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

FORM 10-K

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

For the fiscal year ended December 31, 2018

or

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

For the transition period from to

Commission file number: 001-38441

Apergy Corporation

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

2445 Technology Forest Blvd Building 4, 12th Floor The Woodlands, Texas

(Address of principal executive offices)

(281) 403-5772

(Registrant's telephone number, including area code)

Title of each class

Common stock, \$0.01 par value

Securities registered pursuant to section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o No 🗵

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes o No 🗵

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes \Box No o Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

1

82-3066826

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

77381

Name of each exchange on which registered

New York Stock Exchange

(Zip Code)

Large accelerated filer o Non-accelerated filer \square

Accelerated filer o Smaller reporting company o Emerging growth company o

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

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

The aggregate market value of the registrant's common stock held by non-affiliates of the registrant, determined by multiplying the outstanding shares on June 29, 2018, by the closing price on such day of \$41.75 as reported on the New York Stock Exchange, was\$3,203,241,112. The registrant, solely for the purpose of this required presentation, deemed its Board of Directors and executive officers to be affiliates, and deducted their stockholdings in determining the aggregate market value. The registrant had 77,352,914 shares of common stock, \$0.01 par value, outstanding as of February 20, 2019.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement relating to its 2019 annual meeting of stockholders are incorporated by reference into Part III of this Annual Report of Form 10-K where indicated. The 2019 Proxy Statement will be filed with the U.S. Securities and Exchange Commission within 120 days after the end of the fiscal year to which this report relates.

APERGY CORPORATION

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Cautionary Note Regarding Forward-Looking Statements

This Annual Report on Form 10-K contains "forward-looking statements" intended to qualify for the safe harbors from liability established by the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact contained in this report are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Forward-looking statements usually relate to future events and anticipated revenues, earnings, cash flows or other aspects of our operations or operating results. Forward-looking statements are often identified by the words "believe," "expect," "anticipate," "plan," "intend," "foresee," "should," "would," "could," "may," "estimate," "outlook," "guidance," "potential," "target," "forecast" and similar expressions, including the negative thereof. The absence of these words, however, does not mean that the statements are not forward-looking. These forward-looking statements are based on our current expectations, beliefs and assumptions concerning future developments and business conditions and their potential effect on us. While management believes that these forward-looking statements are reasonable as and when made, there can be no assurance that future developments affecting us will be those that we anticipate.

All of our forward-looking statements involve risks and uncertainties (some of which are significant or beyond our control) and assumptions that could cause actual results to differ materially from our historical experience and our present expectations or projections. Known material factors that could cause our actual results to differ from those in the forward-looking statements are those described in Part I, Item 1A "Risk Factors" of this Annual Report on Form 10-K. We wish to caution you not to place undue reliance on any forward-looking statements, which speak only as of the date hereof. We undertake no obligation to publicly update or revise any of our forward-looking statements after the date they are made, whether as a result of new information, future events or otherwise, except to the extent required by law.

ITEM 1. BUSINESS

OVERVIEW

Apergy Corporation, a Delaware Corporation, ("Apergy," "we," "us" or "our") is a leading provider of highly engineered equipment and technologies that help companies drill for and produce oil and gas safely and efficiently around the world. Our products provide efficient functioning throughout the lifecycle of a well—from drilling to completion to production. We report our results of operations in the following reporting segments: Production & Automation Technologies and Drilling Technologies. Our Production & Automation Technologies segment offerings consist of artificial lift equipment and solutions, including rod pumping systems, electric submersible pump systems, progressive cavity pumps and drive systems and plunger lifts, as well as a full automation and digital offering consisting of equipment, software and Industrial Internet of Things solutions for downhole monitoring, wellsite productivity enhancement and asset integrity management. Our Drilling Technologies segment offering provides market leading polycrystalline diamond cutters and bearings that result in cost effective and efficient drilling.

Our products are used by a broad spectrum of customers in the global oil and gas industry, including national oil and gas companies, large integrated and independent oil and gas companies, major oilfield equipment and services providers, and pipeline companies. We compete across major oil and gas markets globally with a particular strength in the North American onshore market. Our products are particularly well suited for unconventional/shale oil and gas markets.

The quality, innovative technology and performance of our technologies drive improved cost-effectiveness, productivity, efficiency, reliability and safety for our customers. We believe our strong position in our core markets and our long-term customer relationships are due to our focus on technological advancement, product reliability and our commitment to superior customer service across our organization. Our long-term customer relationships and the consumable nature of many of our products also enable us to benefit from recurring revenue throughout the lifecycle of a producing well. We believe we are also differentiated from competitors through our proven business model focused on high customer intimacy, innovative technology and application engineering.

We have a long history of innovation across our businesses, and our heritage in the oilfield equipment industry extends over 60 years. During this time, Apergy has expanded through a series of strategic acquisitions of well-known businesses and brands as well as internal growth initiatives. Key acquisitions that built our artificial lift platform include Harbison-Fischer, Accelerated, Wellmark, PCS Ferguson (f/k/a Production Controls Services, Inc.) and Oil Lift Technology. Our leading polycrystalline diamond cutter business was created through the acquisition of US Synthetic. Through our acquisitions, Apergy has developed experience as an effective operator and successful integrator of businesses.

Separation and Distribution

On April 18, 2018, the Dover Corporation ("Dover") Board of Directors approved the separation of entities conducting its upstream oil and gas energy business within Dover's Energy segment (the "Separation") into an independent, publicly traded company named Apergy Corporation. Apergy Corporation was incorporated in Delaware on October 10, 2017, under the name Wellsite Corporation and was renamed Apergy Corporation on February 2, 2018. Apergy Corporation was formed for the purpose of holding entities, assets and liabilities conducting Dover's upstream oil and gas business within Dover's Energy segment. In accordance with the separation and distribution agreement, the two companies were separated by Dover distributing to Dover's stockholders all 77,339,828 shares of common stock of Apergy on May 9, 2018. Each Dover shareholder received one share of Apergy stock for every two shares of Dover stock held at the close of business on the record date of April 30, 2018. Following the Separation, Dover retained no ownership interest in Apergy, and each company, as of May 9, 2018, has separate public ownership, boards of directors and management. A registration statement on Form 10, as amended, describing the Separation was filed by Apergy with the U.S. Securities and Exchange Commission ("SEC") and was declared effective on April 19, 2018. On May 9, 2018, Apergy common stock began "regular-way" trading on the New York Stock Exchange ("NYSE") under the "APY" symbol.

BUSINESS SEGMENTS

Our business is organized into two reporting segments: Production & Automation Technologies and Drilling Technologies.

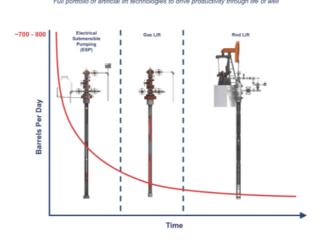
Production & Automation Technologies

Production & Automation Technologies provides products, technologies and services that facilitate the safe, efficient, and cost effective extraction of oil and gas. We design, manufacture, market and service a full range of artificial lift equipment, end-to-end automation and digital solutions, as well as other production equipment. A portion of Production & Automation Technologies revenue is derived from activity-based consumable products, as customers routinely replace items such as sucker rods, plunger lifts and pump parts. We believe that the combination of our artificial lift equipment and our end-to-end proprietary automation solutions helps oil and gas operators lower production costs and optimize well efficiency by enabling oil and gas operators to monitor, predict and optimize performance. Our products are sold under a collection of premier brands, which we believe are recognized by customers as leaders in their market spaces, including Harbison-Fischer, Norris, Alberta Oil Tool, Oil Lift Technology, PCS Ferguson, Pro-Rod, Upco, ESP, Norriseal-Wellmark, Quartzdyne, Spirit, Theta, Timberline and Windrock.

Artificial Lift

Artificial lift equipment is critical to oil and gas operators as a means to increase pressure within the reservoir and improve oil and gas production. Artificial lift is a key technology for increasing oil and gas production throughout the lifecycle of a producing well and is therefore directly linked to operator economics. Production & Automation Technologies offers a full suite of artificial lift solutions to meet the varying needs of operators as oil production volume levels decline over the lifecycle of a producing well, as illustrated in the figure below. Our comprehensive offering provides our customers with cost effective solutions tailored to a well's specific characteristics and production volumes. We have a strong presence within key U.S. basins where artificial lift technologies are prevalent. We believe our offerings also have significant international potential, as production rates continue to decline in existing wells in regions such as the Middle East, South America and Eastern Europe.

Artificial Lift: Life of Well Solutions



Key artificial lift products include:

- Electric Submersible Pump ("ESP")—Our ESPs are fully integrated and customizable systems that are used during the earlier stages of production
 when barrels per day volume is at its highest level. Our ESP products include centrifugal pumps, gas handling devices, motors, controls and digital
 solutions to monitor and optimize ESP performance.
- **Gas Lift**—Gas lift is a method of artificial lift that involves injecting high pressure gas to lift oil from a well. Gas lift is a preferred artificial lift for deviated wells and wells characterized by large amounts of sand or solid materials. We have been delivering innovative and flexible gas lift solutions to our customers for more than 30 years. Our software takes into account the complexity and production characteristics of the well to deliver the best gas lift solution for each well.

- **Rod Pumping Systems ("Rod Lift")**—As well production extends beyond the initial years, operators typically begin to employ a Rod Lift extraction solution. Our Rod Lift solutions include standard and fit-for-purpose sucker rods and accessories as well as a full range of downhole pumps that address all rod pumping applications. Rod Lift is one of the more prevalent lift solutions employed in wells in the United States and internationally. Our Rod Lift business provides for significant recurring revenue as sucker rods, pumps and accessories are replaced with use.
- **Progessive Cavity Pumps ("PCP") Plunger, Hydraulic and Jet Lift Systems**—We offer a full range of PCP solutions including top drives, high performance pumps, drive rods and controls; a broad range of plunger lift systems including surface, downhole equipment and controllers; and a full range of hydraulic and jet lift systems including jet pumps, hydraulic reciprocating pumps, surface multiplex pumps and automation controllers. These solutions are typically used in wells that have been producing for multiple years and are essential for increasing productivity at lower production volumes.

Digital

Our proprietary digital products are aimed at creating an end-to-end production optimization platform that enables oil and gas operators to monitor, predict and optimize well performance and drive improved return on investment during the production lifecycle. We are a leading provider of productivity tools and performance management software for artificial lift and asset integrity management. Our software has modular architecture that enables specific solutions to be tailored to meet exact customer needs. Real-time data is used by our customers to drive decisions, enhance well servicing and obtain an accurate picture of a well's functioning over time, resulting in a more connected, digital wellsite that operates more efficiently and safely.

Digital solutions encompass multiple parts of the wellsite and allow an operator centralized monitoring and control capability. Smart instrumentation and hardware at the wellsite have sensing capabilities that allow for the capture of data. Once captured, the data is communicated to a cloud-based Industrial Internet of Things ("IIoT") infrastructure platform where it can be analyzed and used to drive value enhancing insights for customers. We believe the combination of our digital products and our strong artificial lift presence enables us to drive continued adoption of digital solutions by our customers. We believe digital adoption is a key secular trend in the oil and gas industry, particularly in a lower oil price environment where operators are focused on lowering the cost per barrel produced over the lifecycle of a well.

Digital solutions bring together multiple layers of equipment, sensors and software. A site may employ a full-scale solution (e.g., a fully connected wellsite using our equipment and software) or a more application specific solution (e.g., a controller used for diagnostics on an ESP lift). Technologies included in our digital products offering include:

- **Controllers and Software Solutions**—Controllers and software solutions, including proprietary cloud-based software, to monitor and optimize artificial lift and production. Software is sold on a subscription based model and can be tailored to a breadth of customer requirements, resulting in a fit-for-purpose solution.
- Downhole Monitoring, Logging and Management—Quartz pressure transducers and smart downhole tools for measuring, monitoring and logging downhole well conditions to improve well productivity.
- Asset Integrity Management Solutions—End-to-end digital IIoT solutions and portable analyzers to monitor, predict, and optimize health and performance of reciprocating compressors and engines used in wellsites, pipelines, refineries and chemical plants.

