centers and lean manufacturing principles, to maximize our efficiency as well as workplace safety initiatives to help ensure the health and welfare of our employees. Our businesses place a strong emphasis on continual product quality improvement and new product development to better serve customers and to facilitate expansion into new products and geographic markets. Further, we continue to make significant investments in talent development, especially in the area of operational management, and recognize that the growth and development of our employees is essential for our continued success.

In 2018, we launched our margin expansion program, designed to reduce our selling, general and administrative cost base and rationalize our manufacturing and supply chain footprint across the portfolio. In 2019, we continued to expand initiatives to extract productivity gains across the businesses and initiated a set of productivity actions to realize further savings in 2020. Current margin expansion initiatives are focused on the further centralization of shared services under Dover Business Services, improving utilization and optimization of our manufacturing footprint as well as our IT services and costs, and continuing to leverage our Digital Labs team to improve our e-commerce capabilities.

We have invested, and will continue to invest, in Dover Business Services shared service centers to provide important transactional and value-added services to our operating companies in the areas of finance, IT and human resources. Our shared service model allows us to leverage scale across Dover, increase process efficiencies through technology and specialization and reduce risk through centralized controls. Our shared service centers serve our operating companies by freeing resources normally dedicated to transactional services to allow those resources to focus on customers, markets and product excellence. We expect to continue driving efficiencies through Dover Business Services as we increase the level of service centralization across the portfolio.

Digital Labs consists of a team of approximately 100 software developers, data scientists and product managers who provide digital capabilities to enhance the customer experience, develop connected products, and drive automation and efficiency. Our Dover Digital leadership has begun deploying customer facing applications of common infrastructure design to make it easier to find, experience and buy products from Dover. The Digital Labs team has also deployed shared IIoT capability so many of Dover's products are remotely configurable and monitored, enabling our businesses to sell aftermarket parts and offer remote diagnostic services.

In 2019, we launched a set of initiatives to improve operational efficiency and enhance and solidify the continuous improvement programs embedded in our businesses' day-to-day operations beginning with several significant production automation and footprint consolidation projects. With the launch of the new segment structure and continued evolution of Dover's operating model, we will now oversee operations management from the corporate center. We expect this team to work closely with our businesses to drive execution excellence in our operational initiatives and best-in-class processes, standards and measurement tools to identify, prioritize and monitor execution of operational improvement initiatives.

Additionally, we focus on improving margins and returns by rigorously capturing synergies from our acquisitions and providing best-in-class corporate support and services through a lean corporate center.

Disciplined capital allocation

We are focused on the most efficient allocation of capital to maximize returns on investment. To do this, we prioritize organic reinvestment to grow and strengthen our existing businesses. We plan to make average annual investments in capital spending of approximately 2% - 4% of revenue with a focus on internal projects designed to expand our market participation, develop new products and improve productivity. We also seek to deploy capital in acquisitions in attractive growth areas across our five segments. Dover focuses primarily on bolt-on acquisitions, applying strict selection criteria of market attractiveness (including growth, maturity, and performance-based competition), business fit (including sustained leading position, revenue visibility, and favorable customer value-add versus switching cost or risk) and financial return profile (accretive growth and margins and double-digit return on capital). Finally, we have consistently returned cash to shareholders

by paying dividends, which have increased annually over each of the last 64 years. We also undertake opportunistic share repurchases as part of our capital allocation strategy, and completed \$1 billion of share repurchases towards the end of 2017, and in 2018, primarily with funds received from Apergy in connection to the spin-off, and \$143.3 million in 2019. We employ a prudent financial policy to support our capital allocation strategy, which includes maintaining an investment grade credit rating.

Portfolio Development

Acquisitions

Our acquisition program has two key elements. As a first priority, we seek to acquire attractive add-on businesses with a strong fit that enhance our existing franchises either by increasing their reach and customer access, by broadening their product mix or by enhancing technological capability and customer value-add. Second, in the right circumstances, we may strategically pursue larger, stand-alone businesses that complement our existing businesses or provide a path for us to pursue growth in near adjacencies. With all our acquisitions, we seek businesses that are leaders in their markets or niches, have a strong track record for innovation, offer differentiated solutions, clearly complement our businesses and have a solid organic growth profile, attractive and sustainable returns, and offer significant synergy potential to generate double-digit return on capital within three years after the acquisition is completed.

Over the past three years (2017 through 2019), we have spent approximately \$319.3 million to purchase seven businesses. During 2019, we acquired three businesses for an aggregate consideration of \$216.4 million, net of cash acquired and including contingent consideration. Consistent with our acquisition program, we acquired these businesses to complement and expand upon existing operations within the Fueling Solutions and Pumps & Process Solutions segments. During 2018, we acquired two businesses for an aggregate consideration of \$68.6 million, net of cash acquired. We acquired these businesses to complement and expand upon existing operations within the Pumps & Process Solutions and Refrigeration & Food Equipment segments. During 2017, we acquired two businesses for an aggregate purchase price of \$34.3 million, net of cash acquired, within the Imaging & Identification segment. For more details regarding acquisitions completed over the past three years, see Note 4 — Acquisitions in the Consolidated Financial Statements in Item 8 of this Form 10-K.

Our future growth depends in large part on finding and acquiring successful businesses that expand the scope of our offerings and make us an even more important supplier to our customers. While we expect to generate annual organic revenue growth of 3% - 5% over a long-term business cycle absent extraordinary adverse economic conditions, our success in consistently growing the portfolio is also dependent on the ability to acquire and integrate businesses successfully within our existing structure. To track post-merger integration and accountability, we utilize an internal scorecard and well-defined processes to help ensure expected synergies are realized and value is created.

Dispositions

We have sold or divested some of our businesses based on changes in specific market outlook, structural changes in financial performance, value-creation potential, or for other strategic considerations, which included an effort to reduce our exposure to cyclical markets or focus on our higher margin growth spaces. Most of our efforts to streamline and improve the portfolio to less cyclical and higher growth businesses were completed in 2018 with the Apergy spin-off.

Going forward, we also recognize that some businesses in Dover's portfolio may have a greater value-creation potential if owned by another parent with a larger presence and focus on a given niche. We pragmatically consider such opportunities as part of our ongoing portfolio management and review processes and execute divestitures if the value created is determined to be at an appropriate premium to the value of such business to Dover and allows Dover shareholders to participate in the future value-creation potential from a change in ownership.

During 2019, we completed the sale of Finder Pompe S.r.l. ("Finder") within the Pumps & Process Solutions segment. During 2018, there were no other material dispositions aside from the spin-off of Apergy as previously discussed. The financial position and results of operations for Apergy have been presented as discontinued operations for all periods presented. During 2017, we completed the sale of Performance Motorsports International ("PMI") and the consumer and industrial winch business of Warn Industries ("Warn"), as well as other smaller divestitures. The disposals in 2019 and 2017

did not represent strategic shifts in operations and, therefore, did not qualify for presentation as discontinued operations. For more details, see Note 5 — Discontinued and Disposed Operations in the Consolidated Financial Statements in Item 8 of this Form 10-K.

Business Segments

As noted previously, effective October 1, 2019, Dover transitioned from a three-segment to a five-segment structure as a result of a change to its internal organization. This new structure increases management efficiency and better aligns Dover's operations with its strategic initiatives and capital allocation priorities across its businesses. Dover's five operating and reportable segments are as follows: Engineered Products, Fueling Solutions, Imaging & Identification, Pumps & Process Solutions and Refrigeration & Food Equipment. For financial information about our segments and geographic areas, see Note 19 — Segment Information in the Consolidated Financial Statements in Item 8 of this Form 10-K.

Engineered Products

Our Engineered Products segment provides a wide range of products, software and services that have broad customer applications across a number of markets, including: solid waste handling, aftermarket vehicle service, industrial automation, aerospace and defense, and industrial winch and hoist. Our waste handling business is a leading North American supplier of equipment, software and services for the refuse collection industry and for on-site processing and compaction of trash and recyclable materials. Our vehicle service business provides products, software and services used primarily in vehicle repair and maintenance, including light and heavy-duty vehicle lifts, wheel service equipment, vehicle diagnostics and vehicle collision repair solutions. The businesses in the industrial automation market provide a wide range of modular automation components including manual clamps, power clamps, rotary and linear mechanical indexers, conveyors, pick and place units, glove ports and manipulators, as well as end-of-arm robotic grippers, slides and end effectors. Our industrial winch and hoist business provides a range of winches, hoists, bearings, drives, and electric monitoring systems for infrastructure and other industrial markets. The segment also supplies radio frequency and microwave filters and switches to enable secure communications in aerospace and defense applications, and benchtop soldering and fluid dispensing solutions in electronics and industrial product assembly.

Our Engineered Products segment's products are manufactured primarily in the United States, Europe and Asia and are sold throughout the world directly and through a network of distributors.

Fueling Solutions

Our Fueling Solutions segment provides components, equipment and software and service solutions enabling safe transport of fuels and other hazardous fluids along the supply chain, as well as safe and efficient operation of retail fueling and vehicle wash establishments across the globe. Among solutions supplied by the segment are fuel dispensers, payment systems, hardware and underground containment systems, vehicle wash systems, as well as asset tracking, monitoring and operational optimization software. Additionally, Fueling Solutions supplies components used for transfer of fuels and other critical liquids across the supply chain.

Our Fueling Solutions segment's products are manufactured primarily in the United States, Europe, China and Brazil and are sold throughout the world directly and through a network of distributors.

Imaging & Identification

The companies in our Imaging & Identification segment are global suppliers of precision marking and coding, product traceability and digital textile printing equipment, as well as related consumables, software and services. The Imaging & Identification segment primarily designs and manufactures equipment and consumables used for printing variable information (such as bar coding of dates and serial numbers) on fast-moving consumer goods, capitalizing on expanding food and product safety and traceability requirements and growth in emerging markets. In addition, our businesses serving the apparel and textile printing market are benefiting from a secular shift from analog to digital printing, resulting from growing demand for "fast fashion", and more customized and complex fashion designs, as well as increasing environmental sustainability requirements (digital printing process is significantly more environment-friendly due to lower water consumption). Businesses within this segment leverage digital printing capabilities and operate business models that involve initial equipment and software sales followed by significant consumable, software and service aftermarket revenue streams.

Our Imaging & Identification segment's products are manufactured primarily in the United States, Europe and Asia and are sold throughout the world directly and through a network of distributors.

Pumps & Process Solutions

The businesses in our Pumps & Process Solutions segment manufacture specialty pumps, fluid handling components, plastics and polymers processing equipment, and highly-engineered components for rotating and reciprocating machines. The segment's products are used in a wide variety of markets, including plastics and polymers processing, chemicals production, food/sanitary, biopharma, medical, transportation, petroleum refining, power generation and general industrial applications. Our specialty pumps and components are used in demanding and specialized operating environments with high performance requirements. Businesses within this segment share the following commonalities: the products are components or small pieces of equipment that are part of large production systems with components often specified by customers or regulations, there is a diverse and fragmented customer base, there is significant aftermarket demand from a large installed base, and the route-to-market is a mix of distribution and direct sales.

Our Pumps & Process Solutions segment's products are manufactured primarily in the United States, Europe, Mexico and Asia and are sold throughout the world directly and through a network of distributors and original equipment manufacturers ("OEMs").

Refrigeration & Food Equipment

Our Refrigeration & Food Equipment segment is a provider of innovative and energy-efficient equipment and systems that serve the commercial refrigeration, heating and cooling, and food equipment markets. Our refrigeration business manufactures refrigeration systems, refrigeration display cases, commercial glass refrigerator and freezer doors and brazed plate heat exchangers used for industrial heating and cooling and residential climate control. Other businesses in this segment design and manufacture commercial food service equipment and can-shaping machinery. The majority of the products that are manufactured or serviced by the Refrigeration & Food Equipment segment are used by the retail food industry, including supermarkets, "big-box" retail and convenience stores, the commercial/industrial refrigeration industry, institutional and commercial food service, food production markets and beverage can-shaping industries.

Our Refrigeration & Food Equipment segment's products are manufactured primarily in North America, Europe and Asia and are sold globally, directly and through a network of distributors.

Raw Materials

We use a wide variety of raw materials, primarily metals and semi-processed or finished components, which are generally available from a number of sources. As a result, shortages or the loss of any single supplier have not had, and are not likely to have, a material impact on operating profits. While the required raw materials are generally available, commodity pricing can be volatile, particularly for various grades of steel, copper, aluminum and select other commodities. Although cost increases in commodities may be recovered through increased prices to customers, our operating results are exposed to such fluctuations. We attempt to control such costs through fixed-price contracts with suppliers and various other programs, such as our global supply chain activities.

Research and Development

Our businesses invest to develop innovative products, as well as to upgrade and improve existing products, to satisfy customer needs, including demand for energy-efficient products designed to help customers meet sustainability goals, expand revenue opportunities domestically and internationally, maintain or extend competitive advantages, improve product reliability and reduce production costs.

Our Imaging & Identification segment expends significant effort in research and development because the rate of product development by their customers is often quite high. Our businesses that develop product identification and printing equipment believe that their customers expect a continuing rate of product innovation, and performance and total cost of ownership improvement. The result has been that product life cycles in these markets generally average less than five years with meaningful sales price reductions over that time period.

Our other segments contain many businesses that are also involved in important product improvement initiatives. These businesses concentrate on working closely with customers on specific applications, expanding product lines and market applications and continuously improving manufacturing processes. Most of these businesses experience a much more moderate rate of change in their markets and products than is generally experienced by the Imaging & Identification segment.

Our businesses pursue digital strategies based on customer needs and will now be able to leverage cross-company capabilities developed at the Digital Labs center. For example, with the support of the Digital Labs center, Hydro, which manufacturers chemical injecting, proportioning, dispensing and medicating equipment within our Pumps & Process Solutions segment, launched Hydro Connect in 2018. Hydro Connect is a cloud-based IIoT platform that gives end users increased visibility into their operations, optimizes production, reduces costs and increases customer satisfaction. Building on this momentum, we launched a digital initiative in 2018 to help our businesses increase sales and further improve customer satisfaction through digital technology, starting with Dover Food Retail within our Refrigeration & Food Equipment segment.

In 2019, our businesses continued to expand utilization of the Digital Labs center. Our Vehicle Services Group, within the Engineered Products segment, launched Mosiac advanced diagnostic technology, the industry's first-ever automated advanced driver-assistance system and calibration system through a partnership with Burke Porter Group and the capability developed at the Digital Labs. Additionally, as a part of the digital customer initiative, Colder, a business in the Pumps & Process Solutions segment, and OPW, a business in the Fueling Solutions segment, launched business to business digital engagement platforms that enable their customers to place, track and repeat orders.

Intellectual Property and Intangible Assets

Our businesses own many patents, trademarks, licenses and other forms of intellectual property, which have been acquired over a number of years and, to the extent relevant, expire at various times over a number of years. A large portion of our businesses' intellectual property consists of patents, unpatented technology and proprietary information constituting trade secrets that we seek to protect in various ways, including confidentiality agreements with employees and suppliers where appropriate. In addition, a significant portion of our intangible assets relate to customer relationships. While our intellectual property and customer relationships are important to our success, the loss or expiration of any of these rights or relationships, or any group of related rights or relationships, is not likely to materially affect our results on a consolidated basis. We believe that our commitment to continuous engineering improvements, new product development and improved manufacturing techniques, as well as strong sales, marketing and service efforts, are significant to our general leadership positions in the niche markets we serve.

Customers

We serve thousands of customers, none of which accounted for more than 10% of our consolidated revenue in 2019. Given our diversity of served markets, customer concentrations are not significant. Businesses supplying the environmental solutions, defense, automotive and commercial refrigeration industries tend to deal with a few large customers that are significant within those industries. This also tends to be true for businesses supplying the power generation and chemical industries. In the other markets served, there is usually a much lower concentration of customers, particularly where our companies provide a substantial number of products and services applicable to a broad range of end-use applications.

Seasonality

In general, while our businesses are not highly seasonal, we do tend to have stronger revenue generation in the second half of the year, which is driven by customer capital expenditure timing and seasonal activity patterns in our end-markets. Our businesses serving the retail fueling market tend to increase in the second half of the year based on the historical purchasing patterns of their customers. Our businesses serving the major equipment markets, such as power generation, chemical and processing industries, have longer lead times geared to seasonal, commercial, or consumer demands and customers in these markets tend to delay or accelerate product ordering and delivery to coincide with those market trends which moderates the aforementioned seasonality patterns. Our food retail refrigeration business tends to face higher levels of demand in the second and third quarters as retailers avoid construction and remodeling activity during fall/winter holidays.

Backlog

Backlog is more relevant to our businesses that produce larger and more sophisticated machines or have long-term contracts, primarily for the businesses serving solid waste handling, plastics and polymers processing, bearings and compressor components, can-shaping equipment and commercial refrigeration markets. See Segment Results of Operations within Item 7 for further discussion of this operational measure. Our total backlog relating to our businesses as of December 31, 2019 and 2018 was \$1.5 billion and \$1.4 billion, respectively.

Competition

Our competitive environment is complex because of the wide diversity of our products manufactured and the markets served. In general, most of our businesses are market leaders that compete with only a few companies, and the key competitive factors are customer service, product quality, price and innovation. A summary of our key competitors within each of our segments follows:

Segment	Key Competitors
Engineered Products	Oshkosh Corp. (McNeilus), Tünkers Maschinenbau GmbH, Snap-On Inc. (Challenger Lifts, Car-O-Liner), Labrie Enviroquip Group, PACCAR (Braden), Fortive (Hennessey Industries, Inc.) and numerous others
Fueling Solutions	Fortive (Gilbarco Veeder-Root), Tatsuno, Verifone, Franklin Electric, Elaflex, Gardner Denver, Inc. (Emco Wheaton), Dixon Valve & Coupling Company, Professional Datasolutions, Inc. (PDI), Salco, Washtec AG
Imaging & Identification	Danaher Corporation (Videojet), Brother Industries, Ltd. (Domino Printing), Electronics For Imaging (Reggiani), SPG Prints, Konica Minolta, Kornit Digital Ltd.
Pumps & Process Solutions	IDEX Corporation, ITT, SPX Flow Inc. (Waukesha), Ingersoll Rand (Milton Roy, Dosatron), Spirax Sarco, Nordson Corporation, Kingsbury, Seko, Ecolab, Millipore, Danaher Corporation (Pall), EnPro Industries (Compressor Products International, Garlock), Hoerbiger Holdings AG, Miba AG, Hillenbrand Inc. (Coperion)
Refrigeration & Food Equipment	Panasonic (Hussman Corp.), Alfa Laval, Welbilt Corp, Illinois Tool Works, Middleby Corp.

International

Consistent with our strategic focus on positioning our businesses for growth, we aim to increase our revenue in international markets, particularly in developing economies in Asia, the Middle East, Eastern Europe and South America.

Most of our non-U.S. subsidiaries and affiliates are currently based in China, France, Germany, Italy, Sweden, Switzerland, the United Kingdom, and other locations including Australia, Brazil, Canada, India, Mexico, and the Netherlands.

The following table shows annual revenue derived from customers outside the U.S. as a percentage of total annual revenue for each of the last three years, by segment and in total:

		of Non-U.S. I by Segment	Revenue		
	Years Ended December 31,				
	2019	2018	2017		
Engineered Products	27 %	30 %	30 %		
Fueling Solutions	52 %	54 %	53 %		
Imaging & Identification	77 %	78 %	77 %		
Pumps & Process Solutions	49 %	51 %	50 %		
Refrigeration & Food Equipment	39 %	38 %	34 %		
Total percentage of revenue derived from customers outside of the United States	47 %	48 %	46 %		

Our international operations are subject to certain risks, such as price and exchange rate fluctuations and non-U.S. governmental restrictions, which are discussed further in Item 1A. "Risk Factors." For additional details regarding our non-U.S. revenue and the geographic allocation of the assets of our continuing operations, see Note 19 — Segment Information to the Consolidated Financial Statements in Item 8 of this Form 10-K.

Environmental Matters

Sustainability

We are committed to creating economic value for shareholders by developing products designed to help our customers meet their sustainability goals in response to evolving regulatory and environmental standards. We believe that sustainability-driven innovation in response to customer demand will present a growth opportunity while contributing positively to enhanced resource efficiency and reduced waste. In that regard, our businesses have accelerated efforts and processes around innovation, including by focusing on technologies that create tangible value for our customers. For example, in our Engineered Products segment, we manufacture onsite waste balers and compactors for customers who need to quickly and efficiently process solid waste and recyclables. In our Imaging & Identification segment, we offer packaging intelligence solutions that enable efficient product tracking and identification as well as improved line efficiency, minimized waste and improved compliance for our customers. Our Fueling Solutions segment offers products that support the delivery of alternative fuels, help reduce vehicle emissions and assist in vapor recovery. Through our Pumps and Solutions segment, we focus on the conversion to sustainable and renewable energy usage in heating and cooling applications. We have developed innovative retail refrigeration technologies in our Refrigeration & Food Equipment segment that are both energy efficient and cost effective.

We are also committed to fostering sustainable business practices across our businesses in order to reduce greenhouse gas emissions and energy consumption. We believe that our focus on sustainability will result in enhanced efficiency in our operations, which will reduce costs, improve margins and help us achieve operational excellence. In 2010, we implemented a process to conduct an inventory of our greenhouse gas emissions. Since then, we have evaluated our climate change risks and opportunities, as well as developed an energy and climate change strategy that includes goals, objectives and related projects for reducing energy use and greenhouse gas emissions. To further promote our sustainability efforts, we committed to reducing our overall energy and greenhouse gas intensity indexed to net revenue by 20% from 2010 to 2020. We have achieved those goals ahead of schedule. We are currently evaluating our strategic approach to managing sustainability matters and plan to continue reporting on our energy and greenhouse gas intensity and to work proactively to reduce energy usage and carbon emissions amidst acquisition and business growth. We have participated as a voluntary respondent in the Carbon Disclosure Project (CDP) since 2010 and have maintained our scoring range since we began reporting. We began participating in the CDP water security program in 2018 and expanded our reporting in 2019 with water data collection.

As noted, our businesses assess the energy efficiencies related to their operations and the opportunities associated with the use of their products and services by customers. In some instances, our businesses may be able to help customers reduce energy use and greenhouse gas emissions. Increased demand for energy-efficient products based on a variety of drivers could result in increased sales for a number of our businesses.

Other Matters

Our operations are governed by a variety of international, national, state and local environmental laws. We are committed to continued compliance and believe our operations generally are in substantial compliance with these laws. In a few instances, particular plants and businesses have been the subject of administrative and legal proceedings with governmental agencies or private parties relating to the discharge or potential discharge of regulated substances. Where necessary, these matters have been addressed with specific consent orders to achieve compliance.

There have been no material effects upon our earnings and competitive position resulting from our compliance with laws or regulations enacted or adopted relating to the protection of the environment. We are aware of a number of existing or upcoming regulatory initiatives intended to reduce emissions in geographies where our manufacturing and warehouse/ distribution facilities are located and have evaluated the potential impact of these regulations on our businesses. We anticipate that direct impacts from regulatory actions will not be significant in the short- to medium-term. We expect the regulatory

impacts associated with climate change regulation would be primarily indirect and would result in "pass through" costs from energy suppliers, suppliers of raw materials and other services related to our operations.

Employees

We had approximately 24,000 employees as of December 31, 2019.

Other Information

We make available free of charge through the "Investor Information" link on our website, www.dovercorporation.com, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to these reports. We post each of these reports on the website as soon as reasonably practicable after the report is filed with the Securities and Exchange Commission. The information on our website is not incorporated into this Form 10-K.

ITEM 1A. RISK FACTORS

The risk factors discussed in this section should be considered together with information included elsewhere in this Form 10-K and should not be considered the only risks to which we are exposed. In general, we are subject to the same general risks and uncertainties that impact many other industrial companies such as general economic, industry and/or market conditions and growth rates; the impact of natural disasters and their effect on global markets; and changes in laws or accounting rules. Additional risks and uncertainties not currently known to us or that we currently believe are immaterial also may impair our business, including our results of operations, liquidity and financial condition.

Our results may be impacted by current domestic and international economic conditions and uncertainties.

Our businesses may be adversely affected by disruptions in the financial markets or declines in economic activity both domestically and internationally in those countries in which we operate. These circumstances will also impact our suppliers and customers in various ways which could have an impact on our business operations, particularly if global credit markets are not operating efficiently and effectively to support industrial commerce.

Negative changes in worldwide economic and capital market conditions are beyond our control, are highly unpredictable and can have an adverse effect on our consolidated results of operations, financial condition, cash flows and cost of capital.

 We are subject to risks relating to our existing international operations and expansion into new geographical markets.

Approximately 47% and 48% of our revenues for 2019 and 2018, respectively, were derived outside the United States. We continue to focus on global markets as part of our overall growth strategy and expect sales from outside the United States to continue to represent a significant portion of our revenues. Our international operations and our global expansion strategy are subject to general risks related to such operations, including:

- o political, social and economic instability and disruptions;
- o government export controls, economic sanctions, embargoes or trade restrictions;
- o the imposition of duties and tariffs and other trade barriers;
- o limitations on ownership and dividend of earnings;
- o transportation delays and interruptions;
- o labor unrest and current and changing regulatory environments;
- o health or similar issues, such as a pandemic or epidemic;
- increased compliance costs, including costs associated with disclosure requirements and related due diligence;
- o the impact of loss of a single-source manufacturing facility;
- o difficulties in staffing and managing multi-national operations;
- o limitations on our ability to enforce legal rights and remedies; and
- o access to or control of networks and confidential information due to local government controls and vulnerability of local networks to cyber risks.

If we are unable to successfully manage the risks associated with expanding our global business or adequately manage operational risks of our existing international operations, the risks could have a material adverse effect on our growth in geographic markets, our reputation, our consolidated results of operations, financial position and cash flows.

• Our exposure to exchange rate fluctuations on cross-border transactions and the translation of local currency results into U.S. dollars could negatively impact our results of operations.

We conduct business through our subsidiaries in many different countries, and fluctuations in currency exchange rates could have a significant impact on our reported consolidated results of operations, financial condition and cash flows, which are presented in U.S. dollars. Cross-border transactions, both with external parties and intercompany relationships, result in increased exposure to foreign exchange effects. Accordingly, significant changes in currency exchange rates, particularly the Euro, Chinese Renminbi (Yuan), Swedish krona, Pound Sterling, Indian rupee, Singapore dollar, Danish krone, and Canadian dollar, could cause fluctuations in the reported results of our businesses' operations that could negatively affect our results of operations. Additionally, the strengthening of certain currencies such as the Euro and U.S. dollar potentially exposes us to competitive threats from lower cost producers in other countries. Our sales are translated into U.S. dollars for reporting purposes. The strengthening of the U.S. dollar could result in unfavorable translation effects as the results of foreign locations are translated into U.S. dollars.

 Increasing product/service and price competition by international and domestic competitors, including new entrants, and our inability to introduce new and competitive products could cause our businesses to generate lower revenue, operating profits and cash flows.

Our competitive environment is complex because of the wide diversity of the products that our businesses manufacture and the markets they serve. In general, most of our businesses compete with only a few companies. Our ability to compete effectively depends on how successfully we anticipate and respond to various competitive factors, including new products, digital solutions and support services that may be introduced by competitors, changes in customer preferences, evolving regulations, new business models and technologies and pricing pressures. If our businesses are unable to anticipate their competitors' developments or identify customer needs and preferences on a timely basis, or successfully introduce new products, digital solutions and support services in response to such competitive factors, they could lose customers to competitors. If our businesses do not compete effectively, we may experience lower revenue, operating profits and cash flows.

 Our operating results depend in part on the timely development and commercialization, and customer acceptance, of new and enhanced products, digital solutions and support services based on technological innovation.

The success of new and improved products, digital solutions and support services depends on their initial and continued acceptance by our customers. Certain of our businesses sell in markets that are characterized by rapid technological changes, frequent new product introductions, changing industry standards and corresponding shifts in customer demand, which may result in unpredictable product transitions, shortened life cycles and increased importance of being first to market. Failure to correctly identify and predict customer needs and preferences, to deliver high quality, innovative and competitive products to the market, to adequately protect our intellectual property rights or to acquire rights to third-party technologies and to stimulate customer demand for, and convince customers to adopt new products, digital solutions and support services could adversely affect our consolidated results of operations, financial condition and cash flows. In addition, we may experience difficulties or delays in the research, development, production or marketing of new products, digital solutions and support services which may prevent us from recouping or realizing a return on the investments required to continue to bring new products and services to market.

• Tariffs have resulted in increased prices and could adversely affect our consolidated results of operations, financial position and cash flows.

Over the last several years, tariffs under Section 232 of the Trade Expansion Act of 1962 have been imposed on certain steel and aluminum products imported into the U.S. which have increased the prices of these inputs. Increased prices for imported steel and aluminum products have led domestic sellers to respond with market-based increases to prices for such inputs as well. Tariffs under Section 301 of the Trade Expansion Act were also imposed on goods imported from China in connection with China's intellectual property practices which may increase the cost to our customers of our products manufactured in China as well as the cost of Chinese sourced parts and components for our products manufactured in the U.S. China also has imposed tariffs on some U.S. goods that we manufacture and sell into China. An additional round of tariffs may be imposed on goods imported from China if ongoing trade negotiations between the U.S. and China are not successful. The existing tariffs, along with any additional tariffs or trade restrictions that may be implemented by the U.S. or other countries, could result in further increased prices and a decreased available supply of steel and aluminum as well as additional costs on imported components and inputs. We may not be able to pass price increases on to our customers and may not be able to secure adequate alternative sources on a timely basis. While retaliatory tariffs imposed by other countries on U.S. goods have not yet had a significant impact, we cannot predict

further developments. The tariffs could adversely affect the operating profits for certain of our businesses and customer demand for certain of our products which could have a material adverse effect on our consolidated results of operations, financial position and cash flows.

Our businesses are subject to regulation and their profitability and reputation could be adversely affected by domestic
and foreign governmental and public policy changes, risks associated with emerging markets, changes in statutory
tax rates and unanticipated outcomes with respect to tax audits.

Our businesses' domestic and international sales and operations must comply with a wide variety of laws, regulations and policies (including environmental, employment and health and safety regulations, data security laws, data privacy laws, export/import laws, tax policies such as export subsidy programs and research and experimentation credits, carbon emission regulations and energy efficiency and design regulations and other similar programs). These laws, regulations and policies are complex, change frequently, have tended to become more stringent over time and may be inconsistent across jurisdictions. Failure to comply (or any alleged or perceived failure to comply) with any of the foregoing could result in civil and criminal, monetary and non-monetary penalties as well as potential damage to our reputation and disruption to our business. We cannot provide assurance that our costs of complying with new and evolving regulatory reporting requirements and current or future laws will not exceed our estimates. In addition, the Brexit withdrawal agreement and subsequent negotiations as to go-forward terms and conditions between the United Kingdom and the European Union may continue to cause political and economic uncertainty, including significant volatility in global stock markets and currency exchange rate fluctuations. Although it is unknown what the full terms of the United Kingdom's future relationship with the European Union will be following the transition period in 2020, it is possible that there will be greater restrictions on imports and exports between the United Kingdom and other countries and increased regulatory complexities. Any of these factors could adversely affect customer demand, our relationships with customers and suppliers, and our business and financial position.

Certain of our businesses have sales or operations in countries, including Brazil, Russia, India and China, and may in the future invest in other countries, any of which may carry high levels of currency, political, compliance, or economic risk. While these risks or the impact of these risks are difficult to predict, any one or more of them could adversely affect our businesses and reputation.

Our effective tax rate is impacted by changes in the mix among earnings in countries with differing statutory tax rates, changes in the valuation allowance of deferred tax assets and changes in tax laws. The amount of income taxes and other taxes paid can be adversely impacted by changes in statutory tax rates and laws and are subject to ongoing audits by domestic and international authorities. If these audits result in assessments different from amounts estimated, then our consolidated results of operations, financial position and cash flows may be adversely affected by unfavorable tax adjustments.

We could lose customers or generate lower revenue, operating profits and cash flows if there are significant increases
in the cost of our raw materials or components or if suppliers are not able to meet our quality and delivery
requirements.

We purchase raw materials, sub-assemblies and components for use in our manufacturing operations, which exposes us to pricing and supply risks. Significant price increases for certain commodities, other raw materials or components could adversely affect operating profits of our businesses. While we generally attempt to mitigate the impact of increased raw material prices by hedging or passing along the increased costs to customers, there may be a time delay between the increased raw material prices and the ability to increase the prices of products, or we may be unable to increase the prices of products due to a competitor's pricing pressure or other factors.

We use a wide range of raw materials and components in our manufacturing operations that come from numerous suppliers around the world. While we believe that sources of supply for raw materials and components are generally adequate, it is difficult to predict what effects shortages may have in the future. In addition, some of the raw materials and components may be available only from limited or single source suppliers. If a single source or limited source supplier were to cease or interrupt production for any reason or otherwise fail to supply those raw materials or components to us on favorable purchase terms, including at favorable prices, in sufficient quantities and with adequate lead times needed for efficient manufacturing, our ability to meet customer commitments, and satisfy market demands for affected products could be negatively affected. Consequently, a significant price increase in raw materials or a

shortage in or the unavailability of raw materials or components may result in a loss of customers and adversely impact our consolidated results of operations, financial condition and cash flows.

Our growth and results of operations may be adversely affected if we are unsuccessful in our capital allocation and acquisition program.

We expect to continue our strategy of seeking to acquire value creating add-on businesses that broaden our existing position and global reach as well as, in the right circumstances, strategically pursue larger acquisitions that could have the potential to either complement our existing businesses or allow us to pursue a new platform. However, there can be no assurance that we will be able to continue to find suitable businesses to purchase, that we will be able to acquire such businesses on acceptable terms, or that all closing conditions will be satisfied with respect to any pending acquisition. In addition, we face the risk that a completed acquisition may underperform relative to expectations. We may not achieve the synergies originally anticipated, may become exposed to unexpected liabilities or may not be able to sufficiently integrate completed acquisitions into our current business and growth model. Further, if we fail to allocate our capital appropriately, in respect of either our acquisition program or organic growth in our operations, we could be overexposed in certain markets and geographies and unable to expand into adjacent products or markets. These factors could potentially have an adverse impact on our consolidated results of operations, financial condition and cash flows.

• Our operating profits and cash flows could be adversely affected if we cannot achieve projected savings and synergies.

We are continually evaluating our cost structure and seeking ways to capture synergies across our operations. For example, we recorded rightsizing costs in 2018, comprised of restructuring expense of \$58.5 million and other costs of \$14.3 million, and rightsizing costs in 2019, comprised of restructuring expense of \$26.8 million and other costs of \$5.3 million, primarily related to actions taken on employee reductions, facility consolidations and site closures, product line exits and other associated asset charges. These rightsizing activities and our regular ongoing cost reduction activities (including in connection with the integration of acquired businesses) may reduce our available talent, assets and other resources and could slow improvements in our products and services, adversely affect our ability to respond to customers and limit our ability to increase production quickly if demand for our products increases. In addition, delays in implementing planned restructuring activities or other productivity improvements, and unexpected costs or failure to meet targeted improvements may diminish the operational or financial benefits we expect to realize through our various programs. Any of the circumstances described above could adversely affect our consolidated results of operations, financial condition and cash flows.

• Our operations, businesses and products are subject to cybersecurity risks.

We depend on our own and third party IT systems, including cloud-based systems and managed service providers, to store, process and protect our information and support our business activities. We also use our third party IT systems to support employee data processing for our global work force and to support customer business activities, such as transmitting payment information, providing mobile monitoring services, and capturing operational data. Additionally, some of our products contain computer hardware and software and offer the ability to connect to computer networks. If these technologies, systems, products or services are damaged, cease to function properly, are compromised due to employee error, user error, malfeasance, system errors, or other vulnerabilities, or are subject to cybersecurity attacks, such as those involving denial of service attacks, unauthorized access, malicious software, or other intrusions, including by criminals, nation states or insiders, our business may be adversely impacted. The impacts could include production downtimes, operational delays, and other impacts on our operations and ability to provide products and services to our customers; compromise of confidential, proprietary or otherwise protected information, including personal information and customer confidential data; destruction, corruption, or theft of data; manipulation, disruption, or improper use of these technologies, systems, products or services; financial losses from fraudulent transactions, remedial actions, loss of business or potential liability; adverse media coverage; and legal claims or legal proceedings, including regulatory investigations and actions; and damage to our reputation. There has been a rise in the number of cyberattacks targeting confidential business information generally and in the manufacturing industry specifically, as well as an increase in cyberattacks targeting managed service providers, by both state-sponsored and criminal organizations. Moreover, there has been a rise in the number of cyberattacks that depend on human error or manipulation, including phishing attacks or schemes that use social engineering to gain access to systems or perpetuate wire transfer or other frauds.

These trends increase the likelihood of such events occurring as well as the costs associated with protecting against such attacks. It is possible for vulnerabilities in our IT systems to remain undetected for an extended period of time up to and including several years. While we attempt to mitigate these risks by employing a number of measures, including employee training, systems monitoring and other technical security controls, a breach response plan, maintenance of backup and protective systems, and security personnel, our systems, networks, products and services remain potentially vulnerable to known or unknown cybersecurity attacks and other threats, any of which could have a material adverse effect on our consolidated results of operations, financial condition and cash flows. We, and the service providers that we depend on to support our systems and business operations, are regularly the target of attempted cyberattacks, including phishing and denial-of-service attacks, and must continuously monitor and develop our systems to protect our technology infrastructure and data from misappropriation or corruption. In addition, a cybersecurity attack could persist for an extended period of time before being detected, and, following detection, it could take considerable time for us to obtain full and reliable information about the extent, amount and type of information compromised. During the course of an investigation, we may not know the full impact of the event and how to remediate it, and actions, decisions and mistakes that are taken or made may further increase the negative effects of the event on our business, results of operations and reputation. While we maintain insurance coverage that is intended to address certain aspects of cybersecurity risks, such insurance coverage may not cover all losses or all types of claims that arise. As cyber threats continue to evolve, cybersecurity and data protection laws and regulations continue to develop in the U.S. and globally, and our business continues to move towards increased online connectivity within our information systems and through more Internetenabled products and offerings, we expect to expend additional resources to continue to build out our compliance programs, strengthen our information security, data protection and business continuity measures, and investigate and remediate vulnerabilities.

• Unforeseen developments in contingencies such as litigation and product recalls could adversely affect our consolidated results of operations, financial condition and cash flows.

We and certain of our subsidiaries are, and from time to time may become, parties to a number of legal proceedings incidental to our businesses, including alleged injuries arising out of the use of products or exposure to hazardous substances, or claims related to patent infringement, employment matters and commercial disputes. The defense of these lawsuits may require significant expenses and divert management's attention, and we may be required to pay damages that could adversely affect our consolidated results of operations, financial condition and cash flows. In addition, any insurance or indemnification rights that we may have may be insufficient or unavailable to protect us against potential loss exposures.

We may be exposed to product recalls and adverse public relations if our products are alleged to have defects, to cause property damage, to cause injury or illness, or if we are alleged to have violated governmental regulations. A product recall could result in substantial and unexpected expenditures, which would reduce operating profit and cash flow. In addition, a product recall may require significant management attention. Product recalls may hurt the value of our brands and lead to decreased demand for our products. Product recalls also may lead to increased scrutiny by federal, state or international regulatory agencies of our operations and increased litigation and could have a material adverse effect on our consolidated results of operations, financial condition and cash flows.

• If the Apergy spin-off, together with certain related transactions, does not qualify as a transaction that is generally tax-free for U.S. federal income tax purposes, we and our shareholders could be subject to significant tax liabilities.

In connection with the spin-off of Apergy, we received a private letter ruling from the Internal Revenue Service (the "IRS Ruling") together with an opinion of McDermott Will & Emery LLP, our tax counsel, substantially to the effect that, among other things, certain transactions to effect the spin-off will qualify as a tax-free reorganization for U.S. federal income tax purposes under Section 368(a)(1)(D) of the Internal Revenue Code (the "Code"), and the distribution will qualify as a tax-free distribution to our shareholders under Section 355 of the Code. The IRS Ruling and the opinion of tax counsel relied on certain facts and assumptions, and certain representations and undertakings from us and Apergy, including those regarding the past and future conduct of certain of our businesses and other matters. If any of these facts, assumptions, representations or undertakings are incorrect or not satisfied, we and our shareholders may not be able to rely on the IRS Ruling or the opinion, and could be subject to significant tax liabilities. Notwithstanding the IRS Ruling and the opinion, the IRS could determine on audit that the distribution is taxable if it determines that any of these facts, assumptions, representations or undertakings are not correct or have been violated or if it disagrees with the conclusions

in the opinion. In addition, we and Apergy intend for certain related transactions to qualify for tax-free treatment under U.S. federal, state and local tax law and/or foreign tax law.

If the distribution is determined to be taxable for U.S. federal income tax purposes, we and our shareholders that are subject to U.S. federal income tax could incur significant U.S. federal income tax liabilities. For example, if the distribution fails to qualify for tax-free treatment, we would, for U.S. federal income tax purposes, be treated as if we had sold the Apergy common stock in a taxable sale for its fair market value, and our shareholders who are subject to U.S. federal income tax would be treated as receiving a taxable distribution in an amount equal to the fair market value of the Apergy common stock received in the distribution. In addition, if certain related transactions fail to qualify for tax-free treatment under U.S. federal, state and local tax law and/or foreign tax law, we could incur significant tax liabilities under U.S. federal, state, local and/or foreign tax law, respectively.

• The indemnification provisions of acquisition and disposition agreements by which we have acquired or sold or disposed of companies may not fully protect us and may result in unexpected liabilities.

Certain of the acquisition agreements by which we have acquired companies require the former owners to indemnify us against certain liabilities related to the operation of those companies before we acquired them. In most of these agreements, however, the liability of the former owners is limited and certain former owners may be unable to meet their indemnification responsibilities. Similarly, the purchasers of our disposed operations may from time to time agree to indemnify us for operations of such businesses after the closing. We cannot be assured that any of these indemnification provisions will fully protect us, and as a result we may face unexpected liabilities that adversely affect our consolidated results of operations, financial condition and cash flows. In addition, we have retained certain liabilities directly or through indemnifications made to the buyers of businesses we have sold or disposed against known and unknown contingent liabilities such as tax liabilities and environmental matters.

In connection with the spin-off, Apergy agreed to indemnify us for any losses relating to the conduct of the Apergy business. There can be no assurance that the indemnity agreements will be sufficient to protect us against the full amount of any liabilities that may arise, or that the indemnitors will be able to fully satisfy their indemnification obligations. The failure to receive amounts for which we are entitled to indemnification could adversely affect our results of operations, cash flows and financial condition.

• Our reputation, ability to do business and results of operations may be impaired by improper conduct by any of our employees, agents, or business partners.

While we strive to maintain high standards, we cannot provide assurance that our internal controls and compliance systems will always protect us from acts committed by our employees, agents, or business partners that would violate United States and/or non-United States laws or fail to protect our confidential information, including the laws governing payments to government officials, bribery, fraud, anti-kickback and false claims, competition, export and import compliance, money laundering and data privacy, as well as the improper use of proprietary information or social media. Any such violations of law or improper actions could subject us to civil or criminal investigations in the United States and in other jurisdictions, could lead to substantial civil or criminal, monetary and non-monetary penalties and related shareholder lawsuits, could lead to increased costs of compliance and could damage our reputation, our consolidated results of operations, financial condition and cash flows.

• Our revenue, operating profits and cash flows could be adversely affected if our businesses are unable to protect or obtain patent and other intellectual property rights.

Our businesses own patents, trademarks, licenses and other forms of intellectual property related to their products and continuously invest in research and development that may result in innovations and general intellectual property rights. Our businesses employ various measures to develop, maintain and protect their intellectual property rights. These measures may not be effective in capturing intellectual property rights, and they may not prevent their intellectual property from being challenged, invalidated, or circumvented, particularly in countries where intellectual property rights are not highly developed or protected. Unauthorized use of our businesses' intellectual property rights could adversely impact the competitive position of our businesses and could have a negative impact on our consolidated results of operations, financial condition and cash flows.

• If we experience work stoppages, union and works council campaigns and other labor disputes, our productivity and results of operations could be adversely impacted.

We have a number of collective bargaining units in the United States and various foreign collective labor arrangements. We are subject to potential work stoppages, union and works council campaigns and other labor disputes, any of which could adversely impact our productivity, reputation, consolidated results of operations, financial condition and cash flows.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2. PROPERTIES

The number, type, location and size of the properties used by our operations as of December 31, 2019 are shown in the following charts, by segment:

	Nun	Number and nature of facilities							
	Manufacturing	Warehouse	Sales / Service	Total	Owned	Leased			
Engineered Products	29	17	9	55	2,905	1,265			
Fueling Solutions	25	8	24	57	926	1,855			
Imaging & Identification	12	15	58	85	662	908			
Pumps & Process Solutions	36	6	24	66	3,060	1,441			
Refrigeration & Food Equipment	24	24	18	66	1,506	2,444			

		Loca	ations				n dates of ties (in years)
	North America	Europe	Asia	Other	Total	Minimum	Maximum
Engineered Products	33	14	5	1	53	1	9
Fueling Solutions	13	15	10	2	40	1	13
Imaging & Identification	10	37	23	1	71	1	12
Pumps & Process Solutions	34	14	10	4	62	1	11
Refrigeration & Food Equipment	33	14	9	4	60	1	11

Our owned and leased facilities are well-maintained and suitable for our operations.

ITEM 3. LEGAL PROCEEDINGS

A few of our subsidiaries are involved in legal proceedings relating to the cleanup of waste disposal sites identified under federal and state statutes which provide for the allocation of such costs among "potentially responsible parties." In each instance, the extent of the subsidiary's liability appears to be relatively insignificant in relation to the total projected expenditures and the number of other "potentially responsible parties" involved and it is anticipated to be immaterial to us on a consolidated basis. In addition, a few of our subsidiaries are involved in ongoing remedial activities at certain plant sites, in cooperation with regulatory agencies, and appropriate reserves have been established. At December 31, 2019 and 2018, we have reserves totaling \$30.6 million and \$31.8 million, respectively, for environmental and other matters, including private party claims for exposure to hazardous substances, that are probable and estimable.

The Company and certain of its subsidiaries are also parties to a number of other legal proceedings incidental to their businesses. These proceedings primarily involve claims by private parties alleging injury arising out of use of the Company's products, exposure to hazardous substances, patent infringement, employment matters and commercial disputes. Management and legal counsel, at least quarterly, review the probable outcome of such proceedings, the costs and expenses reasonably expected to be incurred and currently accrued to-date and consider the availability and extent of insurance coverage. The Company has reserves for other legal matters that are probable and estimable and at December 31, 2019 and 2018, these reserves are not significant. While it is not possible at this time to predict the outcome of these legal actions, in the opinion of management, based on the aforementioned reviews, the Company is not currently involved in any legal proceedings which, individually or in the aggregate, could have a material effect on its financial position, results of operations, or cash flows.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

All of our officers are elected annually at the first meeting of the Board of Directors following our annual meeting of shareholders, and are subject to removal at any time by the Board of Directors. Our executive officers as of February 14, 2020, and their positions with Dover (and, where relevant, prior business experience) for the past five years, are as follows:

Name	Age	Positions Held and Prior Business Experience
Richard J. Tobin	56	President and Chief Executive Officer (since May 2018) and Director (since August 2016); prior thereto Chief Executive Officer (from 2013 to 2018) of CNH Industrial NV.
Kimberly K. Bors	59	Senior Vice President, Human Resources (since January 2020) of Dover; prior thereto Senior Vice President – Human Resources of The Mosaic Company (from July 2017 to December 2018); prior thereto Senior Vice President, Human Resources & Administration for Schneider, North America at Schneider Electric (September 2014 to June 2017).
Ivonne M. Cabrera	53	Senior Vice President, General Counsel and Secretary of Dover (since January 2013).
Brad M. Cerepak	60	Senior Vice President and Chief Financial Officer (since May 2011) of Dover.
Girish Juneja	50	Senior Vice President and Chief Digital Officer (since May 2017) of Dover; prior thereto Senior Vice President/Chief Technology Officer and General Manager of the Marketplace Solutions Business of Altisource (from January 2014 to April 2017).
David J. Malinas	45	Senior Vice President, Operations (since July 2019) of Dover; prior thereto Senior Vice President and President, Industrial Process for ITT Corporation (from June 2017 to June 2019); prior thereto Vice President and General Manager, Controlled Temperature Technologies Businesses at Thermo Fisher Scientific Inc. ("Thermo Fisher") (from March 2017 to June 2017); prior thereto Vice President, Industrial Segment at Thermo Fischer (from December 2015 to March 2017); prior thereto Vice President and General Manager, Global Chemicals Business Unit (from June 2012 to November 2015) at Thermo Fisher.
Anthony K. Kosinski	53	Vice President, Tax (since June 2016) of Dover; prior thereto Director, Domestic Tax (June 2003 to June 2016) of Dover.
James M. Moran	54	Vice President, Treasurer (since November 2015) of Dover; prior thereto Senior Vice President and Treasurer (from June 2013 to August 2015) of Navistar International Corporation ("NIC"); prior thereto Vice President and Treasurer (from 2008 to June 2013) of NIC; also served as Senior Vice President and Treasurer of Navistar, Inc. (from June 2013 to August 2015).
Ryan W. Paulson	46	Vice President & Controller (from July 2019) of Dover; prior thereto Assistant Controller, Global Consolidations & Operations Accounting (from August 2017 to July 2019); prior thereto partner at PricewaterhouseCoopers LLP (from July 2012 to June 2017).

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED SHAREHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information and Dividends

The principal market in which Dover common stock is traded is the New York Stock Exchange.

Holders

The number of holders of record of Dover common stock as of February 4, 2020 was approximately 18,689. This figure includes participants in our domestic 401(k) program.

Securities Authorized for Issuance Under Equity Compensation Plans

Information relating to securities authorized for issuance under our equity compensation plans is contained in Part III, Item 12 of this Form 10-K.

Recent Sales of Unregistered Securities

None.

Issuer Purchases of Equity Securities

During the year ended December 31, 2019, under our February 2018 standing share repurchase authorization, the Company purchased 1,343,622 shares of common stock at a total cost of \$143.3 million or \$106.64 per share. As of December 31, 2019, 8,360,044 shares remain authorized for repurchase.

The total number of shares purchased by month during the fourth quarter of 2019 were as follows:

Total Number			Maximum Number (or Approximate Dollar Value in Thousands) of Shares that May Yet Be Purchased under the Plans or Program	
of Shares Purchased			Announced Plans or Programs	February 2018 Program
_	\$	_	_	9,441,859
523,744	10	9.53	523,744	8,918,115
558,071	11	2.23	558,071	8,360,044
1,081,815	\$ 11	0.92	1,081,815	8,360,044
	of Shares Purchased — 523,744 558,071	of Shares Purchased Price	of Shares Purchased Price Paid per Share — \$ — 523,744 109.53 558,071 112.23	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs-\$ -523,744109.53558,071112.23 Shares Purchased as Part of Publicly Announced Plans or Programs

Performance Graph

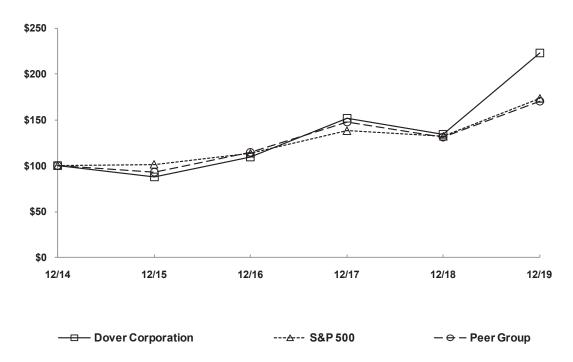
This performance graph does not constitute soliciting material, is not deemed filed with the Securities and Exchange Commission ("SEC"), and is not incorporated by reference in any of our filings under the Securities Act of 1933 or the Exchange Act of 1934, whether made before or after the date of this Form 10-K and irrespective of any general incorporation language in any such filing, except to the extent we specifically incorporate this performance graph by reference therein.

Comparison of Five-Year Cumulative Total Return ⁺ Dover Corporation, S&P 500 Index, Old & New Peer Group Index

Total Shareholder Returns

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among Dover Corporation, the S&P 500 Index, and a Peer Group



Data Source: Research Data Group, Inc

This graph assumes \$100 invested on December 31, 2014 in Dover common stock, the S&P 500 index and an old and new peer group index.

The 2019 peer index consists of the following 30 public companies selected by Dover.

⁺Total return assumes reinvestment of dividends.

3M Company Actuant Corp. AMETEK Inc.

Carlisle Companies Inc.

Colfax Corp.
Corning Inc.
Crane Company
Danaher Corporation
Eaton Corporation Plc
Emerson Electric Co.

Flowserve Corporation

Fortive Corp.

Gardner Denver Holdings Inc. Honeywell International Inc.

IDEX Corporation Illinois Tool Works Inc. Ingersoll-Rand PLC

ITT Inc.

Johnson Controls International PLC

Lennox International Inc.

Nordson Corp.

Parker-Hannifin Corp.

Pentair PLC

Regal Beloit Corp.

Rockwell Automation Inc.

Snap-On Inc. SPX Flow Inc.

Teledyne Technologies Inc.

Textron Inc.

The Timken Company

ITEM 6. SELECTED FINANCIAL DATA

	2019		2018		2017		2016		2015
\$	7,136,397	\$	6,992,118	\$	6,820,886	\$	6,043,224	\$	5,879,842
	677,918		591,145		746,663		502,128		525,208
	_		(20,878)		65,002		6,764		344,621
	677,918		570,267		811,665		508,892		869,829
Ф	1.67	¢	2 04	¢	4.90	Ф	2 22	Ф	3.33
Ф	4.07	Ф		Ф		Ф		Ф	2.19
	4.67								
	4.67		3.80		5.21		3.28		5.52
	145,198		149,874		155,685		155,231		157,619
\$	4.61	\$	3.89	\$	4.73	\$	3.21	\$	3.30
	_		(0.14)		0.41		0.04		2.17
	4.61		3.75		5.15		3.25		5.46
	146,992		152,133		157,744		156,636		159,172
\$	1.94	\$	1.90	\$	1.82	\$	1.72	\$	1.64
\$	186,804	\$	170,994	\$	170,068	\$	139,578	\$	130,045
	272,287		282,580		283,278		249,672		207,817
	8,669,477				· · · · · ·		10,130,325		8,606,075
	2,985,716		2,943,660		3,336,713		3,207,632		2,603,504
	\$	\$ 7,136,397 677,918 — 677,918 \$ 4.67 — 4.67 145,198 \$ 4.61 — 4.61 146,992 \$ 1.94 \$ 186,804 272,287 8,669,477	\$ 7,136,397 \$ 677,918	\$ 7,136,397 \$ 6,992,118 677,918 591,145 — (20,878) 677,918 570,267 \$ 4.67 \$ 3.94 — (0.14) 4.67 3.80 145,198 149,874 \$ 4.61 \$ 3.89 — (0.14) 4.61 3.75 146,992 152,133 \$ 1.94 \$ 1.90 \$ 186,804 \$ 170,994 272,287 282,580 8,669,477 8,365,771	\$ 7,136,397 \$ 6,992,118 \$ 677,918 591,145 — (20,878) 677,918 570,267 \$ 4.67 \$ 3.94 \$ — (0.14) 4.67 3.80 145,198 149,874 \$ 4.61 \$ 3.89 \$ — (0.14) 4.61 3.75 146,992 152,133 \$ 1.94 \$ 1.90 \$ \$ 186,804 \$ 170,994 \$ 272,287 282,580 8,669,477 8,365,771	\$ 7,136,397 \$ 6,992,118 \$ 6,820,886 677,918 591,145 746,663 — (20,878) 65,002 677,918 570,267 811,665 \$ 4.67 \$ 3.94 \$ 4.80 — (0.14) 0.42 4.67 3.80 5.21 145,198 149,874 155,685 \$ 4.61 \$ 3.89 \$ 4.73 — (0.14) 0.41 4.61 3.75 5.15 146,992 152,133 157,744 \$ 1.94 \$ 1.90 \$ 1.82 \$ 186,804 \$ 170,994 \$ 170,068 272,287 282,580 283,278 8,669,477 8,365,771 10,658,359	\$ 7,136,397 \$ 6,992,118 \$ 6,820,886 \$ 677,918 591,145 746,663 — (20,878) 65,002 677,918 570,267 811,665 \$ 4.67 \$ 3.94 \$ 4.80 \$ — (0.14) 0.42 4.67 3.80 5.21 145,198 149,874 155,685 155,685 \$ 4.61 \$ 3.89 \$ 4.73 \$ — (0.14) 0.41 4.61 3.75 5.15 146,992 152,133 157,744 157,744 \$ \$ 1.94 \$ 1.90 \$ 1.82 \$ \$ 186,804 \$ 170,994 \$ 170,068 \$ 272,287 282,580 283,278 8,669,477 8,365,771 10,658,359	\$ 7,136,397 \$ 6,992,118 \$ 6,820,886 \$ 6,043,224 677,918 591,145 746,663 502,128 — (20,878) 65,002 6,764 677,918 570,267 811,665 508,892 \$ 4.67 \$ 3.94 \$ 4.80 \$ 3.23 — (0.14) 0.42 0.04 4.67 3.80 5.21 3.28 145,198 149,874 155,685 155,231 \$ 4.61 \$ 3.89 \$ 4.73 \$ 3.21 — (0.14) 0.41 0.04 4.61 3.75 5.15 3.25 146,992 152,133 157,744 156,636 \$ 1.94 \$ 1.90 \$ 1.82 \$ 1.72 \$ 186,804 \$ 170,994 \$ 170,068 \$ 139,578 272,287 282,580 283,278 249,672 8,669,477 8,365,771 10,658,359 10,130,325	\$ 7,136,397 \$ 6,992,118 \$ 6,820,886 \$ 6,043,224 \$ 677,918 \$ 591,145 \$ 746,663 \$ 502,128 \$ 677,918 \$ 570,267 \$ 811,665 \$ 508,892 \$ \$ 4.67 \$ 3.94 \$ 4.80 \$ 3.23 \$ \$ \$ (0.14) \$ 0.42 \$ 0.04 \$ 4.67 \$ 3.80 \$ 5.21 \$ 3.28 \$ 145,198 \$ 149,874 \$ 155,685 \$ 155,231 \$ \$ 4.61 \$ 3.75 \$ 5.15 \$ 3.25 \$ 146,992 \$ 152,133 \$ 157,744 \$ 156,636 \$ \$ 1.94 \$ 1.90 \$ 1.82 \$ 1.72 \$ \$ 186,804 \$ 170,994 \$ 170,068 \$ 139,578 \$ 272,287 \$ 282,580 \$ 283,278 \$ 249,672 \$ 8,669,477 \$ 8,365,771 \$ 10,658,359 \$ 10,130,325 \$ \$ \$ \$ 6,043,224 \$ \$ \$ 6,043,224 \$ \$ \$ \$ 6,043,224 \$ \$ \$ \$ 6,043,224 \$ \$ \$ \$ 6,764 \$ \$ \$ 6,764 \$ \$ \$ \$ 6,764 \$ \$ \$ \$ 6,764 \$ \$ \$ \$ \$ 6,764 \$ \$ \$ \$ \$ \$ 6,764 \$ \$ \$ \$ \$ \$ 6,764 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$

All results and data in the table above reflect continuing operations, unless otherwise noted. See Note 4 — Acquisitions and Note 5 — Discontinued and Disposed Operations in the Consolidated Financial Statements in Item 8 of this Form 10-K for additional information regarding the impact of 2019, 2018 and 2017 acquisitions and disposed and discontinued operations.

⁽¹⁾ Includes assets from discontinued operations

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

The following Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") is intended to help the reader understand our results of operations and financial condition for the three years ended December 31, 2019, 2018 and 2017. The MD&A should be read in conjunction with our Consolidated Financial Statements and Notes included in Item 8 of this Form 10-K. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those discussed elsewhere in this Form 10-K, particularly in Item 1A. "Risk Factors" and in the "Special Note Regarding Forward-Looking Statements" preceding Part I of this Form 10-K.

Throughout this MD&A, we refer to measures used by management to evaluate performance, including a number of financial measures that are not defined under accounting principles generally accepted in the United States of America ("GAAP"). Please see "Non-GAAP Disclosures" at the end of this Item 7 for further detail on these financial measures. We believe these measures provide investors with important information that is useful in understanding our business results and trends. Reconciliations within this MD&A provide more details on the use and derivation of these measures.

OVERVIEW

Dover Corporation is a diversified global manufacturer and solutions provider delivering innovative equipment and components, consumable supplies, aftermarket parts, software and digital solutions and support services. Effective October 1, 2019, Dover transitioned from a three-segment to a five-segment structure as a result of a change to its management structure and operating model. Dover's five segments are structured around businesses with similar business models, go-to-market strategies and manufacturing practices. This new structure increases management efficiency and better aligns Dover's operations with its strategic initiatives and capital allocation priorities, and provides greater transparency about our performance to external stakeholders. Dover's five operating and reportable segments are as follows: Engineered Products, Fueling Solutions, Imaging & Identification, Pumps & Process Solutions, and Refrigeration & Food Equipment.

For the year ended December 31, 2019, consolidated revenue from continuing operations was \$7.1 billion, an increase of \$0.1 billion or 2.1%, as compared to the prior year. This increase included organic revenue growth of 3.8% and acquisition-related growth of 0.8%, partially offset by an unfavorable impact of 2.0% from foreign currency translation and a 0.5% impact from dispositions. Overall, customer pricing had a favorable impact of 1.0% on revenue for the year.

Within our Engineered Products segment, revenue increased \$64.4 million, or 3.9%, from the prior year, reflecting organic growth of 5.4%, offset by an unfavorable impact from foreign currency translation of 1.5%. Organic revenue growth was driven by strong activity in the refuse truck and digital solutions product lines within our waste handling business, as well as solid revenue growth in our vehicle service business.

Our Fueling Solutions segment revenue increased \$154.6 million, or 10.5% from prior year, reflecting organic growth of 10.5%, acquisition-related growth of 3.4%, partially offset by an unfavorable foreign currency impact of 3.0%, and a 0.4% impact from a disposition. Organic growth was principally driven by continued strong demand in the global retail fueling industry, particularly in the United States, Europe and Asia.

Our Imaging & Identification segment revenue decreased \$25.4 million or 2.3%, from the prior year, reflecting organic growth of 1.2%, more than offset by an unfavorable foreign currency impact of 3.5%. The organic revenue growth was driven by increased equipment shipments and expanded service revenue in our marking and coding business, along with increased service revenue and increased printer and ink volumes in our digital printing business. The significant foreign currency impact was due to our broad international customer base, in particular in Asia and Europe.

Our Pumps & Process Solutions segment revenue increased \$6.6 million or 0.5%, from the prior year, reflecting organic growth of 3.9%, acquisition related growth of 0.5%, partially offset by unfavorable impacts from disposition of 2.0% and foreign currency of 1.9%. Organic growth was broad-based across the segment and was driven by industrial, biopharma and thermal management markets, along with continued strong demand from our OEM customers for rotating equipment components, as well as pump and other equipment for plastics and polymer production.

Our Refrigeration & Food Equipment segment revenue decreased \$56.5 million, or 3.9%, from the prior year, caused by an organic revenue decline of 2.7% and an unfavorable impact from foreign currency translation of 1.2%. The organic decline was driven primarily by reduced new food retail store construction activity with key U.S. retail refrigeration customers, reduced demand for heat exchanger products in Asia, and softer demand from national restaurant chain customers in our foodservice equipment business.

Gross profit was \$2.6 billion for the year ended December 31, 2019, an increase of \$61.4 million, or 2.4%, as compared to the prior year. The increase was primarily due to growth in sales volumes benefited by favorable pricing, product mix and strong volume gains, as well as the benefits from prior restructuring actions, partially offset by increased material costs due, in part, to U.S. Section 232 and 301 tariff exposure. Gross profit margin was 36.7% for the year ended December 31, 2019 compared to 36.6% for the prior year. For further discussion related to our consolidated and segment results, see "Consolidated Results of Operations" and "Segment Results of Operations," respectively, within MD&A.

Bookings decreased 0.4% over the prior year to \$7.3 billion for the year ended December 31, 2019. Included in this result was a 1.3% increase in organic bookings, a 0.8% increase in acquisition-related bookings offset by a 2.1% unfavorable impact due to foreign exchange rates, and a 0.3% decline due to dispositions. Organic bookings increased 6.9% within our Fueling Solutions, 3.3% within our Pumps & Process Solutions and 2.3% within our Imaging & Identification segments, while bookings in our Engineered Products and Refrigeration & Food Equipment segments decreased 4.0% and 0.7% respectively. Overall, our book-to-bill increased from the prior year to 1.02. Backlog as of December 31, 2019 was \$1.5 billion, up from \$1.4 billion from the prior year. Backlog as of December 31, 2019 included \$0.5 billion, \$0.2 billion, \$0.1 billion, \$0.4 billion and \$0.3 billion in the Engineered Products, Fueling Solutions, Imaging & Identification, Pumps & Process Solutions and Refrigeration & Food Equipment segments, respectively.

From a geographic perspective, revenue for the U.S., our largest market, grew by 3.6% organically over the prior year, which was led by growth in our Engineered Products and Fueling Solutions segments. Asia and Europe also grew organically by 2.4% and 6.5%, respectively, over the prior year.

During the year ended December 31, 2019, we executed several rightsizing programs to further optimize operations. Rightsizing charges included restructuring costs of \$26.8 million and other costs of \$5.3 million for the year ended December 31, 2019. Restructuring expense was comprised primarily of broad-based selling, general and administrative expense reduction initiatives and broad-based operational efficiency initiatives focusing on footprint consolidation, operational optimization and IT centralization. These restructuring charges were broad-based across all segments as well as corporate, with costs incurred of \$3.2 million in Engineered Products, \$4.9 million in Fueling Solutions, \$6.4 million in Imaging & Identification, \$5.7 million in Pumps & Process Solutions, \$3.7 million in Refrigeration & Food Equipment and \$3.0 million at Corporate. Other costs were comprised primarily of other charges related to the restructuring actions. We incurred other costs of \$0.4 million in Pumps & Process Solutions, \$2.4 million in Refrigeration & Food Equipment and \$2.6 million at corporate. We expect to incur total rightsizing charges, comprised of \$8 million of restructuring charges and \$1 million of other costs, in 2020 for these initiatives.

During the year ended December 31, 2019, we made a total of three acquisitions totaling \$216.4 million, net of cash acquired including contingent consideration. We acquired the assets of Belanger, Inc. ("Belanger"), a leading full-line car wash equipment manufacturer for \$175 million, net of cash acquired. The acquisition of Belanger strengthens our position in the vehicle wash business within the Fueling Solutions segment. Additionally, we acquired the assets of All-Flow Pump Company, Limited business ("All-Flo"), a growing manufacturer of specialty pumps for \$40 million. The All-Flo acquisition strengthens our position in the growing market for air-operated double-diaphragm pumps within the Pumps & Process Solutions segment. We also completed one immaterial acquisition. See Note 4 — Acquisitions in the Consolidated Financial Statements in Item 8 of this Form 10-K for further details regarding the businesses acquired during the year.

Subsequently, on January 24, 2020, we acquired Sys-Tech Solutions, Inc. ("Systech"). Systech is a leading provider of software and solutions for product traceability, regulatory compliance and brand protections and will strengthen the portfolio of solutions offered by our Imaging & Identification segment to customers in pharmaceutical and consumer products industries. Also on January 24, 2020, we entered into a definitive agreement to acquire So. Cal. Soft-Pak, Incorporated ("Soft-Pak") Software Solutions. Soft-Pak is a leading specialized provider of integrated back office, route management and customer relationship management software solutions to the waste and recycling fleet industry and will further strengthen the digital offerings of our Environmental Solutions Group in the Engineered Products segment. The transaction is subject to

satisfaction of customary closing conditions and is expected to close in the first quarter of 2020. The combined purchase price for both acquisitions is approximately \$210 million, subject to customary post-closing adjustments.

On March 29, 2019 we entered into a definitive agreement to sell Finder for total consideration of approximately \$23.6 million net of estimated selling costs. Finder met the criteria to be classified as held for sale as of March 31, 2019 and based on the total consideration from the sale, net of selling costs, a loss on the assets held for sale of \$46.9 million was recorded. The loss was comprised of an impairment on assets held for sale of \$21.6 million and foreign currency translation losses reclassified from accumulated other comprehensive losses to current earnings of \$25.3 million. Finder was subsequently sold on April 2, 2019, which generated total cash proceeds of \$24.2 million.

On November 4, 2019, we issued €500 million of 0.750% euro-denominated notes due 2027 and \$300 million of 2.950% notes due 2029. The proceeds from the sale of euro-denominated notes of €494.7 million, net of discounts and issuance costs, were used in part to redeem the €300 million 2.125% notes due 2020. The proceeds from the sale of notes of \$296.9 million, net of discounts and issuance costs, and the remaining funds from the sale of the euro-denominated notes, were used to fund the redemption of the \$450 million 4.30% notes due 2021. The remainder of the proceeds will be used for general corporate purposes. The early extinguishment of debt required us to pay a make whole premium to the bondholders resulting in a loss of \$23.5 million.

During the year ended December 31, 2019, we purchased 1.3 million shares of our common stock for a total cost of \$143.3 million, or \$106.64 per share. As of December 31, 2019, 8.4 million shares remain authorized for repurchase under our current share repurchase authorization. We also continued our 64 year history of increasing our annual dividend payments to shareholders and paid a total of \$282.2 million in dividends to our shareholders.

CONSOLIDATED RESULTS OF OPERATIONS

	Years Ended December 31,						% / Point Change	
(dollars in thousands, except per share figures)		2019		2018		2017	2019 vs. 2018	2018 vs. 2017
Revenue	\$ 7,	136,397	\$	6,992,118	\$	6,820,886	2.1 %	2.5 %
Cost of goods and services	4,	515,459		4,432,562		4,291,839	1.9 %	3.3 %
Gross profit	2,	620,938		2,559,556		2,529,047	2.4 %	1.2 %
Gross profit margin		36.7 %		36.6 %		37.1 %	0.10	(0.50)
Selling, general and administrative expenses	1,	599,098		1,716,444		1,722,161	(6.8)%	(0.3)%
Selling, general and administrative expenses as a percent of revenue		22.4 %		24.5 %		25.2 %	(2.10)	(0.70)
Loss on assets held for sale		46,946					nm*	nm*
Operating Earnings		974,894		843,112		806,886	15.6 %	4.5 %
Interest expense		125,818		130,972		144,948	(3.9)%	(9.6)%
Interest income		(4,526)		(8,881)		(8,491)	(49.0)%	4.6 %
Loss on extinguishment of debt		23,543		_		_	nm*	nm*
Other income, net		(12,950)		(4,357)		(2,251)	197.2 %	93.6 %
Gain on sale of businesses						(203,135)	nm*	nm*
Earnings before provision for income taxes and discontinued operations		843,009		725,378		875,815	16.2 %	(17.2)%
Provision for income taxes		165,091		134,233		129,152	23.0 %	3.9 %
Effective tax rate		19.6 %		18.5 %		14.7 %	1.1	3.8
Earnings from continuing operations		677,918		591,145		746,663	14.7 %	(20.8)%
(Loss) earnings from discontinued operations, net		_		(20,878)		65,002	nm*	nm*
Earnings from continuing operations per common share - diluted	\$	4.61	\$	3.89	\$	4.73	18.5 %	(17.8)%
(Loss) earnings from discontinued operations per common share -diluted	\$	_	\$	(0.14)	\$	0.41	nm*	nm*

^{*} nm: not meaningful

Revenue

For the year ended December 31, 2019, revenue increased \$144.3 million, or 2.1% to \$7.1 billion compared with 2018, reflecting organic growth of 3.8% led by our Fueling Solutions and Engineered Products segments, partially offset by our Refrigeration & Food Equipment segment. Revenue also increased due to acquisition-related growth of 0.8% from our Pumps & Process Solutions and Fueling Solutions segments, partially offset by an unfavorable impact from foreign currency translation of 2.0%, particularly in our Fueling Solutions and Imaging & Identification segments and a 0.5% impact from dispositions within our Pumps & Process Solutions and Fueling Solutions segments. Customer pricing favorably impacted revenue by approximately 1.0% in 2019.

For the year ended December 31, 2018, revenue increased \$171.2 million, or 2.5% to \$7.0 billion compared with 2017, reflecting organic growth of 3.7%, led by our Fueling Solutions and Engineered Products segments, partially offset by our Refrigeration & Food Equipment segment, acquisition-related growth of 0.5% from our Pumps & Process Solutions and Refrigeration & Food Equipment segments and a favorable impact from foreign currency translation of 0.8%. Revenue growth was partially offset by a 2.5% impact from dispositions within our Engineered Products segment. Customer pricing favorably impacted revenue by approximately 1.0% in 2018.

Gross Profit

For the year ended December 31, 2019, gross profit increased \$61.4 million, or 2.4%, to \$2.6 billion compared with 2018, primarily due to organic volume growth, pricing actions, and productivity initiatives including the benefits of rightsizing actions and cost reduction initiatives, as well as reduced rightsizing costs, partially offset by increased material costs, due, in part, to U.S. Section 232 and 301 tariff exposure. Gross profit margin increased 10 basis points as compared to the prior year.

For the year ended December 31, 2018, gross profit increased \$30.5 million, or 1.2% to \$2.6 billion compared with 2017, primarily due to growth in sales volumes and benefits of prior restructuring actions partially offset by the loss of gross profits due to divestitures. Gross profit margin decreased 50 basis points as compared to prior year due to unfavorable product mix and rising material costs in our Refrigeration & Food Equipment segment and the impact of inefficiencies due to facility consolidations principally in our Fueling Solutions segment.

Selling, General and Administrative Expenses

Selling, general and administrative expenses for the year ended December 31, 2019, decreased \$117.3 million, or 6.8% to \$1.6 billion compared with 2018, primarily due to benefits from rightsizing actions started in 2018 and a decrease in restructuring costs of \$23.7 million from \$41.6 million in 2018 to \$17.9 million in 2019. As a percentage of revenue, selling, general and administrative expenses decreased 210 basis points in 2019 to 22.4%, reflecting the leverage of costs on a higher revenue base and the decrease in expenses.

Selling, general and administrative expenses for the year ended December 31, 2018, decreased \$5.7 million, or 0.3% to \$1.7 billion compared with 2017 primarily due to benefits from prior restructuring actions and decreases from dispositions within our Engineered Products segment, offset by an increase in restructuring costs of \$6.0 million from \$35.6 million in 2017 to \$41.6 million in 2018. As a percentage of revenue, selling, general and administrative expenses decreased 70 basis points in 2018 to 24.5%, reflecting the leverage of costs on a higher revenue base and the decrease in expenses.

Research and development costs, including qualifying engineering costs, are expensed when incurred and amounted to \$141.0 million, \$143.0 million and \$130.5 million for the years ended December 31, 2019, 2018 and 2017, respectively. These costs as a percent of revenue were 2.0%, 2.0% and 1.9% for the years December 31, 2019, 2018 and 2017, respectively.

Loss on assets held for sale

On March 29, 2019, we entered into a definitive agreement to sell Finder for total consideration of approximately \$23.6 million net of estimated selling costs. As of March 31, 2019, Finder met the criteria to be classified as held for sale and based on the total consideration from the sale, net of selling costs, we recorded a loss on the assets held for sale of \$46.9 million. The loss was comprised of an impairment on assets held for sale of \$21.6 million and foreign currency translation losses reclassified from accumulated other comprehensive losses to current earnings of \$25.3 million. We subsequently sold Finder on April 2, 2019, which generated total cash proceeds of \$24.2 million.

Non-Operating Items

Interest Expense, net

For the year ended December 31, 2019, interest expense, net of interest income, decreased \$0.8 million, or 0.7%, to \$121.3 million compared with 2018 primarily due to the \$350 million 5.45% 10-year notes that were paid in March 2018 that resulted in lower outstanding long-term debt and lower interest expense compared to 2018, partially offset by lower interest income.

For the year ended December 31, 2018, interest expense, net of interest income, decreased \$14.4 million, or 10.5%, to \$122.1 million compared with 2017 due to the \$350 million that was paid in March 2018 that resulted in lower outstanding long-term debt and lower interest expense compared to 2017.

Loss on extinguishment of debt

On December 4, 2019, the Company extinguished the €300,000 2.125% notes due 2020 and the \$450,000 4.30% notes due 2021. The Company was required to pay a make whole premium to the bondholders for the early extinguishment of debt, resulting in a loss of \$23.5 million.