Other Production Equipment

We also offer other production equipment including chemical injection systems, flow control valves, oil and water separation, gas conditioning, process heating and pressure vessel products. These products are complementary to our artificial lift and digital technologies offerings.

Drilling Technologies

Drilling Technologies provides highly specialized products used in drilling oil and gas wells. We design, manufacture and market polycrystalline diamond cutters ("PDC") for use in drill bits under the US Synthetic brand. Our proprietary PDCs are based on years of innovation and intellectual property development in material science applications including the production of highly stable synthetic diamonds, known as "polycrystalline diamonds." US Synthetic has historically filed new patents at a rate of over 50 patents per year as we continue to advance our diamond science process knowledge and has previously received the prestigious Shingo Prize for operational excellence. We believe our highly engineered PDCs are distinguished by their quality, durability, rate of penetration and longevity. PDCs are a relatively small cost to the oil and gas operator in the context of overall drilling costs, but are critical to successful drilling. As a result, we believe our customers value the quality and performance of US Synthetic PDCs over less expensive and lower capability alternatives because a lower quality PDC can cause unnecessary and expensive drilling delays. Our PDCs are primarily custom designed to meet unique customer requirements and are finished to exact customer specification to ensure optimal performance. PDCs are utilized in both vertical and horizontal drilling and are replaced as they wear during the drilling process.

Key products of our Drilling Technologies segment include:

- PDC Drill Bit Inserts—Custom designed and manufactured drill bit inserts.
- **Other Drilling Equipment**—Includes long-lasting diamond bearings for process-fluid lubricated applications, including underwater applications, downhole drilling tools and industrial pumps, as well as diamond roof bolt mining tools for underground mining.

See Note 13—Revenue to our consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K for revenue by end market for each of our reportable segments.

OTHER BUSINESS INFORMATION

Competition

The businesses in which we operate are highly competitive. The competitive factors in our businesses are customer service, product quality and performance, price, breadth of product offering, market expertise and innovation. We believe we differentiate ourselves from our competitors through our model of high customer intimacy, differentiated technology, innovation and a superior level of customer service.

We face competition from other manufacturers and suppliers of oil and gas production and drilling equipment. Production & Automation Technologies' key competitors include Weatherford International plc, Baker Hughes, a GE Company, Halliburton, BORETS, Tenaris, Novomet and Emerson. Drilling Technologies' key competitors include DeBeers (Element 6), Schlumberger Ltd. (Mega Diamond) and various suppliers in China.

Customers, Sales and Distribution

We have built our businesses through high customer intimacy and superior customer service, and we view our intense customer focus as being central to the goal of creating value for all of our stakeholders. Drawing on our industry and application engineering expertise, we strive to develop close, collaborative relationships with our customers. We work closely with our customers' engineering teams to develop technologies and applications that help improve efficiency, reliability and productivity.

We have established long-standing customer relationships with some of the largest operators in oil and gas drilling and production. Our customers include national oil and gas companies, large integrated as well as independent oil and gas companies, major oilfield equipment and service providers and pipeline companies.

We market and sell our products and technologies through a combination of sales representatives, technical seminars, trade shows and print advertising. We sell directly to customers through our direct sales force and indirectly through independent distributors and sales representatives. Our direct sales force is comprised of highly trained industry experts who can advise our customers on the advantages of our technologies and product offerings. We have developed an extensive network of sales and service locations throughout key regions and basins in North America to better serve our customers. We also host forums and training sessions, such as our Artificial Lift Academy, where our customers can share their experiences, and where we can educate and train our customers in the use of our new technologies. Nearly all of our Drilling Technologies sales, and the majority of our Production & Automation Technologies sales in 2018, were sold directly to the end-use customer.

In addition to our direct sales force, we support a global network of distributors and representatives. We provide our distributors with sales and product literature, advertising and sales promotions, and technical assistance and training with our products. Many of our distributors also stock our products.

Our customer base is diverse. No single customer accounted for 10% or more of our 2018 consolidated revenue.

Intellectual Property

We own many patents, trademarks, licenses and other forms of intellectual property, which have been acquired over many years and, to the extent relevant, expire at various times. A large portion of our 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. While our intellectual property is important to our success, the loss or expiration of any of these rights, or any group of related rights, is not likely to materially affect our results of operations on a consolidated basis. We believe that our commitment to continuous engineering improvements, new product development and improved manufacturing techniques, as well as sales, marketing and service expertise, are significant to our leadership positions in the markets we serve.

Research and Development

We operate in markets that are characterized by changing technology and frequent new product introductions. As a result, our success is dependent on our ability to develop and introduce new technologies and products for our customers. We maintain an active research, development and engineering program with a focus on developing innovative products and solutions, upgrading and improving existing offerings to satisfy the changing needs of our customers, expanding revenue opportunities domestically and internationally, maintaining or extending competitive advantages, improving product reliability and reducing production costs. We believe maintaining a robust innovation and product pipeline will allow us to continue to increase our penetration in key businesses and with key customers.

Raw Materials

We use a wide variety of raw materials, primarily metals and semi-processed or finished components. We have not historically experienced material impacts to our financial results due to shortages or the loss of any single supplier. Although the required raw materials are generally available, commodity pricing for metals, such as nickel, chrome, molybdenum, vanadium, manganese and steel scrap, fluctuate with market conditions. Recently, tariffs have increased our material input costs, and any further trade restrictions, retaliatory trade measures and additional tariffs implemented could result in higher input costs to our products. 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 short-duration, fixed-price contracts with suppliers and various other programs, such as our global supply chain initiatives. We source material internationally to achieve the most competitive cost structure. Our global supply chain is intended to provide us with cost-effective solutions for raw materials. Our supply chain could be exposed to logistical disruptions. We maintain domestic suppliers in most cases to provide for contingencies and back-up sources. Despite contingencies and back-up supply optionality, sustained inflation and unpredictable disruptions to supply could have an adverse impact on our business.

Seasonality

Our business is generally not impacted by high levels of seasonality, except for a small portion of our operations in Canada which is impacted by seasonality as the level of drilling activity during the first half of the year is influenced by weather patterns. During the spring months in Canada, wet weather and the spring thaw make the ground unstable and less capable of supporting heavy equipment and machinery. As a result, municipalities and provincial transportation departments enforce road bans that restrict the movement of heavy equipment during the spring months, which reduces our customers' activity levels. As such, there is greater demand for our products, specifically those provided by our Drilling Technologies business, in the fall and winter seasons when weather conditions allow for increased levels of drilling activities.

Employees

As of December 31, 2018, we had approximately 3,300 employees in nine countries. Approximately 100 of our employees in the United States are subject to a collective bargaining agreement. Outside the United States, some of our employees are represented by unions or works councils.

Regulation and Environmental and Occupational Health and Safety Matters

Our operations are subject to a variety of international, national, state and local laws and regulations, including those relating to the discharge of materials into the environment, worker health and safety, or otherwise relating to human health and environmental protection. Failure to comply with these laws or regulations may result in the assessment of administrative, civil and criminal penalties, imposition of remedial or corrective action requirements, and the imposition of injunctions to prohibit certain activities or force future compliance.

In addition, we depend on the demand for our products and services from the oil and gas industry and, therefore, are affected by changing taxes, price controls, tariffs and trade restrictions and other laws and regulations relating to the oil and gas industry in general, including those specifically directed to hydraulic fracturing and onshore products. The adoption of laws and regulations curtailing exploration, drilling or production in the oil and gas industry, or the imposition of more stringent enforcement of existing regulations, could adversely affect our operations by limiting demand for our products and services or restricting our customers' operations. Refer to Item 1A, Risk Factors for additional information related to certain risks regarding regulations and environmental matters.

We utilize behavioral-based safety practices to promote a safe working environment for all of our employees. On a constant basis, safety is prioritized, measured and promoted throughout all levels of our organization. We initiated our "Journey to Zero" program which teaches that all incidents are preventable. The core tenets of our program advocate (i) constant awareness and education of safety principles, (ii) consistent safety behaviors and practices, and (iii) preventing and learning from incidents. Additionally, our operations are subject to a number of federal and state laws and regulations relating to workplace safety and worker health, such as the Occupational Safety and Health Act and regulations promulgated thereunder.

We have incurred and will continue to incur operating and capital expenditures to comply with environmental, health and safety laws and regulations. Historically, there have been no material effects upon our earnings and competitive position resulting from our compliance with such laws or regulations; however, there can be no assurance that such costs will not be material in the future or that such future compliance will not have a material adverse effect on our business or operational costs.

Website Access to Reports

Our Internet website address is https://apergy.com. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to each of those reports, are available free of charge through our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. Alternatively, our reports may be accessed through the website maintained by the SEC at www.sec.gov. Unless expressly noted, the information on our website or any other website is not incorporated by reference in this Annual Report on Form 10-K and should not be considered part of this Annual Report on Form 10-K or any other filing we make with the SEC.

EXECUTIVE OFFICERS OF THE REGISTRANT

Name	Age	Current Position and Business Experience
Sivasankaran Somasundaram	53	President and Chief Executive Officer (2018) Vice President of Dover Corporation and President and Chief Executive Officer of Dover Energy (2013)
Jay A. Nutt	55	Senior Vice President and Chief Financial Officer (2018) Senior Vice President and Chief Financial Officer—Dover Energy of Dover Corporation (2018) Senior Vice President and Controller of TechnipFMC plc (2017) Vice President, Controller and Treasurer of FMC Technologies, Inc. (2015) Vice President and Controller of FMC Technologies, Inc. (2009)
Shankar Annamalai	37	Senior Vice President Operations (2018) Senior Vice President Operations—Dover Energy of Dover Corporation (2017) Global Vice President of Operations and Supply—Pentair Technical Solutions of Pentair plc (2015) Senior Director of Operations—Pentair Valves & Controls of Pentair plc (2013)
Amy Thompson Broussard	42	Senior Vice President and Chief Human Resources Officer (2018) Vice President, Human Resources—Dover Energy of Dover Corporation (2016) Vice President of Human Resources—Dover Artificial Lift of Dover Corporation (2014) Director of Human Resources—Western Hemisphere HR Service Centers of Baker Hughes Inc. (2013)
Robert K. Galloway	52	President, Drilling Technologies (2018) President—US Synthetic of Dover Corporation (2010)
Paul E. Mahoney	54	President, Production & Automation Technologies (2018) President—Dover Artificial Lift of Dover Corporation (2014) Chief Operations Officer and Senior Vice President of Global Sales and Operations—Dover Artificial Lift of Dover Corporation (2012)
Syed Raza	52	Senior Vice President and Chief Digital Officer (2018) President—Dover Energy Automation of Dover Corporation (2016) Vice President and General Manager—Advanced Solutions of Honeywell Process Solutions (2014) General Manager Advanced Solutions—Europe, Middle East & Africa of Honeywell Process Solutions (2013)
Julia Wright	43	Senior Vice President, General Counsel and Secretary (2018) Senior Vice President, General Counsel and Secretary—Dover Energy of Dover Corporation (2018) Vice President and General Counsel of Nabors Industries Ltd. (2016) Interim General Counsel of Nabors Industries Ltd. (2016) Assistant General Counsel of Nabors Industries Ltd. (2013)

No family relationships exist among any of the above-listed officers, and there are no arrangements or understandings between any of the above-listed officers and any other person pursuant to which they serve as an officer. During the past ten years, none of the above-listed officers was involved in any legal proceedings as defined in Item 401(f) of Regulation S-K. All officers are elected by the Board of Directors to hold office until their successors are elected and qualified.

ITEM 1A. RISK FACTORS

In addition to other information in this Annual Report on Form 10-K, you should carefully consider the following risk factors. Each of these risk factors could materially and adversely affect our business, results of operations and financial condition, as well as affect the value of an investment in our common stock.

Risks Related to Our Business

Trends in crude oil and natural gas prices may affect the drilling and production activity, profitability and financial stability of our customers and therefore the demand for, and profitability of, our products and services, which could have a material adverse effect on our business, results of operations and financial condition.

The oil and gas industry is cyclical in nature and experiences periodic downturns of varying length and severity. Most recently, the oil and gas industry experienced a significant downturn in 2015 and 2016. Our ability to regulate our operating activities in response to lower oilfield service activity levels during periodic industry downturns is important to our business, results of operations and prospects. Demand for our products and services is sensitive to the level of capital spending by oil and natural gas companies and the corresponding drilling and production activity. The level of drilling and production activity is directly affected by trends in crude oil and natural gas prices, which are influenced by numerous factors affecting the supply and demand for oil and gas, including:

- worldwide economic activity;
- the level of exploration and production activity;
- interest rates and the cost of capital;
- environmental regulation;
- federal, state and foreign policies regarding exploration and development of oil and gas;
- the ability and/or desire of the Organization of the Petroleum Exporting Countries ("OPEC") and other major producers to set and maintain production levels and pricing;
- governmental regulations regarding future oil and gas exploration and production;
- the cost of exploring and producing oil and gas;
- the pace of adoption and cost of developing alternative energy sources;
- the availability, expiration date and price of onshore and offshore leases;
- the discovery rate of new oil and gas reserves in onshore and offshore areas;
- the success of drilling for oil and gas in unconventional resource plays such as shale formations;
- takeaway capacity within producing basins;
- alternative opportunities to invest in onshore exploration and production opportunities;
- · domestic and global political and economic uncertainty, socio-political unrest and instability, terrorism or hostilities;
- technological advances; and
- weather conditions.

Crude oil and natural gas prices and the level of drilling and production activity have been characterized by significant volatility in recent years. In particular, the prices of crude oil and natural gas were highly volatile from 2014 through 2016 and declined dramatically through early 2016. Prices of crude oil began to recover in late 2016, but experienced a volatile decline again during late 2018. We expect continued volatility in both crude oil and natural gas prices, as well as in the level of drilling and production related activities.

A significant downturn in the industry could result in the reduction in demand for our products and services, and could have a material adverse effect on our business, results of operations, financial condition and cash flows.

We might be unable to successfully compete with other companies in our industry.

The markets in which we operate are highly competitive. The principal competitive factors in our markets are customer service, product quality and performance, price, breadth of product offering, market expertise and innovation. In some of our product and service offerings, we compete with the oil and gas industry's largest oilfield service providers. These large national and multi-national companies may have longer operating histories, greater brand recognition, and a stronger presence in geographic markets than us. They may also have more robust financial and technical capabilities. In addition, we compete with many smaller companies capable of competing effectively on a regional or local basis. Our competitors may be able to respond more quickly to new or emerging technologies and services and changes in customer requirements. Many contracts are awarded on a bid basis, which further increases competition based on price. As a result of the competitive environment in which we operate, we may lose market share, be unable to maintain or increase prices for our products and services, or be unable to acquire

additional business opportunities, which could have a material adverse effect on our business, results of operations, financial condition and cash flows.

If we are unable to develop new products and technologies, our competitive position may be impaired, which could materially and adversely affect our sales and market share.

The markets in which we operate are characterized by changing technologies and the introduction of new products and services. As a result, our success is dependent upon our ability to develop or acquire new products and services on a cost-effective basis, to introduce them into the marketplace in a timely manner, and to protect and maintain critical intellectual property assets related to these developments. Difficulties or delays in research, development or production of new products and technologies, or failure to gain market acceptance of new products and technologies, may significantly reduce future revenues and materially and adversely affect our competitive position. While we intend to continue to commit financial resources and effort to the development of new products and services, we may not be able to successfully differentiate our products and services from those of our competitors. Our customers may not consider our proposed products and services to be of value to them or may not view them as superior to our competitors' products and services. In addition, our competitors or customers may develop new technologies which address similar or improved solutions to our existing technologies. Further, we may not be able to adapt to evolving markets and technologies, develop new products, achieve and maintain technological advantages or protect technologies, our business, results of operations, financial condition and cash flows could be materially adversely affected.

We could lose customers or generate lower revenue, operating profits and cash flows if there are significant increases in the cost of raw materials or if we are unable to obtain raw materials.

We purchase raw materials, sub-assemblies and components for use in our manufacturing operations, which exposes us to volatility in prices for certain commodities. Significant price increases for these commodities could adversely affect our operating profits. While we generally attempt to mitigate the impact of increased raw material prices by endeavoring to make strategic purchasing decisions, broadening our supplier base and passing along increased costs to customers, there may be a time delay between the increased raw material prices and the ability to increase the prices of our products. Additionally, we may be unable to increase the prices of our products due to a competitor's pricing pressure or other factors. While raw materials are generally available now, the inability to obtain necessary raw materials could affect our ability to meet customer commitments and satisfy market demand for certain products. Certain of our product lines depend on a limited number of third-party suppliers and vendors. The ability of these third parties to deliver raw materials may be affected by events beyond our control. Consequently, a significant price increase in raw materials, or their unavailability, may result in a loss of customers and adversely impact our business, results of operations, financial condition and cash flows.

Federal, state and local legislative and regulatory initiatives relating to oil and gas development and the potential for related litigation could result in increased costs and additional operating restrictions or delays for our customers, which could reduce demand for our products and negatively impact our business, financial condition and results of operations.

Environmental laws and regulations could limit our customers' exploration and production activities. Although we do not directly engage in drilling or hydraulic fracturing activities, we provide products and services to operators in the oil and gas industry. There has been significant growth in opposition to oil and gas development both in the United States and globally by national, state and local governments, regulatory agencies, non-government organizations and public citizens. This opposition is focused on attempting to limit or stop hydrocarbon development in certain areas. Examples of such opposition include: efforts to reduce access to public and private lands; delaying or canceling permits for drilling or pipeline construction; limiting or banning industry techniques such as hydraulic fracturing, and/or adding restrictions on the use of water and associated disposal; delaying or denying air-quality permits; advocating for increased regulations, punitive taxation, or citizen ballot initiatives or moratoriums on industry activity.

In addition, various state and local governments have implemented, or are considering, increased regulatory oversight of oil and gas development through additional permitting requirements, operational restrictions, including on the time, place and manner of drilling activities, disclosure requirements and temporary or permanent bans on hydraulic fracturing or other facets of crude oil and natural gas exploration and development in certain areas such as environmentally sensitive watersheds. Increased regulation and opposition to oil and gas activities could increase the potential for litigation concerning these activities, and include the companies who provide products and services used in hydrocarbon development, such as ours.

The adoption of new laws or regulations at the federal, state, or local levels imposing reporting obligations, or otherwise limiting or delaying hydrocarbon development, could make it more difficult to complete oil and gas wells, increase our customers' costs of compliance and doing business, and otherwise adversely affect the oil and gas activities they pursue. Such developments could negatively impact demand for our products and services. In addition, heightened political, regulatory and public scrutiny, including lawsuits, could expose us or our customers to increased legal and regulatory proceedings, which could be time-consuming, costly, or result in substantial legal liability or significant reputational harm. We could be directly affected by adverse litigation or indirectly affected if the cost of compliance or the risks of liability limit the ability or willingness of our customers to operate. Such costs and scrutiny could directly or indirectly, through reduced demand for our products and services, have a material adverse effect on our business, results of operations, financial condition and cash flows.

We and our customers are subject to extensive environmental and health and safety laws and regulations that may increase our costs, limit the demand for our products and services or restrict our operations.

Our operations and the operations of our customers are subject to numerous and complex federal, state, local and foreign laws and regulations relating to the protection of human health, safety and the environment. These laws and regulations may adversely affect our customers by limiting or curtailing their exploration, drilling and production activities, the products and services we design, market and sell and the facilities where we manufacture our products. For example, our operations and the operations of our customers are subject to numerous and complex laws and regulations that, among other things: may regulate the management and disposal of hazardous and non-hazardous wastes; may require acquisition of environmental permits related to its operations; may restrict the types, quantities and concentrations of various materials that can be released into the environment; may limit or prohibit operational activities in certain ecologically sensitive and other protected areas; may regulate specific health and safety criteria addressing worker protection; may require compliance with operational and equipment standards; may impose testing, reporting and record-keeping requirements; and may require remedial measures to mitigate pollution from former and ongoing operations. Sanctions for noncompliance with such laws and regulations may include revocation of permits, corrective action orders, administrative or civil penalties, criminal prosecution and the imposition of injunctions to prohibit certain activities or force future compliance.

Some environmental laws and regulations provide for joint and several strict liability for remediation of spills and releases of hazardous substances. In addition, Apergy or its customers may be subject to claims alleging personal injury or property damage as a result of alleged exposure to hazardous substances, as well as damage to natural resources. These laws and regulations may expose Apergy or its customers to liability for the conduct of or conditions caused by others, or for our acts or for the acts of our customers that were in compliance with all applicable laws and regulations at the time such acts were performed. Any of these laws and regulations could result in claims, fines or expenditures that could be material to our business, results of operations, financial condition and cash flows.

Environmental laws and regulations, and the interpretation and enforcement thereof, frequently change, and have tended to become more stringent over time. New laws and regulations may have a material adverse effect on our customers by limiting or curtailing their exploration, drilling and production activities, which may adversely affect our operations by limiting demand for our products and services. Additionally, the implementation of new laws and regulations may have a material adverse effect on our operating results by requiring us to modify our operations or products or shut down some or all of our facilities.

Numerous proposals have been made, and are likely to continue to be made, at various levels of government to monitor and limit emissions of greenhouse gases ("GHG"). Past sessions of the U.S. Congress considered, but did not enact, legislation to address climate change. The EPA and other federal agencies previously issued regulations that aim to reduce GHG emissions; however, the current administration has generally indicated an interest in scaling back or rescinding regulations addressing GHG emissions, including those affecting the U.S. oil and gas industry. It is difficult to predict the extent to which such policies will be implemented or the outcome of any related litigation. Any regulation of GHG emissions could result in increased compliance costs or additional operating restrictions for Apergy and/or its customers and limit or curtail exploration, drilling and production activities of our customers, which could directly or indirectly, through reduced demand for our products and services, adversely affect our business, results of operations, financial condition and cash flows.

Our growth and results of operations may be adversely affected if we are unable to complete third party acquisitions on acceptable terms.

Over time. we expect to acquire value creating, add-on capabilities that broaden our existing technological, geographic, and cost position, thereby complementing our existing businesses. However, there can be no assurance that we will be able to find suitable opportunities to purchase or to acquire such capabilities on acceptable terms. If we are unsuccessful in our acquisition efforts, our revenue growth could be adversely affected. 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. These factors could potentially have an adverse impact on our business, results of operations, financial condition and cash flows.

Our products are used in operations that are subject to potential hazards inherent in the oil and gas industry and, as a result, we are exposed to potential liabilities that may affect our financial condition and reputation.

Our products are used in potentially hazardous drilling, completion and production applications in the oil and gas industry where an accident or a failure of a product can potentially have catastrophic consequences. Risks inherent in these applications, such as equipment malfunctions and failures, equipment misuse and defects, explosions, blowouts and uncontrollable flows of oil, natural gas or well fluids can cause personal injury, loss of life, suspension of operations, damage to formations, damage to facilities, business interruption and damage to or destruction of property, surface and drinking water resources, equipment and the environment. While we currently maintain insurance protection against some of these risks and seek to obtain indemnity agreements from our customers requiring them to hold us harmless from some of these risks, our current insurance and contractual indemnity protection may not be sufficient or effective enough to protect us under all circumstances or against all risks. The occurrence of a significant event not fully insured or indemnified against, or the failure of a customer to meet its indemnification obligations to us could adversely affect our business, results of operations, financial condition and cash flows.

Our industry is undergoing continuing consolidation that may impact our results of operations.