Other income, net

For the years ended December 31, 2019, 2018 and 2017, other income, net was \$13.0 million, \$4.4 million and \$2.3 million, respectively. For the year ended December 31, 2019, other income increased compared to 2018 primarily due to increased earnings from our equity method investments and reduction of non-operating losses from our defined benefit and post-retirement benefit plans. For the year ended December 31, 2018, other income increased compared to 2017 primarily due to lower foreign exchange losses resulting from the re-measurement and settlement of foreign currency denominated balances.

Gain on sale of businesses

There were no dispositions in the year 2019 aside from the sale of Finder as described above, and no significant dispositions in 2018 aside from the spin-off of Apergy, whose results are presented as discontinued operations.

For the year ended December 31, 2017, gain on sale of businesses was \$203.1 million. The gain was primarily due to the sales of PMI and the consumer and industrial winch business of Warn, both within the Engineered Products segment, in which we recognized gains on sale of \$88.4 million and \$116.9 million, respectively. Other immaterial dispositions completed during the year were recorded as a net loss of \$2.2 million. The disposals in 2017 did not represent strategic shifts in operations and, therefore, did not qualify for presentation as discontinued operations.

Income Taxes

Our businesses have a global presence with 46.8%, 52.5% and 37.8% of our pre-tax earnings in 2019, 2018 and 2017, respectively, generated in foreign jurisdictions. Foreign earnings are generally subject to local country tax rates that differ from the 21.0% U.S. statutory tax rate. As a result of our non-U.S. business locations, our effective foreign tax rate is typically lower than the U.S. statutory tax rate.

Our effective tax rate was 19.6% for the year ended December 31, 2019, compared to 18.5% for the year ended December 31, 2018. The 2019 and 2018 rates were impacted by \$26.6 million and \$24.0 million, respectively, of favorable net discrete items primarily driven by the tax benefit of share award exercises.

On December 22, 2017, the U.S. bill commonly referred to as the Tax Cuts and Jobs Act ("Tax Reform Act") was enacted which reduced the U.S. corporate income tax rate from a maximum of 35% to a flat 21% rate, effective January 1, 2018. As a result of the reduction in the U.S. corporate income tax rate, we revalued our ending net deferred tax liabilities as of December 31, 2017 and recognized a provisional tax benefit of \$172.0 million. The Tax Reform Act also imposed a tax for a one-time deemed repatriation of post-1986 unremitted foreign earnings and profits through the year ended December 31, 2017. For the year ended December 31, 2017, we recorded provisional tax expense related to the deemed repatriation of \$111.6 million payable over eight years.

On December 22, 2017, the SEC staff issued SAB 118 to address the application of U.S. GAAP in situations when a registrant did not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Tax Reform Act. In accordance with the SAB 118 guidance, we recognized the provisional tax impacts related to deemed repatriated earnings and the benefit for the revaluation of deferred tax assets and liabilities in our consolidated financial statements for the year ended December 31, 2017. In accordance with SAB 118, we finalized the financial reporting impact of the Tax Reform Act in the fourth quarter of 2018. For the year ended December 31, 2018, we recorded a \$4.2 million net tax benefit, which resulted in a 0.6% decrease in the effective tax rate, as an adjustment to provisional estimates as a result of additional regulatory guidance and changes in interpretations and assumptions the Company has made as a result of the Tax Reform Act.

For the year ended December 31, 2017, our effective tax rate on continuing operations was 14.7%. The effective tax rate was impacted by favorable net discrete items totaling \$51.7 million, principally related to the impact recorded for the U.S. Tax Reform Act.

We believe it is reasonably possible during the next twelve months that uncertain tax positions may be settled, which could result in a decrease in the gross amount of unrecognized tax benefits. This decrease may result in an income tax benefit. Due to the potential for resolution of federal, state, and foreign examinations and the expiration of various statutes of limitation, our gross unrecognized tax benefits balance may change within the next twelve months by a range of zero to \$15.3 million. We believe adequate provision has been made for all income tax uncertainties.

Earnings from Continuing Operations

For the year ended December 31, 2019, earnings from continuing operations increased \$86.8 million, or \$4.61 per share, compared with earnings from continuing operations of \$591.1 million, or \$3.89 per share, for the year ended December 31, 2018. Earnings increased due to organic volume growth, pricing actions, and productivity initiatives including the benefits of restructuring actions and cost reduction initiatives. Additionally, after-tax rightsizing costs were lower by \$32.9 million in 2019 compared to 2018. These benefits more than offset increases in material costs due, in part, to U.S. Section 232 and 301 tariff exposure, as well as a loss due to the after-tax extinguishment of debt of \$18.4 million and a loss on assets held for sale of \$46.9 million. Diluted earnings per share also improved due to the benefit of the prior and current year share repurchases.

For the year ended December 31, 2018, earnings from continuing operations decreased \$155.5 million, or 20.8%, to \$591.1 million, or \$3.89 per share, compared with earnings from continuing operations of \$746.7 million, or \$4.73 per share, for the year ended December 31, 2017. Earnings decreased primarily because we did not record any gains from dispositions in 2018 compared to 2017 when we recorded net after-tax gains from dispositions of \$172.6 million. In 2018, we recorded a net tax benefit primarily from the Tax Reform Act of \$4.2 million, whereas in 2017, we recorded a net tax benefit of \$54.9 million. Additionally, after-tax rightsizing costs were higher by \$23.7 million in 2018 compared to 2017. Excluding these items, earnings from continuing operations increased in 2018 as a result of higher earnings due to increased sales volumes. Diluted earnings per share also improved due to the benefit of the share repurchase programs announced in November 2017.

Discontinued Operations

There were no discontinued operations for the year ended December 31, 2019.

The results of discontinued operations for December 31, 2018 and 2017 include the historical results of Apergy prior to its distribution on May 9, 2018. The years ended December 31, 2018 and 2017 included costs incurred by the Company to complete the spin-off of Apergy amounting to \$46.4 million and \$15.3 million, respectively, reflected in selling, general and administrative expenses in discontinued operations. Due to lump-sum payments made in 2018 for Apergy participants in the Dover U.S. Pension Plan, non-cash settlement costs of approximately \$9.2 million were classified within discontinued operations.

Refer to Note 5 — Discontinued and Disposed Operations in the Consolidated Financial Statements in Item 8 of this Form 10-K for additional information on disposed and discontinued operations.

Rightsizing Activities, which includes Restructuring and Other Costs

During the year ended December 31, 2019, rightsizing activities included restructuring charges of \$26.8 million and other costs of \$5.3 million. Restructuring expense was comprised primarily of broad-based selling, general and administrative expense reduction initiatives and broad-based operational efficiency initiatives focusing on footprint consolidation, operational optimization and IT centralization designed to increase operating margin, enhance operations and position the Company for sustained growth and investment. Other costs were comprised primarily of other charges related to the restructuring actions. These rightsizing charges were recorded in cost of goods and services and selling, general and administrative expenses in the Consolidated Statement of Earnings. We expect to incur total rightsizing charges, comprised of \$8 million in restructuring charges and \$1 million in other costs, in 2020 for these initiatives. Additional programs, beyond the scope of the announced programs may be implemented during 2020 with related restructuring charges. We recorded the following rightsizing costs for the year ended December 31, 2019:

	 Year Ended December 31, 2019											
(dollars in thousands)	 ineered oducts		ueling olutions		aging & ntification	P	mps & rocess olutions	8	rigeration & Food Juipment	Co	rporate	Total
Restructuring (GAAP)	\$ 3,155	\$	4,943	\$	6,426	\$	5,666	\$	3,671	\$	2,961	\$ 26,822
Other costs, net	(5)		(58)		(76)		462		2,371		2,637	5,331
Rightsizing (non-GAAP)	\$ 3,150	\$	4,885	\$	6,350	\$	6,128	\$	6,042	\$	5,598	\$ 32,153

During the year ended December 31, 2018, rightsizing activities included restructuring charges of \$58.5 million and other costs of \$14.3 million. Restructuring expense was comprised primarily of several programs in order to further optimize operations, including 1) alignment of our cost structure in preparation for the Apergy separation, 2) broad-based selling, general and administrative expense reduction initiatives and 3) initiation of footprint consolidation actions. Other costs were comprised primarily of other charges related to the restructuring actions. These rightsizing charges were recorded in cost of goods and services, selling, general and administrative expenses and other income, net in the Consolidated Statement of Earnings. We recorded the following rightsizing costs for the year ended December 31, 2018:

		Tear Ended December 51, 2016											
(dollars in thousands)	_	gineered roducts		ueling olutions		aging &	P	imps & rocess olutions	8	rigeration & Food uipment	Co	orporate	Total
Restructuring (GAAP)	\$	7,158	\$	15,478	\$	13,882	\$	10,266	\$	3,475	\$	8,244	\$ 58,503
Other costs, net		128		(146)		(1,237)		3,109		6,474		5,997	 14,325
Rightsizing (non-GAAP)	\$	7,286	\$	15,332	\$	12,645	\$	13,375	\$	9,949	\$	14,241	\$ 72,828

Voor Ended December 31 2018

During the year ended December 31, 2017, restructuring charges were \$52.3 million. We commenced broad-based rightsizing actions in the fourth quarter of 2017 in connection with our planned spin-off of Apergy. A portion of our restructuring charges in 2017 were not classified as rightsizing. Rightsizing charges included restructuring charges of \$38.9 million and other costs of \$10.5 million. Restructuring initiatives in 2017 included headcount reductions, facility consolidations and product line exits. Other costs were comprised primarily of other charges related to the restructuring actions.

See Note 11 — Restructuring Activities in the Consolidated Financial Statements in Item 8 of this Form 10-K for additional details regarding our recent restructuring activities.

SEGMENT RESULTS OF OPERATIONS

The summary that follows provides a discussion of the results of operations of each of our five operating and reportable segments (Engineered Products, Fueling Solutions, Imaging & Identification, Pumps & Process Solutions, and Refrigeration & Food Equipment). Each of these segments is comprised of various product and service offerings that serve multiple markets. See Note 19 — Segment Information in the Consolidated Financial Statements in Item 8 of this Form 10-K for a reconciliation of segment revenue, earnings and margin to our consolidated revenue, earnings from continuing operations and margin. Segment EBITDA and segment EBITDA margin, which are presented in the segment discussion that follows, are non-GAAP measures and do not purport to be alternatives to segment earnings (EBIT) as a measure of operating performance. We believe that these measures are useful to investors and other users of our financial information in evaluating ongoing operating profitability as they exclude the depreciation and amortization expense related primarily to capital expenditures and acquisitions that occurred in prior years, as well as in evaluating operating performance in relation to our competitors. For further information, see "Non-GAAP Disclosures" at the end of this Item 7.

Additionally, we believe the following operational metrics are useful to investors and others users of our financial information in assessing the performance of our segments:

- Bookings represent total orders received from customers in the current reporting period. This metric is an important measure of performance and an indicator of revenue order trends.
- Backlog represents an estimate of the total remaining bookings at a point in time for which performance obligations
 have not yet been satisfied. This metric is useful as it represents the aggregate amount we expect to recognize as
 revenue in the future.
- Book-to-bill is a ratio of the amount of bookings received from customers during a period divided by the amount of revenue recorded during that same period. This metric is a useful indicator of demand.

Engineered Products

Our Engineered Products segment is a provider of a wide range of products, software and services that have broad customer applications across a number of markets, including aftermarket vehicle service, solid waste handling, industrial automation, aerospace and defense, industrial winch and hoist, and fluid dispensing.

	Years	En	ded Decem	31,	% Change			
(dollars in thousands)	2019		2018		2017	2019 vs. 2018	2018 vs. 2017	
Revenue	\$ 1,697,557	\$	1,633,147	\$	1,626,856	3.9 %	0.4 %	
Segment earnings (EBIT) (1)	\$ 291,848	\$	252,368	\$	437,078	15.6 %	(42.3)%	
Depreciation and amortization	 41,032		44,995		48,271	(8.8)%	(6.8)%	
Segment EBITDA (1)	\$ 332,880	\$	297,363	\$	485,349	11.9 %	(38.7)%	
Segment margin (1)	17.2 %		15.5 %		26.9 %			
Segment EBITDA margin (1)	19.6 %		18.2 %		29.8 %			
Other measures:								
Bookings	\$ 1,708,321	\$	1,803,555	\$	1,677,319	(5.3)%	7.5 %	
Backlog	\$ 452,142	\$	442,519	\$	333,953	2.2 %	32.5 %	
Components of revenue growth:								
Organic growth						5.4 %	6.6 %	
Dispositions						— %	(7.5)%	
Foreign currency translation						(1.5)%	1.3 %	
Total revenue growth						3.9 %	0.4 %	
(1)					:			

⁽¹⁾ Segment earnings (EBIT) and segment EBITDA for 2017 includes a gain of \$205.3 million from the sales of PMI and Warn.

2019 Versus 2018

Engineered Products segment revenue for the year ended December 31, 2019 increased \$64.4 million, or 3.9% compared to the prior year, comprised of broad-based organic growth of 5.4%, partially offset by a 1.5% unfavorable impact from foreign currency translation. Organic revenue growth was driven by strong activity in the refuse truck and digital solutions product lines within our waste handling business, as well as solid revenue growth in our vehicle service business. Customer pricing favorably impacted revenue by approximately 1.9% in 2019.

Engineered Products segment earnings for the year ended December 31, 2019 increased \$39.5 million, or 15.6%, compared to the prior year. This increase was primarily driven by solid conversion on organic volume growth, pricing actions, and productivity initiatives, including the benefits of rightsizing actions and cost reduction initiatives, as well as a reduction in rightsizing costs. These benefits more than offset increases in material costs driven by U.S. Section 232 tariffs, most notably commodity cost increases impacting steel, and Section 301 tariffs, along with unfavorable foreign currency translation. Segment margin increased from 15.5% to 17.2% as compared to the prior year.

Bookings for the year ended December 31, 2019 decreased 5.3% compared to the prior year, reflecting an organic decline of 4.0% and an unfavorable impact from foreign currency translation of 1.3%. The decrease was primarily due to the timing of orders in our waste handling and vehicle services businesses. Segment book-to-bill was 1.01.

2018 Versus 2017

Engineered Products segment revenue for the year ended December 31, 2018 increased \$6.3 million, or 0.4%, compared to the prior year, comprised of broad-based organic growth of 6.6% with particular strength in our waste handling, industrial winch, and aerospace and defense businesses and a favorable impact from foreign currency translation of 1.3%. This increase was partially offset by a 7.5% decrease from the dispositions of PMI in the first quarter of 2017 and the consumer and industrial winch business of Warn in the fourth quarter of 2017. Customer pricing favorably impacted revenue by approximately 1.9% in 2018.

Engineered Products segment earnings for the year ended December 31, 2018 decreased \$184.7 million, or 42.3%, compared to the prior year. The decline in earnings was impacted by gains of \$205.3 million recognized in 2017 from the sales of PMI and Warn, the lost earnings from those divested businesses of \$25.6 million, and incremental rightsizing costs in 2018. This was partially offset by disposition costs in 2017 of \$5.2 million, solid conversion on organic volume growth, favorable pricing, and productivity initiatives, including the benefits of prior year and current year restructuring initiatives. Partially offsetting this favorable operational performance were increases in material costs, primarily driven by U.S. Section 232 tariffs, most notably commodity cost increases impacting steel, and Section 301 tariffs. Segment margin decreased from 26.9% to 15.5% as compared to the prior year primarily due to the gain from the sales of PMI and Warn, lost earnings and disposition costs from 2017 divested businesses and incremental rightsizing costs.

Fueling Solutions

Our Fueling Solutions segment is focused on providing components, equipment and software and service solutions enabling safe transport of fuels and other hazardous fluids along the supply chain, as well as the safe and efficient operation of retail fueling and vehicle wash establishments.

	 Years	En	ded Decem	31,	% Change			
(dollars in thousands)	2019		2018		2017	2019 vs. 2018	2018 vs. 2017	
Revenue	\$ 1,620,177	\$	1,465,590	\$	1,338,062	10.5 %	9.5 %	
Segment earnings (EBIT)	\$ 231,873	\$	152,255	\$	159,180	52.3 %	(4.4)%	
Depreciation and amortization	75,045		68,463		67,835	9.6 %	0.9 %	
Segment EBITDA	\$ 306,918	\$	220,718	\$	227,015	39.1 %	(2.8)%	
Segment margin	14.3 %		10.4 %		11.9 %			
Segment EBITDA margin	18.9 %		15.1 %		17.0 %			
Other measures:								
Bookings	1,613,764		1,513,019		1,376,714	6.7 %	9.9 %	
Backlog	205,842		208,574		187,046	(1.3)%	11.5 %	
Components of revenue growth:								
Organic growth						10.5 %	9.9 %	
Acquisitions						3.4 %	— %	
Dispositions						(0.4)%	— %	
Foreign currency translation						(3.0)%	(0.4)%	
Total revenue growth						10.5 %	9.5 %	

2019 Versus 2018

Fueling Solutions segment revenue for the year ended December 31, 2019 increased \$154.6 million, or 10.5%, compared to the prior year, attributable to organic growth of 10.5% and acquisition-related growth of 3.4%, partially offset by an unfavorable foreign currency translation impact of 3.0% and a 0.4% decrease from a disposition. The organic growth was principally driven by continued strong demand in the global retail fueling industry, particularly in the United States, Europe and Asia. Growth was also driven by the acquisition of Belanger. Customer pricing favorably impacted revenue by approximately 1.0% in 2019.

Fueling Solutions segment earnings for the year ended December 31, 2019 increased \$79.6 million, or 52.3%, compared to the prior year. The increase was driven by volume leverage, pricing initiatives, productivity actions, acquisitions, and benefits of selling, general and administrative cost reductions realized, as well as decreased rightsizing costs. This growth was partially offset by increased material costs due, in part, to U.S. Section 232 and 301 tariff exposure. Segment margin increased 390 basis points compared to the prior year.

Bookings for the year ended December 31, 2019 increased 6.7% compared to the prior year, reflecting organic growth of 6.9% and acquisition-related growth of 3.2%, partially offset by a unfavorable impact from foreign currency translation of 3.1%, and a disposition related decline of 0.3%. Book to bill was 1.00.

2018 Versus 2017

Fueling Solutions segment revenue for the year ended December 31, 2018 increased \$127.5 million, or 9.5%, compared to the prior year, attributable to organic growth of 9.9% and an unfavorable foreign currency translation impact of 0.4%. The organic growth was principally driven by continued strength in retail fueling, especially in the Asia Pacific region. Transport revenue improved over the prior year and the rail business experienced strong growth, in part, due to softer volumes experienced in last year's second half and the continued rebound of aftermarket volumes. Customer pricing favorably impacted revenue by approximately 0.5% in 2018.

Fueling Solutions segment earnings for the year ended December 31, 2018 decreased \$6.9 million, or 4.4%, compared to the prior year, primarily driven by increased material costs due, in part, to U.S. Section 232 and 301 tariff exposure, the negative productivity impacts of footprint consolidation and supply chain disruptions and increased rightsizing costs. Segment margin decreased 150 basis points primarily due to cost impacts driven by footprint consolidations and temporary supply chain disruptions impacting production.

Imaging & Identification

Our Imaging & Identification segment supplies precision marking and coding, product traceability and digital textile printing equipment, as well as related consumables, software and services.

	Years	En	ded Decem	31,	% Change			
(dollars in thousands)	 2019		2018		2017	2019 vs. 2018	2018 vs. 2017	
Revenue	\$ 1,084,471	\$	1,109,843	\$	1,041,188	(2.3)%	6.6 %	
Segment earnings (EBIT)	\$ 229,484	\$	198,902	\$	167,404	15.4 %	18.8 %	
Depreciation and amortization	30,530		30,882		37,176	(1.1)%	(16.9)%	
Segment EBITDA	\$ 260,014	\$	229,784	\$	204,580	13.2 %	12.3 %	
Segment margin	21.2 %		17.9 %		16.1 %			
Segment EBITDA margin	24.0 %		20.7 %		19.6 %			
Other measures:								
Bookings	\$ 1,092,915	\$	1,106,303	\$	1,061,260	(1.2)%	4.2 %	
Backlog	\$ 125,775	\$	118,057	\$	125,378	6.5 %	(5.8)%	
Components of revenue growth:								
Organic growth						1.2 %	4.6 %	
Acquisitions						— %	0.3 %	
Foreign currency translation						(3.5)%	1.7 %	
Total revenue growth					•	(2.3)%	6.6 %	

2019 Versus 2018

Imaging & Identification segment revenue for the year ended December 31, 2019 decreased \$25.4 million, or 2.3% compared to the prior year, comprised of organic growth of 1.2%, more than offset by an unfavorable impact from foreign currency translation of 3.5%. The organic revenue growth was driven by increased equipment shipments and expanded service revenue in our marking and coding business, along with increased service revenue and increased printer and ink volumes in our digital printing business. The significant foreign currency impact was due to our broad international customer base, in particular in Asia and Europe. Customer pricing favorably impacted revenue by approximately 1.0% in 2019.

Imaging & Identification segment earnings for the year ended December 31, 2019 increased \$30.6 million, or 15.4%, compared to the prior year. This increase was primarily driven by productivity initiatives, including the benefits of restructuring actions, favorable pricing, and conversion on revenue growth, as well as reduced rightsizing costs. As a result, segment margin increased from 17.9% to 21.2% as compared to the prior year.

Segment bookings for the year ended December 31, 2019 decreased 1.2% compared to the prior year, reflecting organic growth of 2.3%, more than offset by a unfavorable impact from foreign currency translation of 3.5%. Segment book-to-bill was 1.01.

2018 Versus 2017

Imaging & Identification segment revenue for the year ended December 31, 2018 increased \$68.7 million, or 6.6%, compared to the prior year, comprised of organic growth of 4.6%, led by strong activity in our digital printing businesses,

complemented by growth in our marking and coding businesses, acquisition-related growth of 0.3% and a favorable impact from foreign currency translation of 1.7%. Customer pricing favorably impacted revenue by approximately 0.5% in 2018.

Imaging & Identification segment earnings for the year ended December 31, 2018 increased \$31.5 million, or 18.8%, compared to the prior year. This increase was primarily driven by solid conversion on organic volume growth, favorable pricing and productivity initiatives, including the benefits of restructuring actions, as well as the net benefit of an earn-out reversal recorded in the second quarter of 2018. Partially offsetting the favorable operational performance were incremental rightsizing costs in 2018 as well as increases in material costs, primarily driven by U.S. Section 301 tariffs. Segment margin increased from 16.1% to 17.9% as compared to the prior year.

Pumps & Process Solutions

Our Pumps & Process Solutions segment manufactures specialty pumps, fluid handling components, plastics and polymer processing equipment, and highly engineered components for rotating and reciprocating machines.

	Years	En	ded Decem	ber	31,	% Change			
(dollars in thousands)		2019		2018		2017	2019 vs. 2018	2018 vs. 2017	
Revenue	\$	1,338,528	\$	1,331,893	\$	1,217,235	0.5 %	9.4 %	
Segment earnings (EBIT) (1)	\$	240,081	\$	237,549	\$	209,451	1.1 %	13.4 %	
Depreciation and amortization	<u></u>	67,584		71,982		67,986	(6.1)%	5.9 %	
Segment EBITDA (1)	\$	307,665	\$	309,531	\$	277,437	(0.6)%	11.6 %	
Segment margin (1)		17.9 %		17.8 %		17.2 %			
Segment EBITDA margin (1)		23.0 %		23.2 %		22.8 %			
Other measures:									
Bookings		1,393,830		1,386,875		1,236,376	0.5 %	12.2 %	
Backlog		353,073		315,230		272,704	12.0 %	15.6 %	
Components of revenue growth:									
Organic growth							3.9 %	7.4 %	
Acquisitions							0.5 %	1.4 %	
Dispositions							(2.0)%	(0.4)%	
Foreign currency translation							(1.9)%	1.0 %	
Total revenue growth							0.5 %	9.4 %	
-						-			

⁽¹⁾ Segment earnings (EBIT) and segment EBITDA for 2019 include a \$46,946 loss on assets held for sale for Finder.

2019 Versus 2018

Pumps & Process Solutions segment revenue for the year ended December 31, 2019 increased \$6.6 million, or 0.5%, compared to the prior year, attributable to organic growth of 3.9% and acquisition-related growth of 0.5%. This increase was partially offset by an unfavorable foreign currency translation impact of 1.9% and a 2.0% decrease from a disposition. The organic growth was principally driven by biopharma and thermal management markets, along with strong continued demand from our OEM customers for rotating and reciprocating machinery components. Customer pricing favorably impacted revenue by approximately 1.4% in 2019.

Pumps & Process Solutions segment earnings for the year ended December 31, 2019 increased \$2.5 million, or 1.1%, compared to the prior year. Segment earnings includes a loss on assets held for sale for Finder in the first quarter of 2019 of \$46.9 million. Segment earnings increased significantly excluding the loss on sale of Finder driven by volume leverage, pricing initiatives, and productivity actions, as well as reduced rightsizing costs. These benefits were partially offset by increased material costs due, in part, to U.S. Section 232 and 301 tariff exposure, inflation costs, and unfavorable product and regional mix. Segment margin increased to 17.9% from 17.8% in the prior year, an increase of 10 basis points.

Bookings for the year ended December 31, 2019 increased 0.5% compared to the prior year, reflecting organic growth of 3.3% and acquisition-related growth of 0.5%, offset by a unfavorable impact from foreign currency translation of 1.9% and disposition related decline of 1.4%. Ending backlog was 12.0% higher than prior year, driven by growth in polymer processing, rotating and reciprocating machinery, and connection solutions businesses. Book to bill was 1.04.

2018 Versus 2017

Pumps & Process Solutions segment revenue for the year ended December 31, 2018 increased \$114.7 million, or 9.4%, compared to the prior year, attributable to organic growth of 7.4%, acquisition-related growth of 1.4% and a favorable foreign currency translation impact of 1.0%. This increase was partially offset by a 0.4% decrease from dispositions. The organic growth was principally driven by industrial pump activity, strength in our Middle East market, solid biopharma and medical markets, continued infrastructure spending by our OEM customers, and polymer demand increase. Additionally, the revenue increase was driven by the acquisition of Ettlinger Group ("Ettlinger"). Customer pricing favorably impacted revenue by approximately 1.0% in 2018.

Pumps & Process Solutions segment earnings for the year ended December 31, 2018 increased \$28.1 million, or 13.4%, compared to the prior year, primarily driven by increased volume and productivity gains. This growth was partially offset by increased material costs due, in part, to U.S. Section 232 and 301 tariff exposure and increased rightsizing costs. Segment margin increased 60 basis points for the year ended December 31, 2018 compared to the prior year.

Refrigeration & Food Equipment

Our Refrigeration & Food Equipment segment is a provider of innovative and energy-efficient equipment and systems that serve the commercial refrigeration, heating and cooling and food equipment markets.

	Years	En	ded Decem	31,	% Change			
(dollars in thousands)	2019		2018		2017	2019 vs. 2018	2018 vs. 2017	
Revenue	\$ 1,396,617	\$	1,453,093	\$	1,599,105	(3.9)%	(9.1)%	
Segment earnings (EBIT)	\$ 118,832	\$	136,119	\$	193,822	(12.7)%	(29.8)%	
Depreciation and amortization	 51,360		60,477		57,207	(15.1)%	5.7 %	
Segment EBITDA	\$ 170,192	\$	196,596	\$	251,029	(13.4)%	(21.7)%	
Segment margin	8.5 %		9.4 %		12.1 %			
Segment EBITDA margin	12.2 %		13.5 %		15.7 %			
Other measures:								
Bookings	1,446,755		1,474,717		1,582,606	(1.9)%	(6.8)%	
Backlog	320,577		268,991		244,972	19.2 %	9.8 %	
Components of revenue decline:								
Organic (decline) growth						(2.7)%	(7.9)%	
Acquisitions						— %	0.7 %	
Dispositions						— %	(2.6)%	
Foreign currency translation						(1.2)%	0.7 %	
Total revenue decline						(3.9)%	(9.1)%	

2019 Versus 2018

Refrigeration & Food Equipment segment revenue for the year ended December 31, 2019 decreased \$56.5 million, or 3.9%, compared to the prior year, reflecting an organic revenue decline of 2.7% and an unfavorable impact from foreign currency translation of 1.2%. The organic revenue decrease for the year ended December 31, 2019 was driven principally by reduced new food retail store construction activity with key U.S. Retail Refrigeration customers, reduced demand for heat exchanger products in Asia, and softer demand from national restaurant chain customers in our foodservice equipment business. These reductions were partially offset by increased project activity for can-shaping equipment and strong growth in the core door case product line within food retail industry which primarily serves store remodel applications. Customer pricing minimally impacted revenue in 2019.

Refrigeration & Food Equipment segment earnings for the year ended December 31, 2019 decreased \$17.3 million, or 12.7%, compared to the prior year. Segment margin decreased to 8.5% from 9.4% in the prior year due to reduced volumes, unfavorable business mix in retail refrigeration, volume ramp costs for our door case product line, and costs incurred as a result of plant consolidations at our foodservice equipment business. These reductions were partially offset by improved productivity and benefits from prior year rightsizing actions, as well as reduced rightsizing costs.

Bookings for the year ended December 31, 2019 decreased 1.9% compared to the prior year, primarily driven by reduced demand in our U.S. retail refrigeration and foodservice equipment businesses, partially offset by increased market demand for aluminum can-shaping equipment driven by beverage companies shifting from plastic to aluminum containers. Bookings decreased 0.7% organically and decreased 1.2% due to foreign currency translation. Ending backlog was 19.2% higher than

prior year, driven by fourth quarter bookings growth in our retail refrigeration and can-shaping equipment businesses. Book to bill for the full year was 1.04.

2018 Versus 2017

Refrigeration & Food Equipment segment revenue for the year ended December 31, 2018 decreased \$146.0 million, or 9.1%, compared to the prior year, reflecting an organic revenue decline of 7.9%, the impact from product line dispositions of 2.6%, partially offset by acquisition-related growth of 0.7% and a favorable impact from foreign currency translation of 0.7%. Customer pricing favorably impacted revenue by approximately 0.8% in 2018. Refrigeration & Food Equipment organic revenue declined principally due to weak capital spending and deferred remodel programs by key U.S. retail refrigeration customers, as well as a product re-design and SKU rationalization program in our refrigeration door system product line. Additionally, the foodservice equipment and can-shaping businesses also had year over year shortfalls due to project timing and market softness. These were partially offset by increased demand for heat exchanger products, most notably in Europe, and by the addition of sales from our Rosario acquisition.

Refrigeration & Food Equipment segment earnings for the year ended December 31, 2018 decreased \$57.7 million, or 29.8%, compared to the prior year. Segment margin decreased to 9.4% from 12.1% in the prior year, as benefits from rightsizing actions, productivity gains and lower rightsizing costs were more than offset by volume reductions, unfavorable product mix in our can-shaping business, costs associated with product re-design and SKU rationalization in our refrigeration door system product line and a favorable \$1.7 million disposition gain in 2017 due to a working capital adjustment. Segment margin was also impacted by rising material costs, most notably steel, inclusive of commodity pricing impacts attributable to U.S. Section 232 tariffs.

FINANCIAL CONDITION

We assess our liquidity in terms of our ability to generate cash to fund our operating, investing and financing activities. Significant factors affecting liquidity are: cash flows generated from operating activities, capital expenditures, acquisitions, dispositions, dividends, repurchase of outstanding shares, adequacy of available commercial paper and bank lines of credit and the ability to attract long-term capital with satisfactory terms. We generate substantial cash from the operations of our businesses and remain in a strong financial position, with sufficient liquidity available for reinvestment in existing businesses and strategic acquisitions.

Cash Flow Summary

The following table is derived from our Consolidated Statements of Cash Flows:

	 Years Ended December 31								
Cash Flows from Continuing Operations (in thousands)	2019		2018		2017				
Net cash flows provided by (used in):									
Operating activities	\$ 945,306	\$	789,193	\$	739,409				
Investing activities	(384,255)		(245,480)		208,335				
Financing activities	(558,042)		(897,838)		(592,933)				

Operating Activities

Cash provided by operating activities for the year ended December 31, 2019 increased \$156.1 million compared to 2018. This increase was driven primarily by higher continuing earnings of \$147.0 million, excluding a loss from discontinued operations, depreciation and amortization, a loss on assets held for sale and a loss on extinguishment of debt.

Cash provided by operating activities for the year ended December 31, 2018 increased \$49.8 million compared to 2017. This increase was primarily driven by higher continuing earnings of \$46.9 million, excluding non-cash activity from depreciation and amortization and gain on sale of businesses, and significantly lower tax payments in 2018 due to a lower tax rate as well as tax payments made in 2017 for dispositions. The increase was offset by higher investments in working capital relative to the prior year in support of organic bookings and timing of year end revenue.

Pension and Other Post-Retirement Activity: Total cash used in conjunction with pension plans during 2019 was \$21.4 million, including contributions to our international pension plans and payments of benefits under our non-qualified supplemental pension plan.

The funded status of our U.S. qualified defined benefit pension plan is dependent upon many factors, including returns on invested assets, the level of market interest rates and the level of funding. We contribute cash to our plans at our discretion, subject to applicable regulations and minimum contribution requirements. Due to the overfunded status of this plan, the Company did not make contributions in 2019, 2018 or 2017 and does not expect to make contributions in the near term.

Our international pension plans are located in regions where often it is not economically advantageous to pre-fund the plans due to local regulations. Total cash contributions to ongoing international defined benefit pension plans in 2019, 2018 and 2017 totaled \$7.2 million, \$6.0 million and \$8.0 million, respectively. In 2020, we expect to contribute approximately \$4.6 million to our non-U.S. plans.

Our non-qualified supplemental pension plans are funded through Company assets as benefits are paid. In 2019, 2018 and 2017 a total of \$13.6 million, \$19.4 million, and \$11.6 million in benefits were paid under these plans, respectively. See Note 17 — Employee Benefit Plans in the Consolidated Financial Statements in Item 8 of this Form 10-K for further discussion regarding our post-retirement plans.

Adjusted Working Capital: We believe adjusted working capital (a non-GAAP measure calculated as accounts receivable, plus inventory, less accounts payable) provides a meaningful measure of our operational results by showing changes caused solely by revenue.

Adjusted Working Capital (dollars in thousands)		mber 31, 2019	December 31, 2018			
Accounts receivable	\$	1,217,190	\$	1,231,859		
Inventories		806,141		748,796		
Less: Accounts payable		983,293		969,531		
Adjusted working capital	\$	1,040,038	\$	1,011,124		

Adjusted working capital increased from December 31, 2018 by \$28.9 million, or 2.9%, to \$1.04 billion at December 31, 2019, which reflected a decrease in accounts receivable of \$14.7 million, an increase in inventory of \$57.3 million and an increase in accounts payable of \$13.8 million. We continue to focus on improving working capital management by reducing our accounts receivable balance and increasing our accounts payable balance at December 31, 2019 compared to the prior year. However, inventories increased at December 31, 2019 compared to 2018 given planned footprint moves and a higher backlog going into 2020.

Investing Activities

Cash flow from investing activities is derived from cash inflows from proceeds from sales of businesses, property, plant and equipment and short-term investments, offset by cash outflows for capital expenditures and acquisitions. The majority of the activity in investing activities was comprised of the following:

- Acquisitions: In 2019, we deployed \$215.7 million to acquire three businesses. In comparison, we acquired two businesses in 2018 for an aggregate purchase price of approximately \$68.6 million. Total acquisition spend in 2017 was \$27.2 million and was comprised of two businesses. See Note 4 Acquisitions in the Consolidated Financial Statements in Item 8 of this Form 10-K for additional information with respect to recent acquisitions.
- *Proceeds from sale of businesses:* In 2019, we generated cash proceeds of \$24.2 million, due to the sale of Finder. Cash proceeds of \$3.9 million in 2018 was primarily due to cash received on a sale in 2017. In 2017, we generated cash proceeds of \$372.7 million primarily from the sale of PMI and Warn.
- Capital spending: Capital expenditures, primarily to support growth initiatives, productivity and new product launches, were \$186.8 million in 2019, \$171.0 million in 2018 and \$170.1 million in 2017. Our capital expenditures increased \$15.8 million in 2019 compared to 2018, and remained relatively flat in 2018 compared to 2017.

We anticipate that capital expenditures and any additional acquisitions we make in 2020 will be funded from available cash and internally generated funds and, if necessary, through the issuance of commercial paper, or by accessing the public debt or equity markets.

Financing Activities

Our cash flow from financing activities generally relates to the use of cash for purchases of our common stock and payment of dividends, offset by net borrowing activity. The majority of financing activity was attributed to the following:

• Long-term debt, commercial paper and notes payable, net: During 2019, we issued €500 million of 0.750% eurodenominated notes due 2027 and \$300 million of 2.950% notes due 2029. The proceeds from the sale of eurodenominated notes of €494.7 million, net of discounts and issuance costs, were used in part to redeem the €300 million 2.125% notes due 2020. The proceeds from the sale of notes of \$296.9 million, net of discounts and issuance costs, and the remaining funds from the sale of the euro-denominated notes, were used to fund the redemption of the \$450 million 4.30% notes due 2021. The early extinguishment of debt resulted in a pre-tax loss of \$23.5 million. Net borrowings decreased by \$93.3 million due to the issuance of debt, early extinguishment of debt, and decrease in borrowings from commercial paper.

During 2018, we repaid the Company's \$350.0 million 5.45% notes, which matured on March 15, 2018, and decreased net borrowings from commercial paper by \$10.7 million. During 2017, we decreased net borrowings from commercial paper by \$182.6 million with the cash proceeds from the sale of PMI and Warn.

- Cash received from Apergy, net of cash distributed: In connection with the separation of Apergy from Dover on May 9, 2018, Apergy incurred borrowings to fund a one-time cash payment of \$700.0 million to Dover in connection with Dover's contribution to Apergy of stock and assets relating to the businesses spun off with Apergy. Dover received net cash of \$689.6 million upon separation, which reflects \$10.4 million of cash held by Apergy at the time of distribution and retained by it in connection with its separation from Dover.
- Repurchase of common stock: During the year ended December 31, 2019, we repurchased 1,343,622 shares of common stock at a total cost of \$143.3 million. For the year ended December 31, 2018, we used \$45.0 million to repurchase 440,608 shares under our January 2015 authorization, which expired on January 9, 2018. Under a share repurchase authorization adopted by the Board of Directors in February 2018, we also repurchased 1,753,768 shares of common stock at a total cost of \$150.0 million and used \$700 million to repurchase a total of 8,542,566 shares through an accelerated share repurchase transaction which concluded in December 2018. We funded the accelerated share repurchase primarily with funds received from Apergy in connection with the consummation of the Apergy spin-off. For the year ended December 31, 2017, we used \$105.0 million to repurchase 1,059,682 shares under the January 2015 authorization.
- *Dividend payments:* Total dividend payments to common shareholders were \$282.2 million in 2019, \$283.6 million in 2018 and \$284.0 million in 2017. Our dividends paid per common share increased 2% to \$1.94 per share in 2019 compared to \$1.90 per share in 2018, which represents the 64th consecutive year that our dividend has increased. The number of common shares outstanding decreased from 2018 to 2019 due to our share repurchase programs.
- Net Proceeds from the exercise of share-based awards: Payments to settle tax obligations on share exercises were \$37.4 million, \$46.3 million and \$18.4 million in 2019, 2018 and 2017, respectively. These tax payments generally increase or decrease correspondingly to the number of exercises in a particular year.