The oil and gas industry continues to experience consolidation and as a result, some of our largest customers have consolidated and are using their size and purchasing power to seek economies of scale and pricing concessions. This consolidation may result in reduced capital spending by some of our customers or the acquisition of one or more of our primary customers, which may lead to decreased demand for our products and services. There is no assurance that we will be able to maintain our level of sales to a customer that has consolidated, or replace that revenue with increased business activity with other customers. As a result, the acquisition of one or more of our primary customers may have a significant adverse impact on our business, results of operations, financial condition and cash flows. We are unable to predict what effect consolidations in the industry may have on prices, capital spending by our customers, our selling strategies, our competitive position, our ability to retain customers or our ability to negotiate favorable agreements with our customers.

We are subject to information technology, cybersecurity and privacy risks.

We depend on various information technologies to store and process information and support our business activities. We also manufacture and sell hardware and software to provide monitoring, controls and optimization of customer critical assets in oil and gas production and distribution. We also provide services to maintain these systems. Additionally, our operations rely upon partners, vendors and other third-party providers of information technology software and services. If any of these information technologies, products or services are damaged, cease to properly function, are breached due to employee error, malfeasance, system errors, or other vulnerabilities, or are subject to cybersecurity attacks, such as those involving unauthorized access, malicious software and/or other intrusions, Apergy or its partners, vendors or other third parties could experience: (i) production downtimes, (ii) operational delays, (iii) the compromising of confidential, proprietary or otherwise protected information, including personal and customer data, (iv) destruction, corruption, or theft of data, (v) security breaches, (vi) other manipulation, disruption, misappropriation or improper use of its systems or networks, (vii) financial losses from remedial actions, (viii) loss of business or potential liability, (ix) adverse media coverage, and (x) legal claims or legal proceedings, including regulatory investigations and actions, and/or damage to its reputation. While we attempt to mitigate these risks by employing a number of measures, including employee training, technical security controls and maintenance of backup and protective systems, Apergy's and its partners', vendors' and other third-parties' 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 business, results of operations, financial condition and cash flows.

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

We continue to focus on penetrating 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 revenue. Our international operations and our global expansion strategy are subject to general risks related to such operations, including:

- political, social and economic instability and disruptions;
- government export controls, economic sanctions, embargoes or trade restrictions;
- the imposition of duties and tariffs and other trade barriers;
- limitations on ownership and on repatriation or dividend of earnings;
- transportation delays and interruptions;
- labor unrest and current and changing regulatory environments;
- increased compliance costs, including costs associated with disclosure requirements and related due diligence;
- difficulties in staffing and managing multi-national operations;
- limitations on our ability to enforce legal rights and remedies; and
- 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, these risks could have a material adverse effect on our growth strategy into new geographical markets, our reputation, our business, results of operations, financial condition and cash flows.

New tariffs and other trade measures could adversely affect our results of operations, financial position and cash flows.

In 2018 the U.S. government imposed tariffs on steel and aluminum and a broad range of other products imported into the United States. In response to the tariffs imposed by the U.S. government, the European Union, Canada, Mexico and China have announced tariffs on U.S. goods and services. The new tariffs have increased our material input costs, and any further trade restrictions, retaliatory trade measures and additional tariffs could result in higher input costs to our products. We may not be able to fully mitigate the impact of these increased costs or pass price increases on to our customers. While tariffs and other retaliatory trade measures imposed by other countries on U.S. goods have not yet had a significant impact on our business or results of operations, we cannot predict further developments, and such existing or future tariffs could have a material adverse effect on our results of operations, financial position and cash flows.

Changes in domestic and foreign governmental and public policy changes, risks associated with emerging markets, changes in statutory tax rates and laws, and unanticipated outcomes with respect to tax audits could adversely affect our business, profitability and reputation.

Our domestic and international sales and operations are subject to risks associated with changes in laws, regulations and policies (including environmental and employment regulations, export/import laws, tax policies such as export subsidy programs and research and experimentation credits, carbon emission regulations and other similar programs). Failure to comply with any of the foregoing laws, regulations and policies could result in civil and criminal, monetary and non-monetary penalties, as well as damage to our reputation. In addition, we cannot provide assurance that our costs of complying with new and evolving regulatory reporting requirements and current or future laws, including environmental protection, employment, data security, data privacy and health and safety laws, will not exceed our estimates. In addition, Apergy has made investments in certain countries, including Argentina, Australia, Bahrain, Colombia and Oman, 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 business, results of operations and reputation.

We are subject to taxation in a number of jurisdictions. Accordingly, 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 disagreements with taxing authorities with respect to the interpretation of tax laws and changes in tax laws. The amount of income taxes and other taxes paid could be adversely impacted by changes in statutory tax rates and laws (which have been and may in the future be under active consideration in various jurisdictions) and are subject to ongoing audits by domestic and international authorities. For example, the U.S. bill commonly referred to as the Tax Cuts and Jobs Act ("Tax Reform Act"), which was enacted on December 22, 2017, significantly changes U.S. tax law by, among other things, imposing a repatriation tax on deemed repatriated earnings of foreign subsidiaries and imposing limitations on the ability to deduct interest expense. If changes in statutory tax rates or laws or audits result in assessments different from amounts estimated, then our business,



results of operations, financial condition and cash flows may be adversely affected. In addition, changes in tax laws could have an adverse effect on our customers, resulting in lower demand for our products and services.

Failure to attract, retain and develop personnel for key management could have an adverse effect on our results of operations, financial condition and cash flows.

Our growth, profitability and effectiveness in conducting our operations and executing our strategic plans depend in part on our ability to attract, retain and develop qualified personnel, align them with appropriate opportunities for key management positions and support for strategic initiatives. Additionally, during periods of increased investment in the oil and gas industry, competition to hire may increase and the availability of qualified personnel may be reduced. If we are unsuccessful in our efforts to attract and retain qualified personnel, our business, results of operations, financial condition, cash flows, market share and competitive position could be adversely affected. Additionally, we could miss opportunities for growth and efficiencies.

The credit risks of our customer base could result in losses.

Many of our customers are oil and gas companies that have faced or may in the future face liquidity constraints during adverse commodity price environments. These customers impact our overall exposure to credit risk as they are also affected by prolonged changes in economic and industry conditions. If a significant number of our customers experience a prolonged business decline or disruptions, we may incur increased exposure to credit risk and bad debts.

The loss of one or more significant customers could have an adverse impact on our financial results.

Our customers represent a combination of some of the largest operators in the oil and gas drilling and production markets, including major integrated, large, medium and small independents, and foreign national oil and gas companies, as well as oilfield equipment and service providers. In 2018, our top 10 customers represented approximately 38% of total revenue. While Apergy is not dependent on any one customer or group of customers, the loss of one or more of our significant customers could have an adverse effect on our business, results of operations, financial condition and cash flows.

The inability to protect or obtain patent and other intellectual property rights could adversely affect our revenue, operating profits and cash flows.

We own patents, trademarks, licenses and other forms of intellectual property related to our products and continuously invest in research and development that may result in innovations and general intellectual property rights. We employ various measures to develop, maintain and protect our intellectual property rights. These measures may not be effective in capturing intellectual property rights, and they may not prevent our 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 intellectual property rights could adversely impact our competitive position and have a negative impact on our business, results of operations, financial condition and cash flows.

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

We 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 may 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.

We are subject to risk due to the volatility of global energy prices and regulations that impact drilling and production, with overall demand for our products and services impacted by depletion rates, global economic conditions and related energy demands. Negative changes in worldwide economic and capital market conditions are beyond our control, are highly unpredictable, and can have an adverse effect on our business, results of operations, financial condition, cash flows and cost of capital.

A deterioration in our future expected profitability or cash flows could result in an impairment of our recorded goodwill and intangible assets.

Apergy has significant goodwill and intangible assets recorded on its consolidated balance sheet. The valuation and classification of these assets and the assignment of useful lives to intangible assets involve significant judgments and the use of estimates. Impairment testing of goodwill and intangible assets requires significant use of judgment and assumptions, particularly as it relates to the determination of fair market value. A decrease in the long-term economic outlook and future cash flows of our business could significantly impact asset values and potentially result in the impairment of intangible assets, including goodwill. Although fair values currently exceed carrying values for each reporting unit, the value of our business could be unfavorably impacted by steep declines in revenue and order rates as drilling and production activity would be reduced due to sustained unfavorable crude oil prices and lower U.S. rig counts. Accordingly, sustained future economic declines could result in impairment charges that could have a material adverse effect on our results of operations.

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.

Our operations require us to comply with a number of U.S. and international laws and regulations, including those 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. In particular, our international operations are subject to the regulations imposed by the Foreign Corrupt Practices Act and the United Kingdom Bribery Act 2010 as well as anti-bribery and anti-corruption laws of various jurisdictions in which we operate. 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 such U.S. or international laws or regulations or fail to protect our confidential information. Any such violations of law or improper actions could subject us to civil or criminal investigations in the United States or other jurisdictions, could lead to substantial civil or criminal, monetary and non-monetary penalties and related stockholder lawsuits, could lead to increased costs of compliance and could damage our reputation, business, results of operations, financial condition 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.

A portion of our business is transacted and/or denominated in foreign currencies, and fluctuations in currency exchange rates could have a significant impact on our 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. Although the impact of foreign currency fluctuations on our results of operations has historically not been material, significant changes in currency exchange rates, principally the Canadian Dollar, Australian Dollar, Argentinian Peso, and Colombian Peso, could negatively affect our results of operations. Additionally, the strengthening of the U.S. dollar potentially exposes us to competitive threats from lower cost producers in other countries and could result in unfavorable translation effects as the results of foreign locations are translated into U.S. dollars for reporting purposes.

Natural disasters and unusual weather conditions could have an adverse impact on our business.

Our business could be materially and adversely affected by natural disasters or severe weather conditions. Hurricanes, tropical storms, flash floods, blizzards, cold weather and other natural disasters or severe weather conditions could result in evacuation of personnel, curtailment of services, damage to equipment and facilities, interruption in transportation of products and materials, and loss of productivity. For example, certain of our manufactured products and components are manufactured at a single facility, and disruptions in operations or damage to any such facilities could reduce our ability to manufacture our products and satisfy customer demand. If our customers are unable to operate or are required to reduce operations due to severe weather conditions, our business could be adversely affected as a result of curtailed deliveries of our products and services.

Our indebtedness could adversely affect our financial condition and operating flexibility.

In connection with the Separation, we incurred a significant amount of indebtedness. Subject to the limits contained in the credit agreement governing our senior secured credit facilities and the indenture that governs our senior notes, we may be able to incur substantial additional indebtedness from time to time to finance working capital, capital expenditures, investments or acquisitions, or for other purposes. If we do so, the risks related to our level of indebtedness could intensify.

Specifically, our level of indebtedness could have important consequences, including:

- making it more difficult for us to satisfy our obligations with respect to our outstanding debt;
- limiting our ability to obtain additional financing to fund our business operations;
- requiring a substantial portion of our cash flows to be dedicated to debt service payments;
- increasing our vulnerability to general adverse economic and industry conditions;
- exposing us to the risk of increased interest rates as certain of our borrowings, including borrowings under our senior secured credit facilities, are at variable rates of interest;
- limiting our flexibility in planning for and reacting to changes in the industry in which we compete;
- placing us at a disadvantage compared to other, less leveraged competitors; and
- increasing our cost of borrowing.

In addition, the credit agreement governing our senior secured credit facilities and the indenture that governs our senior notes contain restrictive covenants that limit our ability to engage in activities that may be in our long-term interests. Our failure to comply with these covenants could result in an event of default which, if not cured or waived, could result in the acceleration of the repayment obligations of our debt.

Our ability to make payments on and to refinance our indebtedness, as well as any future indebtedness that we may incur, depends upon the level of cash flows generated by our operations, our ability to sell assets, availability under our revolving credit facility, and our ability to access the capital markets and/or other sources of financing. Our ability to generate cash is subject to general economic, industry, financial, competitive, legislative, regulatory and other factors that are beyond our control. If we are not able to repay or refinance our indebtedness as it becomes due, we may be forced to sell assets or take other disadvantageous actions, including (i) reducing financing in the future for working capital, capital expenditures, acquisitions and general corporate purposes or (ii) dedicating an unsustainable level of our cash flow from operations to the payment of principal and interest on our indebtedness. In addition, our ability to withstand competitive pressures and to react to changes in the oil and gas industry could be impaired.

Risks Related to the Separation

Potential indemnification liabilities between Apergy and Dover pursuant to the separation and distribution agreement could materially and adversely affect our business, financial condition, results of operations and cash flows.

The separation and distribution agreement, among other things, provides for indemnification obligations designed to make Apergy financially responsible for substantially all liabilities that may exist relating to its business activities, whether incurred prior to or after the Separation. If we are required to indemnify Dover under the circumstances set forth in the separation and distribution agreement, we may be subject to substantial liabilities.

Additionally, pursuant to the separation and distribution agreement and certain other agreements with Dover, Dover agreed to indemnify Apergy for certain liabilities. However, third parties could also seek to hold us responsible for any of the liabilities that Dover has agreed to retain, and there can be no assurance that the indemnity from Dover will be sufficient to protect us against the full amount of such liabilities, or that Dover will be able to fully satisfy its indemnification obligations. In addition, Dover's insurers may attempt to deny coverage to Apergy for liabilities associated with certain occurrences of indemnified liabilities prior to the Separation. Moreover, even if Apergy ultimately succeeds in recovering from Dover or such insurance providers any amounts for which we are held liable, we may be temporarily required to bear these losses until recovery is achieved. Each of these risks could negatively affect our business, results of operations, financial condition and cash flows.

We are subject to continuing contingent liabilities of Dover following the Separation.

There are several significant areas where the liabilities of Dover may become Apergy's obligations. For example, under the U.S. Internal Revenue Code of 1986, as amended (the "Code") and related rules and regulations, each corporation that was a member of the Dover U.S. consolidated group during a taxable period, or portion of a taxable period ending on or before the effective time of the distribution, is jointly and severally liable for the U.S. federal income tax liability of the entire Dover U.S. consolidated group for that taxable period. Consequently, we could be required to pay the entire amount of Dover's consolidated U.S. federal income tax liability for a prior period, which could be substantial and in excess of the amount allocated to us under the tax matters agreement. Other provisions of federal law establish similar liability for other matters, including laws governing tax-qualified pension plans as well as other contingent liabilities.

If the distribution in connection with the Separation, together with certain related transactions, does not qualify as a transaction that is generally tax-free for U.S. federal income tax purposes, Dover could be subject to significant tax liability and, in certain circumstances, Apergy could be required to indemnify Dover for material taxes pursuant to indemnification obligations under the tax matters agreement.

Prior to the distribution, Dover received a private letter ruling from the IRS (the "IRS Ruling") together with an opinion of McDermott Will & Emery LLP, tax counsel to Dover, substantially to the effect that, among other things, the contribution and the distribution, taken together, would qualify as a tax-free reorganization for U.S. federal income tax purposes under Section 368(a)(1)(D) of the Code, and the distribution would qualify as a tax-free distribution to Dover's stockholders under Section 355 of the Code. The IRS Ruling relies on, and the opinion of tax counsel relies on, certain facts and assumptions, and certain representations and undertakings from Dover and Apergy, including those regarding the past and future conduct of the companies' respective businesses and other matters. If any of these facts, assumptions, representations or undertakings are incorrect or not satisfied, Dover and its stockholders at the time of the Separation 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 of tax counsel, the IRS could determine through an audit that the distribution is taxable if it determines that any of the facts, assumptions, representations or undertakings are not correct or have been violated or if it disagrees with the conclusions in the opinion. In addition, Dover 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, Dover and its stockholders 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, Dover would for U.S. federal income tax purposes be treated as if it had sold the Apergy common stock in a taxable sale for its fair market value, and Dover's stockholders 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, Dover (and, under the tax matters agreement described below, Apergy) could incur significant tax liabilities under U.S. federal, state, local and/or foreign tax law, respectively.

Under the tax matters agreement between Dover and Apergy, Apergy would generally be required to indemnify Dover for taxes incurred by Dover that arise as a result of Apergy's taking, or failing to take, as the case may be, certain actions or any breach of any representations made by Apergy that, in either case, result in the distribution failing to meet the requirements of a tax-free distribution under Section 355 of the Code or of such related transactions failing to qualify for tax-free treatment. Also, under the tax matters agreement, Apergy would generally be required to indemnify Dover for one-half of taxes and other liabilities incurred by Dover if the distribution fails to meet the requirements of a tax-free distribution under Section 355 of the Code for reasons other than an act or failure to act on the part of Apergy or Dover, and therefore Apergy might be required to indemnify Dover for such taxes and liabilities due to circumstances and events not within our control. Under the tax matters agreement, Apergy is also required to indemnify Dover for one-half of certain taxes incurred as a result of the restructuring activities undertaken to effectuate the distribution, whether payable upon filing tax returns related to the restructuring and distribution or upon a subsequent audit of those returns. Our indemnification obligations to Dover under the tax matters agreement are not limited by a maximum amount. If we are required to indemnify Dover under the circumstances set forth in the tax matters agreement, we may be subject to substantial liabilities, which could materially adversely affect our business, results of operations, financial condition and cash flows.

Under the tax matters agreement between Dover and Apergy, Dover may, in its sole discretion, make protective elections under Section 336(e) of the Code for Apergy and some or all of its domestic subsidiaries with respect to the distribution. If, notwithstanding the IRS Ruling and the opinion of tax counsel, the distribution fails to qualify as tax-free under Section 355 of the Code, the Section 336(e) elections would generally cause deemed sales of the assets of Apergy and its electing subsidiaries, causing the Dover group to recognize a gain to the extent the fair market value of the assets exceeded the basis of Apergy and

its electing subsidiaries in such assets. In such case, to the extent that Dover is responsible for the resulting transaction taxes, Apergy generally would be required under the tax matters agreement to make periodic payments to Dover equal to the tax savings arising from a "step up" in the tax basis of Apergy's assets.

We may not be able to engage in certain corporate transactions as a result of the Separation.

To preserve the tax-free treatment to Dover and its stockholders at the time of the Separation of the contribution and the distribution and certain related transactions, under the tax matters agreement that Apergy entered into with Dover, Apergy is restricted from taking any action following the distribution that prevents the distribution and related transactions from being tax-free for U.S. federal income tax purposes. Under the tax matters agreement, for the two-year period following the distribution, Apergy may be prohibited, except in certain circumstances, from:

- entering into any transaction resulting, when combined with prior transactions, in the acquisition of 40% or more of its stock, or substantially all of
 its assets, whether by merger or otherwise;
- merging, consolidating or liquidating;
- issuing equity securities representing 40% or more of its stock, subject to certain exceptions and adjustments;
- repurchasing its capital stock in excess of specified amounts;
- ceasing to actively conduct its business or disposing of more than 25% of the assets used in its actively conducted business; and
- engaging in certain internal transactions.

These restrictions may limit our ability to pursue certain strategic transactions or other transactions that we may believe to be in the best interests of our stockholders or that might increase the value of our business. In addition, under the tax matters agreement, we may be required to indemnify Dover against all or a portion of such tax liabilities as a result of the acquisition of Apergy's stock or assets, even if it did not participate in or otherwise facilitate the acquisition.

The spin-off and related internal restructuring transactions may expose Apergy to potential liabilities arising out of state and federal fraudulent conveyance laws and legal dividend requirements.

If Dover files for bankruptcy or is otherwise determined or deemed to be insolvent under federal bankruptcy laws, a court could deem the spin-off or certain internal restructuring transactions undertaken by Dover in connection with the Separation to be a fraudulent conveyance or transfer. Fraudulent conveyances or transfers are defined to include transfers made or obligations incurred with the actual intent to hinder, delay or defraud current or future creditors or transfers made or obligations incurred for less than reasonably equivalent value when the debtor was insolvent, or that rendered the debtor insolvent, inadequately capitalized or unable to pay its debts as they become due. A court could void the transactions or impose substantial liabilities upon Apergy, which could adversely affect our financial condition and our results of operations. Among other things, the court could require Apergy's stockholders to return to Dover some or all of the shares of its common stock issued in the spin-off, or require us to fund liabilities of other companies involved in the restructuring transactions for the benefit of creditors.

The distribution of Apergy's common stock is also subject to review under state corporate distribution statutes. Under the Delaware General Corporation Law, a corporation may only pay dividends to its stockholders either (i) out of its surplus (net assets minus capital) or (ii) if there is no such surplus, out of its net profits for the fiscal year in which the dividend is declared and/or the preceding fiscal year. Although Dover made the distribution of Apergy's common stock entirely out of surplus, we cannot assure you that a court will not later determine that some or all of the distribution to Dover stockholders was unlawful.

Certain of our executive officers and directors may have actual or potential conflicts of interest because of their previous positions at Dover.

Because of their former positions with Dover, certain of our executive officers and directors own equity interests in Dover. Even though our Board of Directors consists of a majority of directors who are independent, and our executive officers who were formerly employees of Dover ceased to be employees of Dover upon the Separation, some of our executive officers and directors will continue to have a financial interest in shares of Dover's common stock. Continuing ownership of shares of Dover's common stock could create, or appear to create, potential conflicts of interest if Apergy and Dover pursue the same corporate opportunities or face decisions that could have different implications for Dover and Apergy.

Our accounting and other management systems and resources may not be adequately prepared to meet the financial reporting and other requirements to which we are subject following the Separation.

Prior to the Separation, our financial results were included within the consolidated results of Dover, and we believe that our financial reporting and internal controls were appropriate for a subsidiary of a public company. However, we are now directly subject to the reporting and other requirements of the Exchange Act. Beginning with our Annual Report on Form 10-K for the year ending December 31, 2019, we will be required to comply with Section 404 of the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act"), which will require annual management assessments of the effectiveness of our internal control over financial reporting. These reporting and other obligations may place significant demands on our management, administrative and operational resources, including accounting systems and resources.

The Exchange Act requires that we file annual, quarterly and current reports with respect to our business and financial condition. Under the Sarbanes-Oxley Act, we are required to maintain effective disclosure controls and procedures and internal control over financial reporting. To comply with these requirements, we may need to upgrade our systems, implement additional financial and management controls, reporting systems and procedures and/or hire additional accounting and finance staff. We expect to incur additional annual expenses for the purpose of addressing these requirements, and those expenses may be significant. If we are unable to upgrade our financial and management controls, reporting systems, information technology systems and procedures in a timely and effective fashion, our ability to comply with our financial reporting requirements and other rules that apply to reporting companies under the Exchange Act could be impaired. Any failure to achieve and maintain effective internal controls could have a material adverse effect on our business, results of operations, financial condition and cash flows.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We lease our corporate headquarters in The Woodlands, Texas. We maintain technical customer support offices and operating facilities in North America, Australia, the Middle East, and Latin America.

The following tables show information regarding our principal properties by reporting segment as of December 31, 2018:

			Sales /	
	Manufacturing	Warehouse	Service/Other	Total
Production & Automation Technologies	22	74	55	151
Drilling Technologies	1		1	2
	North America	Australia	Other	Total
Production & Automation Technologies	130	4	17	151
Drilling Technologies	2	_		2

We believe our properties and facilities are suitable for their present and intended purposes and are operating at a level consistent with the requirements of the industry in which we operate.

ITEM 3. LEGAL PROCEEDINGS

We are involved in various pending or potential legal actions in the ordinary course of our business. Management is unable to predict the ultimate outcome of these actions because of the inherent uncertainty of litigation. However, management believes the most probable, ultimate resolution of these matters will not have a material adverse effect on our consolidated financial position, results of operations or cash flows.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

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

Our common stock is listed on the NYSE under the "APY" symbol.

Closing stock price at December 31, 2018	\$ 27.08
Closing stock price at January 31, 2019	\$ 33.62
Number of common stockholders of record at January 31, 2019	1,206

We have not declared or paid cash dividends in 2018, and we do not currently have a plan to pay cash dividends in the future.