Cash Flows from Discontinued Operations

There were no cash flows from discontinued operations for the year ended December 31, 2019. Our cash flows from discontinued operations for the years ended December 31, 2018 and 2017 (used) generated \$(14.3) million and \$48.5 million, respectively. These cash flows primarily reflect the operating results of Apergy prior to its separation during the second quarter of 2018. Cash flows used in discontinued operations for the year ended December 31, 2018 primarily reflects cash payments of spin-off costs of \$46.4 million and capital expenditures of \$23.7 million, partially offset by cash provided by operations of approximately \$55.4 million. Cash flows generated for the years ended December 31, 2017 primarily reflects cash provided by operating activities of approximately \$96.2 million, respectively, partially offset by capital expenditures.

Liquidity and Capital Resources

Free Cash Flow

In addition to measuring our cash flow generation and usage based upon the operating, investing and financing classifications included in the Consolidated Statements of Cash Flows, we also measure free cash flow (a non-GAAP measure) which represents net cash provided by operating activities minus capital expenditures. We believe that free cash flow is an important measure of operating performance because it provides management and investors a measurement of cash generated from operations that may be available for mandatory payment obligations and investment opportunities, such as funding acquisitions, paying dividends, repaying debt and repurchasing our common stock.

The following table reconciles our free cash flow to cash flow provided by operating activities:

		31,			
Free Cash Flow (dollars in thousands)		2019	2018		2017
Cash flow provided by operating activities	\$	945,306	\$ 789,193	\$	739,409
Less: Capital expenditures		(186,804)	(170,994)		(170,068)
Free cash flow	\$	758,502	\$ 618,199	\$	569,341
Free cash flow as a percentage of revenue		10.6 %	8.8 %		8.3 %
Free cash flow as a percentage of earnings from continuing operations		111.9 %	104.6 %		76.3 %

For 2019, we generated free cash flow of \$758.5 million, representing 10.6% of revenue and 111.9% of earnings from continuing operations. Free cash flow in 2018 was \$618.2 million or 8.8% of revenue and 104.6% of earnings from continuing operations. Free cash flow in 2017 was \$569.3 million, or 8.3% of revenue and 76.3% of earnings from continuing operations. The full year increase in 2019 free cash flow reflects higher cash flow provided by operations due to higher operating earnings, as previously mentioned, partially offset by higher capital expenditures. The 2018 increase in free cash flow compared to 2017 is due to higher operating earnings. Cash payments related to restructuring initiatives were \$33.3 million, \$52.0 million, and \$22.6 million in 2019, 2018, and 2017, respectively.

Capitalization

We use commercial paper borrowings for general corporate purposes, including the funding of acquisitions and the repurchase of our common stock. On October 4, 2019, we entered into a \$1 billion five-year unsecured revolving credit facility with a syndicate of banks (the "Credit Agreement") that replaced a similar existing credit facility that was set to expire in November 2020. The Credit Agreement will expire on October 4, 2024. This facility is used primarily as liquidity back-up for our commercial paper program. We have not drawn down any loans under this facility nor do we anticipate doing so. If we were to draw down a loan, at our election, the loan would bear interest at a base rate plus an applicable margin. Under this facility, we are required to pay a facility fee and to maintain an interest coverage ratio of consolidated EBITDA to consolidated net interest expense of not less than 3.0 to 1. We were in compliance with this covenant and our other long-term debt covenants at December 31, 2019 and had a coverage ratio of 10.6 to 1. We are not aware of any potential impairment to our liquidity and expect to remain in compliance with all of our debt covenants.

On March 15, 2018, the outstanding 5.45% notes with a principal value of \$350,000 matured. The repayment of debt was funded in part by borrowings under our commercial paper program and with existing cash balances.

On November 4, 2019, we issued €500 million of 0.750% euro-denominated notes due 2027 and \$300 million of 2.950% notes due 2029. The proceeds from the sale of euro-denominated notes of €494.7 million, net of discounts and issuance costs, were used in part to redeem the €300 million 2.125% notes due 2020. The proceeds from the sale of notes of \$296.9 million, net of discounts and issuance costs, and the remaining funds from the sale of the euro-denominated notes, were used to fund the redemption of the \$450 million 4.30% notes due 2021. Such redemption payments were made on December 4, 2019, which required us to pay a make whole premium to the bondholders, resulting in a loss of \$23.5 million. The remainder of the proceeds will be used for general corporate purposes.

We also have a current shelf registration statement filed with the SEC that allows for the issuance of additional debt securities that may be utilized in one or more offerings on terms to be determined at the time of the offering. Net proceeds of any offering would be used for general corporate purposes, including repayment of existing indebtedness, capital expenditures and acquisitions.

At December 31, 2019, our cash and cash equivalents totaled \$397.3 million, of which approximately \$273.1 million was held outside the United States. At December 31, 2018, our cash and cash equivalents totaled \$396.2 million, of which \$247.5 million was held outside the United States. Cash and cash equivalents are held primarily in bank deposits with highly rated banks. We regularly hold cash in excess of near-term requirements in bank deposits or invest the funds in government money market instruments or short-term investments, which consist of investment grade time deposits with original maturity dates at the time of purchase of no greater than three months.

We utilize the net debt to net capitalization calculation (a non-GAAP measure) to assess our overall financial leverage and capacity and believe the calculation is useful to investors for the same reason. Net debt represents total debt minus cash and cash equivalents. Net capitalization represents net debt plus stockholders' equity. The following table provides a reconciliation of net debt to net capitalization to the most directly comparable GAAP measures:

Net Debt to Net Capitalization Ratio (dollars in thousands)	Dec	ember 31, 2019	Dec	cember 31, 2018	De	cember 31, 2017
Current maturities of long-term debt	\$	_	\$	_	\$	350,402
Commercial paper		84,700		220,318		230,700
Notes payable and current maturities of long-term debt		84,700		220,318		581,102
Long-term debt		2,985,716		2,943,660		2,986,702
Total debt		3,070,416		3,163,978		3,567,804
Less: Cash and cash equivalents		(397,253)		(396,221)		(753,964)
Net debt		2,673,163		2,767,757		2,813,840
Add: Stockholders' equity		3,032,660		2,768,666		4,383,180
Net capitalization	\$	5,705,823	\$	5,536,423	\$	7,197,020
Net debt to net capitalization		46.8 %		50.0 %		39.1 %

Our net debt to net capitalization ratio decreased to 46.8% at December 31, 2019 compared to 50.0% at December 31, 2018. The decrease in this ratio was driven primarily by the increase in stockholders' equity of \$264.0 million for the period as a result of increase in current earnings of \$677.9 million, offset by \$143.3 million in share repurchases and \$282.2 million of dividends paid. Net debt decreased \$94.6 million during the period primarily due to a reduction in commercial paper, partially offset by a net increase in long-term debt after debt issuances and redemptions in 2019.

Our net debt to net capitalization ratio increased to 50.0% at December 31, 2018 compared to 39.1% at December 31, 2017 primarily due to the reduction in stockholders' equity as a result of the \$906.8 million distribution of Apergy, \$895.0 million in share repurchases and \$283.6 million of dividends paid, offset by \$570.3 million of current earnings. Net debt decreased \$46.1 million during the period primarily due to a reduction in current maturities of long term debt, partially offset by a reduction in cash levels to fund dividends and other operating purposes.

Our ability to obtain debt financing at comparable risk-based interest rates is partly a function of our existing cash flow-to-debt and debt-to-capitalization levels as well as our current credit standing. Our credit ratings, which are independently developed by the respective rating agencies, were as follows as of December 31, 2019:

	Short Term Rating	Long Term Rating	Outlook
Moody's	P-2	Baal	Stable
Standard & Poor's	A-2	BBB+	Stable

Operating cash flow and access to capital markets are expected to satisfy our various cash flow requirements, including acquisitions and capital expenditures. Acquisition spending and/or share repurchases could potentially increase our debt.

We believe that existing sources of liquidity are adequate to meet anticipated funding needs at current risk-based interest rates for the foreseeable future.

Off-Balance Sheet Arrangements and Contractual Obligations

As of December 31, 2019, we had approximately \$158.5 million outstanding in letters of credit, surety bonds, and performance and other guarantees with financial institutions, which expire on various dates through 2028. These letters of credit and bonds are primarily issued as security for insurance, warranty and other performance obligations. In general, we would only be liable for the amount of these guarantees in the event of default in the performance of our obligations, the probability of which we believe is remote.

We have also provided typical indemnities in connection with sales of certain businesses and assets, including representations and warranties and related indemnities for environmental, health and safety, tax and employment matters. We do not have any material liabilities recorded for these indemnifications and are not aware of any claims or other information that would give rise to material payments under such indemnities.

A summary of our consolidated contractual obligations and commitments as of December 31, 2019 and the years when these obligations are expected to be due is as follows:

		Payments Due by Period							
(in thousands)	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years	Other			
Long-term debt (1)	\$2,985,716	\$ —	\$ —	\$ —	\$2,985,716	\$ —			
Interest payments (2)	1,336,429	98,673	197,346	197,346	843,064	_			
Operating lease obligations	179,557	45,838	63,535	30,150	40,034	_			
Purchase obligations	35,552	34,885	667	_	_	_			
Finance lease obligations	11,502	2,199	3,923	2,471	2,909	_			
Supplemental and post-retirement benefits (3)	77,824	14,936	20,840	13,561	28,487	_			
Income tax payable - deemed repatriation tax (4)	52,000	_	3,050	21,559	27,391	_			
Unrecognized tax benefits (5)	101,052					101,052			
Total obligations	\$4,779,632	\$196,531	\$289,361	\$265,087	\$3,927,601	\$101,052			

⁽¹⁾ See Note 12 — Borrowings and Lines of Credit to the Consolidated Financial Statements. Amounts represent principal payments for all long-term debt, including current maturities, net of unamortized discounts and deferred issuance costs.

Financial Instruments and Risk Management

The diverse nature of our businesses' activities necessitates the management of various financial and market risks, including those related to changes in interest rates, foreign currency exchange rates and commodity prices. We periodically use derivative financial instruments to manage some of these risks. We do not hold or issue derivative instruments for trading or speculative purposes. We are exposed to credit loss in the event of nonperformance by counterparties to our financial instrument contracts; however, nonperformance by these counterparties is considered unlikely as our policy is to contract with highly-rated, diversified counterparties.

Interest Rate Exposure

As of December 31, 2019 and during the three year period then ended, we did not have any open interest rate swap contracts; however, we may in the future enter into interest rate swap agreements to manage our exposure to interest rate changes. We issue commercial paper, which exposes us to changes in variable interest rates; however, maturities are typically three months or less so a change in rates over this period would not have a material impact on our pre-tax earnings.

We consider our current risk related to market fluctuations in interest rates to be minimal since our debt is largely long-term and fixed-rate in nature. Generally, the fair market value of fixed-interest rate debt will increase as interest rates fall and

⁽²⁾ Amounts represent estimate of future interest payments on long-term debt using the interest rates in effect at December 31, 2019.

⁽³⁾ Amounts represent estimated benefit payments under our unfunded supplemental and post-retirement benefit plans and our unfunded non-U.S. qualified defined benefit plans. See Note 17 — Employee Benefit Plans to the Consolidated Financial Statements. We also expect to contribute approximately \$4.6 million to our non-U.S. qualified defined benefit plans in 2020, which amount is not reflected in the above table.

⁽⁴⁾ Amounts represent a tax imposed by the Tax Reform Act for a one-time deemed repatriation of unremitted earnings of foreign subsidiaries, including current payable.

⁽⁵⁾ Due to the uncertainty of the potential settlement of future unrecognized tax benefits, we are unable to estimate the timing of the related payments, if any, that will be made subsequent to 2019. This amount does not include the potential indirect benefits resulting from deductions or credits for payments made to other jurisdictions. This amount includes accrued interest and penalties.

decrease as interest rates rise. A 100 basis point increase in market interest rates would decrease the 2019 year-end fair value of our long-term debt by approximately \$275.2 million. However, since we have no plans to repurchase our outstanding fixed-rate instruments before their maturities, the impact of market interest rate fluctuations on our long-term debt does not affect our results of operations or financial position.

Foreign Currency Exposure

We conduct business in various non-U.S. countries, including Canada, substantially all of the European countries, Mexico, Brazil, China, India and other Asian countries. Therefore, we have foreign currency risk relating to receipts from customers, payments to suppliers and intercompany transactions denominated in foreign currencies. We will occasionally use derivative financial instruments to offset such risks, when it is believed that the exposure will not be limited by our normal operating and financing activities. We have formal policies to mitigate risk in this area by using fair value and/or cash flow hedging programs.

Changes in the value of the currencies of the countries in which we operate affect our results of operations, financial position and cash flows when translated into U.S. dollars, our reporting currency. The strengthening of the U.S. dollar could result in unfavorable translation effects as the results of foreign operations are translated into U.S. dollars. We have generally accepted the exposure to exchange rate movements relative to our investment in non-U.S. operations. We may, from time to time, for a specific exposure, enter into fair value hedges.

Additionally, we have designated the €600 million and €500 million of euro-denominated notes issued November 9, 2016 and November 4, 2019, respectively, as a hedge of our net investment in euro-denominated operations. We had also designated the €300 million notes due in 2020 as a net investment hedge prior to our redemption of the notes. Due to the high degree of effectiveness between the hedging instruments and the exposure being hedged, fluctuations in the value of the euro-denominated debt due to exchange rate changes are offset by changes in the net investment. Accordingly, changes in the value of the euro-denominated debt are recognized in the cumulative translation adjustment section of other comprehensive income to offset changes in the value of the net investment in euro-denominated operations. Due to the fluctuations of the euro relative to the U.S. dollar, the U.S. dollar equivalent of this debt increases or decreases, resulting in the recognition of a pre-tax gain (loss) of \$22.4 million, \$45.2 million and \$(125.3) million in other comprehensive income for the years ended December 31, 2019, 2018, and 2017 respectively.

Commodity Price Exposure

Certain of our businesses are exposed to volatility in the prices of certain commodities, such as aluminum, steel, copper and various precious metals, among others. Our primary exposure to commodity pricing volatility relates to the use of these materials in purchased component parts or the purchase of raw materials. When possible, we maintain long-term fixed price contracts on raw materials and component parts; however, we are prone to exposure as these contracts expire.

Critical Accounting Policies and Estimates

Our consolidated financial statements and related financial information are based on the application of U.S. GAAP. The preparation of financial statements in accordance with U.S. GAAP requires the use of estimates, assumptions, judgments and interpretations of accounting principles that affect the amount of assets, liabilities, revenue and expenses on the consolidated financial statements. These estimates also affect supplemental information contained in our disclosures, including information regarding contingencies, risk and our financial condition. The significant accounting policies used in the preparation of our consolidated financial statements are discussed in Note 1 — Description of Business and Summary of Significant Accounting Policies in the Consolidated Financial Statements in Item 8 of this Form 10-K. The accounting assumptions and estimates discussed in the section below are most critical to an understanding of our financial statements because they inherently involve significant judgments and estimates. We believe our use of estimates and underlying accounting assumptions conforms to U.S. GAAP and is consistently applied. We evaluate our critical accounting estimates and judgments on an ongoing basis and update them as necessary. Management has discussed our critical accounting policies and estimates with the audit committee of the Board of Directors.

Revenue Recognition - Effective January 1, 2018, we adopted Accounting Standard Codification ("ASC") Topic 606, Revenue from Contracts with Customers. Under ASC Topic 606, a contract with a customer is an agreement which both parties have approved, that creates enforceable rights and obligations, has commercial substance and where payment terms

are identified and collectability is probable. Once we enter a contract, it is evaluated to identify performance obligations. For each performance obligation, revenue is recognized as control of promised goods or services transfers to the customer in an amount that reflects the consideration we expect to receive in exchange for those goods or services. The amount of revenue recognized takes into account variable consideration, such as discounts and volume rebates. The majority of our revenue is generated through the manufacture and sale of a broad range of specialized products and components, with revenue recognized upon transfer of title and risk of loss, which is generally upon shipment. Service revenue represents less than 5% of our total revenue and is recognized as the services are performed. In limited cases, our revenue arrangements with customers require delivery, installation, testing, certification, or other acceptance provisions to be satisfied before revenue is recognized. We include shipping costs billed to customers in revenue and the related shipping costs in cost of goods and services.

Inventories - Inventories for the majority of our subsidiaries, including all international subsidiaries, are stated at the lower of cost, determined on the first-in, first-out (FIFO) basis, or net realizable value. Other domestic inventories are stated at cost, determined on the last-in, first-out (LIFO) basis, which is less than market value. Under certain market conditions, estimates and judgments regarding the valuation of inventories are employed by us to properly value inventories.

Goodwill and Other Intangible Assets - We have significant goodwill and intangible assets on our consolidated balance sheets as a result of current and past acquisitions. The valuation and classification of these assets and the assignment of useful lives involve significant judgments and the use of estimates. In addition, the testing of goodwill and intangibles for impairment requires significant use of judgment and assumptions, particularly as it relates to the determination of fair value. Our indefinite-lived intangible assets and reporting units are tested and reviewed for impairment on an annual basis during the fourth quarter, or more frequently when indicators of impairment exist, when some portion but not all of a reporting unit is disposed of or classified as assets held for sale, or when a change in the composition of reporting units occurs for other reasons, such as a change in segments.

When performing an impairment test, we estimate fair value using the income-based valuation method. Under the income-based valuation method, fair value is determined based on the present value of estimated future cash flows, discounted at an appropriate risk-adjusted rate. We use our internal forecasts to estimate future cash flows and include an estimate of long-term future growth rate based on our most recent views of the long-term outlook for each reporting unit. Actual results may differ from these estimates. The discount rates used in these analyses vary by reporting unit and are based on a capital asset pricing model and published relevant industry rates. We use discount rates commensurate with the risks and uncertainties inherent to each reporting unit and in our internally developed forecasts. Discount rates used in our 2019 reporting unit valuations ranged from 8.0% to 9.5%.

Concurrent with the timing of the annual impairment test, effective October 1, 2019, we changed our management structure which resulted in a change in our operating segments and reporting units. As a result, management tested goodwill for impairment before and after the segment change under the old and new reporting unit structures. We performed a quantitative goodwill impairment test for each of our seven reporting units under the old structure and fifteen reporting units under the new structure, concluding that the fair values of all of its reporting units were substantially in excess of their carrying values. As such, no goodwill impairment was recognized. While we believe the assumptions used in the 2019 impairment analysis are reasonable and representative of expected results, actual results may differ from expectations.

Employee Benefit Plans - The valuation of our pension and other post-retirement plans requires the use of assumptions and estimates that are used to develop actuarial valuations of expenses and assets/liabilities. Inherent in these valuations are key assumptions, including discount rates, investment returns, projected salary increases and benefits and mortality rates. Annually, we review the actuarial assumptions used in our pension reporting and compare them with external benchmarks to ensure that they accurately account for our future pension obligations. Changes in assumptions and future investment returns could potentially have a material impact on our pension expense and related funding requirements. Our expected long-term rate of return on plan assets is reviewed annually based on actual and forecasted returns, economic trends and and portfolio allocation. Our discount rate assumption is determined by developing a yield curve based on high quality corporate bonds with maturities matching the plans' expected benefit payment streams. The plans' expected cash flows are then discounted by the resulting year-by-year spot rates. As disclosed in Note 17 — Employee Benefit Plans to the Consolidated Financial Statements, the 2019 weighted-average discount rates used to measure our qualified defined benefit obligations ranged from 1.18% to 3.40%, a general decrease from the 2018 rates, which ranged from 1.83% to 4.35%. The lower 2019 discount rates used for these plans would have increased the post-retirement benefit obligations by approximately \$31.3 million from the

amount recorded in the consolidated financial statements at December 31, 2019. Our pension expense is also sensitive to changes in the expected long-term rate of return on plan assets. A decrease of 25 basis points in the expected long-term rate of return on assets would have increased our defined benefit pension expense by approximately \$1.5 million.

Income Taxes - We have significant amounts of deferred tax assets that are reviewed for recoverability and valued accordingly. These assets are evaluated by using estimates of future taxable income streams and the impact of tax planning strategies. Reserves are also estimated, using more likely than not criteria, for ongoing audits regarding federal, state and non-U.S. issues that are currently unresolved. We routinely monitor the potential impact of these situations and believe that we have established the proper reserves. Reserves related to tax accruals and valuations related to deferred tax assets can be impacted by changes in tax codes and rulings (as further described below with respect to U.S. tax law), changes in statutory tax rates and our future taxable income levels. The provision for uncertain tax positions provides a recognition threshold and measurement attribute for financial statement tax benefits taken or expected to be taken in a tax return and disclosure requirements regarding uncertainties in income tax positions. The tax position is measured at the largest amount of benefit that is greater than 50 percent likely of being realized upon ultimate settlement. We record interest and penalties related to unrecognized tax benefits as a component of our provision for income taxes.

On December 22, 2017, the Tax Reform Act was enacted which permanently reduced the U.S. corporate income tax rate from a maximum of 35% to a flat 21% rate, effective January 1, 2018. As a result of the reduction in the U.S. corporate income tax rate, we revalued our ending net deferred tax liabilities as of December 31, 2017 and recognized a provisional tax benefit of \$172.0 million. The Tax Reform Act also imposed a tax for a one-time deemed repatriation of post-1986 unremitted foreign earnings and profits through the year ended December 31, 2017. For the year ended December 31, 2017, we recorded provisional tax expense related to the deemed repatriation of \$111.6 million payable over eight years.

On December 22, 2017, the SEC staff issued SAB 118 to address the application of U.S. GAAP in situations when a registrant did not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Tax Reform Act. In accordance with the SAB 118 guidance, we recognized the provisional tax impacts related to deemed repatriated earnings and the benefit for the revaluation of deferred tax assets and liabilities in its consolidated financial statements for the year ended December 31, 2017. In accordance with SAB 118, we finalized the financial reporting impact of the Tax Reform Act in the fourth quarter of 2018. For the year ended December 31, 2018, we recorded a \$4.2 million net tax benefit, which resulted in a 0.6% decrease in the effective tax rate, as an adjustment to the provisional estimates as a result of additional regulatory guidance and changes in interpretations and assumptions we made as a result of the Tax Reform Act.

Risk, Retention, Insurance - We have significant accruals and reserves related to the self-insured portion of our risk management program. These accruals require the use of estimates and judgment with regard to risk exposure and ultimate liability. We estimate losses under these programs using actuarial assumptions, our experience and relevant industry data. We review these factors quarterly and consider the current level of accruals and reserves adequate relative to current market conditions and experience.

Contingencies - We have established liabilities for environmental and legal contingencies at both the business and corporate levels. A significant amount of judgment and the use of estimates are required to quantify our ultimate exposure in these matters. The valuation of liabilities for these contingencies is reviewed on a quarterly basis to ensure that we have accrued the proper level of expense. The liability balances are adjusted to account for changes in circumstances for ongoing issues and the establishment of additional liabilities for emerging issues. While we believe that the amount accrued to-date is adequate, future changes in circumstances could impact these determinations.

Restructuring - We establish liabilities for restructuring activities at an operation when management has committed to an exit or reorganization plan and when termination benefits are probable and can be reasonably estimated based on circumstances at the time the restructuring plan is approved by management or when termination benefits are communicated. Exit costs may include contractual terminations and asset impairments as a result of an approved restructuring plan. The accrual of both severance and exit costs requires the use of estimates. Though we believe that these estimates accurately reflect the anticipated costs, actual results may be different than the estimated amounts.

Disposed and Discontinued Operations - From time to time we sell or discontinue or dispose of certain operations for various reasons. Estimates are used to adjust, if necessary, the assets and liabilities of discontinued operations to their estimated fair value. These estimates include assumptions relating to the proceeds anticipated as a result of the sale. Fair

value is established using internal valuation calculations along with market analysis of similar-type entities. The adjustments to fair value of these operations provide the basis for the gain or loss when sold. Changes in business conditions or the inability to sell an operation could potentially require future adjustments to these estimates. As noted previously, in 2019, we recorded an impairment on assets held for sale due to the sale of Finder. In 2018 and 2017, no impairment charges were recorded due to operations sold, discontinued, or disposed.

Stock-Based Compensation - We are required to recognize in our Consolidated Statements of Earnings the expense associated with all share-based payment awards made to employees and directors, including stock appreciation rights ("SARs"), restricted stock units and performance share awards. We use the Black-Scholes valuation model to estimate the fair value of SARs granted to employees. The model requires that we estimate the expected life of the SAR, expected forfeitures and the volatility of our stock using historical data. For additional information related to the assumptions used, see Note 15 — Equity and Cash Incentive Program to the Consolidated Financial Statements in Item 8 of this Form 10-K.

Recent Accounting Standards

See Note 1 — Description of Business and Summary of Significant Accounting Policies to the Consolidated Financial Statements in Item 8 of this Form 10-K for a discussion of recent accounting pronouncements and recently adopted accounting standards.

Non-GAAP Disclosures

In an effort to provide investors with additional information regarding our results as determined by GAAP, we also disclose non-GAAP information which we believe provides useful information to investors. Segment EBITDA, segment EBITDA margin, free cash flow, free cash flow as a percentage of revenue, free cash flow as a percentage of earnings from continuing operations, net debt, net capitalization, net debt to net capitalization ratio, adjusted working capital, organic revenue growth and rightsizing costs are not financial measures under GAAP and should not be considered as a substitute for earnings, cash flows from operating activities, debt or equity, working capital, revenue or restructuring costs as determined in accordance with GAAP, and they may not be comparable to similarly titled measures reported by other companies.

We believe that segment EBITDA and segment EBITDA margin are useful to investors and other users of our financial information in evaluating ongoing operating profitability as they exclude the depreciation and amortization expense related primarily to capital expenditures and acquisitions that occurred in prior years, as well as in evaluating operating performance in relation to our competitors. Segment EBITDA is calculated by adding back depreciation and amortization expense to segment earnings, which is the most directly comparable GAAP measure. We do not present segment net income because corporate expenses are not allocated at a segment level. Segment EBITDA margin is calculated as segment EBITDA divided by segment revenue.

We believe the net debt to net capitalization ratio, free cash flow and free cash flow ratios are important measures of liquidity. Net debt to net capitalization ratio is helpful in evaluating our capital structure and the amount of leverage we employ. Free cash flow and free cash flow ratios provide both management and investors a measurement of cash generated from operations that is available to fund acquisitions, pay dividends, repay debt and repurchase our common stock. Free cash flow as a percentage of revenue equals free cash flow divided by revenue. Free cash flow as a percentage of earnings from continuing operations equals free cash flow divided by earnings from continuing operations. We believe that reporting adjusted working capital, which is calculated as accounts receivable, plus inventory, less accounts payable, provides a meaningful measure of our operational results by showing the changes caused solely by revenue. We believe that reporting organic revenue growth, which exclude the impact of foreign currency exchange rates and the impact of acquisitions and divestitures, provides a useful comparison of our revenue performance and trends between periods. We believe that reporting rightsizing costs, which include restructuring and other charges, is important as it enables management and investors to better understand the financial impact of our broad-based cost reduction and operational improvement initiatives.

Reconciliations of non-GAAP measures can be found above in this Item 7, MD&A.

ITEM 7A. OUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The information required by this section is incorporated by reference to the section, "Financial Instruments and Risk Management", included within the MD&A in Item 7.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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(All other schedules are not required and have been omitted)

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f).

The Company's management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2019. In making this assessment, the Company's management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control*—*Integrated Framework* (2013).

Based on its assessment under the criteria set forth in *Internal Control* — *Integrated Framework* (2013), management concluded that, as of December 31, 2019, the Company's internal control over financial reporting was effective to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. GAAP.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2019 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears herein.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Dover Corporation:

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Dover Corporation and its subsidiaries (the "Company") as of December 31, 2019 and 2018, and the related consolidated statements of earnings, of comprehensive earnings, of stockholders' equity and of cash flows for each of the three years in the period ended December 31, 2019, including the related notes and financial statement schedule listed in the accompanying index for each of the three years in the period ended December 31, 2019 (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

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 opinions on the Company's consolidated financial statements and 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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

Critical Audit Matters

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

Goodwill Impairment Test

As described in Notes 1 and 9 to the consolidated financial statements, the Company's consolidated goodwill balance was \$3.783 billion as of December 31, 2019. Management performs its goodwill impairment test annually in the fourth quarter, or more frequently if events or circumstances indicate that the carrying value of goodwill may be impaired, when some portion but not all of a reporting unit is disposed of or classified as held for sale, or when a change in the composition of reporting units occurs for other reasons, such as a change in segments. Concurrent with the timing of the annual impairment test, effective October 1, 2019, the Company changed its management structure which resulted in a change in its operating segments and reporting units. As a result, management tested goodwill for impairment before and after the segment change under the old and new reporting unit structures. When performing the impairment test, management estimates fair value of each reporting unit using the income-based valuation method, which involves significant judgment. Under the income-based valuation method, fair value is determined based on the present value of estimated future cash flows, discounted at an appropriate risk-adjusted rate. Management uses internal forecasts to estimate future cash flows, which are based on historical performance and future estimated results.

The principal considerations for our determination that performing procedures relating to the goodwill impairment test is a critical audit matter are there was significant judgment by management when developing the fair value measurement of each reporting unit, which in turn led to a high degree of auditor judgment and subjectivity in performing procedures and in evaluating management's estimate of fair value of the reporting units, specifically related to revenue growth in the estimated future cash flows. In addition, the nature and extent of audit effort required to address the matter was a consideration, including the fact that in 2019, procedures were performed on reporting units before and after the Company's change in segments.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's goodwill impairment test, including controls over the determination of revenue growth in the estimated future cash flows. These procedures also included, among others, testing the identification of the reporting units, testing the carrying value of the reporting units, testing the appropriateness of the discounted cash flow model, assessing sensitivities over the assumptions in the discounted cash flow model, and testing the reasonableness of significant assumptions used by management, specifically revenue growth. When testing revenue growth, we evaluated whether the assumptions were reasonable by (i) understanding management's process to develop the estimated future cash flows, (ii) comparing management's forecasted revenue growth to current and prior period performance and (iii) comparing management's forecasted revenue growth to external market and/or industry data.

/s/ PricewaterhouseCoopers LLP

Chicago, Illinois February 14, 2020

We have served as the Company's auditor since 1995.

DOVER CORPORATION CONSOLIDATED STATEMENTS OF EARNINGS (In thousands, except per share amounts)

	 Years Ended December 31,				
	2019		2018		2017
Revenue	\$ 7,136,397	\$	6,992,118	\$	6,820,886
Cost of goods and services	 4,515,459		4,432,562		4,291,839
Gross profit	2,620,938		2,559,556		2,529,047
Selling, general and administrative expenses	1,599,098		1,716,444		1,722,161
Loss on assets held for sale	 46,946		<u> </u>		
Operating earnings	974,894		843,112		806,886
Interest expense	125,818		130,972		144,948
Interest income	(4,526)		(8,881)		(8,491)
Loss on extinguishment of debt	23,543				· —
Gain on sale of businesses					(203,135)
Other income, net	 (12,950)		(4,357)		(2,251)
Earnings before provision for income taxes	843,009		725,378		875,815
Provision for income taxes	 165,091		134,233		129,152
Earnings from continuing operations	677,918		591,145		746,663
(Loss) earnings from discontinued operations, net	 		(20,878)		65,002
Net earnings	\$ 677,918	\$	570,267	\$	811,665
Earnings per share from continuing operations:					
Basic	\$ 4.67	\$	3.94	\$	4.80
Diluted	\$ 4.61	\$	3.89	\$	4.73
(Loss) earnings per share from discontinued operations:					
Basic	\$ _	\$	(0.14)	\$	0.42
Diluted	\$ _	\$	(0.14)		0.41
Net earnings per share:					
Basic	\$ 4.67	\$	3.80	\$	5.21
Diluted	\$ 4.61	\$	3.75	\$	5.15
Weighted average shares outstanding:					
Basic	145,198		149,874		155,685
Diluted	146,992		152,133		157,744

DOVER CORPORATION CONSOLIDATED STATEMENTS OF COMPREHENSIVE EARNINGS (In thousands)

	Years Ended December 31,					
	2019			2018	2017	
Net earnings	\$	677,918	\$	570,267	\$	811,665
Other comprehensive earnings (loss), net of tax						
Foreign currency translation adjustments:						
Foreign currency translation (losses) gains		(5,025)		(59,970)		143,064
Reclassification of foreign currency translation losses to earnings		25,339				3,992
Total foreign currency translation adjustments		20,314		(59,970)		147,056
Pension and other postretirement benefit plans:						
Actuarial gains (losses)		47		(13,107)		12,439
Prior service credit (cost)		1,818		(14,661)		3,136
Amortization of actuarial losses included in net periodic pension cost		596		3,829		5,267
Amortization of prior service costs included in net periodic pension cost		2,141		2,875		3,007
Settlement and curtailment impact		806		9,926		(2,462)
Total pension and other postretirement benefit plans		5,408		(11,138)		21,387
Changes in fair value of cash flow hedges:						
Unrealized net gains (losses)		1,495		1,158		(1,801)
Net (gains) losses reclassified into earnings		(147)		1,541		(590)
Total cash flow hedges		1,348		2,699		(2,391)
Other						(1,485)
Other comprehensive earnings (loss), net of tax		27,070		(68,409)		164,567
Comprehensive earnings	\$	704,988	\$	501,858	\$	976,232

DOVER CORPORATION CONSOLIDATED BALANCE SHEETS

(In thousands, except share and per share amounts)

	De	cember 31, 2019	Dec	cember 31, 2018
Assets				
Current assets:				
Cash and cash equivalents	\$	397,253	\$	396,221
Receivables, net of allowances of \$29,381 and \$28,469		1,217,190		1,231,859
Inventories		806,141		748,796
Prepaid and other current assets		127,846		126,878
Total current assets		2,548,430		2,503,754
Property, plant and equipment, net		842,318		806,497
Goodwill		3,783,347		3,677,328
Intangible assets, net		1,055,014		1,134,256
Other assets and deferred charges		440,368		243,936
Total assets	\$	8,669,477	\$	8,365,771
Liabilities and Stockholders' Equ	ity			
Current liabilities:				
Notes payable	\$	84,700	\$	220,318
Accounts payable		983,293		969,531
Accrued compensation and employee benefits		226,658		212,666
Accrued insurance		98,432		97,600
Other accrued expenses		339,060		313,452
Federal and other income taxes		17,748		13,854
Total current liabilities		1,749,891		1,827,421
Long-term debt		2,985,716		2,943,660
Deferred income taxes		322,036		339,325
Noncurrent income tax payable		52,000		54,304
Other liabilities		527,174		432,395
Stockholders' equity:				
Preferred stock - \$100 par value; 100,000 shares authorized; none issued		_		_
Common stock - \$1 par value; 500,000,000 shares authorized; 258,551,748 and 257,822,352 shares issued at December 31, 2019 and 2018		258,552		257,822
Additional paid-in capital		869,719		886,016
Retained earnings		8,211,257		7,815,486
Accumulated other comprehensive loss		(216,026)		(243,096)
Treasury stock, at cost: 114,249,432 and 112,905,810 shares at December 31, 2019 and 2018		(6,090,842)		(5,947,562)
Total stockholders' equity		3,032,660		2,768,666
Total liabilities and stockholders' equity	\$	8,669,477	\$	8,365,771

DOVER CORPORATION CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(In thousands, except per share amounts)

	Common Stock \$1 Par Value	Additional Paid-In Capital	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Earnings (Loss)	Total Stockholders' Equity
Balance at December 31, 2016	\$ 256,538	\$ 946,755	\$ (4,972,016)	\$ 7,927,795	\$ (359,326)	\$ 3,799,746
Net earnings	_	_	_	811,665	_	811,665
Dividends paid (\$1.82 per share)	_	_	_	(283,959)	_	(283,959)
Common stock issued for the exercise of share-based awards	454	(18,897)	_		_	(18,443)
Stock-based compensation expense	_	26,528	_	_	_	26,528
Common stock acquired		_	(105,023)	_	_	(105,023)
Other comprehensive earnings, net of tax	_	_	_	_	164,567	164,567
Other	_	(11,901)	_	_	_	(11,901)
Balance at December 31, 2017	256,992	942,485	(5,077,039)	8,455,501	(194,759)	4,383,180
Adoption of ASU 2018-02	_			12,856	(12,856)	
Cumulative catch-up adjustment related to Adoption of Topic 606	_	_	_	175	_	175
Net earnings	_	_	_	570,267	_	570,267
Dividends paid (\$1.90 per share)	_	_	_	(283,570)	_	(283,570)
Separation of Apergy	_	_	_	(939,743)	32,928	(906,815)
Common stock issued for the exercise of share-based awards	830	(47,084)	_	_	_	(46,254)
Stock-based compensation expense	_	24,442	_	_	_	24,442
Common stock acquired	_	(24,454)	(870,523)	_	_	(894,977)
Other comprehensive loss, net of tax	_	_	_	_	(68,409)	(68,409)
Other		(9,373)				(9,373)
Balance at December 31, 2018	257,822	886,016	(5,947,562)	7,815,486	(243,096)	2,768,666
Net earnings	_	_	_	677,918	_	677,918
Dividends paid (\$1.94 per share)	_	_	_	(282,197)	_	(282,197)
Common stock issued for the exercise of share-based awards	730	(38,100)	_	_	_	(37,370)
Stock-based compensation expense	_	29,702	_	_	_	29,702
Common stock acquired	_	_	(143,280)	_	_	(143,280)
Other comprehensive earnings, net of tax	_	_	_	_	27,070	27,070
Other	_	(7,899)	_	50	_	(7,849)
Balance at December 31, 2019	\$ 258,552	\$ 869,719	\$ (6,090,842)	\$ 8,211,257	\$ (216,026)	\$ 3,032,660

DOVER CORPORATION CONSOLIDATED STATEMENTS OF CASH FLOWS (In thousands)

	Years Ended December 31,							
		2019		2018		2017		
Operating Activities of Continuing Operations				- - - - - - - - - -				
Net earnings	\$	677,918	\$	570,267	\$	811,665		
Adjustments to reconcile net earnings to cash from operating activities:								
Loss (earnings) from discontinued operations, net				20,878		(65,002)		
Loss on assets held for sale		46,946		_		_		
Loss on extinguishment of debt		23,543		_		_		
Depreciation and amortization		272,287		282,580		283,278		
Stock-based compensation		29,702		23,698		24,073		
Gain on sale of businesses		_		_		(203,135)		
Provision for losses on accounts receivable (net of recoveries)		5,933		3,875		10,341		
Deferred income taxes		(11,966)		(35,448)		(160,395)		
Employee benefit plan expense		5,844		11,912		12,191		
Contributions to employee benefit plans		(21,436)		(25,933)		(18,588)		
Other, net		(3,652)		(6,762)		(4,216		
Cash effect of changes in assets and liabilities (excluding effects of acquisitions, dispositions and foreign exchange):				(, ,				
Accounts receivable		(7,903)		(87,573)		(43,450)		
Inventories		(56,870)		(85,052)		605		
Prepaid expenses and other assets		(25,797)		(7,453)		(5,232)		
Accounts payable		18,270		106,561		94,052		
Accrued compensation and employee benefits		15,580		(7,037)		23,319		
Accrued expenses and other liabilities		(12,656)		(5,026)		(36,024)		
Accrued taxes		(10,437)		29,706		15,927		
Net cash provided by operating activities of continuing operations		945,306		789,193		739,409		
Investing Activities of Continuing Operations		715,500		707,173		737,107		
Additions to property, plant and equipment		(186,804)		(170,994)		(170,068)		
Acquisitions (net of cash and cash equivalents acquired)		(215,687)		(68,557)		(27,188)		
Proceeds from sale of property, plant and equipment		4,168		5,908		11,774		
Proceeds from sale of businesses		24,218		3,937		372,666		
Other		(10,150)		(15,774)		21,151		
		(384,255)	_					
Net cash (used in) provided by investing activities of continuing operations		(364,233)		(245,480)		208,335		
Financing Activities of Continuing Operations				(00 (42				
Cash received from Apergy, net of cash distributed		(125 (50)		689,643		(100.506		
Change in commercial paper and notes payable, net		(135,650)		(10,722)		(182,596		
Proceeds from long-term debt		847,469		(250,000)		_		
Repayment of long-term debt		(805,112)		(350,000)		(202.050)		
Dividends to stockholders		(282,197)		(283,570)		(283,959)		
Purchase of common stock		(143,280)		(894,977)		(105,023)		
Payments for employee tax obligations upon exercise of share-based awards		(37,370)		(46,254)		(18,443)		
Other		(1,902)	_	(1,958)		(2,912)		
Net cash used in financing activities of continuing operations		(558,042)		(897,838)		(592,933		
Cash Flows from Discontinued Operations								
Net cash provided by operating activities of discontinued operations		_		9,442		96,225		
Net cash used in investing activities of discontinued operations		_		(23,705)		(46,484)		
Net cash used in financing activities of discontinued operations						(1,208)		
Net cash (used in) provided by discontinued operations		_		(14,263)		48,533		
Effect of exchange rate changes on cash and cash equivalents		(1,977)	_	10,645		1,474		
Net (decrease) increase in cash and cash equivalents		1,032		(357,743)		404,818		
Cash and cash equivalents at beginning of year		396,221		753,964	_	349,146		
Cash and cash equivalents at end of year	\$	397,253	\$	396,221	\$	753,964		
Supplemental information - cash paid during the year for:								
Income taxes	\$	191,084	\$	135,427	\$	337,987		
Interest		126,753		131,823		140,863		

DOVER CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in thousands except share data and where otherwise indicated)

1. Description of Business and Summary of Significant Accounting Policies

Description of Business

Dover Corporation ("Dover" or "Company") is a diversified global manufacturer and solutions provider delivering innovative equipment and components, consumable supplies, aftermarket parts, software and digital solutions and support services. The Company's businesses are based primarily in the United States and Europe with manufacturing and other operations throughout the world. The Company operates through five business segments that are structured around similar business models, go-to market strategies and manufacturing practices: Engineered Products, Fueling Solutions, Imaging & Identification, Pumps & Process Solutions and Refrigeration & Food Equipment. For additional information on the Company's segments, see Note 19 — Segment Information.