As of December 31, 2018, our securities authorized for issuance under equity compensation plans were as follows:

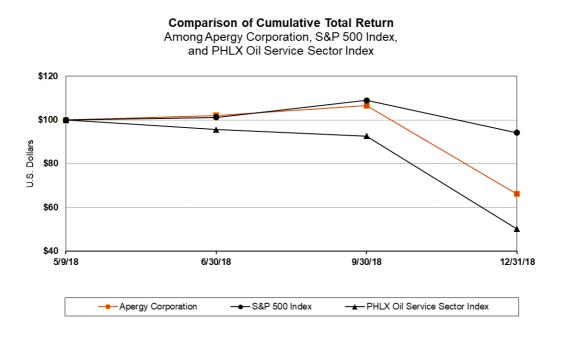
	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance under Equity Compensation Plans		
Equity compensation plans approved by security holders ⁽¹⁾	477,950	\$ 29.43	6,461,864		
Equity compensation plans not approved by security holders	_	_	_		
Total	477,950	\$ 29.43	6,461,864		

(1) Shares issuable pursuant to outstanding stock appreciation rights of 477,950 were originally granted under Dover Corporation's 2012 Equity and Cash Incentive Plan and were converted to Apergy stock appreciation rights at the Separation. Number of securities available for future issuance includes 86,817 and 414,840 of unvested performance share awards and restricted stock units, respectively, that vest after December 31, 2018. Under our 2018 Equity and Cash Incentive Plan, the number of securities remaining available for future issuance will be reduced by one share for each share of common stock issued pursuant to the exercise of stock appreciation rights and three shares for each share of common stock issued pursuant to restricted stock units and performance share awards.

We had no unregistered sales of equity securities during the year ended December 31, 2018.

We had no repurchases of our common stock during the year ended December 31, 2018.

The following performance graph and related information shall not be deemed "soliciting material" or "filed" with the SEC, nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933 or the Exchange Act, each as amended, except to the extent that we specifically incorporate it by reference into such filing.



The chart compares the percentage change in the cumulative stockholder return on our common stock against the cumulative total return of the Philadelphia Oil Service Sector Index and the S&P Composite 500 Stock Index. The comparison is for a period beginning May 9, 2018 and ending December 31, 2018. The chart assumes the investment of \$100 on the closing price of May 9, 2018, and the reinvestment of all dividends.



ITEM 6. SELECTED FINANCIAL DATA

The following tables set forth selected financial data of Apergy for each of the five years in the period ended December 31, 2018. Prior to the Separation, the selected historical financial data presented below consisted of the combined operations of certain Dover entities conducting its upstream oil and gas energy business, including an allocated portion of Dover's corporate costs. Refer to Note 1 to our consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K for additional information regarding the basis of presentation of financial data prior to the Separation.

The selected historical combined financial data as of and for the year ended December 31, 2014, was derived from Apergy's underlying financial records, which were derived from the financial records of Dover, and was not included in the audited financial statements within our registration statement on Form 10, as amended, filed with the SEC. In our opinion, the unaudited combined financial statements for this period have been prepared on the same basis as the audited combined financial statements included in this Annual Report on Form 10-K for periods prior to the Separation and include all adjustments, consisting only of normal recurring adjustments and allocations, necessary for a fair statement of the information for the period presented.

This information should be read in conjunction with Part I, Item 1 "Business," Part II, Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the audited consolidated financial statements and notes thereto included in Part II, Item 8 of this Annual Report on Form 10-K.

(in thousands, except per share data)									
Years Ended December 31	 2018		2017		2016		2015		2014 ⁽¹⁾
Statement of income (loss) data:									
Revenue	\$ 1,216,646	\$	1,010,466	\$	751,337	\$	1,076,680	\$	1,530,631
Gross profit ⁽²⁾	416,299		320,476		195,271		334,639		621,091
Provision for (benefit from) income taxes	28,796		(21,876)		(8,043)		24,131		110,323
Net income (loss)	94,495		112,664		(10,900)		53,134		223,496
Net income (loss) attributable to Apergy	94,041		111,734		(12,751)		51,698		222,707
Earnings (loss) per share attributable to Apergy ⁽³⁾ :									
Basic	\$ 1.22	\$	1.44	\$	(0.16)	\$	0.67	\$	2.88
Diluted	\$ 1.21	\$	1.43	\$	(0.16)	\$	0.66	\$	2.86
As of December 31	 2018		2017		2016		2015		2014 ⁽¹⁾
Balance sheet data:									
Cash and cash equivalents	\$ 41,832	\$	23,712	\$	26,027	\$	10,417	\$	24,355
Property, plant and equipment, net	244,328		213,562		202,528		232,886		250,482
Total assets	1,971,756		1,906,615		1,851,676		1,983,379		2,218,752
Long-term debt ⁽²⁾	666,108		5,806		2,809		3.282		3,516
Total Apergy stockholders' equity	979,069		_		_		_		—
Total Parent Company equity	—		1,635,636		1,546,322		1,639,865		1,793,176
Years Ended December 31	2018		2017		2016		2015		2014 ⁽¹⁾
Statement of cash flows data:									
Net cash provided by operating activities	\$ 163,900	\$	76,050	\$	132,991	\$	215,671	\$	280,990
Net cash required by investing activities	(54,205)		(41,949)		(27,273)		(34,101)		(660,177)
Net cash provided by (used in) financing activities	(90,838)		(36,693)		(90,018)		(194,977)		389,149

(1) During 2014, Apergy acquired Timberline Manufacturing Company, WellMark Holdings, Inc., and Accelerated Companies LLC in three separate transactions for net cash consideration of \$627.0 million. Our results of operations, financial position and cash flows reflect these businesses since the date of acquisition.

⁽²⁾ Prior-year amounts have been reclassified to conform with current year presentation.

(3) For comparative purposes and to provide a more meaningful calculation of weighted-average shares outstanding, we have assumed the shares issued in conjunction with the Separation to be outstanding as of the beginning of each period prior to the Separation. In addition, we have assumed the potential dilutive securities outstanding as of May 8, 2018, were outstanding and fully dilutive in each of the periods with positive income prior to the Separation.

EXECUTIVE OVERVIEW

Apergy is a leading provider of highly engineered equipment and technologies that help companies drill for and produce oil and gas safely and efficiently around the world. Our products provide efficient functioning throughout the lifecycle of a well—from drilling to completion to production.

A description of our products and services and annual financial data for each reporting segment can be found in Part I, Item 1, "Business" and Note 19 to our consolidated financial statements in Part II, Item 8 of this Annual Report on Form 10-K. A discussion of our consolidated results of operations and the results of operations of each of our reporting segments for the years ended December 31, 2018, 2017 and 2016 follows.

Separation and Distribution

On April 18, 2018, the Dover Board of Directors approved the separation of entities conducting its upstream oil and gas energy business within the Dover Energy segment into an independent, publicly traded company named Apergy Corporation. In accordance with the separation and distribution agreement, the two companies were separated by Dover distributing to its stockholders all 77,339,828 shares of Apergy common stock on May 9, 2018. Each Dover stockholder received one share of Apergy common stock for every two shares of Dover common stock held at the close of business on the record date of April 30, 2018. In conjunction with the Separation, Dover received a private letter ruling from the IRS to the effect that, based on certain facts, assumptions, representations and undertakings set forth in the ruling, for U.S. federal income tax purposes, the distribution of Apergy common stock was not taxable to Dover or U.S. holders of Dover common stock, except in respect to cash received in lieu of fractional share interests. Following the Separation, Dover retained no ownership interest in Apergy, and each company now has separate public ownership, boards of directors and management.

Basis of Presentation

Prior to the Separation, our results of operations, financial position and cash flows were derived from the consolidated financial statements and accounting records of Dover and reflect the combined historical results of operations, financial position and cash flows of certain Dover entities conducting its upstream oil and gas energy business within Dover's Energy segment, including an allocated portion of Dover's corporate costs. These financial statements have been presented as if such businesses had been combined for all periods prior to the Separation. All intercompany transactions and accounts within Dover were eliminated. The assets and liabilities were reflected on a historical cost basis since all of the assets and liabilities presented were wholly owned by Dover and were transferred within the Dover consolidated group. These pre-Separation combined financial statements may not include all of the actual expenses that would have been incurred had we been a stand-alone public company during the periods presented prior to the Separation and consequently may not reflect our results of operations, financial position and cash flows had we been a stand-alone public company during the periods presented prior to the Separation. All financial information presented after the Separation represents the consolidated results of operations, financial position and cash flows of Apergy. Refer to Note 1 to our consolidated financial statements in Part II, Item 8 of this Annual Report on Form 10-K for additional information on the basis of presentation of the consolidated financial statements.

Business Environment

We focus on economic- and industry-specific drivers and key risk factors affecting our business segments as we formulate our strategic plans and make decisions related to allocating capital and human resources. Our business segments provide a broad range of technologies and products for the oil and gas drilling and production industry and, as a result, are substantially dependent upon activity levels in the oil and gas industry. Demand for our products, technologies and services is impacted by overall global demand for oil and gas, ongoing depletion rates of existing wells which produce oil and gas, and our customers' willingness to invest in the development and production of oil and gas resources. Our customers determine their operating and capital budgets based on current and future crude oil and natural gas prices, U.S. and worldwide rig count and U.S. well completions, among other factors. Crude oil and natural gas prices are impacted by supply and demand, which are influenced by geopolitical, macroeconomic and local events and have historically been subject to substantial volatility and cyclicality. Future higher crude oil and natural gas prices typically translate into higher exploration and production budgets. Rig count, footage drilled and exploration and production investment by oil and gas operators have often been used as leading indicators for the level of drilling and development activity in the oil and gas sector.

Market Conditions and Outlook

Oil supply markets tightened in the back half of 2017 and through the third quarter of 2018, driving 2018 average West Texas Intermediate ("WTT") crude oil prices higher. In late 2018 and while oil and gas prices were experiencing significant volatility, OPEC members announced production cuts that began in 2019 and which are likely to lead to global oil markets returning to more balanced conditions during the latter half of 2019. We expect low to modest growth in rig count, as well as footage drilled, in 2019 as the supply and demand for oil and gas become more balanced. We believe that demand for oil and gas will continue to grow in 2019 and commodity prices will remain constructive. Given the current market conditions, we remain focused on (i) growing our ESP product line in the U.S. unconventional markets, (ii) capitalizing on existing well conversions to rod lift as production declines, (iii) further adoption of our digital products to improve our customers' productivity and economics, (iv) continued innovation and advancement of our technology in diamond sciences, and (v) continued adoption of our diamond bearings offering for downhole applications. We believe our growth initiatives will allow us to meet our operational and financial growth targets in 2019.

Recently announced tariffs by the U.S. government, and retaliatory tariffs and other trade restrictions instituted by other countries, introduce uncertainty to our business since some of our products are impacted by the tariffs. We are actively working to mitigate the impacts of higher costs through various measures, including customer price increases, stronger supplier relationships as well as operational productivity improvement initiatives. In addition, we remain ready to respond to any changes in our customers' activity levels based on the recent takeaway capacity issues in the Permian basin.

Although risk remains that crude oil prices and activity levels could deteriorate from current levels, we believe the long-term outlook for our businesses is favorable. Increasing global demand for oil and gas, in combination with ongoing depletion of existing reservoirs, is expected to drive continued investment in the drilling and completion of new wells. In addition, productivity and efficiency are becoming increasingly important in the oil and gas industry as operators focus on improving per-well economics.

Average crude oil and natural gas prices, rig counts and well completions are summarized below:

			2017					2018		
	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3	Q4	FY
WTI crude (\$ per bbl) ^(a)	51.62	48.10	48.15	55.23	50.81	62.91	68.07	69.69	59.50	65.04
Brent crude (\$ per bbl) ^(a)	53.59	49.55	52.10	61.40	54.12	66.86	74.53	75.08	67.99	71.12
Henry Hub natural gas (\$ per mmBtu) ^(a)	3.02	3.08	2.95	2.91	2.99	3.08	2.85	2.93	3.77	3.16
U.S. rig count ^(b)	742	895	946	921	876	966	1,039	1,051	1,073	1,032
Canada rig count ^(b)	295	117	208	204	206	269	108	209	179	191
International rig count ^(b)	939	958	947	949	948	970	968	1,003	1,011	988
Worldwide rig count	1,976	1,970	2,101	2,074	2,030	2,205	2,115	2,263	2,263	2,211
U.S. well completions ^(a)	788	961	1,051	1,070	967	1,097	1,232	1,248	1,277	1,213

(a) Source: U.S. Energy Information Administration (EIA), as of January 15, 2019.