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. Intercompany accounts and transactions have been eliminated in consolidation. The results of operations of acquired businesses are included from the dates of acquisitions. As discussed in Note 5 — Discontinued and Disposed Operations, the Company is reporting the assets, liabilities, results of operations and cash flows of Apergy prior to the spin-off, as discontinued operations for all periods presented.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in the Consolidated Financial Statements and accompanying disclosures. These estimates may be adjusted due to changes in future economic, industry, or customer financial conditions, as well as changes in technology or demand. Estimates are used for, but not limited to, allowances for doubtful accounts receivable, net realizable value of inventories, restructuring reserves, warranty reserves, pension and post-retirement plans, stock-based compensation, useful lives for depreciation and amortization of long-lived assets, future cash flows associated with impairment testing for goodwill, indefinite-lived intangible assets and other long-lived assets, deferred tax assets, uncertain income tax positions and contingencies. Actual results may ultimately differ from estimates, although management does not believe such differences would materially affect the consolidated financial statements in any individual year. Estimates and assumptions are periodically reviewed and the effects of revisions are reflected in the Consolidated Financial Statements in the period that they are determined.

Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, demand deposits and short-term investments, which are highly liquid in nature and have original maturities at the time of purchase of three months or less. The carrying value of cash and cash equivalents approximate fair value.

Accounts Receivable and Allowance for Doubtful Accounts

Accounts receivable are recorded at face amounts less an allowance for doubtful accounts. The allowance is an estimate based on historical collection experience, current economic and market conditions and a review of the current status of each customer's trade accounts receivable. Management evaluates the aging of the accounts receivable balances and the financial condition of its customers to estimate the amount of accounts receivable that may not be collected in the future and records the appropriate provision.

Inventories

Inventories for the majority of the Company's subsidiaries, including all international subsidiaries, are stated at the lower of cost, determined on the first-in, first-out (FIFO) basis, or net realizable value. Other domestic inventories are stated at cost, determined on the last-in, first-out (LIFO) basis, which is less than market value.

DOVER CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in thousands except share data and where otherwise indicated)

Property, Plant and Equipment

Property, plant and equipment includes the historical cost of land, buildings, machinery and equipment, purchased software and significant improvements to existing plant and equipment or, in the case of acquisitions, the fair value appraisal of assets. Expenditures for maintenance, repairs and minor renewals are expensed as incurred. When property or equipment is sold or otherwise disposed of, the related cost and accumulated depreciation are removed from the respective accounts and the gain or loss realized on disposition is reflected in earnings. The Company depreciates its assets on a straight-line basis over their estimated useful lives as follows: buildings and improvements 5 to 31.5 years; machinery and equipment 3 to 15 years; furniture and fixtures 3 to 7 years; vehicles 3 to 7 years; and software 3 to 10 years.

Derivative Financial Instruments

The Company uses derivative financial instruments to hedge its exposures to various risks, including interest rate and foreign currency exchange rate risk. The Company does not enter into derivative financial instruments for speculative purposes and does not have a material portfolio of derivative financial instruments. Derivative financial instruments used for hedging purposes must be designated and effective as a hedge of the identified risk exposure at inception of the contract. The Company recognizes all derivatives as either assets or liabilities on the consolidated balance sheet and measures those instruments at fair value. For derivatives designated as hedges of the fair value of assets or liabilities, the changes in fair value of both the derivatives and of the hedged items are recorded in current earnings. For derivatives designated as cash flow hedges, the change in the fair value of the derivatives is recorded as a component of other comprehensive earnings and subsequently recognized in net earnings when the hedged items impact earnings.

Goodwill and Other Intangible Assets

Goodwill represents the excess of purchase price over the fair value of net assets acquired. Goodwill and certain other intangible assets deemed to have indefinite lives (primarily trademarks) are not amortized. For goodwill, impairment tests are required at least annually, or more frequently if events or circumstances indicate that it may be impaired, when some portion but not all of a reporting unit is disposed of or classified as assets held for sale, or when a change in the composition of reporting units occurs for other reasons, such as a change in segments.

The Company performs its goodwill impairment test annually in the fourth quarter at the reporting unit level. Concurrent with the timing of the annual impairment test, effective October 1, 2019, the Company changed its management structure which resulted in a change in its operating segments and reporting units. As a result, management tested goodwill for impairment before and after the segment change under the old and new reporting unit structures. Based on its new organizational structure, the Company identified fifteen reporting units for which cash flows are determinable and to which goodwill may be allocated.

A quantitative test is used to determine existence of goodwill impairment and the amount of the impairment loss at the reporting unit level. The quantitative test compares the fair value of a reporting unit with its carrying amount, including goodwill. The Company uses an income-based valuation method, determining the present value of estimated future cash flows, to estimate the fair value of a reporting unit. If the fair value of a reporting unit exceeds its carrying amount, goodwill of the reporting unit is not impaired. If the carrying amount of a reporting unit exceeds its fair value, an impairment loss shall be recognized in an amount equal to that excess, limited to the total amount of goodwill allocated to that reporting unit. Factors used in the impairment analysis require significant judgment, and actual results may differ from assumed and estimated amounts. The Company uses its own market assumptions including internal projections of future cash flows, discount rates and other assumptions considered reasonable in the analysis. These forecasts are based on historical performance and future estimated results. The discount rates used in these analyses vary by reporting unit and are based on a capital asset pricing model and published relevant industry rates. The Company uses discount rates commensurate with the risks and uncertainties inherent to each reporting unit and in the internally developed forecasts. See Note 9 — Goodwill and Other Intangible Assets for further discussion of the Company's annual goodwill impairment test and results.

The Company uses an income-based valuation method to annually test its indefinite-lived intangible assets for impairment. The fair value of the intangible asset is compared to its carrying value. This method uses the Company's own market assumptions, which are considered reasonable. Any excess of carrying value over the estimated fair value is recognized as an impairment loss. No impairment of indefinite-lived intangible assets was required for the years ended December 31, 2019, 2018, or 2017.

(Amounts in thousands except share data and where otherwise indicated)

Other intangible assets with determinable lives primarily consist of customer intangibles, unpatented technologies, patents and trademarks. The other intangible assets are amortized over their estimated useful lives, ranging from 5 to 20 years.

Long-lived assets (including definite-lived intangible assets) are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable, such as a significant sustained change in the business climate. If an indicator of impairment exists for any grouping of assets, an estimate of undiscounted future cash flows is produced and compared to its carrying value. If an asset is determined to be impaired, the loss is measured by the excess of the carrying amount of the asset over its fair value, as determined by an estimate of discounted future cash flows.

Leases

Effective January 1, 2019, the Company adopted Accounting Standard Codification ("ASC") Topic 842, Leases, which requires the recording of operating lease right-of-use assets ("ROU") and operating lease liabilities. Finance leases were not impacted by the adoption of ASC Topic 842, as finance lease liabilities and the corresponding ROU assets were already recorded in the balance sheet under the previous guidance, ASC Topic 840.

The Company has operating and finance leases for corporate offices, manufacturing plants, research and development facilities, shared services facilities, vehicle fleets and certain office and manufacturing equipment. Leases with an initial term of 12 months or less are not recorded in the balance sheet. The Company has elected the practical expedient to account for each separate lease component of a contract and its associated non-lease components as a single lease component, thus causing all fixed payments to be capitalized. The Company also elected the package of practical expedients permitted within the new standard, which among other things, allows the Company to carry forward historical lease classification. Variable lease payment amounts that cannot be determined at the commencement of the lease, such as increases in lease payments based on changes in index rates or usage, are not included in the ROU assets or liabilities. These are expensed as incurred and recorded as variable lease expense.

The Company determines if an arrangement is a lease at inception of a contract. Operating lease ROU assets are included in other assets and deferred charges and operating lease liabilities are included in other accrued expenses and other liabilities in the Consolidated Balance Sheet. Finance lease ROU assets are included in property and equipment, and the related lease liabilities are included in other accrued expenses and other liabilities in the Consolidated Balance Sheet.

ROU assets represent the Company's right to use an underlying asset during the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. ROU assets and liabilities are recognized at commencement date based on the net present value of fixed lease payments over the lease term. The lease term includes options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. ROU assets also include any advance lease payments made and exclude lease incentives. As most of the Company's operating leases do not provide an implicit rate, the Company uses its incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. Finance lease agreements generally include an interest rate that is used to determine the present value of future lease payments. Fixed operating lease expense and finance lease depreciation expense are recognized on a straight-line basis over the lease term.

Restructuring Accruals

The Company takes actions to reduce headcount, close facilities, or otherwise exit operations. Such restructuring activities at an operation are recorded when management has committed to an exit or reorganization plan and when termination benefits are probable and can be reasonably estimated based on circumstances at the time the restructuring plan is approved by management or when termination benefits are communicated. Exit costs may include contractual terminations and asset impairments as a result of an approved restructuring plan. The accrual of both severance and exit costs requires the use of estimates. Though the Company believes that its estimates accurately reflect the anticipated costs, actual results may be different from the original estimated amounts.

Foreign Currency

Assets and liabilities of non-U.S. subsidiaries, where the functional currency is not the U.S. dollar, have been translated at year-end exchange rates and profit and loss accounts have been translated using weighted-average monthly exchange

(Amounts in thousands except share data and where otherwise indicated)

rates. Foreign currency translation gains and losses are included in the Consolidated Statements of Comprehensive Earnings as a component of other comprehensive earnings (loss). Assets and liabilities of an entity that are denominated in currencies other than an entity's functional currency are re-measured into the functional currency using end of period exchange rates or historical rates, where applicable to certain balances. Gains and losses related to these re-measurements are recorded within the Consolidated Statements of Earnings as a component of other income, net. Gains and losses arising from intercompany foreign currency transactions that are of a long-term investment in nature are reported in the same manner as translation adjustments.

Revenue Recognition

Effective January 1, 2018, the Company adopted ASC Topic 606, Revenue from Contracts with Customers. Under ASC Topic 606, a contract with a customer is an agreement which both parties have approved, that creates enforceable rights and obligations, has commercial substance and where payment terms are identified and collectability is probable. Once the Company has entered a contract, it is evaluated to identify performance obligations. For each performance obligation, revenue is recognized as control of promised goods or services transfers to the customer in an amount that reflects the consideration the Company expects to receive in exchange for those goods or services. The amount of revenue recognized takes into account variable consideration, such as discounts and volume rebates.

Prior to 2018, revenue was recognized when all the following conditions were satisfied: a) persuasive evidence of an arrangement exists, b) price is fixed or determinable, c) collectability is reasonably assured and d) delivery has occurred or services have been rendered.

The majority of the Company's revenue is generated through the manufacture and sale of a broad range of specialized products and components, with revenue recognized upon transfer of control, title and risk of loss, which is generally upon shipment. Service revenue represents less than 5% of total revenue and is recognized as the services are performed. In limited cases, revenue arrangements with customers require delivery, installation, testing, certification, or other acceptance provisions to be satisfied before revenue is recognized. The Company includes shipping costs billed to customers in revenue and the related shipping costs in cost of goods and services.

Stock-Based Compensation

The principal awards issued under the Company's stock-based compensation plans include non-qualified stock appreciation rights ("SARs"), restricted stock units and performance share awards. The cost for such awards is measured at the grant date based on the fair value of the award. At the time of grant, the Company estimates forfeitures, based on historical experience, in order to estimate the portion of the award that will ultimately vest. The value of the portion of the award that is expected to ultimately vest is recognized as expense on a straight-line basis, generally over the explicit service period of three years (except for retirement-eligible employees) and is included in selling, general and administrative expenses in the Consolidated Statements of Earnings. Expense for awards granted to retirement-eligible employees is recorded over the period from the date of grant through the date the employee first becomes eligible to retire and is no longer required to provide service. See Note 15 — Equity and Cash Incentive Program for additional information related to the Company's stock-based compensation.

Income Taxes

The provision for income taxes includes federal, state, local and non-U.S. taxes. Tax credits, primarily for research and experimentation, are recognized as a reduction of the provision for income taxes in the year in which they are available for tax purposes. Deferred taxes are provided using enacted rates on the future tax consequences of temporary differences. Temporary differences between the financial statement carrying amounts of assets and liabilities and their respective tax basis and the tax benefit of carryforwards. A valuation allowance is established for deferred tax assets for which it is more likely than not that some portion or all will not be realized. In assessing the need for a valuation allowance, management considers all available evidence, including the future reversal of existing taxable temporary differences, taxable income in carryback periods, prudent and feasible tax planning strategies and estimated future taxable income. The valuation allowance can be affected by changes to tax regulations, interpretations and rulings, changes to enacted statutory tax rates and changes to future taxable income estimates.

(Amounts in thousands except share data and where otherwise indicated)

Tax benefits are recognized from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position in consideration of applicable tax statutes and related interpretations and precedents. Tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized on ultimate settlement.

On December 22, 2017, the U.S. bill commonly referred to as the Tax Cuts and Jobs Act ("Tax Reform Act") was enacted, which significantly changed U.S. tax law by, among other things, lowering corporate income tax rates, implementing a territorial tax system and imposing a one-time repatriation tax on deemed repatriated earnings of foreign subsidiaries. The Tax Reform Act reduced the U.S. corporate income tax rate from a maximum of 35% to a flat 21% rate, effective January 1, 2018. The Tax Reform Act also provided for a one-time deemed repatriation of post-1986 undistributed foreign subsidiary earnings and profits ("E&P") through the year ended December 31, 2017. The Global Intangible Low-Taxed Income ("GILTI") provisions of the Tax Reform Act require the Company to include in its U.S. income tax return foreign subsidiary earnings in excess of an allowable return on the foreign subsidiary's tangible assets. The Company is subject to incremental U.S. tax on GILTI income due to expense allocations required by the U.S. foreign tax credit rules. The Company has elected to account for the GILTI tax in the period in which it is incurred, and therefore has not provided any deferred tax impacts of GILTI in its consolidated financial statements.

On December 22, 2017, the SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118") to address the application of U.S. GAAP in situations when a registrant did not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Tax Reform Act. The Company recognized the provisional tax impacts related to deemed repatriated earnings and the benefit for the revaluation of deferred tax assets and liabilities, and included these amounts in its consolidated financial statements for the year ended December 31, 2017. In accordance with SAB 118, the Company finalized the financial reporting impact of the Tax Reform Act in the fourth quarter of 2018. For the year ended December 31, 2018, the Company recorded a \$4.2 million net tax benefit, which resulted in a 0.6% decrease in the effective tax rate, as an adjustment to provisional estimates as a result of additional regulatory guidance and changes in interpretations and assumptions the Company made as a result of the Tax Reform Act.

Research and Development Costs

Research and development costs, including qualifying engineering costs, are expensed when incurred and amounted to \$140,957 in 2019, \$143,033 in 2018 and \$130,536 in 2017. These costs as a percent of revenue were 2.0% in 2019, 2.0% in 2018 and 1.9% in 2017.

Advertising Costs

Advertising costs are expensed when incurred and amounted to \$24,609 in 2019, \$26,831 in 2018 and \$33,369 in 2017.

Risk, Retention, Insurance

The Company currently self-insures its product and commercial general liability claims up to \$5.0 million per occurrence, its workers' compensation claims up to \$0.8 million per occurrence and automobile liability claims up to \$1.0 million per occurrence. Third-party insurance provides primary level coverage in excess of these amounts up to certain specified limits. In addition, the Company has excess liability insurance from third-party insurers on both an aggregate and an individual occurrence basis well in excess of the limits of the primary coverage. A worldwide program of property insurance covers the Company's owned and leased property and business interruption that may occur due to an insured hazard affecting those properties, subject to reasonable deductibles and aggregate limits. The Company's property and casualty insurance programs contain various deductibles that, based on the Company's experience, are typical and customary for a company of its size and risk profile. The Company does not consider any of the deductibles to represent a material risk to the Company. The Company generally maintains deductibles for claims and liabilities related primarily to workers' compensation, health and welfare claims, general commercial, product and automobile liability, cybersecurity risks, property damage and business interruption resulting from certain events. The Company accrues for claim exposures that are probable of occurrence and can be reasonably estimated. As part of the Company's risk management program, insurance is maintained to transfer risk beyond the level of self-retention and provide protection on both an individual claim and annual aggregate basis.

(Amounts in thousands except share data and where otherwise indicated)

Reclassifications – Certain amounts in prior years have been reclassified to conform to the current year presentation. As described in Note 19 — Segment Information, the Company realigned into five business segments effective October 1, 2019.

Recent Accounting Pronouncements

Recently Issued Accounting Standards

The following standards, issued by the Financial Accounting Standards Board ("FASB"), will, or are expected to, result in a change in practice and/or have a financial impact to the Company's Consolidated Financial Statements:

In June 2016, the FASB issued Accounting Standards Update ("ASU") No. 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, which amends the impairment model by requiring entities to use a forward-looking approach based on expected losses rather than incurred losses to estimate credit losses on certain types of financial instruments, including trade receivables. This may result in the earlier recognition of allowances for losses. In addition, the FASB issued ASU 2019-04, Codification Improvements to Topic 326 which provides clarity on certain aspects of the amendments in ASU 2016-13. The guidance is effective for interim and annual periods for the Company beginning on January 1, 2020. The Company believes that the most notable impact of this ASU will relate to its processes around the assessment of the adequacy of its allowance for doubtful accounts on trade accounts receivable and the recognition of credit losses. Management does not expect this update to have a material impact to the Company's Consolidated Financial Statements.

Recently Adopted Accounting Standards

In July 2019, the FASB issued ASU 2019-07, Codification Updates to SEC Sections. This ASU amends various SEC paragraphs pursuant to the issuance of SEC Final Rule Releases No. 33-10532, Disclosure Update and Simplification, and Nos. 33-10231 and 33-10442, Investment Company Reporting Modernization. One of the changes in the ASU requires a presentation of changes in stockholders' equity in the form of a reconciliation, either as a separate financial statement or in the notes to the financial statements, for the current and comparative year-to-date interim periods. The Company presented changes in stockholders' equity as separate financial statements for the current and comparative year-to-date interim periods beginning on January 1, 2019. The additional elements of the ASU did not have a material impact on the Company's Consolidated Financial Statements. This guidance was effective immediately upon issuance.

In August 2018, the FASB issued ASU 2018-15, Intangibles-Goodwill and Other Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract. The amendments in this update align the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). The accounting for the service element of a hosting arrangement that is a service contract is not affected by the amendments in this update. The Company early adopted the guidance prospectively beginning on January 1, 2019. The adoption of this ASU did not have a material impact on the Company's Consolidated Financial Statements.

In August 2017, the FASB issued ASU 2017-12, Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities. This ASU provides new guidance about income statement classification and eliminates the requirement to separately measure and report hedge ineffectiveness. The entire change in fair value for qualifying hedge instruments will be recorded in Other Comprehensive Income ("OCI") and amounts deferred in OCI will be reclassified to earnings in the same income statement line item in which the earnings effect of the hedged item is reported. The Company adopted this guidance on January 1, 2019. The adoption of this ASU did not have a material impact on the Company's Consolidated Financial Statements.

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842), which amended existing guidance to require lessees to recognize assets and liabilities on the balance sheet for the rights and obligations created by long-term leases and to disclose additional quantitative and qualitative information about leasing arrangements. This ASU also provides clarifications surrounding the presentation of the effects of leases in the income statement and statement of cash flows. In addition, the FASB issued ASU 2018-11, Leases Targeted Improvements, which provides an additional transition method that allows entities to apply the new leases standard at adoption date. The Company elected this new transition method when it adopted ASU 2016-02 on January 1, 2019. Upon adoption on January 1, 2019, total assets and liabilities increased due to the

(Amounts in thousands except share data and where otherwise indicated)

recording of right-of-use assets and lease liabilities amounting to approximately \$163 million. See Note 8 — Leases for further details.

2. Spin-off of Apergy Corporation

On May 9, 2018, Dover completed the distribution of Apergy to its shareholders. The transaction was completed through the pro rata distribution of 100% of the common stock of Apergy to Dover's shareholders of record as of the close of business on April 30, 2018. Each Dover shareholder received one share of Apergy common stock for every two shares of Dover common stock held as of the record date.

The following is a summary of the assets and liabilities transferred to Apergy as part of the separation on May 9, 2018:

Assets:	
Cash and cash equivalents	\$ 10,357
Current assets	462,620
Non-current assets	 1,438,760
	\$ 1,911,737
Liabilities:	
Current liabilities	\$ 185,354
Non-current liabilities	 119,568
	\$ 304,922
Net assets distributed to Apergy Corporation	\$ 1,606,815
Less: Cash received from Apergy Corporation	 700,000
Net distribution to Apergy Corporation	\$ 906,815

In connection with the spin-off from the Company, Apergy issued and sold \$300.0 million in aggregate principal amount of its 6.375% senior notes due May 2026 in a private offering exempt from the registration requirements of the Securities Act of 1933, as amended, and incurred \$415.0 million in borrowings under its new senior secured term loan facility to fund a one-time cash payment of \$700.0 million to Dover. Dover received net cash of \$689.6 million upon separation, which reflects \$10.4 million of cash held by Apergy on the distribution date and retained by it in connection with its separation from Dover. Dover utilized the proceeds from Apergy as the primary source of funding for the 2018 accelerated share repurchase program. See Note 21 — Stockholders' Equity for further information.

Included within the net assets distributed to Apergy is approximately \$33 million of accumulated other comprehensive earnings attributable to Apergy, relating primarily to foreign currency translation gains, offset by unrecognized losses on pension obligations.

The historical results of Apergy, including the results of operations, cash flows, and related assets and liabilities have been reclassified to discontinued operations for all periods presented herein. See Note 5 — Discontinued and Disposed Operations.

3. Revenue

Revenue from contracts with customers

Effective January 1, 2018, the Company adopted ASC Topic 606, Revenue from Contracts with Customers, using the modified retrospective method applied to those contracts which were not completed as of January 1, 2018. Accordingly, all periods prior to January 1, 2018 are presented in accordance with ASC Topic 605, Revenue Recognition.

Under ASC Topic 606, a contract with a customer is an agreement which both parties have approved, that creates enforceable rights and obligations, has commercial substance and where payment terms are identified and collectability is probable. Once the Company has entered a contract, it is evaluated to identify performance obligations. For each performance obligation, revenue is recognized as control of promised goods or services transfers to the customer in an amount that reflects the

(Amounts in thousands except share data and where otherwise indicated)

consideration the Company expects to receive in exchange for those goods or services. The amount of revenue recognized takes into account variable consideration, such as discounts and volume rebates.

A majority of the Company's revenue is short cycle in nature with shipments within one year from order. A small portion of the Company's revenue derives from contracts extending over one year. The Company's payment terms generally range between 30 to 90 days and vary by the location of businesses, the type of products manufactured to be sold and the volume of products sold, among other factors.

Disaggregation of Revenue

Revenue from contracts with customers is disaggregated by segments and geographic location, as it best depicts the nature and amount of the Company's revenue.

See Note 19 — Segment Information for revenue by segment and geographic location.

Performance Obligations

A performance obligation is a promise in a contract to transfer a distinct good or service, or a bundle of goods or services, to the customer, and is the unit of accounting under ASC Topic 606. A contract's transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. A majority of the Company's contracts have a single performance obligation which represents, in most cases, the equipment or product being sold to the customer. Some contracts include multiple performance obligations such as a product and the related installation, extended warranty and/or maintenance services. These contracts require judgment in determining the number of performance obligations.

The Company has elected to use the practical expedient to not adjust the promised amount of consideration for the effects of a significant financing component if it is expected, at contract inception, that the period between when Dover transfers a promised good or service to a customer, and when the customer pays for that good or service, will be one year or less. Thus, the Company may not consider an advance payment to be a significant financing component, if it is received less than one year before product completion.

The majority of the Company's contracts offer assurance-type warranties in connection with the sale of a product to a customer. Assurance-type warranties provide a customer with assurance that the related product will function as the parties intended because it complies with agreed-upon specifications. Such warranties do not represent a separate performance obligation.

The Company may also offer service-type warranties that provide services to the customer, in addition to the assurance that the product complies with agreed-upon specifications. If a warranty is determined to be a service-type warranty, it represents a distinct service and is treated as a separate performance obligation.

For contracts with multiple performance obligations, the Company allocates the total transaction price to each performance obligation in an amount based on the estimated relative standalone selling prices of the promised goods or services underlying each performance obligation. The Company uses an observable price to determine the standalone selling price for separate performance obligations or a cost plus margin approach when one is not available.

Over 95% of the Company's performance obligations are recognized at a point in time that relate to the manufacture and sale of a broad range of products and components. Revenue is recognized when control transfers to the customer upon shipment or completion of installation, testing, certification, or other substantive acceptance provisions required under the contract. Less than 5% of the Company's revenue is recognized over time and relates to the sale of engineered to order equipment or services.

For revenue recognized over time, there are two types of methods for measuring progress and both are relevant to the Company: (1) input methods and (2) output methods. Although this may vary by business, input methods generally are based on costs incurred relative to estimated total costs. Output methods generally are based on a measurement of progress, such as milestone achievement. The businesses use the method and measure of progress that best depicts the transfer of control to the customer of the goods or services to date relative to the remaining goods or services promised under the contract.

(Amounts in thousands except share data and where otherwise indicated)

Transaction Price Allocated to the Remaining Performance Obligations

At December 31, 2019, we estimated that \$80.4 million in revenue is expected to be recognized in the future related to performance obligations that are unsatisfied (or partially unsatisfied) at the end of the reporting period. We expect to recognize approximately 50% of our unsatisfied (or partially unsatisfied) performance obligations as revenue in 2020, with the remaining balance to be recognized in 2021 and thereafter.

Remaining consideration, including variable consideration, from contracts with customers is included in the amounts presented above and primarily consists of extended warranties on products and multi-year maintenance agreements, which are typically recognized as the performance obligation is satisfied.

The Company applied the standard's practical expedient that permits the omission of unsatisfied performance obligations for (i) contracts with an original expected length of one year or less and (ii) contracts for which the Company recognizes revenue at the amount to which the Company has the right to invoice for services performed.

Contract Balances

The following table provides information about contract assets and contract liabilities from contracts with customers:

	12	/31/2019 12/31/2018		12/31/2019		At	Adoption
Contract assets	\$	14,894	\$	9,330	\$	11,932	
Contract liabilities - current		44,001		36,461		48,268	
Contract liabilities - non-current		9,121		9,382		9,916	

Contract assets primarily relate to the Company's right to consideration for work completed but not billed at the reporting date and are recorded in prepaid and other current assets in the Condensed Consolidated Balance Sheet. Contract assets are transferred to receivables when the right to consideration becomes unconditional. Contract liabilities relate to advance consideration received from customers for which revenue has not been recognized. Current contract liabilities are recorded in other accrued expenses and non-current contract liabilities are recorded in other liabilities in the Condensed Consolidated Balance Sheet. Contract liabilities are reduced when the associated revenue from the contract is recognized.

The revenue recognized during 2019 and 2018 that was included in the contract liability at the beginning of the respective periods amounted to \$31,283 and \$38,410.

Contract Costs

Costs incurred to obtain a customer contract are not material to the Company. The Company elected to apply the practical expedient to not capitalize contract costs to obtain contracts with a duration of one year or less, which are expensed and included within cost of goods and services in the Condensed Consolidated Statements of Earnings.

Critical Accounting Estimates

Estimates are used to determine the amount of variable consideration in contracts, the standalone selling price among separate performance obligations and the measure of progress for contracts where revenue is recognized over time. The Company reviews and updates these estimates regularly.

Some contracts with customers include variable consideration primarily related to volume rebates. The Company estimates variable consideration at the most likely amount to determine the total consideration which the Company expects to be entitled. Estimated amounts are included in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved. The Company's estimates of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of anticipated performance and all information (historical, current and forecasted) that is reasonably available.

(Amounts in thousands except share data and where otherwise indicated)

Changes in Accounting Policies

The Company adopted ASC Topic 606, effective January 1, 2018, using the modified retrospective method applying ASC Topic 606 to contracts that are not complete as of the date of initial application. Under the modified retrospective method, the cumulative effect of applying the standard has been recognized at the date of initial application, January 1, 2018. The comparative information has not been adjusted and continues to be reported under ASC Topic 605. The Company's accounting policy has been updated to align with ASC Topic 606, and no significant changes to revenue recognition have occurred as a result of the change.

Shipping and handling charges are not considered a separate performance obligation. If revenue is recognized for the related good before the shipping and handling activities occur, the related costs of those shipping and handling activities are accrued.

Additionally, all taxes assessed by a governmental authority that are both imposed on and concurrent with a specific revenue-producing transaction and collected from a customer (e.g., sales, use, value added, and some excise taxes) are excluded from revenue. The Company's policy elections related to shipping and handling and taxes have not changed with the adoption of ASC Topic 606.

Under ASC Topic 605, revenue was generally recognized when all of the following criteria were met: a) persuasive evidence of an arrangement exists, b) price is fixed or determinable, c) collectability is reasonably assured and d) delivery has occurred or services have been rendered. The majority of the Company's revenue is generated through the manufacture and sale of a broad range of specialized products and components and revenue was recognized upon transfer of title and risk of loss, which was generally upon shipment. In limited cases, the Company's revenue arrangements with customers required delivery, installation, testing, certification, or other acceptance provisions to be satisfied before revenue was recognized. The Company included shipping costs billed to customers in revenue and the related shipping costs in cost of goods and services.

Impact on Financial Statements

The adoption of ASC Topic 606 impacted certain contracts for highly customized customer products that have no alternative use and in which the contract specifies the Company has a right to payment for its costs, plus a reasonable margin. For these contracts, the Company now recognizes revenue over time based on the method and measure of progress that best depicts the transfer of control to the customer of the goods or services to date relative to the remaining goods or services promised under the contract.

The Company recorded a cumulative catch-up adjustment to retained earnings at January 1, 2018 for \$0.2 million, related to the impact of adopting ASC Topic 606 under the modified retrospective method.

4. Acquisitions

2019

During the year ended December 31, 2019, the Company acquired three businesses in separate transactions for total consideration of \$216,398, net of cash acquired and including contingent consideration. These businesses were acquired to complement and expand upon existing operations within the Fueling Solutions and Pumps & Process Solutions segments. The goodwill recorded as a result of these acquisitions represents the economic benefits expected to be derived from product line expansions and operational synergies. The goodwill is deductible for U.S. income tax purposes for these acquisitions.

On May 7, 2019, the Company acquired the assets of the All-Flo Pump Company, Limited business ("All-Flo"), a growing manufacturer of specialty pumps for \$39,954. The All-Flo acquisition strengthens Dover's position in the growing market for air-operated double-diaphragm pumps within the Pumps & Process Solutions segment.

On January 25, 2019, the Company acquired the assets of Belanger, Inc. ("Belanger"), a leading full-line car wash equipment manufacturer for \$175,350, net of cash acquired. The Belanger acquisition strengthens Dover's position in the vehicle wash business within the Fueling Solutions segment.

One other immaterial acquisition was completed during the year ended December 31, 2019, which included contingent consideration, within the Pumps & Process Solutions segment.

(Amounts in thousands except share data and where otherwise indicated)

The following presents the allocation of purchase price to the assets acquired and liabilities assumed, based on their estimated fair values at acquisition date:

	 Total
Current assets, net of cash acquired	\$ 14,018
Property, plant and equipment	1,030
Goodwill	119,512
Intangible assets	91,980
Other assets and deferred charges	20
Current liabilities	 (10,162)
Net assets acquired	\$ 216,398

The amounts assigned to goodwill and major intangible asset classifications were as follows:

	Amount allocated	Useful life (in years)
Goodwill	\$ 119,512	na
Customer intangibles	68,500	9 - 13
Patents	16,000	9
Trademarks	7,480	15
	\$ 211,492	

2018

During the year ended December 31, 2018, the Company acquired two businesses in separate transactions for total consideration of \$68,557, net of cash acquired. The businesses were acquired to complement and expand upon existing operations within the Pumps & Process Solutions and Refrigeration & Food Equipment segments. The goodwill identified by these acquisitions reflects the benefits expected to be derived from product line expansion and operational synergies. The goodwill is non-deductible for U.S. federal income tax purposes for these acquisitions.

On January 2, 2018, the Company acquired 100% of the voting stock of Ettlinger Group ("Ettlinger"), within the Pumps & Process Solutions segment for \$53,218, net of cash acquired. In connection with this acquisition, the Company recorded goodwill of \$36,303 and intangible assets of \$19,907, primarily related to customer intangibles. The intangible assets are being amortized over 8 to 15 years.

On January 12, 2018, the Company acquired 100% of the voting stock of Rosario Handel B.V. ("Rosario"), within the Refrigeration & Food Equipment segment for total consideration of \$15,339, net of cash acquired. In connection with this acquisition, the Company recorded goodwill of \$10,408 and a customer intangible asset of \$4,149. The customer intangible asset is being amortized over 10 years.

The pro forma effects of the 2019 and 2018 acquisitions on the Company's operations are disclosed in this footnote.

2017

During the year ended December 31, 2017, the Company acquired two businesses in separate transactions for total consideration of \$34,300. On April 5, 2017, the Company purchased 100% of the voting stock of Caldera Graphics S.A.S. ("Caldera") within the Imaging & Identification segment for \$32,857, net of cash acquired and including contingent consideration. One other immaterial acquisition was completed during the year within the Imaging & Identification segment.

(Amounts in thousands except share data and where otherwise indicated)

Pro Forma Information

The following unaudited pro forma results of operations reflect the 2019 acquisitions as if they had occurred on January 1, 2018 and the 2018 acquisitions as if they had occurred on January 1, 2017. The pro forma information is not necessarily indicative of the results that actually would have occurred, nor does it indicate future operating results. The supplemental pro forma earnings reflect adjustments to earnings from continuing operations as reported in the Consolidated Statements of Earnings to exclude nonrecurring expense related to the fair value adjustments to acquisition-date inventory (after-tax) and acquisition-related costs (after-tax) from the year ended December 31, 2019. These adjustments were not material in 2019 and 2018. The supplemental pro forma earnings for the 2018 period were similarly adjusted for 2018 acquisitions charges as if incurred at the beginning of 2017. The 2019 and 2018 supplemental pro forma earnings are also adjusted to reflect the comparable impact of additional depreciation and amortization expense, net of tax, resulting from the fair value measurement of tangible and intangible assets relating to 2019 and 2018 acquisitions.