^(b) Source: Baker Hughes Rig Count, as of January 15, 2019.

CONSOLIDATED RESULTS OF OPERATIONS YEARS ENDED DECEMBER 31, 2018, 2017 AND 2016

	Years Ended December 31,			2018 v	s. 2017	2017 vs. 2016		
(dollars in thousands)	 2018		2017	2016	\$	%	\$	%
Revenue	\$ 1,216,646	\$	1,010,466	\$ 751,337	206,180	20.4	259,129	34.5
Cost of goods and services	800,347		689,990	556,066	110,357	16.0	133,924	24.1
Gross profit	416,299		320,476	 195,271	95,823	29.9	125,205	64.1
Selling, general and administrative expense	262,625		218,558	204,383	44,067	20.2	14,175	6.9
Interest expense, net	27,440		753	477	26,687	*	276	*
Other expense, net	2,943		10,377	9,354	(7,434)	*	1,023	*
Income (loss) before income taxes	 123,291		90,788	 (18,943)	32,503	35.8	109,731	579.3
Provision for (benefit from) income taxes	28,796		(21,876)	(8,043)	50,672	231.6	(13,833)	(172.0)
Net income (loss)	 94,495		112,664	 (10,900)	(18,169)	(16.1)	123,564	1,133.6
Net income attributable to noncontrolling interest	454		930	1,851	(476)	*	(921)	*
Net income (loss) attributable to Apergy	\$ 94,041	\$	111,734	\$ (12,751)	(17,693)	(15.8)	124,485	976.3
Gross profit margin	34.2%		31.7 %	26.0%		250 bps.		570 bps.
SG&A expense, percent of revenue	21.6%		21.6 %	27.2%		0 bps.		(560) bps.
Effective tax rate	23.4%		(24.1)%	42.5%		4,750 bps.		(6,660) bps.

* Not meaningful

2018 Compared with 2017

Revenue. Revenue increased \$206.2 million, or 20.4%, in 2018 compared to the prior year driven by broad-based volume growth in our Production & Automation Technologies' artificial lift and digital offerings due to improving oil and gas markets, particularly in the United States, primarily as a result of increased well completion activity. In addition, revenue increased in our Drilling Technologies segment year-over-year due to increased volumes driven by increased U.S. rig counts and continued adoption of diamond bearings.

Gross profit. Gross profit increased \$95.8 million, or 29.9%, in 2018 compared to the prior year, reflecting benefits of increased sales volumes in both our Production & Automation Technologies and Drilling Technologies segments, combined with realization of productivity initiatives.

Selling, general and administrative (SG&A) expense. Selling, general and administrative expense increased \$44.1 million, or 20.2%, in 2018 compared to the prior year. The increase was due to increased headcount in support of our growth initiatives, higher incentive compensation resulting from improved business performance and \$14.6 million in professional fees and other related charges associated with the Separation.

Interest expense, net. Interest expense, net increased \$26.7 million in 2018 compared to the prior year due to the issuances of our term loan facility and senior notes during the second quarter of 2018 related to the Separation.

Provision for (benefit from) income taxes. Our provision for (benefit from) income taxes reflected effective tax rates of 23.4% and (24.1)% in 2018 and 2017, respectively. The year-over-year increase in the effective tax rate was primarily due to a non-recurring net tax benefit of \$49.3 million recorded in 2017 due to the Tax Reform Act. The Tax Reform Act reduced the U.S. corporate income tax rate from a maximum of 35% to 21%, effective January 1, 2018, and resulted in the re-valuation of deferred tax assets and liabilities which produced the 2017 net tax benefit.

2017 Compared with 2016

Revenue. Revenue increased \$259.1 million, or 34.5%, in 2017 compared to the prior year, driven by significant growth in U.S. and Canadian rig counts and increased well completion activity.

Gross profit. Gross profit increased \$125.2 million, or 64.1%, in 2017 compared to the prior year, primarily due to a significant increase in sales volume related to improving oil and gas markets. Gross profit margin improved primarily due to the increase in sales volume, operating cost leverage, the benefits of prior year restructuring actions and lower restructuring cost.

Selling, general and administrative expense. Selling, general and administrative expense increased \$14.2 million, or 6.9%, in 2017 compared to the prior year reflecting an increase in employee incentive compensation and corporate allocations by Dover as a result of a significant increase in revenues and earnings and an increase in the number of employees, partially offset by the benefits of prior restructuring actions and lower restructuring costs.

Provision for (benefit from) income taxes. Our provision for (benefit from) income taxes reflected effective tax rates of (24.1)% and 42.5% in 2017 and 2016, respectively. The decrease in our effective tax rate in 2017 from 2016 was driven by a net tax benefit of \$49.3 million due to the Tax Reform Act which reduced the U.S. corporate income tax rate from a maximum of 35% to 21%, effective January 1, 2018, which resulted in the re-evaluation of deferred tax assets and liabilities which produced the 2017 net tax benefit.

SEGMENT RESULTS OF OPERATIONS YEARS ENDED DECEMBER 31, 2018, 2017 AND 2016

Production & Automation Technologies

	Ye	ars E	nded December 31, 2018 vs. 2017 2017 vs. 2016								
(dollars in thousands)	 2018		2017		2017		2016	\$	%	\$	%
Revenue	\$ 931,081	\$	782,813	\$	638,017	148,268	18.9	144,796	22.7		
Operating profit (loss)	75,918		26,890		(21,744)	49,028	182.3	48,634	223.7		
Operating profit (loss) margin	8.2%		3.4%		(3.4)%	480 bps.			680 bps.		
Depreciation and amortization	\$ 112,955	\$	100,912	\$	99,664	12,043	11.9	1,248	1.3		
Royalty expense	2,277		9,765		7,366	(7,488)	*	2,399	32.6		
Restructuring and other related charges	4,347		6,921		12,757	(2,574)	*	(5,836)	*		
Other measures:											
Bookings	\$ 941,302	\$	792,798	\$	625,149	148,504	18.7	167,649	26.8		
Book-to-bill ratio	1.01		1.01		0.98						

* Not meaningful

2018 Compared with 2017

Revenue. Production & Automation Technologies revenue increased \$148.3 million, or 18.9%, in 2018 compared to the prior year, driven by broad-based volume growth in our artificial lift offering, particularly from further penetration in the U.S. onshore electric submersible pump market. Additionally, we realized higher revenue from our digital offerings due to expansion of our offering and increased customer adoption.

Operating profit (loss). Production & Automation Technologies operating profit increased \$49.0 million, or 182.3%, in 2018 compared to the prior year. The increase was primarily driven by growth in sales volume associated with improving oil and gas markets, particularly U.S. well completion activity. In addition, the increase in operating profit was due to productivity initiatives, partially offset by higher material costs related to aluminum and steel. Operating profit in 2018 also benefitted from lower royalty charges from Dover which ended on April 1, 2018, and lower restructuring and other related charges year-over-year.

Bookings. Bookings increased \$148.5 million, or 18.7%, in 2018 compared to the prior year, reflecting ongoing market improvement.

2017 Compared with 2016

Revenue. Production & Automation Technologies revenue increased \$144.8 million, or 22.7%, in 2017 compared to the prior year. The increase in revenue was the result of significantly higher demand from our customers as a result of the increase of active drilling rigs and well completion activity in the U.S. and abroad.

Operating profit (loss). Production & Automation Technologies operating profit increased \$48.6 million, or 223.7%, in 2017 compared to the prior year operating loss. The higher operating profit was due to increased sales volume from improving oil and gas markets, cost savings realized from restructuring programs initiated in 2017, as well as a reduction in restructuring and other related charges year-over-year.

Bookings. Bookings increased \$167.6 million, or 26.8%, in 2017 compared to the prior year, reflecting market improvement.

Drilling Technologies

	Years Ended December 31,				l,	2018 vs. 2	017	2017 vs. 2016		
(dollars in thousands)	 2018		2017		2016	\$	%	\$	%	
Revenue	\$ 285,565	\$	227,653	\$	113,320	57,912	25.4	114,333	100.9	
Operating profit	98,620		74,317		8,397	24,303	32.7	65,920	785.0	
Operating profit margin	34.5%		32.6%		7.4%		190 bps.		2,520 bps.	
Depreciation and amortization	\$ 11,037	\$	11,950	\$	12,448	(913)	(7.6)	(498)	(4.0)	
Restructuring and other related charges	_		_		2,405	_		(2,405)	*	
Other measures:										
Bookings	\$ 293,473	\$	232,796	\$	118,433	60,677	26.1	114,363	96.6	
Book-to-bill ratio	1.03		1.02		1.05					

* Not meaningful

2018 Compared with 2017

Revenue. Drilling Technologies revenue increased \$57.9 million, or 25.4%, in 2018 compared to the prior year. The higher revenue was the result of increased volumes driven by growing worldwide rig counts and footage drilled, market share gains and continued customer adoption of our diamond bearings technology.

Operating profit. Drilling Technologies operating profit increased \$24.3 million, or 32.7%, in 2018 compared to the prior year due to higher volumes driven by growing U.S. rig counts and overall operational productivity gains.

Bookings and Book-to-bill. Bookings increased \$60.7 million, or 26.1%, in 2018 compared to the prior year, reflecting improved market conditions. Segment book-to-bill ratio was 1.03 in 2018, reflecting strong customer demand.

2017 Compared with 2016

Revenue. Drilling Technologies revenue increased \$114.3 million, or 100.9%, in 2017 compared to the prior year. The higher revenue was the result of significantly higher demand as a result of the growth in active drilling rigs in the United States and Canada.

Operating profit. Drilling Technologies operating profit increased \$65.9 million in 2017 compared to the prior year primarily driven by improved sales volume and from the benefit of approximately \$2.9 million in restructuring savings from actions taken in 2016.

Bookings. Bookings increased \$114.4 million, or 96.6%, in 2017 compared to the prior year, due to market improvement.

CAPITAL RESOURCES AND LIQUIDITY

As of December 31, 2018, approximately 39% of our cash balances were held outside the United States primarily for working capital and operational support needs. All of our cash held outside the United States could be repatriated; however, we have not provided for foreign withholding taxes on our undistributed foreign earnings from jurisdictions which impose such taxes since we have determined that such earnings are indefinitely reinvested in those jurisdictions. As of December 31, 2017, all of our cash balances were held outside the United States. Prior to the Separation, our U.S. cash was historically pooled to Dover through intercompany advances and is not reflected on our consolidated balance sheet as of December 31, 2017.

We have historically generated and expect to continue to generate positive cash flow from operations. In response to the oil and gas industry downturn that began in the latter half of 2014 and continued through 2016, we pursued a comprehensive plan which included aggressive restructuring actions aimed at facility and cost structure rationalization, including headcount reductions. Company-wide working capital reduction initiatives were undertaken, specifically targeting inventory reductions and increases in payment terms to suppliers. Additionally, our global sourcing teams secured incremental material savings to lower product costs while our operational teams drove productivity gains within our facilities. These efforts resulted in our ability to continue to generate positive cash from operations through the downturn and in 2016. As the market stabilized and U.S. rig count and customer spending increased in 2017, we utilized more cash to increase production and invest in working capital requirements while still maintaining positive cash from operations. U.S. rig counts and well completions continued to show improvement in 2018, leading to our ability to generate improved cash from operations in 2018 compared to 2017 as a result of our historical investments and cost and capital discipline.

We expect to meet the continuing funding requirements of our U.S. operations with cash generated by such U.S. operations and our revolving credit facility.