	 Years Ended December 31,		
	2019		2018
Revenue:			
As reported	\$ 7,136,397	\$	6,992,118
Pro forma	7,145,275		7,059,856
Earnings:			
As reported	\$ 677,918	\$	591,145
Pro forma	680,824		600,603
Basic earnings per share:			
As reported	\$ 4.67	\$	3.94
Pro forma	4.69		4.01
Diluted earnings per share:			
As reported	\$ 4.61	\$	3.89
Pro forma	4.63		3.95

5. Discontinued and Disposed Operations

Discontinued Operations

The Apergy businesses, as discussed in Note 2, met the criteria to be reported as discontinued operations because the spin-off is a strategic shift in business that has a major effect on the Company's operations and financial results. Therefore, the results of discontinued operations for the years ended December 31, 2018 and 2017 include the historical results of Apergy prior to its distribution on May 9, 2018. The years ended December 31, 2018 and 2017 included costs incurred by Dover to complete the spin-off of Apergy amounting to \$46,384 and \$15,270, respectively, reflected in selling, general and administrative expenses in discontinued operations. Due to lump-sum payments made in 2018 for Apergy participants of the Dover U.S. Pension Plan, non-cash settlement and curtailment costs of approximately \$9,200 were classified within discontinuing operations. See Note 2 — Spin-off of Apergy Corporation and Note 17 — Employee Benefit Plans for further information.

(Amounts in thousands except share data and where otherwise indicated)

Summarized results of the Company's discontinued operations are as follows:

	Years End	Years Ended December 31,		
	2018	2017		
Revenue	\$ 403,6	88 \$ 1,010,135		
Cost of goods and services	254,2	05 648,805		
Gross profit	149,4	83 361,330		
Selling, general and administrative expenses	147,2	61 262,353		
Operating earnings	2,2	22 98,977		
Other expense, net	9,0	48 949		
(Loss) earnings from discontinued operations before taxes	(6,8	26) 98,028		
Provision (benefit) for income taxes	14,0	52 33,026		
(Loss) earnings from discontinued operations, net of tax	\$ (20,8)	78) \$ 65,002		

On May 9, 2018, all assets and liabilities of Apergy were spun-off. Therefore, as of December 31, 2019 and 2018, there were no assets and liabilities classified as discontinued operations.

Disposed Businesses

2019

On March 29, 2019, the Company entered into a definitive agreement to sell Finder Pompe S.r.l ("Finder"), a wholly owned subsidiary, to Gruppo Aturia S.p.A ("Aturia"). As of March 31, 2019, Finder met the criteria to be classified as held for sale. The Company classified Finder's assets and liabilities separately on the consolidated balance sheet as of March 31, 2019.

Based on the total consideration from the sale, net of selling costs, the Company recorded a loss on the assets held for sale of \$46,946 in the Condensed Consolidated Statements of Earnings during the three months ended March 31, 2019. The loss was comprised of an impairment on assets held for sale of \$21,607 and \$25,339 of foreign currency translation losses reclassified out of accumulated other comprehensive losses.

On April 2, 2019, Dover completed the sale of Finder to Aturia, which generated total cash proceeds of \$24,218. The Finder business was included in the results of the Pumps & Process Solutions segment. The sale does not represent a strategic shift that will have a major effect on operations and financial results and, therefore, did not qualify for presentation as a discontinued operation.

2018

There were no other material dispositions in 2018 aside from the spin-off of Apergy.

2017

On November 1, 2017, the Company completed the sale of the consumer and industrial winch business of Warn Industries, Inc. ("Warn"), a wholly owned subsidiary of the Company, for total consideration of \$250,283. The Company recognized a pre-tax gain on sale of \$116,932. The Company retained the automotive business of Warn within the Engineered Products segment.

On February 14, 2017, the Company completed the sale of Performance Motorsports International ("PMI"), a wholly owned subsidiary of the Company that manufactures pistons and other engine related components serving the motorsports and powersports markets. Total consideration for the transaction was \$147,313, including cash proceeds of \$118,706. The Company recognized a pre-tax gain on sale of \$88,402 and recorded a 25% equity method investment at fair value of \$18,607 as well as a subordinated note receivable of \$10,000.

(Amounts in thousands except share data and where otherwise indicated)

Other immaterial dispositions completed during the year were recorded as a net pre-tax loss of \$2,196. Gains and losses recorded from the sale of businesses were reported in the gain on sale of businesses line in the Consolidated Statements of Earnings.

6. Inventories

The components of inventories were as follows:

	December 31, 2019	December 31, 2018
Raw materials	\$ 467,912	\$ 439,616
Work in progress	162,670	154,878
Finished goods	280,051	265,722
Subtotal	910,633	860,216
Less reserves	(104,492)	(111,420)
Total	\$ 806,141	\$ 748,796

At December 31, 2019 and 2018, approximately 8% and 11%, respectively, of the Company's total inventories were accounted for using the LIFO method.

7. Property, Plant and Equipment, net

The components of property, plant and equipment, net were as follows:

	December 31, 2019	December 31, 2018
Land	\$ 56,583	\$ 53,623
Buildings and improvements	527,192	529,982
Machinery, equipment and other	1,648,354	1,555,345
Property, plant and equipment, gross	2,232,129	2,138,950
Total accumulated depreciation	(1,389,811)	(1,332,453)
Property, plant and equipment, net	\$ 842,318	\$ 806,497

Total depreciation expense was \$133,340, \$138,712 and \$133,107 for the years ended December 31, 2019, 2018 and 2017, respectively.

(Amounts in thousands except share data and where otherwise indicated)

8. Leases

The Company adopted ASC Topic 842, Leases as of January 1, 2019, using the transition method per ASU No. 2018-11 issued in July 2018 wherein entities were allowed to initially apply the new leases standard at adoption date. Accordingly, all periods prior to January 1, 2019 were presented in accordance with the previous ASC Topic 840, Leases, and no retrospective adjustments were made to the comparative periods presented. Adoption of ASC Topic 842 resulted in an increase to total assets and liabilities due to the recording of operating lease ROU assets and operating lease liabilities of approximately \$163 million, as of January 1, 2019. The adoption did not materially impact the Company's Consolidated Statements of Earnings or Cash Flows. See Note 1 — Basis of Presentation for further detail on ROU assets and lease liabilities.

The components of lease costs were as follows:

	Year Ended December 31, 2019
Operating Lease Costs:	
Fixed	\$ 52,317
Variable	6,584
Short-term	17,387
Total ⁽¹⁾	\$ 76,288

⁽¹⁾ Finance lease cost and sublease income were immaterial.

Supplemental cash flow information related to leases was as follows:

	 ar Ended iber 31, 2019
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows from operating leases	\$ 53,450
Operating cash flows from finance leases	425
Financing cash flows from finance leases	 1,915
Total	\$ 55,790
Right-of-use assets obtained in exchange for lease obligations:	
Operating leases	\$ 41,598
Financing leases	1,542
Total	\$ 43,140

(Amounts in thousands except share data and where otherwise indicated)

Supplemental balance sheet information related to leases were as follows:

	December 31, 2019
Operating Leases	
Right-of-use assets:	
Other assets and deferred charges	\$ 155,019
Lease liabilities:	
Other accrued expenses	\$ 41,835
Other liabilities	121,298
Total operating lease liabilities	\$ 163,133
Finance Leases	
Right of use assets:	
Property and equipment, net (1)	\$ 9,008
Lease liabilities:	
Other accrued expenses	\$ 1,794
Other liabilities	8,078_
Total financing lease liabilities	\$ 9,872

The aggregate future lease payments for operating and finance leases as of December 31, 2019 were as follows:

(1) Finance lease assets are recorded net of accumulated depreciation of \$4,614.

	C	Operating		Finance
2020	\$	45,838	\$	2,199
2021		36,761		2,107
2022		26,774		1,816
2023		17,184		1,338
2024		12,966		1,133
Thereafter		40,034		2,909
Total lease payments		179,557		11,502
Less: Interest		(16,424)		(1,630)
Present value of lease liabilities	\$	163,133	\$	9,872

Average lease terms and discount rates were as follows:

	December 31, 2019
Weighted-average remaining lease term (years)	
Operating leases	5.9
Finance leases	5.9
Weighted-average discount rate	
Operating leases	3.2%
Finance leases	4.1%

(Amounts in thousands except share data and where otherwise indicated)

9. Goodwill and Other Intangible Assets

Goodwill

ASC 350, Intangibles - Goodwill and Other Intangibles, provides guidance on an entity's subsequent measurement and recognition of goodwill and other intangibles, including subsequent changes to carrying amounts, including impairment and fair value adjustments. In accordance with the guidance set forth in ASC 350, and in connection with the separation of Apergy, in 2018, the Company was required to calculate the portion of goodwill included in the Apergy distribution. Using a relative fair value approach, the Company reallocated \$3,546 of goodwill from a reporting unit that included Apergy to a reporting unit now included within the Engineered Products segment. In 2019, in connection with the change in segment structure, the Company changed its reporting units which resulted in a reallocation of \$40,394 of goodwill from the Engineered Products segment to the Imaging & Identification segment using the relative fair value approach. See Note 19 — Segment Information for further information.

The changes in the carrying value of goodwill by reportable operating segments were as follows:

	Engineered Products	Fueling Solutions	Imaging & Identification	Pumps & Process Solutions	Refrigeration & Food Equipment	Total
Goodwill	\$ 695,041	\$794,635	\$ 960,939	\$ 769,619	\$ 536,699	\$ 3,756,933
Accumulated impairment loss	(10,591)			(59,970)	_	(70,561)
Balance at January 1, 2018	684,450	794,635	960,939	709,649	536,699	3,686,372
Reallocation due to Apergy separation	3,546	_	_		_	3,546
Acquisitions	_	_	_	36,303	10,408	46,711
Purchase price adjustments	_	_	328		_	328
Foreign currency translation	(8,803)	(24,016)	(16,799)	(8,970)	(1,041)	(59,629)
Balance at December 31, 2018	679,193	770,619	944,468	736,982	546,066	3,677,328
Acquisitions	_	97,898	_	21,614	_	119,512
Reallocation due to reporting unit changes	(40,394)	_	40,394		_	
Disposition of business	_	_	_	(4,739)	_	(4,739)
Foreign currency translation	(2,228)	4,864	(7,793)	(3,230)	(367)	(8,754)
Balance at December 31, 2019	\$ 636,571	\$873,381	\$ 977,069	\$ 750,627	\$ 545,699	\$ 3,783,347

During 2019 and 2018, the Company recognized additions of \$119,512 and \$46,711, respectively, to goodwill as a result of acquisitions as discussed in Note 4 — Acquisitions. During 2019 and 2018, the Company recorded adjustments totaling \$0 and \$328, respectively, as a result of the finalization of purchase price allocation to assets acquired and liabilities assumed related to acquisitions completed in 2018 and 2017.

During 2019, the Company derecognized \$4,739 of goodwill as a result of the disposition of businesses as discussed in Note 5 — Discontinued and Disposed Operations. The Company reallocated goodwill upon disposal based upon the fair value of the disposed business relative to the remaining entities in its reporting unit.

Annual impairment testing

The Company tests goodwill for impairment annually in the fourth quarter of each year, whenever events or circumstances indicate an impairment may have occurred, or when a change in the composition of reporting units occurs for other reasons, such as a change in segments. Concurrent with the timing of the annual impairment test, effective October 1, 2019, the Company changed its management structure which resulted in a change in its operating segments and reporting units. As a result, management tested goodwill for impairment before and after the segment change under the old and new reporting unit structures.

The Company performed its annual goodwill impairment test during the fourth quarter of 2019 using a discounted cash flow analysis as discussed in Note 1 — Description of Business and Summary of Significant Accounting Policies. The Company performed a quantitative goodwill impairment test for each of its seven reporting units under the old structure and fifteen reporting units under the new structure, concluding that the fair values of all of its reporting units were substantially in excess of their carrying values. No impairment of goodwill was required. As previously noted, the fair values of each of the

(Amounts in thousands except share data and where otherwise indicated)

Company's reporting units was determined using a discounted cash flow analysis which includes management's current assumptions as to future cash flows and long-term growth rates. The discount rates used in these analyses varied by reporting unit and were based on a capital asset pricing model and published relevant industry rates. The Company used discount rates commensurate with the risks and uncertainties inherent to each reporting unit and in our internally developed forecasts. Discount rates used in the 2019 reporting unit valuations ranged from 8.0% to 9.5%.

While the Company believes the assumptions used in the 2019 impairment analysis are reasonable and representative of expected results, actual results may differ from expectations.

Intangible Assets

The Company's definite-lived and indefinite-lived intangible assets by major asset class were as follows:

	D	ecei	mber 31, 201	19	December 31, 2018					
	Gross Carrying Amount		ccumulated nortization	Net Carrying Amount	Gross Carrying Amount		ccumulated nortization	Net Carrying Amount		
Amortized intangible assets:										
Customer intangibles	\$1,410,636	\$	714,566	\$ 696,070	\$1,395,742	\$	645,305	\$ 750,437		
Trademarks	218,064		85,791	132,273	214,774		72,305	142,469		
Patents	159,376		133,677	25,699	144,302		128,254	16,048		
Unpatented technologies	154,505		99,276	55,229	155,380		85,560	69,820		
Distributor relationships	82,779		44,202	38,577	82,970		37,943	45,027		
Drawings & manuals	27,500		22,403	5,097	31,849		23,273	8,576		
Other	22,355		16,939	5,416	21,046		15,835	5,211		
Total	2,075,215		1,116,854	958,361	2,046,063		1,008,475	1,037,588		
Unamortized intangible assets:										
Trademarks	96,653			96,653	96,668			96,668		
Total intangible assets, net	\$2,171,868	\$	1,116,854	\$1,055,014	\$2,142,731	\$	1,008,475	\$1,134,256		

The Company recorded \$91,980 of acquired intangible assets in 2019. See Note 4 — Acquisitions.

Amortization expense was \$138,947, \$143,868 and \$150,171, including acquisition-related intangible amortization of \$136,963, \$142,170 and \$148,147, for the years ended December 31, 2019, 2018 and 2017, respectively.

Estimated future amortization expense related to intangible assets held at December 31, 2019 is as follows:

	Estimated Amortization
2020	\$ 127,990
2021	122,079
2022	108,670
2023	98,960
2024	94,528

(Amounts in thousands except share data and where otherwise indicated)

10. Other Accrued Expenses and Other Liabilities

The following table details the major components of other accrued expenses:

	December 31, 2019	December 31, 2018
Contract liabilities - current	\$ 44,001	\$ 36,461
Accrued rebates and volume discounts	43,694	38,064
Warranty	43,018	42,498
Operating lease liability	41,835	_
Taxes other than income	34,419	34,785
Accrued interest	20,403	25,390
Restructuring and exit costs	16,173	27,697
Accrued commissions (non-employee)	15,916	17,847
Other (none of which are individually significant)	79,601	90,710
Total other accrued expenses	\$ 339,060	\$ 313,452

The following table details the major components of other liabilities (non-current):

	Dece	mber 31, 2019	December 31, 2018
Defined benefit and other post-retirement benefit plans	\$	165,150	\$ 167,930
Operating lease liabilities		121,298	_
Unrecognized tax benefits		101,052	112,299
Deferred compensation		78,375	81,332
Legal and environmental		30,514	31,462
Contract liabilities - non current		9,121	9,382
Warranty		6,098	7,575
Other (none of which are individually significant)		15,566	22,415
Total other liabilities	\$	527,174	\$ 432,395

Warranty

Estimated warranty program claims are provided for at the time of sale. Amounts provided for are based on historical costs and adjusted for new claims. The changes in the carrying amount of product warranties were as follows:

	Years Ended December 31,						
		2019		2018		2017	
Beginning Balance, December 31 of the Prior Year	\$	50,073	\$	59,403	\$	80,331	
Provision for warranties		63,957		59,176		57,164	
Settlements made		(63,574)		(66,687)		(71,068)	
Other adjustments, including acquisitions and currency translation		(1,340)		(1,819)		(7,024)	
Ending Balance, December 31	\$	49,116	\$	50,073	\$	59,403	

(Amounts in thousands except share data and where otherwise indicated)

11. Restructuring Activities

The Company initiated various restructuring programs and incurred severance and other restructuring costs by segment as follows:

	Years Ended December 31,					· 31,
		2019	2018			2017
Engineered Products	\$	3,155	\$	7,158	\$	3,991
Fueling Solutions		4,943		15,478		9,968
Imaging & Identification		6,426		13,882		8,076
Pumps & Process Solutions		5,666		10,266		6,379
Refrigeration & Food Equipment		3,671		3,475		14,070
Corporate		2,961		8,244		9,776
Total	\$	26,822	\$	58,503	\$	52,260
These amounts are classified in the Consolidated Statements of Earnings as follows:						-
Cost of goods and services	\$	8,910	\$	16,921	\$	16,658
Selling, general and administrative expenses		17,912		41,582		35,602
Total	\$	26,822	\$	58,503	\$	52,260

Total restructuring charges of \$26,822 incurred during the year ended December 31, 2019, were a result of restructuring programs initiated in 2018 and 2019. Restructuring expense was comprised primarily of broad-based selling, general and administrative expense reduction initiatives and broad-based operational efficiency initiatives focusing on footprint consolidation, operational optimization and IT centralization designed to increase operating margin, enhance operations and position the Company for sustained growth and investment. The Company expects to incur total charges of approximately \$8 million in 2020 for these initiatives. Additional programs, beyond the scope of the announced programs may be implemented during 2020 with related restructuring charges.

The \$26,822 of restructuring charges incurred during 2019 included the following programs:

- The Engineered Products segment recorded \$3,155 of restructuring charges related to programs across the segment focused on headcount reductions and facility restructuring costs.
- The Fueling Solutions segment recorded \$4,943 of restructuring charges principally related to headcount reductions.
- The Imaging & Identification segment recorded \$6,426 of restructuring charges principally related to headcount reductions.
- The Pumps & Process Solutions segment recorded \$5,666 of restructuring charges principally related to headcount reductions.
- The Refrigeration & Food Equipment segment recorded \$3,671, of restructuring charges primarily due to headcount reductions and facility restructuring costs.
- Corporate recorded \$2,961 of restructuring charges primarily related to headcount reductions.

Restructuring expenses incurred in 2018 and 2017 also included headcount reduction, targeted facility consolidations at certain businesses and actions taken to optimize the Company's cost structure.

(Amounts in thousands except share data and where otherwise indicated)

The following table details the Company's severance and other restructuring accrual activities:

	Severance	Exit		Total
Balance at January 1, 2017	\$ 10,658	\$ 1,230	\$	11,888
Restructuring charges	32,228	20,032		52,260
Payments	(16,898)	(5,707)		(22,605)
Other, including foreign currency translation	(1,033)	(9,239)	(1)	(10,272)
Balance at December 31, 2017	24,955	6,316		31,271
Restructuring charges	45,146	13,357		58,503
Payments	(43,287)	(8,713)		(52,000)
Other, including foreign currency translation	(2,530)	(7,080)	(1)	(9,610)
Balance at December 31, 2018	24,284	3,880		28,164
Restructuring charges	20,271	6,551		26,822
Payments	(29,887)	(3,383)		(33,270)
Other, including foreign currency translation	(917)	(4,409)	(1)	(5,326)
Balance at December 31, 2019	\$ 13,751	\$ 2,639	\$	16,390

⁽¹⁾ Other activity in exit reserves primarily represents the non-cash write-off of certain long-lived assets and inventory in connection with certain facility closures and product exits.

The restructuring accrual balances at December 31, 2019 primarily reflect restructuring plans initiated during the year.

12. Borrowings and Lines of Credit

Borrowings consist of the following:

	Decem	<u>ber 31, 2019</u>	December 31, 2018			
Short-term:						
Commercial paper	\$	84,700	\$	220,318		
Notes payable	\$	84,700	\$	220,318		

				Carrying	g amount (1)		
	Principal		De	cember 31, 2019	De	cember 31, 2018	
Long-term:							
2.125% 7-year notes due December 1, 2020 (euro-denominated)	€	300,000	\$	_	\$	339,657	
4.30% 10-year notes due March 1, 2021	\$	450,000		_		449,200	
3.150% 10-year notes due November 15, 2025	\$	400,000		396,042		395,368	
1.25% 10-year notes due November 9, 2026 (euro-denominated)	€	600,000		658,089		672,103	
0.750% 8-year notes due November 4, 2027 (euro denominated)	€	500,000		548,008			
6.65% 30-year debentures due June 1, 2028	\$	200,000		199,155		199,054	
2.950% 10-year notes due November 4, 2029	\$	300,000		296,270			
5.375% 30-year debentures due October 15, 2035	\$	300,000		296,060		295,811	
6.60% 30-year notes due March 15, 2038	\$	250,000		247,939		247,827	
5.375% 30-year notes due March 1, 2041	\$	350,000		344,153		343,877	
Other						763	
Total long-term debt				2,985,716		2,943,660	
Less long-term debt current portion				_			
Net long-term debt			\$	2,985,716	\$	2,943,660	

⁽¹⁾ Carrying amount is net of unamortized debt discount and deferred debt issuance costs. Total unamortized debt discounts were \$18.9 million and \$15.8 million as of December 31, 2019 and 2018, respectively. Total deferred debt issuance costs were \$16.2 million and \$13.0 million as of December 31, 2019 and 2018, respectively.

The discounts are being amortized to interest expense using the effective interest method over the life of the issuances. The deferred issuance costs are amortized on a straight-line basis over the life of the debt.

(Amounts in thousands except share data and where otherwise indicated)

On March 15, 2018, the outstanding 5.45% notes with a principal value of \$350,000 matured. The repayment of debt was funded by the Company's commercial paper program and existing cash balances.

On November 4, 2019, the Company issued €500,000 of 0.750% euro-denominated notes due 2027 and \$300,000 of 2.950% notes due 2029 and notified the debt holders of our €300,000 2.125% notes due 2020 ("2020 Notes") and our \$450,000 4.30% Notes due 2021 ("2021 Notes") of our intent to redeem these notes on December 4, 2019. The proceeds from the sale of euro-denominated notes of €494,685, net of discounts and issuance costs, were used in part to redeem the 2020 Notes. The proceeds from the sale of notes of \$296,937, net of discounts and issuance costs, and the remaining funds from the sale of the euro-denominated notes, were used to fund the redemption of the 2021 Notes. Such redemption payments were made on December 4, 2019, which required the Company to pay a make whole premium to the bondholders, resulting in a loss of \$23,543. The remainder of the proceeds will be used for general corporate purposes.

On October 4, 2019, the Company entered into a \$1 billion five-year unsecured revolving credit facility with a syndicate banks (the "Credit Agreement") that replaced a similar existing credit facility that was set to expire in November 2020. The Credit Agreement will expire on October 4, 2024. The Company may elect to have loans under the Credit Agreement bear interest at a rate based on a benchmark interbank offered rate specified for each currency and, in the case of US Dollars, an alternate base rate (as defined in the Credit Agreement) based on a prime rate plus a specified margin ranging from 0.805% to 1.20%, set on the basis of the credit rating accorded to the Company's senior unsecured debt by S&P and Moody's. The Credit Agreement requires the Company to pay a facility fee and imposes various restrictions on the Company such as, among other things, a requirement to maintain a minimum interest coverage ratio of EBITDA to consolidated net interest expense of not less than 3.0 to 1. The Company was in compliance with all covenants in the Credit Agreement and other long-term debt covenants at December 31, 2019 and had a coverage ratio of 10.6 to 1. The Company primarily uses this facility as liquidity back-up for its commercial paper program and has not drawn down any loans under the facility and does not anticipate doing so. The Company generally uses commercial paper borrowings for general corporate purposes, funding of acquisitions and the repurchases of its common stock.

As of December 31, 2019, the future maturities of long-term debt were as follows:

	Future	e Maturities
2020	\$	_
2021		_
2022		_
2023		_
2024		_
2025 and thereafter		2,985,716
Total	\$	2,985,716

Letters of Credit and other Guarantees

As of December 31, 2019, the Company had approximately \$158.5 million outstanding in letters of credit, surety bonds, and performance and other guarantees with financial institutions, which expire on various dates through 2028. These letters of credit and bonds are primarily issued as security for insurance, warranty and other performance obligations. In general, the Company would only be liable for the amount of these guarantees in the event of default in the performance of its obligations, the probability of which is believed to be remote.

(Amounts in thousands except share data and where otherwise indicated)

13. Financial Instruments

Derivatives

The Company is exposed to market risk for changes in foreign currency exchange rates due to the global nature of its operations and certain commodity risks. In order to manage these risks, the Company has hedged portions of its forecasted sales and purchases, which occur within the next twelve months that are denominated in non-functional currencies, with currency forward contracts designated as cash flow hedges. At December 31, 2019 and 2018, the Company had contracts with U.S. dollar equivalent notional amounts of \$179,580 and \$193,649, respectively, to exchange foreign currencies, principally the Pound sterling, Chinese yuan, Swedish krona, Euro, Canadian dollar and Swiss franc. The Company believes it is probable that all forecasted cash flow transactions will occur.

In addition, the Company had outstanding contracts at December 31, 2019 and 2018 with a total notional amount of \$79,707 and \$66,906, respectively, that are not designated as hedging instruments. These instruments are used to reduce the Company's exposure to operating receivables and payables that are denominated in non-functional currencies. Gains and losses on these contracts are recorded in other income, net in the Consolidated Statements of Earnings.

The following table sets forth the fair values of derivative instruments held by the Company as of December 31, 2019 and 2018 and the balance sheet lines in which they are recorded:

	F	air Value As	sset (Lial		
	Decemb	er 31, 2019	Decem	ber 31, 2018	Balance Sheet Caption
Foreign currency forward	\$	2,892	\$	1,874	Prepaid and other current assets
Foreign currency forward		(476)		(1,165)	Other accrued expenses

For a cash flow hedge, the change in estimated fair value of a hedging instrument is recorded in accumulated other comprehensive earnings (loss), net of tax as a separate component of the Consolidated Statements of Stockholders' Equity and is reclassified into revenues and cost of goods and services in the Consolidated Statements of Earnings during the period in which the hedged transaction is recognized. The amount of gains or losses from hedging activity recorded in earnings is not significant and the amount of unrealized gains and losses from cash flow hedges that are expected to be reclassified to earnings in the next twelve months, is not significant; therefore, additional tabular disclosures are not presented. There are no amounts excluded from the assessment of hedge effectiveness, and the Company's derivative instruments that are subject to credit risk contingent features were not significant.

The Company is exposed to credit loss in the event of nonperformance by counterparties to the financial instrument contracts held by the Company; however, nonperformance by these counterparties is considered unlikely as the Company's policy is to contract with highly-rated, diversified counterparties.

The Company has designated the €600,000 and €500,000 of euro-denominated notes issued November 9, 2016 and November 4, 2019, respectively, as a hedge of its net investment in euro-denominated operations. The Company also designated the 2020 Notes as a net investment hedge prior to the redemption of the notes. Changes in the value of the euro-denominated debt are recognized in foreign currency translation adjustments within other comprehensive earnings (loss) of the Consolidated Statements of Comprehensive Earnings to offset changes in the value of the net investment in euro-denominated operations. Changes in the value of the euro-denominated debt resulting from exchange rate differences are offset by changes in the net investment due to the high degree of effectiveness between the hedging instruments and the exposure being hedged.

Amounts recognized in other comprehensive earnings (loss) for the gains (losses) on its net investment hedges were as follows:

	2019	2018	2017
Gain/(loss) on euro-denominated debt	\$ 22,449	\$ 45,230	\$ (125,262)
Tax (expense)/benefit	(4,714)	(9,498)	43,842
Gain/(loss) on net investment hedges, net of tax	\$ 17,735	\$ 35,732	\$ (81,420)

(Amounts in thousands except share data and where otherwise indicated)

Fair Value Measurements

ASC 820, Fair Value Measurements and Disclosures, establishes a fair value hierarchy that requires the Company to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. A financial instrument's categorization within the hierarchy is based on the lowest level of input that is significant to the fair value measurement. ASC 820 establishes three levels of inputs that may be used to measure fair value as follows:

Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 inputs include inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices in active markets for similar assets and liabilities, quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of assets or liabilities.

Level 3 inputs are unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions.

The Company's assets and liabilities measured at fair value on a recurring basis as of December 31, 2019 and 2018 were as follows:

	Dece	ember 31, 2019		ember 31, 2018
	I	Level 2	I	Level 2
Assets:				
Foreign currency cash flow hedges	\$	2,892	\$	1,874
Liabilities:				
Foreign currency cash flow hedges		476		1,165

The derivative contracts are measured at fair value using models based on observable market inputs such as foreign currency exchange rates and interest rates; therefore, they are classified within Level 2 of the fair value hierarchy.

In addition to fair value disclosure requirements related to financial instruments carried at fair value, accounting standards require disclosures regarding the fair value of all of the Company's financial instruments.

The estimated fair value of long-term debt at December 31, 2019 and 2018 was \$3,322,033 and \$3,132,330, respectively. The estimated fair value of long-term debt is based on quoted market prices for similar instruments and is, therefore, classified as Level 2 within the fair value hierarchy.

The carrying values of cash equivalents, trade receivables, accounts payable and notes payable are reasonable estimates of their fair values as of December 31, 2019 and 2018 due to the short-term nature of these instruments.

14. Income Taxes

Income taxes have been based on the following components of earnings before provision for income taxes and discontinued operations in the Consolidated Statements of Earnings:

	Yea	Years Ended December 31,						
	2019		2018		2017			
Domestic	\$ 448,30	\$	344,793	\$	544,900			
Foreign	394,70	3	380,585		330,915			
Total	\$ 843,00	\$	725,378	\$	875,815			

(Amounts in thousands except share data and where otherwise indicated)

Income tax expense (benefit) relating to continuing operations for the years ended December 31, 2019, 2018 and 2017 is comprised of the following:

	Years Ended December 31,					
	2019			2018		2017
Current:						
U.S. federal	\$	71,069	\$	47,445	\$	188,559
State and local		16,709		14,120		18,857
Foreign		102,284		86,523		43,228
Total current		190,062		148,088		250,644
Deferred:						
U.S. federal		(6,033)		876		(121,879)
State and local		1,770		626		(1,247)
Foreign		(20,708)		(15,357)		1,634
Total deferred		(24,971)		(13,855)		(121,492)
Total expense	\$	165,091	\$	134,233	\$	129,152

Differences between the effective income tax rate and the U.S. federal income statutory tax rate are as follows:

	Years E	Years Ended December 31,					
	2019	2018	2017				
U.S. federal income tax rate	21.0 %	21.0 %	35.0 %				
State and local taxes, net of federal income tax benefit	1.7	1.6	1.0				
Foreign operations tax effect	(1.3)	(1.1)	(6.2)				
SAB 118		(0.6)					
Domestic manufacturing deduction	_	<u> </u>	(1.7)				
Foreign tax credits	(0.1)	(0.3)	0.1				
Share awards	(1.7)	(2.0)	(1.0)				
Changes in tax law		· —	(6.7)				
Disposition of businesses	1.2	<u> </u>	(4.6)				
Other	(1.2)	(0.1)	(1.2)				
Effective tax rate from continuing operations	19.6 %	18.5 %	14.7 %				

(Amounts in thousands except share data and where otherwise indicated)

The tax effects of temporary differences that give rise to deferred tax assets and liabilities are as follows:

	Decem	ber 31, 2019	Decemb	per 31, 2018
Deferred Tax Assets:				
Accrued compensation, principally postretirement and other employee benefits	\$	62,547	\$	72,795
Accrued expenses, principally for state income taxes, interest and warranty		29,736		30,159
Net operating loss and other carryforwards		269,599		290,629
Inventories, principally due to reserves for financial reporting purposes and capitalization for tax purposes		17,671		19,228
Accounts receivable, principally due to allowance for doubtful accounts		3,409		3,379
Accrued insurance		2,001		1,897
Long-term liabilities, principally warranty, environmental and exit costs		3,305		4,183
Total gross deferred tax assets		388,268		422,270
Valuation allowance		(244,153)		(264,398)
Total deferred tax assets, net of valuation allowances		144,115		157,872
Deferred Tax Liabilities:				
Intangible assets, principally due to different tax and financial reporting bases and amortization lives	\$	(364,843)	\$	(394,851)
Property, plant and equipment, principally due to differences in depreciation		(56,401)		(49,380)
Other liabilities		(18,434)		(23,533)
Total gross deferred tax liabilities		(439,678)		(467,764)
Net deferred tax liability	\$	(295,563)	\$	(309,892)
Classified as follows in the Consolidated Balance Sheets:				
Other assets and deferred charges	\$	26,473	\$	29,433
Deferred income taxes		(322,036)		(339,325)
	\$	(295,563)	\$	(309,892)

As of December 31, 2019, the Company had non-U.S loss carryforwards of \$938.5 million primarily resulting from non-operating activities. The entire balance of the non-U.S. losses as of December 31, 2019 is available to be carried forward, with \$72.6 million of these losses expiring during the years 2020 through 2039. The remaining \$865.9 million of such losses can be carried forward indefinitely.

The Company has \$54.1 million and \$62.9 million of state tax loss carryforwards as of December 31, 2019 and 2018, respectively, that are available for use by the Company between 2020 and 2039.

The Company maintains valuation allowances by jurisdiction against the deferred tax assets related to certain of these carryforwards for which it is more likely than not that some portion or all will not be realized.

On December 22, 2017, the Tax Reform Act was enacted which permanently reduced the U.S. corporate income tax rate from a maximum of 35% to a flat 21% rate, effective January 1, 2018. As a result of the reduction in the U.S. corporate income tax rate, the Company revalued its ending net deferred tax liabilities as of December 31, 2017 and recognized a provisional tax benefit of \$172.0 million. The Tax Reform Act also imposed a tax for a one-time deemed repatriation of post-1986 unremitted foreign earnings and profits through the year ended December 31, 2017. As of December 31, 2017, the Company recorded provisional tax expense related to the deemed repatriation of \$111.6 million payable over eight years. The GILTI provisions of the Tax Reform Act require the Company to include in its U.S. income tax return foreign subsidiary earnings in excess of an allowable return on the foreign subsidiary's tangible assets.

On December 22, 2017, the SEC staff issued SAB 118 to address the application of U.S. GAAP in situations when a registrant did not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Tax Reform Act. In accordance with the SAB 118 guidance, the Company recognized the provisional tax impacts related to deemed repatriated earnings and the benefit for the revaluation of deferred tax assets and liabilities in its consolidated financial statements for the year ended December 31, 2017. In accordance with SAB 118, the Company finalized the financial reporting impact of the Tax Reform Act in the fourth

(Amounts in thousands except share data and where otherwise indicated)

quarter of 2018. For the year ended December 31, 2018, the Company recorded a \$4.2 million net tax benefit, which resulted in a 0.6% decrease in the effective tax rate, as an adjustment to the provisional estimates as a result of additional regulatory guidance and changes in interpretations and assumptions the Company has made as a result of the Tax Reform Act.

Unrecognized Tax Benefits

The Company files federal, state, local and foreign tax returns. The Company is routinely audited by the tax authorities in these jurisdictions, and a number of audits are currently underway. It is reasonably possible during the next twelve months that uncertain tax positions may be settled, which could result in a decrease in the gross amount of unrecognized tax benefits. This decrease may result in an income tax benefit. Due to the potential for resolution of federal, state and foreign examinations, and the expiration of various statutes of limitation, the Company's gross unrecognized tax benefits balance may change within the next twelve months by a range of zero to \$15.3 million. The Company is no longer subject to examinations of its federal income tax returns through 2015. All significant state, local and international matters have been concluded through 2012. The Company believes adequate provision has been made for all income tax uncertainties.

The following table is a reconciliation of the beginning and ending balances of the Company's unrecognized tax benefits:

	 <u>Total</u>
Unrecognized tax benefits at January 1, 2017	\$ 70,315
Additions based on tax positions related to the current year	14,466
Additions for tax positions of prior years	4,105
Reductions for tax positions of prior years	(9,653)
Cash settlements	(954)
Lapse of statutes	 (10,245)
Unrecognized tax benefits at December 31, 2017	68,034
Additions based on tax positions related to the current year	15,580
Additions for tax positions of prior years	29,637
Reductions for tax positions of prior years	(5,226)
Cash settlements	(7,345)
Lapse of statutes	 (7,219)
Unrecognized tax benefits at December 31, 2018	 93,461
Additions based on tax positions related to the current year	4,493
Additions for tax positions of prior years	6,668
Reductions for tax positions of prior years	(9,217)
Cash settlements	(922)
Lapse of statutes	(11,269)
Unrecognized tax benefits at December 31, 2019 (1)	\$ 83,214

⁽¹⁾ If recognized, the net amount of potential tax benefits that would impact the Company's effective tax rate is \$75.5 million. During the years ended December 31, 2019, 2018 and 2017, the Company recorded (income) expense of \$(0.6) million, \$2.4 million and \$(0.5) million, respectively, as a component of provision for income taxes related to the accrued interest and penalties on unrecognized tax benefits. The Company had accrued interest and penalties of \$17.8 million at December 31, 2019 and \$18.8 million at December 31, 2018, which are not included in the above table.

(Amounts in thousands except share data and where otherwise indicated)

15. Equity and Cash Incentive Program

The Company's share-based awards are typically granted annually at its regularly scheduled first quarter Compensation Committee meeting. Additionally, in the second quarter of 2018, the Company granted equity awards to its new President and Chief Executive Officer. Awards were made pursuant to the terms of the Company's 2012 Equity and Cash Incentive Plan (the "2012 Plan"), which was approved by shareholders on May 3, 2012. This plan replaced the 2005 Equity and Cash Incentive Plan (the "2005 Plan"), which would have otherwise terminated according to its terms on January 31, 2015 and the 1996 Non-Employee Directors Stock Compensation Plan (the "Directors Plan"), which would have otherwise terminated according to its terms on December 31, 2012. Upon adoption of the 2012 Plan, no additional awards could be granted under the 2005 Plan. Officers and other key employees, as well as non-employee directors, are eligible to participate in the 2012 Plan, which has a ten-year term and will terminate on May 3, 2022. The 2012 Plan provides for stock options and SARs grants, restricted stock awards, restricted stock unit awards, performance share awards, cash performance awards, directors' shares and deferred stock units. Under the 2012 Plan, a total of 17,000,000 shares of common stock are reserved for issuance, subject to adjustments resulting from stock dividends, stock splits, recapitalizations, reorganizations and other similar changes.

In 2018, in connection with the separation of Apergy, the Company modified the outstanding equity awards for its employees. The awards were modified such that all individuals received an equivalent fair value both before and after the separation of Apergy. This modification resulted in the issuance of an additional 1,138,008 SARs, 26,316 performance shares, and 47,063 RSUs in 2018. The exercise price of these outstanding awards, where applicable, was adjusted to preserve the value of the awards immediately prior to the separation. As no incremental fair value was awarded as a result of the issuance of these additional shares, the modification did not result in additional compensation expense.

Stock-based compensation costs are reported within selling, general and administrative expenses in the Consolidated Statements of Earnings. The following table summarizes the Company's compensation expense relating to all stock-based incentive plans:

	Years Ended December 31,					
		2019		2018		2017
Pre-tax stock-based compensation expense (continuing)	\$	29,702	\$	23,698	\$	24,073
Tax benefit		(2,490)		(2,722)		(8,411)
Total stock-based compensation expense, net of tax	\$	27,212	\$	20,976	\$	15,662

Pre-tax stock-based compensation expense attributable to Apergy employees for the years ended December 31, 2018 and 2017 was \$744 and \$2,454, respectively. These costs are reported within earnings from discontinued operations in the Consolidated Statement of Earnings.

SARs

The exercise price per share for SARs is equal to the closing price of the Company's stock on the New York Stock Exchange on the date of grant. New common shares are issued when SARs are exercised. The period during which SARs are exercisable is fixed by the Company's Compensation Committee at the time of grant. Generally, the SARs vest after three years of service and expire at the end of ten years.

In 2019, 2018 and 2017, the Company issued SARs covering 615,089, 757,603 and 1,028,116 shares, respectively. Since 2006, the Company has only issued SARs and does not anticipate issuing stock options in the future. The fair value of each SAR grant was estimated on the date of grant using a Black-Scholes option-pricing model with the following assumptions:

	2019	2018	2017
Risk-free interest rate	2.51 %	2.58 % - 2.87%	1.80 %
Dividend yield	2.13 %	1.99% - 2.43%	2.27 %
Expected life (years)	5.6	5.6 - 5.7	4.6
Volatility	22.35 %	20.95% - 21.20%	21.90 %
Grant price (1)	\$ 91.20	\$79.75 — \$82.09	\$ 66.85
Fair value at date of grant (1)	\$ 17.55	14.58 - 15.41	\$ 10.65

(Amounts in thousands except share data and where otherwise indicated)

(1) 2018 and 2017 grant prices and fair values at date of grant reflect the modification of grants in connection with the separation of Apergy on May 9, 2018.

Expected volatilities are based on Dover's stock price history, including implied volatilities from traded options on Dover stock. The Company uses historical data to estimate SAR exercise and employee termination patterns within the valuation model. The expected life of SARs granted is derived from the output of the option valuation model and represents the average period of time that SARs granted are expected to be outstanding. The interest rate for periods within the contractual life of the awards is based on the U.S. Treasury yield curve in effect at the time of grant.

A summary of activity relating to SARs granted under the 2012 Plan and the predecessor plans for the year ended December 31, 2019 is as follows:

		SARs	
	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term
Outstanding at January 1, 2019	5,329,204	\$ 60.19	
Granted	615,089	91.24	
Forfeited / expired	(181,498)	78.84	
Exercised	(2,163,626)	52.66	
Outstanding at December 31, 2019	3,599,169	69.07	6.4
Exercisable at December 31, 2019	1,579,082	\$ 57.26	4.3

The following table summarizes information about outstanding SARs at December 31, 2019:

	SARs Outstanding							SARs Exercisable						
Range of Exercise Prices	Number Exerc		Weighted Average Average Exercise Price Weighted Average Remaining Life in Years			ggregate ntrinsic Value	Number of Shares			Weighted Average Remaining Life in Years	Ir	ggregate atrinsic Value		
\$25.96 - \$58.69	952,991	\$	51.11	4.0	\$	61,132	952,991	\$	51.20	4.0	\$	61,922		
\$61.79 - \$79.75	1,636,963	\$	68.43	6.3		76,655	624,996	\$	66.65	4.5		30,318		
\$82.09 - \$97.33	1,009,215	\$	87.06	8.7		28,457	1,095	\$	82.09	3.9		36		
	3,599,169				\$	166,244	1,579,082				\$	92,276		

Unrecognized compensation expense related to SARs not yet exercisable was \$8,862 at December 31, 2019. This cost is expected to be recognized over a weighted average period of 1.7 years.

Other information regarding the exercise of SARs is listed below:

	2019	2018	2017
SARs			
Fair value of SARs that became exercisable	\$ 8,611	\$ 12,832	\$ 16,006
Aggregate intrinsic value of SARs exercised	\$ 89.473	\$ 101.365	\$ 44,646

(Amounts in thousands except share data and where otherwise indicated)

Performance Share Awards

Performance share awards granted are expensed over the three-year requisite performance and service period. Awards become vested if (1) the Company achieves certain specified internal metrics and (2) the employee remains continuously employed by the Company during the performance period. Partial vesting may occur after separation from service in the case of certain terminations not for cause and for retirements.

In 2019, 2018 and 2017, the Company issued performance shares covering 35,172, 122,459 and 57,958 shares, respectively. The performance share awards granted in these years are considered performance condition awards as attainment is based on Dover's performance relative to established internal metrics. The fair value of these awards was determined using Dover's closing stock price on the date of grant. The expected attainment of the internal metrics for these awards is analyzed each reporting period, and the related expense is adjusted up or down based on expected attainment, if that attainment differs from previous estimates. The cumulative effect on current and prior periods of a change in attainment is recognized in selling, general and administrative expenses in the Consolidated Statements of Earnings in the period of change.

The fair value and average attainment used in determining compensation cost of the performance shares issued in 2019, 2018 and 2017 are as follows for the year ended December 31, 2019:

	2019	2018	2017
Fair value per share at date of grant (1)	\$91.20	\$79.75 - \$82.09	\$66.85
Average attainment rate reflected in expense	200.3%	282.4%	237.0 %

^{(1) 2018} and 2017 fair values per share at date of grant reflect the modification of grants in connection with the separation of Apergy on May 9, 2018.

A summary of activity for performance share awards for the year ended December 31, 2019 is as follows:

	Number of Shares	Weighted Average Grant-Date Fair Value
Unvested at January 1, 2019	144,957	\$ 76.99
Granted	35,172	91.33
Forfeited	(19,026)	76.46
Vested	(23,294)	66.85
Unvested at December 31, 2019	137,809	\$ 82.45

Unrecognized compensation expense related to unvested performance shares as of December 31, 2019 was \$13,016, which will be recognized over a weighted average period of 1.3 years.

Restricted Stock Units

The Company also has restricted stock authorized for grant (as part of the 2012 Plan). Under this Plan, common stock of the Company may be granted at no cost to certain officers and key employees. In general, restrictions limit the sale or transfer of these shares during a three-year period, and restrictions lapse proportionately over the three-year period. The Company granted 124,929, 284,721 and 174,203 of restricted stock units in 2019, 2018 and 2017, respectively. The fair value of these awards was determined using Dover's closing stock price on the date of grant.

(Amounts in thousands except share data and where otherwise indicated)

A summary of activity for restricted stock units for the year ended December 31, 2019 is as follows:

	Number of Shares	Weigh Aver Grant- Fair V	age -Date
Unvested at January 1, 2019	390,481	\$ 7	73.35
Granted	124,929	ç	91.34
Forfeited	(23,706)) {	34.02
Vested	(167,151)	<u>)</u> (59.55
Unvested at December 31, 2019	324,553	_ \$ 8	31.45

Unrecognized compensation expense relating to unvested restricted stock units as of December 31, 2019 was \$17,307, which will be recognized over a weighted average period of 1.6 years.

Directors' Shares

The Company issued the following shares to its non-employee directors under the 2012 Plan as partial compensation for serving as directors of the Company:

	Years ended December 31,				
	2019	2017			
Aggregate shares granted	10,838	15,802	16,231		
Shares deferred	(6,168)	(9,917)	(11,337)		
Net shares issued	4,670	5,885	4,894		

16. Commitments and Contingent Liabilities

Guarantees

The Company has provided typical indemnities in connection with sales of certain businesses and assets, including representations and warranties and related indemnities for environmental, health and safety, tax and employment matters. The Company does not have any material liabilities recorded for these indemnifications and is not aware of any claims or other information that would give rise to material payments under such indemnities.

Litigation

A few of the Company's subsidiaries are involved in legal proceedings relating to the cleanup of waste disposal sites identified under federal and state statutes which provide for the allocation of such costs among "potentially responsible parties." In each instance, the extent of the Company's liability appears to be relatively insignificant in relation to the total projected expenditures and the number of other "potentially responsible parties" involved and is anticipated to be immaterial to the Company. In addition, a few of the Company's subsidiaries are involved in ongoing remedial activities at certain current and former plant sites, in cooperation with regulatory agencies, and appropriate reserves have been established. At December 31, 2019 and 2018, the Company has reserves totaling \$30,608 and \$31,797, respectively, for environmental and other matters, including private party claims for exposure to hazardous substances, that are probable and estimable.

The Company and some of its subsidiaries are also parties to a number of other legal proceedings incidental to their businesses. These proceedings primarily involve claims by private parties alleging injury arising out of use of the Company's products, exposure to hazardous substances, patent infringement, employment matters and commercial disputes. Management and legal counsel, at least quarterly, review the probable outcome of such proceedings, the costs and expenses reasonably expected to be incurred and currently accrued to-date and consider the availability and extent of insurance coverage. The Company has reserves for other legal matters that are probable and estimable, and at December 31, 2019 and 2018, these reserves were not significant. While it is not possible at this time to predict the outcome of these legal actions, in the opinion

(Amounts in thousands except share data and where otherwise indicated)

of management, based on the aforementioned reviews, the Company is not currently involved in any legal proceedings which, individually or in the aggregate, could have a material effect on its financial position, results of operations, or cash flows.

17. Employee Benefit Plans

The Company offers defined contribution retirement plans which cover the majority of its U.S. employees, as well as employees in certain other countries. The Company's expense relating to defined contribution plans was \$50,031, \$46,030 and \$43,447 for the years ended December 31, 2019, 2018 and 2017, respectively.

The Company sponsors qualified defined benefit pension plans covering certain employees of the Company and its subsidiaries. The plans' benefits are generally based on years of service and employee compensation. The Company also provides to certain management employees, through non-qualified plans, supplemental retirement benefits in excess of qualified plan limits imposed by federal tax law.

In July 2013, the Company announced that, after December 31, 2013, the U.S. qualified and non-qualified defined benefit plans would be closed to new employees. All pension-eligible employees as of December 31, 2013 will continue to earn a pension benefit through December 31, 2023 as long as they remain employed by an operating company participating in the impacted plans. The Company also announced that effective January 1, 2024, the plans would be frozen to any future benefit accruals.

In connection with the spin-off on May 9, 2018, assets and liabilities related to the Norris USW participants were moved to a new plan sponsored by Apergy. Assets and liabilities of several non-U.S. qualified and U.S. non-qualified plans were also transferred to Apergy. Apergy participants (other than Norris USW participants) in the Dover U.S. pension plan (the "Plan") fully vested in their benefits and ceased accruing future benefits. The separation of Apergy triggered a pension plan curtailment which required a re-measurement of the Plan's benefit obligation in the second quarter of 2018, assuming a discount rate of 4.2% and an expected return on assets of 6.8%. The Plan retained the obligation and participants were able to elect lump-sum payments from plan assets. In 2018, the Plan made total lump sum payments of \$74,016. Based on the total lump sum payments made to both Apergy and other participants in the plan during the year and the second quarter remeasurement, the Company recorded non-cash settlement and curtailment charges of approximately \$13,939 in 2018, of which \$9,200 was classified within discontinued operations.

The Company also maintains other post-retirement benefit plans which cover approximately 409 participants, approximately 386 of whom are eligible for medical benefits. These plans are closed to new entrants. The supplemental and other post-retirement benefit plans are supported by the general assets of the Company.

(Amounts in thousands except share data and where otherwise indicated)

Obligations and Funded Status

The following tables summarize the Consolidated Balance Sheets impact, including the benefit obligations, assets and funded status associated with the Company's significant defined benefit and other post-retirement benefit plans at December 31, 2019 and 2018:

	Q	ualified De	fined Benef	Non-Qu Supple		Other Post- Retirement				
	U.S.	Plan	Non-U.	S. Plans		efits		nefits		
	2019	2018	2019	2018	2019	2018	2019	2018		
Change in benefit obligation:										
Benefit obligation at beginning of year	\$ 447,173	\$ 566,389	\$ 270,329	\$ 278,188	\$ 66,836	\$ 106,012	\$ 7,849	\$ 8,595		
Service cost	7,016	9,019	5,665	5,359	1,942	2,624	19	30		
Interest cost	19,026	20,756	5,101	4,962	2,670	3,204	312	290		
Plan participants' contributions	_	_	1,681	1,279	_	_	_	_		
Benefits paid	(38,093)	(18,172)	(9,298)	(8,161)	(13,617)	(19,352)	(572)	(620)		
Actuarial (gain) loss	55,105	(48,104)	24,791	(19,533)	2,352	(7,687)	462	(446)		
Amendments	_	69	_	3,073	_	_	_	_		
Settlements and curtailments	_	(78,896)	(5,412)	(1,813)	_	(2,289)	_	_		
Currency translation and other	1	_	3,677	21,554	_	_	_	_		
Spin-off of Apergy		(3,888)		(14,579)		(15,676)				
Benefit obligation at end of year	490,228	447,173	296,534	270,329	60,183	66,836	8,070	7,849		
Change in plan assets:										
Fair value of plan assets at beginning of year	488,900	617,840	162,589	175,534	_	_	_	_		
Actual return (loss) on plan assets	99,431	(32,939)	23,812	(8,490)	_	_	_	_		
Company contributions	_	_	7,247	5,961	13,617	19,352	572	620		
Plan participants' contributions	_	_	1,681	1,279	_	_	_	_		
Benefits paid	(38,093)	(18,172)	(9,298)	(8,161)	(13,617)	(19,352)	(572)	(620)		
Settlements and curtailments	_	(74,016)	(4,350)	(1,472)	_	_	_	_		
Currency translation and other	_	_	3,909	11,223	_	_	_	_		
Spin-off of Apergy		(3,813)		(13,285)						
Fair value of plan assets at end of year	550,238	488,900	185,590	162,589	_	_				
Funded (Unfunded) status	\$ 60,010	\$ 41,727	\$(110,944)	\$(107,740)	\$ (60,183)	\$ (66,836)	\$ (8,070)	\$ (7,849)		
Amounts recognized in the consolidated balance sheets consist of:										
Assets and Liabilities:										
Other assets and deferred charges	\$ 60,010	\$ 41,727	\$ 671	\$ 919	\$ —	\$ —	\$ —	\$ —		
Accrued compensation and employee benefits	_	_	(1,526)	(1,493)	(12,500)	(13,219)	(692)	(702)		
Other liabilities (deferred compensation)			(110,089)	(107,166)	(47,683)	(53,617)	(7,378)	(7,147)		
Total assets and liabilities	60,010	41,727	(110,944)	(107,740)	(60,183)	(66,836)	(8,070)	(7,849)		
Accumulated Other Comprehensive Loss (Earnings):										
Net actuarial losses (gains)	71,247	81,437	70,694	66,480	(20,556)	(25,186)	(632)	(1,164)		
Prior service cost (credit)	549	852	(2,724)	(72)	6,288	9,099	58	71		
Deferred taxes	(15,263)	(17,597)	(15,492)	(14,861)	3,066	3,461	290	412		
Total accumulated other comprehensive loss (earnings), net of tax	56,533	64,692	52,478	51,547	(11,202)	(12,626)	(284)	(681)		
Net amount recognized at December 31,	\$ 116,543	\$ 106,419	\$ (58,466)	\$ (56,193)	\$ (71,385)	\$ (79,462)	\$ (8,354)	\$ (8,530)		
Accumulated benefit obligations	\$ 476,357	\$ 438,005	\$ 282,883	\$ 258,109	\$ 56,017	\$ 60,080				

The Company's net unfunded status at December 31, 2019 and 2018 includes net liabilities of \$110,944 and \$107,740, respectively, relating to the Company's significant international qualified plans, some in locations where it is not economically advantageous to pre-fund the plans due to local regulations. The majority of the international obligations relate to defined pension plans operated by the Company's businesses in Germany, Switzerland, and the United Kingdom.

(Amounts in thousands except share data and where otherwise indicated)

The accumulated benefit obligation for all defined benefit pension plans was \$815,257 and \$756,194 at December 31, 2019 and 2018, respectively. Pension plans with accumulated benefit obligations in excess of plan assets consist of the following at December 31, 2019 and 2018:

	2019	2018
Projected benefit obligation (PBO)	\$ 348,137	\$ 330,168
Accumulated benefit obligation (ABO)	331,126	311,192
Fair value of plan assets	177,057	154,673

Net Periodic Benefit Cost

The operating expense component of net periodic benefit cost (service cost) is reported with similar compensation costs in the Company's Consolidated Statement of Earnings. The non-operating components (all other components of net periodic benefit expense, including interest cost, amortization of prior service cost, curtailments and settlements, etc.) are reported outside of operating income in other income, net in the Consolidated Statement of Earnings.

Components of the net periodic benefit cost were as follows:

Defined Benefit Plans

		Qı	Non-Qualified								
		U.S. Plan	n		No	n-U.S. Pla	ns	Supplemental Benefits			
	2019 2018 2017		2017	2019	2018 2017		2019	2018	2017		
Service cost	\$ 7,016	\$ 9,019		\$ 12,083	\$ 5,665	\$ 5,359	\$ 5,688	\$ 1,942	\$ 2,624	\$ 2,473	
Interest cost	19,026	20,756		21,718	5,101	4,962	5,263	2,670	3,204	4,076	
Expected return on plan assets	(34,136)	(39,045)		(39,812)	(6,220)	(7,675)	(7,417)	_	_	_	
Amortization of:											
Prior service cost (credit)	303	298		427	(398)	(449)	(425)	2,811	3,770	4,411	
Recognized actuarial loss (gain)	_	3,102		5,582	3,109	2,952	3,506	(2,280)	(1,132)	(1,192)	
Transition obligation	_	_		_	_	1	4	_	_	_	
Settlement and curtailment loss (gain)		13,939	(1)	76	961	7	678		(1,381)		
Net periodic benefit expense	\$ (7,791)	\$ 8,069		\$ 74	\$ 8,218	\$ 5,157	\$ 7,297	\$ 5,143	\$ 7,085	\$ 9,768	
Less: Discontinued operations		10,109	(1)	3,383		114	810		279	1,226	
Net periodic (income) expense - Continuing operations	\$ (7,791)	\$(2,040)		\$ (3,309)	\$ 8,218	\$ 5,043	\$ 6,487	\$ 5,143	\$ 6,806	\$ 8,542	

^{(1) \$9.2} million of the total settlement and curtailment loss on the U.S. Plan is attributable to Apergy participants in the Dover Defined Benefit Plan and has therefore been reflected in the results of discontinued operations.

Other Post-Retirement Benefits

	2	2019		9 2018	
Service cost	\$	19	\$	30	\$ 68
Interest cost		312		290	783
Amortization of:					
Prior service cost		13		13	7
Recognized actuarial gain		(70)		(30)	(161)
Settlement and curtailment gain					(4,598)
Net periodic expense (benefit)	\$	274	\$	303	\$ (3,901)

The curtailment gain in 2017 relates primarily to the impact of an amendment to the post-retirement plan in Brazil.

(Amounts in thousands except share data and where otherwise indicated)

Amounts expected to be amortized from accumulated other comprehensive earnings (loss) into net periodic benefit cost during 2020 are as follows:

	Qu	Qualified Defined Benefits				on-Qualified	C	Other Post-	
	U.	U.S. Plan		Non-U.S. Plans		- · · · · · · · · · · · · · · · · · · ·		Retirement Benefits	
Amortization of:									
Prior service cost (credit)	\$	227	\$	(473)	\$	1,695	\$	13	
Recognized actuarial loss (gain)		7,536		2,986		(1,858)		(15)	
Total	\$	7,763	\$	2,513	\$	(163)	\$	(2)	

Assumptions

The Company determines actuarial assumptions on an annual basis. The weighted average assumptions used in determining the benefit obligations were as follows:

	Q	ualified Defi	ned Benefits		Non-Qua		0.1	5	
	U.S. P	lan	Non-U.S.	Plans	Supplem Benef		Other Post- Retirement Benefits		
	2019	2018	2019	2018	2019	2018	2019	2018	
Discount rate	3.40 %	4.35 %	1.18 %	1.83 %	3.20 %	4.30 %	3.10 %	4.15 %	
Average wage increase	4.00 %	4.50 %	1.80 %	2.10 %	4.50 %	4.50 %	na	na	
Ultimate medical trend rate	na	na	na	na	na	na	5.00 %	5.00 %	

The weighted average assumptions used in determining the net periodic benefit cost were as follows:

_	Qualified Defined Benefits						Nor	ı- Qualifi	ied	Other Post-Retirement			
_	U.S. Plan			Non-U.S. Plans				mental B		Benefits			
	2019	2018	2017	2019	2018	2017	2019	2018	2017	2019	2018	2017	
Discount rate	4.35 %	4.2%/3.65% (1)	4.10 %	1.83 %	1.94 %	2.06 %	4.30 %	3.57 %	3.97 %	4.15 %	3.50 %	6.49 %	
Average wage increase	4.00 %	4.00 %	4.00 %	2.10 %	2.33 %	2.34 %	4.50 %	4.50 %	4.50 %	na	na	na	
Expected return on plan assets	6.80 %	6.8%/7.25% (1)	7.25 %	3.67 %	4.66 %	4.73 %	na	na	na	na	na	na	

⁽¹⁾ The separation of Apergy triggered a pension plan curtailment which required a re-measurement of the Plan's benefit obligation in the second quarter 2018, assuming a discount rate of 4.2% and an expected return on assets of 6.8%.

The Company's discount rate assumption is determined by developing a yield curve based on high quality corporate bonds with maturities matching the plans' expected benefit payment streams. The plans' expected cash flows are then discounted by the resulting year-by-year spot rates. The remeasurement in the second quarter of 2018, triggered by the Apergy spin-off, resulted in an increase to the discount rate used in determining net periodic benefit cost from 3.65% to 4.20% for the balance of 2018.

For other post-retirement benefit measurement purposes, a 7.00% annual rate of increase in the per capita cost of covered benefits (i.e., health care cost trend rates) was assumed for 2020. The rate was assumed to decrease gradually to 5.00% by the year 2027 and remain at that level thereafter. The health care cost trend rate assumption can have an effect on the amounts reported. For example, increasing (decreasing) the assumed health care cost trend rates by one percentage point in each year would increase (decrease) the accumulated other post-retirement benefit obligation as of December 31, 2019 by \$78 and \$(76), respectively, and would have a negligible impact on the net post-retirement benefit cost for 2019.

Plan Assets

The primary financial objective of the plans is to secure participant retirement benefits. Accordingly, the key objective in the plans' financial management is to promote stability and, to the extent appropriate, growth in the funded status. Related and supporting financial objectives are established in conjunction with a review of current and projected plan financial requirements.

(Amounts in thousands except share data and where otherwise indicated)

As it relates to the funded defined benefit pension plans, the Company's funding policy is consistent with the funding requirements of the Employment Retirement Income Security Act ("ERISA") and applicable international laws. The Company is responsible for overseeing the management of the investments of the plans' assets and otherwise ensuring that the plans' investment programs are in compliance with ERISA, other relevant legislation and related plan documents. Where relevant, the Company has retained professional investment managers to manage the plans' assets and implement the investment process. The investment managers, in implementing their investment processes, have the authority and responsibility to select appropriate investments in the asset classes specified by the terms of their applicable prospectus or investment manager agreements with the plans.

The assets of the plans are invested to achieve an appropriate return for the plans consistent with a prudent level of risk. The plan's long-term investment objective is to generate investment returns that provide adequate assets to meet all benefit obligations in accordance with applicable regulations. The expected return on assets assumption used for pension expense is developed through analysis of historical and forecasted market returns, statistical analysis, current market conditions and the past experience of plan asset investments. Overall, it is projected that the investment of plan assets within Dover's U.S. defined benefit plan will achieve a net return over time from the asset allocation strategy of 6.80%.

The Company's actual and target weighted average asset allocation for our U.S. Corporate Pension Plan was as follows:

	2019	2018	Current Target
Equity securities	34 %	36 %	34 %
Fixed income	64 %	55 %	66 %
Real estate and other	2 %	9 %	<u> </u>
Total	100 %	100 %	100 %

While the non-U.S. investment policies are different for each country, the long-term objectives are generally the same as for the U.S. pension assets. The Company's non-U.S. plans were expected to achieve average rates of return on invested assets of 3.67% in 2019, 4.66% in 2018 and 4.73% in 2017.

The fair values of both U.S. and non-U.S. pension plan assets by asset category within the fair value hierarchy (as defined in Note 13 — Financial Instruments) were as follows:

	U.S. Qualified Defined Benefits Plan											
	12/31/2019							12/31/2018				
	Level 1		Level 2		Total Fair Value		Level 1		Level 2		Total Fair Value	
Corporate bonds	\$		\$	216,981	\$	216,981	\$	_	\$ 150,179	\$	150,179	
Government securities		5,846		69,486		75,332		1,586	113,931		115,517	
Interest-bearing cash and short-term investments		1,438				1,438		2,066			2,066	
Total investments at fair value		7,284		286,467		293,751		3,652	264,110		267,762	
Investments measured at net asset value*												
Collective funds		_		_		241,058		_	_		175,963	
Real estate investments		_		_		_		_	_		32,686	
Short-term investment funds				_		15,429					12,489	
Total investments	\$	7,284	\$	286,467	\$	550,238	\$	3,652	\$ 264,110	\$	488,900	

(Amounts in thousands except share data and where otherwise indicated)

Non-U.S. Plans

	11011 0101 1 11110									
		12/3	1/2019	_	12/31/2018					
	Level 1	Level 2	Level 3	Total Fair Value	Level 1	Level 2	Level 3	Total Fair Value		
Common stocks	\$ 44,685	\$ —	\$ —	\$ 44,685	\$ 28,528	\$ —	\$ —	\$ 28,528		
Fixed income investments	_	19,871	_	19,871	_	27,797	_	27,797		
Mutual funds	26,799	_	_	26,799	23,438	_	_	23,438		
Cash and cash equivalents	3,752	_	_	3,752	470	_	_	470		
Other		3,519	18,597	22,116		2,390	21,283	23,673		
Total investments at fair value	75,236	23,390	18,597	117,223	52,436	30,187	21,283	103,906		
Investments measured at net asset value*										
Collective funds	_	_	_	64,000	_	_	_	54,505		
Other				4,367				4,178		
Total	\$ 75,236	\$ 23,390	\$ 18,597	\$ 185,590	\$ 52,436	\$ 30,187	\$ 21,283	\$ 162,589		

^{*} In accordance with Fair Value Measurement Topic 820 (Subtopic 820-10), certain investments that are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient were not classified in the fair value hierarchy. These are included to permit reconciliation of the fair value hierarchy to the aggregate pension plan assets.

Common stocks represent investments in domestic and foreign equities, which are publicly traded on active exchanges and are valued based on quoted market prices.

Fixed income investments include U.S. Treasury bonds and notes, which are valued based on quoted market prices, as well as investments in other government and municipal securities and corporate bonds, which are valued based on yields currently available on comparable securities of issuers with similar credit ratings.

Mutual funds are categorized as either Level 1, 2 or Net Asset Value ("NAV") as a practical expedient depending on the nature of the observable inputs. Collective funds and real estate investment funds are valued using NAV as a practical expedient as of the last business day of the year. The NAV is based on the underlying value of the assets owned by the fund, minus its liabilities, and then divided by the number of shares outstanding. The value of the underlying assets is based on quoted prices in active markets.

The methods described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Company believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The availability of observable data is monitored by plan management to assess appropriate classification of financial instruments within the fair value hierarchy. Depending upon the availability of such inputs, specific securities may transfer between levels. In such instances, the transfer is reported at the end of the reporting period.

(Amounts in thousands except share data and where otherwise indicated)

The fair value measurement of plan assets using significant unobservable inputs (Level 3) changed during 2018 and 2019, due to the following:

	 Level 3
Balance at December 31, 2017	\$ 4,592
Actual return on plan assets:	
Relating to assets still held at December 31, 2018	(29)
Insurance contracts added	16,975
Foreign currency translation	 (255)
Balance at December 31, 2018	21,283
Actual return on plan assets:	
Relating to assets still held at December 31, 2019	319
Relating to assets sold during the period	14
Purchases	1,615
Sales and settlements	(4,971)
Foreign currency translation	 337
Balance at December 31, 2019	\$ 18,597

Future Estimates

Benefit Payments

Estimated future benefit payments to retirees, which reflect expected future service, are as follows:

	Qı	ualified De	Benefits	Non- • Qualified		Oth	er Post-		
	U	U.S. Plan		Non-U.S. Plans		Supplemental Benefits		Retirement Benefits	
2020	\$	37,225	\$	8,592	\$	12,698	\$	704	
2021		35,141		8,720		11,820		675	
2022		35,407		9,205		4,428		658	
2023		33,303		10,578		4,442		634	
2024		34,510		11,618		3,808		608	
2025 - 2029		149,224		60,816		14,453		2,626	

Contributions

In 2020, the Company expects to contribute approximately \$4.6 million to its non-US plans and currently does not expect to contribute to its U.S. plans.

(Amounts in thousands except share data and where otherwise indicated)

18. Other Comprehensive Earnings (Loss)

The amounts recognized in other comprehensive earnings (loss) were as follows:

Year Ended December 31, 2019	F	re-tax	Tax	Net of tax		
Foreign currency translation adjustments	\$	25,028	\$ (4,714)	\$	20,314	
Pension and other postretirement benefit plans		6,592	\$ (1,184)	\$	5,408	
Changes in fair value of cash flow hedges		1,707	\$ (359)	\$	1,348	
Total other comprehensive earnings	\$	33,327	\$ (6,257)	\$	27,070	

Year Ended December 31, 2018	 Pre-tax	Tax	Net of tax		
Foreign currency translation adjustments	\$ (69,468)	\$ 9,498	\$	(59,970)	
Pension and other post-retirement benefit plans	(14,379)	3,241		(11,138)	
Changes in fair value of cash flow hedges	3,416	(717)		2,699	
Total other comprehensive loss	\$ (80,431)	\$ 12,022	\$	(68,409)	

Year Ended December 31, 2017	Pre-tax	Tax	Net of tax		
Foreign currency translation adjustments	\$ 103,214	\$ 43,842	\$	147,056	
Pension and other postretirement benefit plans	28,784	(7,397)		21,387	
Changes in fair value of cash flow hedges	(3,678)	1,287		(2,391)	
Other	(1,687)	202		(1,485)	
Total other comprehensive earnings	\$ 126,633	\$ 37,934	\$	164,567	

The components of accumulated other comprehensive earnings (loss) are as follows:

	December 31, 20	19 D	December 31, 2018
Cumulative foreign currency translation adjustments	\$ (122,2	52) \$	(142,567)
Pension and other postretirement benefit plans	(97,5	25)	(102,932)
Changes in fair value of cash flow hedges and other	3,7	51	2,403
	\$ (216,0	26) \$	(243,096)

Total comprehensive earnings (loss) were as follows:

	Years Ended December 31,								
		2019		2018		2017			
Net earnings	\$	677,918	\$	570,267	\$	811,665			
Other comprehensive (loss) earnings		27,070		(68,409)		164,567			
Comprehensive earnings	\$	704,988	\$	501,858	\$	976,232			

(Amounts in thousands except share data and where otherwise indicated)

Amounts reclassified from accumulated other comprehensive earnings (loss) to earnings (loss) during the year ended December 31, 2019, 2018 and 2017 were as follows:

	Years Ended December 31,								
		2019		2018		2017			
Foreign currency translation:									
Reclassification of foreign currency translation losses to earnings	\$	25,339	\$		\$	3,992			
Tax benefit						_			
Net of tax	\$	25,339	\$		\$	3,992			
Pension and other postretirement benefit plans:	_								
Amortization of actuarial losses	\$	759	\$	4,893	\$	7,735			
Amortization of prior service costs and transition obligation		2,729		3,631		4,424			
Settlement and curtailment		961		12,565		(3,844)			
Total before tax		4,449		21,089		8,315			
Tax benefit		(906)		(4,459)		(2,503)			
Net of tax	\$	3,543	\$	16,630	\$	5,812			
Cash flow hedges:									
Net (gains) losses reclassified into earnings	\$	(186)	\$	1,950	\$	(908)			
Tax expense (benefit)		39		(409)		318			
Net of tax	\$	(147)	\$	1,541	\$	(590)			

The Company recognizes the amortization of net actuarial losses, prior service costs and transition obligation as well as settlements and curtailments, in other income, net in the Consolidated Statements of Earnings.

Cash flow hedges consist mainly of foreign currency forward contracts. The Company recognizes the realized gains and losses on its cash flow hedges in the same line item as the hedged transaction, such as revenue, cost of goods and services, or selling, general and administrative expenses in the Consolidated Statements of Earnings.

(Amounts in thousands except share data and where otherwise indicated)

19. Segment Information

Effective October 1, 2019, Dover transitioned from a three-segment to a five-segment structure as a result of a change to its management structure and operating model. The Company's businesses are structured around similar business models, go-to market strategies and manufacturing practices which increases management efficiency and better aligns Dover's operations with its strategic initiatives and capital allocation priorities, and provide greater transparency about performance. Operating segments are defined as the components of an enterprise for which separate financial information is available and regularly evaluated by the entity's chief operating decision maker ("CODM") or decision-making group, which is composed of Dover's executive leadership team, in making resource allocation decisions and evaluating performance.

The Company categorizes its operating companies into five reportable segments based on how the CODM analyze performance, allocate capital and make strategic and operational decisions. The five reportable segments are as follows:

- Engineered Products segment is a provider of a wide range of products, software and services that have broad customer applications across a number of markets, including aftermarket vehicle service, solid waste handling, industrial automation, aerospace and defense, industrial winch and hoist, and fluid dispensing.
- Fueling Solutions segment is focused on providing components, equipment and software and service solutions enabling safe transport of fuels and other hazardous fluids along the supply chain, as well as the safe and efficient operation of retail fueling and vehicle wash establishments.
- Imaging & Identification segment supplies precision marking and coding, product traceability and digital textile printing equipment, as well as related consumables, software and services.
- Pumps & Process Solutions segment manufactures specialty pumps, fluid handling components, plastics and polymer processing equipment, and highly engineered components for rotating and reciprocating machines.
- Refrigeration & Food Equipment segment is a provider of innovative and energy-efficient equipment and systems that serve the commercial refrigeration, heating and cooling and food equipment markets.

(Amounts in thousands except share data and where otherwise indicated)

Segment financial information and a reconciliation of segment results to consolidated results follows:

	Years Ended December 31,						
		2019		2018		2017	
Revenue:							
Engineered Products	\$	1,697,557	\$	1,633,147	\$	1,626,856	
Fueling Solutions		1,620,177		1,465,590		1,338,062	
Imaging & Identification		1,084,471		1,109,843		1,041,188	
Pumps & Process Solutions		1,338,528		1,331,893		1,217,235	
Refrigeration & Food Equipment		1,396,617		1,453,093		1,599,105	
Intra-segment eliminations		(953)		(1,448)		(1,560)	
Total consolidated revenue	\$	7,136,397	\$	6,992,118	\$	6,820,886	
Earnings from continuing operations:							
Segment earnings (EBIT): (1)							
Engineered Products	\$	291,848	\$	252,368	\$	437,079	
Fueling Solutions		231,873		152,255		159,180	
Imaging & Identification		229,484		198,902		167,404	
Pumps & Process Solutions (2)		240,081		237,549		209,451	
Refrigeration & Food Equipment		118,832		136,119		193,822	
Total segment earnings (EBIT)		1,112,118		977,193		1,166,936	
Corporate expense / other (3)		124,274		129,724		154,664	
Interest expense		125,818		130,972		144,948	
Interest income		(4,526)		(8,881)		(8,491)	
Loss on extinguishment of debt		23,543		(s,sss)			
Earnings before provision for income taxes and discontinued operations		843,009		725,378		875,815	
Provision for income taxes		165,091		134,233		129,152	
Earnings from continuing operations	\$	677,918	\$	591,145	\$	746,663	
Segment margins:	Ψ	077,510	Ψ	571,110	Ψ	7 10,005	
Engineered Products		17.2 %		15.5 %		26.9 %	
Fueling Solutions		14.3 %		10.4 %		11.9 %	
Imaging & Identification		21.2 %		17.9 %		16.1 %	
Pumps & Process Solutions (2)		17.9 %		17.8 %		17.2 %	
Refrigeration & Food Equipment		8.5 %		9.4 %		12.1 %	
Total Segments		15.6 %		14.0 %		17.1 %	
Earnings from continuing operations		9.5 %		8.5 %		10.9 %	
Depreciation and amortization:		9.5 70		0.5 /0		10.9 /0	
Engineered Products	\$	41,032	\$	44,995	\$	48,271	
Fueling Solutions	Φ	75,045	Φ	68,463	Ψ	67,835	
Imaging & Identification		30,530		30,882		37,176	
Pumps & Process Solutions		67,584		71,982		67,986	
Refrigeration & Food Equipment		51,360		60,477		57,207	
Corporate		6,736		5,781			
Consolidated total	\$		•		•	4,803	
	<u> </u>	272,287	\$	282,580	\$	283,278	
Capital expenditures:	\$	38,049	Ф	24.016	¢	25 762	
Engineered Products	Ф		\$	34,016	\$	25,762	
Fueling Solutions		21,780		37,232		40,702	
Imaging & Identification		18,593		13,029		11,733	
Pumps & Process Solutions		50,442		49,333		49,923	
Refrigeration & Food Equipment		51,052		32,482		32,541	
Corporate	C	6,888	Φ.	4,902	Φ.	9,407	
Consolidated total	\$	186,804	\$	170,994	\$	170,068	

⁽¹⁾ Segment earnings (EBIT) includes non-operating income and expense directly attributable to the segments. Non-operating income and expense includes gain on sale of businesses and other income, net.

(Amounts in thousands except share data and where otherwise indicated)

Selected financial information by segment (continued):

Total assets at December 31:	2019	2018
Engineered Products	\$ 1,431,948	\$ 1,477,671
Fueling Solutions	2,107,045	1,895,308
Imaging & Identification	1,673,689	1,592,349
Pumps & Process Solutions	1,553,836	1,562,845
Refrigeration & Food Equipment	1,302,618	1,252,870
Corporate (4)	600,341	584,728
Total assets	\$ 8,669,477	\$ 8,365,771

⁽⁴⁾The significant portion of corporate assets are principally cash and cash equivalents.

		Long-Lived Assets						
	Years	Ended Decem	ber 31,	At December 31,				
	2019 2018 2017 2019							
United States	\$ 3,806,033	\$ 3,619,717	\$ 3,654,102	\$ 491,732	\$ 480,780			
Europe	1,571,901	1,572,788	1,476,686	261,170	239,070			
Asia	863,050	867,268	754,845	60,601	59,550			
Other Americas	625,707	631,164	621,831	24,174	24,872			
Other	269,706	301,181	313,422	4,641	2,225			
Consolidated total	\$ 7,136,397	\$ 6,992,118	\$ 6,820,886	\$ 842,318	\$ 806,497			

The majority of revenue from our Engineered Products, Fueling Systems, Imaging & Identification. Pumps & Process Solutions, and Refrigeration & Food Equipment segments is generated from sales to customers within the United States, Europe and Asia. Each segment also generates revenue across the other geographies, with no significant concentration of any segment's remaining revenue.

Revenue is attributed to regions based on the location of the Company's customer, which in some instances is an intermediary and not necessarily the end user. Long-lived assets are comprised of net property, plant and equipment. The Company's businesses are based primarily in the United States, Europe and Asia. The Company's businesses serve thousands of customers, none of which accounted for more than 10% of consolidated revenue.

⁽²⁾ For the year ended December 31, 2019 includes a \$46,946 loss on assets held for sale for Finder.

⁽³⁾ Certain expenses are maintained at the corporate level and not allocated to the segments. These expenses include executive and functional compensation costs, non-service pension costs, non-operating insurance expenses, shared business services overhead costs, deal related expenses and various administrative expenses relating to the corporate headquarters.

(Amounts in thousands except share data and where otherwise indicated)

20. Earnings per Share

The following table sets forth a reconciliation of the information used in computing basic and diluted earnings per share:

		Years Ended December 31,								
		2019		2018		2017				
Earnings from continuing operations	\$	677,918	\$	591,145	\$	746,663				
(Loss) earnings from discontinued operations, net				(20,878)		65,002				
Net earnings	\$	677,918	\$	570,267	\$	811,665				
Basic earnings per common share:										
Earnings from continuing operations	\$	4.67	\$	3.94	\$	4.80				
(Loss) earnings from discontinued operations, net	\$		\$	(0.14)	\$	0.42				
Net earnings	\$	4.67	\$	3.80	\$	5.21				
Weighted average basic shares outstanding	14	5,198,000	_14	49,874,000	_1.	55,685,000				
Diluted earnings per common share:										
Earnings from continuing operations	\$	4.61	\$	3.89	\$	4.73				
(Loss) earnings from discontinued operations, net	\$		\$	(0.14)	\$	0.41				
Net earnings	\$	4.61	\$	3.75	\$	5.15				
Weighted average diluted shares outstanding	14	6,992,000	15	52,133,000	_1	57,744,000				

The following table is a reconciliation of the share amounts used in computing earnings per share:

	Years Ended December 31,						
	2019	2018	2017				
Weighted average shares outstanding - Basic	145,198,000	149,874,000	155,685,000				
Dilutive effect of assumed exercise of SARs and vesting of performance shares and RSUs	1,794,000	2,259,000	2,059,000				
Weighted average shares outstanding - Diluted	146,992,000	152,133,000	157,744,000				

Diluted earnings per share amounts are computed using the weighted average number of common shares outstanding and, if dilutive, potential common shares outstanding during the period. Potential common shares consist of the incremental common shares issuable upon the exercise of SARs and vesting of performance shares and RSUs, as determined using the treasury stock method. For the years ended December 31, 2019, 2018 and 2017, the weighted average number of anti-dilutive potential common shares excluded from the calculation above totaled 28,096, 1,382 and 79,756, respectively.

21. Stockholders' Equity

The Company has the authority to issue up to 100,000 shares of \$100 par preferred stock and up to 500,000,000 shares of \$1.00 par common stock. There were no issuances of preferred stock. As of December 31, 2019 and 2018, the Company issued 258,551,748 and 257,822,352 shares of common stock and had 114,249,432 and 112,905,810 treasury shares, held at cost, respectively.

Share Repurchases

The Company's prior January 2015 share repurchase authorization expired on January 9, 2018. From January 1 to January 9, 2018, the Company repurchased 440,608 shares of common stock at a total cost of \$44,977 or \$102.08 per share. There were 5,271,168 shares available for repurchase under this authorization upon expiration.

In February 2018, the Company's Board of Directors approved a new standing share repurchase authorization, whereby the Company may repurchase up to 20 million shares of its common stock through December 31, 2020. This share repurchase authorization replaced the January 2015 share repurchase authorization.

(Amounts in thousands except share data and where otherwise indicated)

On May 22, 2018, the Company entered into a \$700,000 accelerated share repurchase agreement (the "ASR Agreement") with Goldman Sachs & Co. LLC ("Goldman Sachs") to repurchase its shares in an accelerated share repurchase program (the "ASR Program"). The Company conducted the ASR Program under the February 2018 share repurchase authorization. The Company funded the ASR Program with funds received from Apergy in connection with the consummation of the Apergy spin-off.

Under the terms of the ASR Agreement, the Company paid Goldman Sachs \$700,000 on May 24, 2018 and on that date received initial deliveries of 7,078,751 shares, representing a substantial majority of the shares expected to be retired over the course of the ASR Agreement. In December 2018 Goldman Sachs delivered a total of 1,463,815 shares which completed the ASR Program. During 2018, the Company received a total of 8,542,566 shares as part of the ASR Agreement. The total number of shares ultimately repurchased under the ASR Agreement was based on the volume-weighted average share price of Dover's common stock during the calculation period of the ASR Program, less a discount, which was \$81.94 over the term of the ASR Program.

During the year ended December 31, 2019 and 2018, under the February 2018 authorization, exclusive of the ASR Agreement, the Company repurchased 1,343,622 and 1,753,768 shares of common stock at a total cost of \$143,280 and \$150,000 or \$106.64 and \$85.53 per share, respectively.

As of December 31, 2019, 8,360,044 shares remain authorized for repurchase under the February 2018 share repurchase authorization.

22. Quarterly Data (Unaudited)

					Continui	ng (Operati	ions		N	let	Earning	Earnings			
<u>Quarter</u>	 Revenue	G	Gross Profit		Earnings		Per Share - Basic		Per nare - iluted	Net Earnings	\mathbf{S}	Per hare - Basic	Sh	Per are - luted		
<u>2019</u>																
First	\$ 1,724,757	\$	623,542	\$	105,705	\$	0.73	\$	0.72	\$ 105,705	\$	0.73	\$	0.72		
Second	1,810,706		672,593		198,085		1.36		1.35	198,085		1.36		1.35		
Third	1,825,345		673,488		206,006		1.42		1.40	206,006		1.42		1.40		
Fourth	 1,775,589		651,315		168,122		1.16		1.15	168,122	_	1.16		1.15		
	\$ 7,136,397	\$	2,620,938	\$	677,918	\$	4.67	\$	4.61	\$ 677,918	\$	4.67	\$	4.61		
<u>2018</u>																
First	\$ 1,637,671	\$	602,828	\$	109,409	\$	0.71	\$	0.70	\$ 131,434	\$	0.85	\$	0.84		
Second	1,798,094		665,236		166,456		1.10		1.08	139,959		0.92		0.91		
Third	1,747,403		646,520		157,305		1.07		1.05	157,305		1.07		1.05		
Fourth	1,808,950		644,972		157,975		1.08		1.07	141,569		0.97		0.96		
	\$ 6,992,118	\$	2,559,556	\$	591,145	\$	3.94	\$	3.89	\$ 570,267	\$	3.80	\$	3.75		

23. Subsequent Events

On January 24, 2020, the Company acquired Sys-Tech Solutions, Inc. ("Systech"). Systech is a leading provider of software and solutions for product traceability, regulatory compliance and brand protections and will strengthen the portfolio of solutions offered by the Imaging & Identification segment.

On January 24, 2020, the Company entered into a definitive agreement to acquire So. Cal. Soft-Pak, Incorporated ("Soft-Pak") Software Solutions. Soft-Pak is a leading provider of integrated back office, route management and customer relationship management software solutions to the waste and recycling fleet industry and will further strengthen the digital offerings of the Engineered Products segment. The transaction is subject to satisfaction of customary closing conditions and is expected to close in the first quarter of 2020.

The combined purchase price for both acquisitions is approximately \$210,000, subject to customary post-closing adjustments.

SCHEDULE II

VALUATION AND QUALIFYING ACCOUNTS Years Ended December 31, 2019, 2018 and 2017 (In thousands)

Allowance for Doubtful Accounts	_	Balance at Beginning of Year	Charged to Cost and Expense (A)	Accounts Written Off	Other	_	alance at id of Year
Year Ended December 31, 2019	\$	28,469	5,933	(3,464)	(1,557)	\$	29,381
Tour Ended Beechieer 51, 2017	Ψ	20,107	2,733	(3,101)	(1,557)	Ψ	27,501
Year Ended December 31, 2018	\$	34,479	3,875	(9,326)	(559)	\$	28,469
Year Ended December 31, 2017	\$	16,381	10,341	(3,706)	11,463	\$	34,479
(A) Net of recoveries on previously reserv	ed o		,	())	,		,
Deferred Tax Valuation Allowance	Balance at Beginning of Year		Additions	Reductions	Other	_	alance at id of Year
Year Ended December 31, 2019	\$	264,398	14,189	(34,434)		\$	244,153
Teal Ended December 31, 2019	Ф	204,336	14,109	(34,434)	_	Ф	244,133
Year Ended December 31, 2018	\$	238,236	26,162	_	_	\$	264,398
Year Ended December 31, 2017	\$	289,237		(51,001)		\$	238,236
Teal Ended December 31, 2017	Ф	209,237	_	(31,001)	_	Ф	236,230
LIFO Reserve	_	Balance at Beginning of Year	Charged to Cost and Expense	Reductions	Other	_	alance at id of Year
W E LID 1 21 2010	Φ	20.020	401	(0.062)		Ф	11 420
Year Ended December 31, 2019	\$	20,020	491	(9,083)	<u> </u>	\$	11,428
Year Ended December 31, 2018	\$	17,571	3,474	(1,025)	_	\$	20,020

- \$ 17,571

Year Ended December 31, 2017

\$

20,245

1,708

(4,382)

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Based on an evaluation under the supervision and with the participation of the Company's management, the Company's Chief Executive Officer and Chief Financial Officer have concluded that the Company's disclosure controls and procedures as defined in Rule 13a-15(e) under the Exchange Act were effective as of December 31, 2019 to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms and (ii) accumulated and communicated to the Company's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Controls

During the fourth quarter of 2019, there were no changes in the Company's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Inherent Limitations Over Internal Controls

The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. The Company's internal control over financial reporting includes those policies and procedures that:

- i. pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the Company's assets;
- ii. provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that the Company's receipts and expenditures are being made only in accordance with authorizations of the Company's management and directors; and
- iii. 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.

Management's report on the effectiveness of the Company's internal control over financial reporting is included in Item 8 of this Form 10-K. Management, including the Company's Chief Executive Officer and Chief Financial Officer, does not expect that the Company's internal controls will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of internal controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. Also, any evaluation of the effectiveness of controls in future periods is subject to the risk that those internal controls may become inadequate because of changes in business conditions, or that the degree of compliance with the policies or procedures may deteriorate.

ITEM 9B. OTHER INFORMATION

None

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information with respect to the corporate governance matters and Section 16 compliance required to be included pursuant to this Item 10 will be included in the 2020 Proxy Statement that will be filed with the Securities and Exchange Commission pursuant to Rule 14a-6 under the Exchange Act in accordance with applicable SEC deadlines, and is incorporated in this Item 10 by reference.

As set forth below is a list of the members of our Board of Directors as of February 14, 2020.

H. John Gilbertson, Jr. 1,4

Retired Managing Director, Goldman Sachs Group Inc.

Kristiane C. Graham^{2,3}

Private Investor

Michael F. Johnston, Chairman of the Board^{2,3}

Retired Chief Executive Officer, Visteon Corporation

Eric A. Spiegel^{1,4}

Former President and CEO of Siemens USA

Richard J. Tobin

President & Chief Executive Officer, Dover Corporation

Stephen M. Todd¹

Former Global Vice Chairman of Assurance Professional Practice of Ernst & Young Global Limited

Stephen K. Wagner^{1,3}

Former Senior Advisor, Center for Corporate Governance, Deloitte & Touche LLP

Keith E. Wandell^{2,4}

Retired President and Chief Executive Officer, Harley-Davidson, Inc.

Mary A. Winston^{2.4}

President of WinsCo Enterprises Inc.;

Former Executive Vice President & Chief Financial Officer, Family Dollar Stores, Inc.

The information with respect to Section 16(a) reporting compliance required to be included in this Item 10 will be included in our 2020 Proxy Statement and is incorporated in this Item 10 by reference.

The Company has adopted a code of ethics that applies to its chief executive officer and senior financial officers. A copy of this code of ethics can be found on our website at www.dovercorporation.com. In the event of any amendment to, or waiver from, the code of ethics, we will publicly disclose the amendment or waiver by posting the information on our website.

ITEM 11. EXECUTIVE COMPENSATION

The information with respect to executive compensation and the compensation committee required to be included pursuant to this Item 11 will be included in our 2020 Proxy Statement and is incorporated in this Item 11 by reference.

¹ Members of Audit Committee

² Members of Compensation Committee

³ Members of Governance & Nominating Committee

⁴ Members of Finance Committee

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

The information regarding security ownership of certain beneficial owners and management that is required to be included pursuant to this Item 12 will be included in our 2020 Proxy Statement and is incorporated in this Item 12 by reference.

Equity Compensation Plans

The Equity Compensation Plan Table below presents information regarding our equity compensation plans at December 31, 2019:

	(a)		(b)	(c)
Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights (1)	Av Exerc of Out Op Warr	ighted- erage sise Price tstanding otions, ants and ights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (2)
Equity compensation plans approved by stockholders	4,061,531	\$	69.07	6,302,521
Equity compensation plans not approved by stockholders			_	_
Total	4,061,531	\$	69.07	6,302,521

- 1. Column (a) includes shares issuable pursuant to outstanding SARs, restricted stock units and performance share awards under the Company's 2012 Equity and Cash Incentive Plan (the "2012 Plan") and the 2005 Equity and Cash Incentive Plan. Performance shares are subject to satisfaction of the applicable performance criteria over a three-year performance period. Restricted stock unit and performance share awards are not reflected in the weighted exercise price in column (b) as these awards do not have an exercise price.
- 2. Column (c) consists of shares available for future issuance under the Company's the 2012 Plan. Under the 2012 Plan, the Company could grant options, SARs, restricted stock or restricted stock units, performance share awards, director shares, or deferred stock units. Under the 2012 Plan, the number of shares available for issuance will be reduced (i) by one share for each share issued pursuant to options or SARs and (ii) by three shares for each share of stock issued pursuant to restricted stock, restricted stock unit, performance share, director share, or deferred stock unit awards.

As of December 31, 2019, equity securities have been authorized for issuance to employees and/or non-employee directors under the 2012 Plan and its predecessor plan, the 2005 Plan. Although the 2005 Plan has expired and no further awards may be granted under the Plan, there remain outstanding stock-settled appreciation rights and performance share awards under the 2005 Plan, which are reflected in Column (a) of the table.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information with respect to any director independence, related party transaction policies and any reportable transaction, business relationship, or indebtedness between the Company and the beneficial owners of more than 5% of the Common Stock, the directors or nominees for director of the Company, the executive officers of the Company, or the members of the immediate families of such individuals that are required to be included pursuant to this Item 13 will be included in the 2020 Proxy Statement and is incorporated in this Item 13 by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information with respect to the Company's relationship with its independent registered public accounting firm and fees paid thereto required to be included pursuant to this Item 14 will be included in the 2020 Proxy Statement and is incorporated in this Item 14 by reference.

The information with respect to audit committee pre-approval policies and procedures required to be included pursuant to this Item 14 will be included in the 2020 Proxy Statement and is incorporated in this Item 14 by reference.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

- a) The following documents are filed as part of this report:
- (1) Financial Statements. The financial statements are set forth under "Item 8. Financial Statements and Supplementary Data" of this Form 10-K.
- (2) Schedules. The following financial statement schedule is set forth under "Item 8. Financial Statements and Supplementary Data" of this Form 10-K. All other schedules have been omitted because they are not required, are not applicable or the required information is included in the financial statements or the notes thereto.
 - Schedule II Valuation and Qualifying Accounts
- Exhibits. The exhibits below are filed or incorporated by reference as part of this Form 10-K. The exhibits will be filed with the SEC but will not be included in the printed version of the Annual Report to Shareholders.

EXHIBIT INDEX

- (2.1) <u>Separation and Distribution Agreement, dated May 9, 2018, by and between Dover Corporation and Apergy Corporation, filed as Exhibit 2.1 to the Company's Current Report on Form 8-K filed May 11, 2018 (SEC File No. 001-04018), is incorporated by reference.</u>
- (3)(i) Fifth Restated Certificate of Incorporation of the Company, filed as Exhibit 3(i)(a) to the Company's Current Report on Form 8-K filed May 7, 2019 (SEC File No. 001-04018), is incorporated by reference.
- (3)(ii) Amended and Restated By-Laws of the Company, effective as of August 1, 2019, filed as Exhibit 3.1 to the Company's Current Report on Form 8-K filed on August 2, 2019 (SEC File No. 001-04018), are incorporated by reference.
- (4.1) Indenture, dated as of June 8, 1998 between the Company and The First National Bank Chicago, as trustee, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed June 12, 1998 (SEC File No. 001-04018), is incorporated by reference.
- (4.2) Form of 6.65% Debentures due June 1, 2028 (\$200,000,000 aggregate principal amount), filed as Exhibit 4.4 to the Company's Current Report on Form 8-K filed June 12, 1998 (SEC File No. 001-04018), is incorporated by reference.
- (4.3) Indenture, dated as of February 8, 2001 between the Company and BankOne Trust Company, N.A., as trustee, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed February 13, 2001 (SEC File No. 001-04018), is incorporated by reference.
- (4.4) First Supplemental Indenture, dated as of October 13, 2005, among the Company, J.P. Morgan Trust Company, National Association, as original trustee, and The Bank of New York, as trustee, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed October 13, 2005 (SEC File No. 001-04018), is incorporated by reference.
- (4.5) Form of 5.375% Debentures due October 15, 2035 (\$300,000,000 aggregate principal amount), filed as Exhibit 4.3 to the Company's Current Report on Form 8-K filed October 13, 2005 (SEC File No. 001-04018), is incorporated by reference.
- (4.6) Second Supplemental Indenture, dated as of March 14, 2008, between the Company and The Bank of New York, as trustee, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed March 14, 2008 (SEC File No. 001-04018), is incorporated by reference.
- (4.7) Form of Global Note representing 6.60% Notes due March 15, 2038 (\$250,000,000 aggregate principal amount), filed as Exhibit 4.3 to the Company's Current Report on Form 8-K filed March 14, 2008 (SEC File No. 001-04018), is incorporated by reference.
- (4.8) Third Supplemental Indenture, dated as of February 22, 2011, between the Company and The Bank of New York Mellon, as trustee, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed February 22, 2011 (SEC File No. 001-04018), is incorporated by reference.
- (4.9) Form of 5.375% Notes due March 1, 2041 (\$350,000,000 aggregate principal amount), filed as Exhibit 4.3 to the Company's Current Report on Form 8-K filed February 22, 2011 (SEC File No. 001-04018), is incorporated by reference.

- (4.10) Fourth Supplemental Indenture, dated as of December 2, 2013, between the Company and The Bank of New York Mellon, as trustee and The Bank of New York Mellon, London Branch, as paying agent, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed December 3, 2013 (SEC File No. 001-04018), is incorporated by reference.
- (4.11) Fifth Supplemental Indenture, dated as of November 3, 2015, between the Company and J.P. Morgan Trust Company National Association, as trustee, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed on November 3, 2015 (SEC File No. 001-04018), is incorporated by reference.
- (4.12) Form of Global Note representing the 3.150% Notes due 2025 (\$400,000,000 aggregate principal amount) (included as Exhibit A to the Fifth Supplemental Indenture), filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed on November 3, 2015 (SEC File No. 001-04018), is incorporated by reference.
- (4.13) Sixth Supplemental Indenture, dated as of November 9, 2016, between the Company and J.P. Morgan Trust Company National Association, as trustee, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed on November 9, 2016 (SEC File No. 001-04018), is incorporated by reference.
- (4.14) Form of Global Note representing the 1.250% Notes due 2026 (€600,000,000 aggregate principal amount) (included as Exhibit A to the Sixth Supplemental Indenture), filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed on November 9, 2016 (SEC File No. 001-04018), is incorporated by reference.
- (4.15) Seventh Supplemental Indenture, dated as of November 4, 2019, between the Company and the Bank of New York Mellon, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed on November 4, 2019 (SEC File No. 001-04018), is incorporated by reference.
- (4.16) Form of Global Note representing the 0.750% Notes due 2027 (€500,000,000 aggregate principal amount) (included as Exhibit A to the Seventh Supplemental Indenture), filed as Exhibit 4.2 to the Company's Current Report on Form 8-K filed on November 4, 2019 (SEC File No. 001-04018), is incorporated by reference.
- (4.17) Eighth Supplemental Indenture, dated as of November 4, 2019, between the Company and the Bank of New York Mellon, as trustee, filed as Exhibit 4.3 to the Company's Current Report on Form 8-K filed on November 4, 2019 (SEC File No. 001-04018), is incorporated by reference.
- (4.18) Form of Global Note representing the 2.950% Notes due 2029 (\$300,000,000 aggregate principal amount) (included as Exhibit A to the Eighth Supplemental Indenture), filed as Exhibit 4.4 to the Company's Current Report on Form 8-K filed on November 4, 2019 (SEC File No. 001-04018), is incorporated by reference.
- (4.19) Description of Dover Corporation's securities registered pursuant to Section 12 of the Exchange Act.(1)
 - The Company agrees to furnish to the Securities and Exchange Commission upon request, a copy of any instrument with respect to long-term debt under which the total amount of securities authorized does not exceed 10 percent of the total consolidated assets of the Company.
- (10.1) Dover Corporation Senior Executive Change-in-Control Severance Plan, as amended and restated effective November 1, 2018, as filed as Exhibit 10.1 to the Company's Annual Report on Form 10-K for the period ended December 31, 2018 (SEC File No. 001-04018), is incorporated by reference.*
- (10.2) Dover Corporation Executive Officer Annual Incentive Plan, as amended and restated as of January 1, 2009, filed as Exhibit 10.2 to the Company's Current Report on Form 8-K filed May 13, 2009 (SEC File No. 001-04018), is incorporated by reference.*
- (10.3) First Amendment to the Dover Corporation Executive Officer Annual Incentive Plan, as amended November 14, 2019* (1)
- (10.4) Dover Corporation Deferred Compensation Plan, as amended and restated as of January 1, 2009, filed as Exhibit 10.6 to the Company's Annual Report on Form 10-K for the year ended December 31, 2008 (SEC File No. 001-04018), is incorporated by reference.*
- (10.5) First Amendment and Second Amendment to the Dover Corporation Deferred Compensation Plan, as amended and restated as of January 1, 2009, filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2013 (SEC File No. 001-04018), is incorporated by reference.*
- (10.6) Third Amendment, adopted on July 31, 2014 and effective as of January 1, 2014, to the Dover Corporation Deferred Compensation Plan, filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2014 (SEC File No. 001-04018), is incorporated by reference.*
- (10.7) Fourth Amendment, effective as of January 1, 2015, to the Dover Corporation Deferred Compensation Plan, filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2015 (SEC File No. 001-04018), is incorporated by reference.*

- (10.8) Fifth Amendment, dated as of October 28, 2015, to the Dover Corporation Deferred Compensation Plan, filed as Exhibit 10.8 to the Company's Annual Report on Form 10-K for the period ended December 31, 2015 (SEC File No. 001-04018), is incorporated by reference.*
- (10.9) Sixth Amendment, dated as of November 28, 2016, to the Dover Corporation Deferred Compensation Plan, filed as Exhibit 10.9 to the Company's Annual Report on Form 10-K for the period ended December 31, 2016 (SEC File No. 001-04018), is incorporated by reference.*
- (10.10) Seventh Amendment, dated as of May 8, 2018, to the Dover Corporation Deferred Compensation Plan, filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended June 30, 2018 (SEC File No. 001-04018), is incorporated by reference.*
- (10.11) Dover Corporation 2005 Equity and Cash Incentive Plan, amended and restated as of January 1, 2009, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed May 13, 2009 (SEC File No. 001-04018), is incorporated by reference.*
- (10.12) Amendment No. 1 to the Dover Corporation 2005 Equity and Cash Incentive Plan (Amended and Restated as of January 1, 2009), filed as Exhibit 10.9 to the Company's Annual Report on Form 10-K for the period ended December 31, 2014 (SEC File No. 001-04018), is incorporated by reference.*
- (10.13) Amendment No. 1 to the Dover Corporation 2012 Equity and Cash Incentive Plan, filed as Exhibit 10.25 to the Company's Annual Report on Form 10-K for the year ended December 31, 2013 (SEC File No. 001-04018), is incorporated by reference.*
- (10.14) Form of award grant letter for SSAR grants made under the Dover Corporation 2005 Equity and Cash Incentive Plan, filed as Exhibit 10.8 to the Company's Annual Report on Form 10-K for the period ended December 31, 2011 (SEC File No. 001-04018), is incorporated by reference.*
- (10.15) Dover Corporation Pension Replacement Plan (formerly the Supplemental Executive Retirement Plan), as amended and restated as of January 1, 2010, filed as Exhibit 10.11 to the Company's Annual Report on Form 10-K for the year ended December 31, 2009 (SEC File No. 001-04018), is incorporated by reference.*
- (10.16) First Amendment to the Dover Corporation Pension Replacement Plan, as amended and restated as of January 1, 2010, filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2013 (SEC File No. 001-04018), is incorporated by reference.*
- (10.17) Second Amendment, dated as of November 28, 2016, to the Dover Corporation Pension Replacement Plan, as amended and restated as of January 1, 2010, filed as Exhibit 10.19 to the Company's Annual Report on Form 10-K for the period ended December 31, 2016 (SEC File No. 001-04018), is incorporated by reference.*
- (10.18) Third Amendment, dated as of May 8, 2018, to the Dover Corporation Pension Replacement Plan, as amended and restated as of January 1, 2010, filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the period ended June 30, 2018 (SEC File No. 001-04018), is incorporated by reference.*
- (10.19) Dover Corporation Executive Severance Plan, as amended and restated effective November 1, 2018, as filed as Exhibit 10.18 to the Company's Annual Report on Form 10-K for the period ended December 31, 2018 (SEC File No. 001-04018), is incorporated by reference.*
- (10.20) Amendment No. 1 to the Executive Employee Supplemental Retirement Agreement with Robert A. Livingston, Jr., filed as Exhibit 99.1 to the Company's Current Report on Form 8-K filed March 3, 2010 (SEC_File No. 001-04018), is incorporated by reference.*
- (10.21) Dover Corporation 2012 Equity and Cash Incentive Plan, effective as of May 3, 2012, filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended June 30, 2012 (SEC File No. 001-04018), is incorporated by reference.*
- (10.22) Amendment No. 2, adopted and effective as of August 6, 2014, to the Dover Corporation 2012 Equity and Cash Incentive Plan, filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2014 (SEC File No. 001-04018), is incorporated by reference.*
- (10.23) Form of award grant letter for SSAR grants made under the Dover Corporation 2012 Equity and Cash Incentive Plan, filed as Exhibit 10.20 to the Company's Annual Report on Form 10-K for the year ended December 31, 2012 (SEC File No. 001-04018), is incorporated by reference.*
- (10.24) Form of award grant letter for SSAR grants made under the Dover Corporation 2012 Equity and Cash Incentive Plan, filed as Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2014 (SEC File No. 001-04018), is incorporated by reference.*
- (10.25) Form of award grant letter for SSAR grants made under the Dover Corporation 2012 Equity and Cash Incentive Plan, filed as Exhibit 10.25 to the Company's Annual Report on Form 10-K for the period ended December 31, 2014 (SEC File No. 001-04018), is incorporated by reference.*

- (10.26) Form of award grant letter for SSAR grants made under the Dover Corporation 2012 Equity and Cash Incentive Plan, filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2016 (SEC File No. 001-04018), is incorporated by reference.*
- (10.27) Form of award grant letter for SSAR grants made under the Dover Corporation 2012 Equity and Cash Incentive Plan, filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2017 (SEC File No. 001-04018), is incorporated by reference.*
- (10.28) Form of award grant letter for SSAR grants made under the Dover Corporation 2012 Equity and Cash Incentive Plan, filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2018 (SEC File No. 001-04018), is incorporated by reference.*
- (10.29) Form of award grant letter for SSAR grants made under the Dover Corporation 2012 Equity and Cash Incentive Plan, filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2019 (SEC File No. 001-04019), is incorporated by reference.*
- (10.30) Form of award grant letter for cash performance awards made under the Dover Corporation 2012 Equity and Cash Incentive Plan, filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2018 (SEC File No. 001-04018), is incorporated by reference.*
- (10.31) Form of award grant letter for cash performance awards made under the Dover Corporation 2012 Equity and Cash Incentive Plan, filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2019 (SEC File No. 001-04018), is incorporated by reference.*
- (10.32) Form of award grant letter for performance share awards made under the Dover Corporation 2012 Equity and Cash Incentive Plan, filed as Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2018 (SEC File No. 001-04018), is incorporated by reference.*
- (10.33) Form of award grant letter for performance share awards made under the Dover Corporation 2012 Equity and Cash Incentive Plan, filed as Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2019 (SEC File No. 001-04018), is incorporated by reference.*
- (10.34) Form of Restricted Stock Unit Award Letter under the Dover Corporation 2012 Equity and Cash Incentive Plan, filed as Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2017 (SEC File No. 001-04018), is incorporated by reference.*
- (10.35) Form of Restricted Stock Unit Award Letter under the Dover Corporation 2012 Equity and Cash Incentive Plan, filed as Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2018 (SEC File No. 001-04018), is incorporated by reference.*
- (10.36) Form of Restricted Stock Unit Award Letter under the Dover Corporation 2012 Equity and Cash Incentive Plan, filed as Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2019 (SEC File No. 001-04018), is incorporated by reference.*
- (10.37) Employment Agreement of Richard J. Tobin dated March 16, 2018, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed March 20, 2018 (SEC File No. 001-04018), is incorporated by reference.*
- (10.38) Five-Year Credit Agreement, dated as of October 4,2019, among the Company, the Borrowing Subsidiaries party thereto from time to time, the Lenders party thereto, and JPMorgan Chase Bank, N.A, as Administrative Agent, filed as Exhibit 10.01 to the Company's Current Report on Form 8-K filed October 10, 2019 (SEC File No. 001-04018), is incorporated by reference.
- (10.39) Employee Matters Agreement, dated May 9, 2018, by and between Dover Corporation and Apergy Corporation, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed May 11, 2018 (SEC File No. 001-04018), is incorporated by reference.
- (10.40) Tax Matters Agreement, dated May 9, 2018, by and between Dover Corporation and Apergy Corporation, filed as Exhibit 10.2 to the Company's Current Report on Form 8-K filed May 11, 2018 (SEC File No. 001-04018), is incorporated by reference.
 - (21) Subsidiaries of Dover. (1)
 - (23) Consent of Independent Registered Public Accounting Firm. (1)
 - (24) Power of Attorney (included in signature page). (1)
 - (31.1) Certification pursuant to Rule 13a-14 of the Securities and Exchange Act of 1934, as amended, signed and dated by Brad M. Cerepak. (1)
 - (31.2) Certification pursuant to Rule 13a-14 of the Securities and Exchange Act of 1934, as amended, signed and dated by Richard J. Tobin. (1)
 - (32) Certification pursuant to 18 U.S.C. Section 1350, signed and dated by Richard J. Tobin and Brad M. Cerepak. (1)

- (101) The following materials from Dover Corporation's Annual Report on Form 10-K for the year ended December 31, 2018 formatted in iXBRL (Inline eXtensible Business Reporting Language): (i) Consolidated Statements of Earnings, (ii) Consolidated Statements of Comprehensive Earnings (iii) Consolidated Balance Sheets, (iv) Consolidated Statements of Stockholders' Equity, (v) Consolidated Statements of Cash Flows, and (vi) Notes to the Consolidated Financial Statements. (1)
- (104) Cover Page formatted in Inline XBRL and contained in Exhibit 101. (1)
 - * Executive compensation plan or arrangement.
 - (1) Filed herewith.

ITEM 16. SUMMARY

None.

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized.

DOVER CORPORATION

/s/ Richard J. Tobin

Richard J. Tobin

President and Chief Executive Officer

Date: February 14, 2020

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this Annual Report on Form 10-K has been signed below by the following persons on behalf of the Registrant in the capacities and on the dates indicated. Each of the undersigned, being a director or officer of Dover Corporation (the "Company"), hereby constitutes and appoints Richard J. Tobin, Brad M. Cerepak and Ivonne M. Cabrera and each of them (with full power to each of them to act alone), his or her true and lawful attorney-in-fact and agent for him or her and in his or her name, place and stead in any and all capacities, to sign the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2019 under the Securities Exchange Act of 1934, as amended, and any and all amendments thereto, and to file the same with all exhibits thereto and other documents in connection therewith with the Securities and Exchange Commission and any other appropriate authority, granting unto such attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing required and necessary to be done in and about the premises in order to effectuate the same as fully to all intents and purposes as he or she might or could do if personally present, hereby ratifying and confirming all that such attorneys-in-fact and agents, or any of them, may lawfully do or cause to be done by virtue hereof.

Signature	Title	Date		
/s/ Michael F. Johnston Michael F. Johnston	Chairman, Board of Directors	February 14, 2020		
/s/ Richard J. Tobin Richard J. Tobin	Chief Executive Officer, President and Director (Principal Executive Officer)	February 14, 2020		
/s/ Brad M. Cerepak Brad M. Cerepak	Senior Vice President and Chief Financial Officer (Principal Financial Officer)	February 14, 2020		
/s/ Ryan W. Paulson Ryan W. Paulson	Vice President, Controller (Principal Accounting Officer)	February 14, 2020		
/s/ Kristiane C. Graham Kristiane C. Graham	Director	February 14, 2020		
/s/ H. John Gilbertson, Jr. H. John Gilbertson, Jr.	Director	February 14, 2020		

Signature	Title	Date		
/s/ Eric A. Spiegel Eric A. Spiegel	Director	February 14, 2020		
/s/ Stephen M. Todd Stephen M. Todd	Director	February 14, 2020		
/s/ Stephen K. Wagner Stephen K. Wagner	Director	February 14, 2020		
/s/ Keith E. Wandell Keith E. Wandell	Director	February 14, 2020		
/s/ Mary A. Winston Mary A. Winston	Director	February 14, 2020		







Board of Directors

H. John Gilbertson Jr. 1,4

Former Managing Director, Goldman Sachs Group Inc.

Kristiane C. Graham 2,3

Private Investor

Michael F. Johnston^{2,3}

Chairman of the Board, Dover Corporation; Former Chief Executive Officer, Visteon Corporation

Eric A. Spiegel 1,4

Former President & Chief Executive Officer, Siemens USA

Richard J. Tobin

President & Chief Executive Officer, Dover Corporation

Stephen M. Todd¹

Former Global Vice Chairman, Assurance Professional Practice, Ernst & Young Global Limited

Stephen K. Wagner 1,3

Former Senior Advisor, Center for Corporate Governance, Deloitte & Touche LLP

Keith E. Wandell^{2,4}

Former President & Chief Executive Officer, Harley-Davidson, Inc.

Mary A. Winston^{2,4}

President, WinsCo Enterprises Inc.; Former Executive Vice President & Chief Financial Officer, Family Dollar Stores, Inc.

Management Team

Richard J. Tobin

President & Chief Executive Officer

Kimberly K. Bors

Senior Vice President, Human Resources

Ivonne M. Cabrera

Senior Vice President, General Counsel & Secretary

Brad M. Cerepak

Senior Vice President & Chief Financial Officer

Girish Juneja

Senior Vice President & Chief Digital Officer

David J. Malinas

Senior Vice President, Operations

Anthony K. Kosinski

Vice President, Tax

James M. Moran

Vice President, Treasurer

Ryan W. Paulson

Vice President & Controller

Shareholder Information

Investor Inquiries and Corporate News:

For quarterly earnings releases, information on conference calls and webcasts, press releases, annual reports, SEC filings including our Form 10-K, acquisitions, supplemental financial disclosure, and all other corporate news releases, please visit our website at: dovercorporation.com.

Dividends:

Quarterly dividends on Dover Corporation common stock are typically paid on or about the 15th of March, June, September and December. Dover has paid an increased dividend each year since 1955.

Dover's Ticker Symbol:

Dover's ticker symbol is DOV. The stock trades on the New York Stock Exchange and is one of the corporations listed in the S&P 500.

Independent Accountants:

PricewaterhouseCoopers LLP Chicago, IL

Executive Offices:

Dover Corporation 3005 Highland Parkway Downers Grove, IL 60515 (630) 541-1540 Visit us on the web at: dovercorporation.com

This report (including financial statements and financial statement schedules) will be provided free of charge upon written request to Investor Relations at the above address.

Annual Shareholders Meeting:

Friday, May 8, 2020 9:00am Central Time Dover Corporation Headquarters 3005 Highland Parkway Downers Grove, IL 60515

Shareholder Services:

For help with any of the following, please contact:
Computershare

Shareowner Services:

- Address changes
- Direct deposit of dividends
- Dividend reinvestmentLost dividend checks
- Lost stock certificates
- Name changes
- Shareholder records
- Stock transfers
- IRS Form 1099

Computershare Shareowner Services can be reached at the following address:

By Regular Mail:

Computershare Investor Services P.O. Box 505000 Louisville, KY 40233-5000 United States

By Overnight Delivery:

Computershare Investor Services 462 South 4th Street, Suite 1600 Louisville, KY 40202 United States

Toll Free:

(888) 567-8341

Toll

+1 (201) 680-6578

computershare.com/investor

¹ Members of Audit Committee

²Members of Compensation Committee

³Members of Governance & Nominating Committee

⁴Members of Finance Committee



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