Cash Flows

	Years Ended December 31,							
(in thousands)	2018			2017	2016			
Cash provided by operating activities	\$	163,900	\$	76,050	\$	132,991		
Cash required by investing activities		(54,205)		(41,949)		(27,273)		
Cash required by financing activities		(90,838)		(36,693)		(90,018)		
Effect of exchange rate changes on cash and cash equivalents		(737)		277		(90)		
Net increase (decrease) in cash and cash equivalents	\$	18,120	\$	(2,315)	\$	15,610		

Operating Cash Flows

Cash provided by operating activities in 2018 increased \$87.9 million compared to 2017. The increase in cash provided by operating activities was primarily driven by higher cash income generated from operations. Both our Production & Automation Technologies and Drilling Technologies segments reported increased cash income year-over-year. Additionally, we required less net cash investment in working capital in 2018 as compared to 2017.

Cash provided by operating activities in 2017 decreased \$56.9 million compared to 2016. This decrease was primarily a result of higher investment in working capital in support of sales volume increases, partially offset by higher cash income generated from operations.

Expenditures for assets that are expected to be placed into our leased asset program and with a useful life of less than one year are reported in "leased assets and other" in the operating section of our consolidated statement of cash flows. Additionally, the cash receipts related to the sale of assets on lease are presented in "lease assets and other" in the operating section of our statement of cash flows.

Investing Cash Flows

Cash required by investing activities was \$54.2 million in 2018 and was primarily comprised of capital expenditures to support productivity, new product launches as well as increased investments in assets available to customers on a rental basis. Cash required by investing activities was \$41.9 million in 2017 and was primarily comprised of capital expenditures and an \$8.8 million payment to acquire a supplier of progressive cavity pump products and services. Refer to Note 5 to our consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K for additional information related to this acquisition. Cash required by investing activities was \$27.3 million in 2016 and was primarily comprised of capital expenditures and \$3.7 million of patent acquisitions from Dover.

Expenditures for assets that are expected to be placed into our lease asset program and with a useful life of greater than one year are reported in "capital expenditures" in the investing section of our consolidated statement of cash flows. During the years ended December 31, 2018, 2017, and 2016 we purchased \$26.7 million, \$14.5 million, and \$1.1 million, respectively, of assets with a useful life of greater than one year that are expected to be placed into the lease program.

Financing Cash Flows

Cash required by financing activities was \$90.8 million in 2018, and was the result of net transfers to Dover of \$736.6 million, primarily comprised of our \$700 million payment to Dover related to the Separation, and \$45.0 million of debt repayment on our term loan. These payments were partially offset by issuances of long-term debt, net of debt issuance costs and original issue discounts, of \$698.0 million.

Cash required by financing activities of \$36.7 million and \$90.0 million in 2017 and 2016, respectively, was primarily due to net transfers to Dover.

Debt and Liquidity

Total borrowings were comprised of the following:

(in thousands)	December 31, 2018	Dece	mber 31, 2017	
Revolving credit facility	\$	_	\$	—
Term loan facility	370,	000		_
6.375% Senior Notes due 2026	300,	000		—
Capital lease obligations	7,	485		5,806
Total borrowings	\$ 677,	485	\$	5,806

Senior Notes

On May 3, 2018, and in connection with the Separation, we completed the private placement of \$300 million in aggregate principal amount of 6.375% senior notes due May 2026 ("Senior Notes"). Interest on the Senior Notes is payable semi-annually in arrears on May 1 and November 1 of each year commencing on November 1, 2018. Net proceeds of \$293.8 million from the offering were utilized to partially fund the cash payment to Dover and to pay fees and expenses incurred in connection with the Separation. On November 15, 2018, we filed a registration statement on Form S-4 with the SEC in accordance with the registration rights agreement outlining our offer to exchange the Senior Notes for substantially identical notes without transfer restrictions. The registration statement was declared effective on November 20, 2018, and the exchange offer for the Senior Notes was completed in December 2018 with full participation.

Senior Secured Credit Facilities

On May 9, 2018, we entered into a credit agreement ("credit agreement") governing the terms of our senior secured credit facilities, consisting of (i) a sevenyear senior secured term loan B facility ("term loan facility") and (ii) a five-year senior secured revolving credit facility ("revolving credit facility," and together with the term loan facility, the "senior secured credit facilities"), with JPMorgan Chase Bank, N.A. as administrative agent. The net proceeds of the senior secured credit facilities were used (i) to pay fees and expenses in connection with the Separation, (ii) partially fund the cash payment to Dover and (iii) provide for working capital and other general corporate purposes. *Term Loan Facility.* The term loan facility had an initial commitment of \$415 million. The full amount of the term loan facility was funded on May 9, 2018. Amounts borrowed under the term loan facility that are repaid or prepaid may not be re-borrowed. The term loan facility matures in May 2025. Net proceeds of \$408.7 million from the term loan facility were utilized to partially fund the cash payment to Dover and to pay fees and expenses incurred in connection with the Separation.

During the year ended December 31, 2018, we repaid \$45 million of our term loan facility.

Revolving Credit Facility. The revolving credit facility consists of a five-year senior secured facility with aggregate commitments in an amount equal to \$250 million, of which up to \$50 million is available for the issuance of letters of credit. Amounts repaid under the revolving credit facility may be re-borrowed. The revolving credit facility matures in May 2023.

A summary of our revolving credit facility as of December 31, 2018 was as follows:

		Letters								
		Debt of								
(in millions)	Amount		Outstanding		Credit		Unu	sed Capacity	Maturity	
Five-year revolving credit facility	\$ 250.0	\$	—	\$		3.6	\$	246.4	May 2023	

As of December 31, 2018, we were in compliance with all restrictive covenants under our revolving credit facility.

See Note 10—Debt to our consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K for additional information.

Outlook

As a result of the Separation, we no longer participate in cash management and funding arrangements with Dover. Prior to the Separation, we utilized these arrangements to fund both daily operating activities and significant business expenditures, such as manufacturing capacity expansion and acquisitions.

We expect to generate our liquidity and capital resources through operations and, when needed, through our revolving credit facility. We have \$246.4 million of capacity available under our revolving credit facility that we expect to utilize if working capital needs temporarily increase. The volatility in credit, equity and commodity markets creates some uncertainty for our businesses. However, management believes, based on our current financial condition and current expectations of future market conditions, that we will meet our short- and long-term needs with a combination of cash on hand, cash generated from operations, our use of our revolving credit facility and access to capital markets.

Over the next year, we expect to fund our organic capital expenditure needs and reduce our leverage through earnings growth and further debt reduction. We continue to focus on improving our customer collection efforts and overall working capital efficiency to improve our cash flow position. In 2019 we project spending approximately two and one-half percent of revenue for infrastructure related capital expenditures and an additional \$20 million to \$25 million for capital investments directed at expanding our portfolio of electric submersible pump leased assets.

We continue to evaluate acquisitions that meet our strategic priorities, expand our technology and product portfolio, improve our cost position or productivity, or broaden our geographic reach.

Contractual Obligations

The following is a summary of our contractual obligations as of December 31, 2018:

			Payments Due by Period							
(in thousands)	Total Payments		Less than 1 year		1-3 years		3-5 years		Af	ter 5 years
Long-term debt	\$	670,000	\$		\$		\$		\$	670,000
Interest on long-term debt ⁽¹⁾		143,544		19,125		38,250		38,250		47,919
Operating leases		68,742		14,781		24,008		21,219		8,734
Purchase obligations		46,272		43,103		3,169		—		_
Capital leases		8,214		4,447		3,623		119		25
Supplemental and post-retirement benefits ⁽²⁾		18,105		2,105		4,133		3,981		7,886
Total contractual obligations	\$	954,877	\$	83,561	\$	73,183	\$	63,569	\$	734,564

(1) Interest included relates to our senior notes. Interest on our term loan was not included as we cannot estimate these obligations given its variable nature.

(2) Amounts represent estimated benefit payments under our unfunded employee benefit plans. See Note 16 to our consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K for additional information.

Other Off-Balance Sheet Arrangements

As of December 31, 2018, we had approximately \$3.6 million outstanding in letters of credit with financial institutions, which expire at various dates through 2020. These letters of credit are primarily maintained 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.



CRITICAL ACCOUNTING ESTIMATES

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make certain estimates, judgments and assumptions about future events that affect the reported amounts of assets and liabilities at the date of the financial statements, the reported amounts of revenue and expenses during the periods presented and the related disclosures in the accompanying notes to the financial statements. Management has reviewed these critical accounting estimates with the Audit Committee of the Board of Directors. We believe the following critical accounting estimates used in preparing our financial statements address all important areas where the nature of the estimates or assumptions is material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change. See Note 1 to our consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K for a description of our significant accounting policies.

Inventory Valuation

Inventory is recorded at the lower of cost or net realizable value. We evaluate the components of inventory on a regular basis for excess and obsolescence. We record the decline in the carrying value of estimated excess or obsolete inventory as a reduction of inventory and as an expense included in cost of sales in the period in which it is identified. Our estimate of excess and obsolete inventory is a critical accounting estimate because it is highly susceptible to change from period to period. In addition, the estimate requires management to make judgments about the future demand of inventory. Factors that could materially impact our estimate include changes in crude oil prices and its effect on the longevity of the current oil and gas industry, which would impact the demand for our products and services, as well as changes in the pattern of demand for the products that we offer. We believe our inventory valuation reserve is adequate to properly value potential excess and obsolete inventory as of December 31, 2018. However, any significant changes to the factors mentioned above could lead our estimate to change. Refer to Note 6 to our consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K for additional information related to inventory.

Impairment of Long-Lived and Intangible Assets

Long-lived assets, including property, plant and equipment, identifiable intangible assets being amortized and capitalized software costs are reviewed for impairment whenever events or circumstances indicate the carrying amount of the long-lived asset may not be recoverable. The carrying amount of a long-lived asset is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. If it is determined that an impairment loss has occurred, the loss is measured as the amount by which the carrying amount of the long-lived asset exceeds its fair value. The determination of future cash flows as well as the estimated fair value of long-lived assets involves significant estimates on the part of management. Because there usually is a lack of quoted market prices for long-lived assets, fair value of impaired assets is typically determined based on the present values of expected future cash flows using discount rates believed to be consistent with those used by principal market participants, or based on a multiple of operating cash flow validated with historical market transactions of similar assets where possible. The expected future cash flows used for impairment reviews and related fair value calculations are based on judgmental assessments of future productivity of the asset, operating costs and capital decisions and all available information at the date of review. If future market conditions deteriorate from our current expectations or assumptions, impairment of long-lived assets may be identified if we conclude that the carrying amounts are no longer recoverable. We recorded \$1.0 million and \$3.6 million of impairments during 2018 and 2017, respectively, primarily related to restructuring activities.

Impairment of Goodwill

Goodwill is not subject to amortization but is tested for impairment on an annual basis, or more frequently if impairment indicators arise. We have established October 1st as the date of our annual test for impairment of goodwill. Determining the fair value of a reporting unit is judgmental in nature and involves the use of significant estimates and assumptions. When performing a goodwill impairment test, we estimate fair value using the income approach. Under the income approach, fair value is determined based on the present value of estimated future cash flows, discounted at an appropriate risk-adjusted rate. The estimates and assumptions necessary in a discounted future cash flow model include revenue growth rates and operating margins used to calculate projected future cash flows, discount rates believed to be consistent with those used by principal market participants and future economic and market conditions. Our estimates are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable and do not reflect unanticipated events and circumstances that may occur.



A lower fair value estimate in the future for any of our reporting units could result in goodwill impairments. Factors that could trigger a lower fair value estimate include sustained price declines of the reporting unit's products and services, cost increases, regulatory or political environment changes, changes in customer demand, and other changes in market conditions, which may affect certain market participant assumptions used in the discounted future cash flow model. We have not recognized any goodwill impairments in 2018, 2017 or 2016, as the fair value of our reporting units exceeded their carrying amounts. In addition, there were no negative conditions, or triggering events, that occurred in 2018 requiring us to perform additional impairment reviews.

Employee Benefit Plans

Our pension and other post-retirement obligations are described in Note 16 to our consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K. In order to measure the expense and obligations associated with our employee benefit plans, management must make a variety of estimates, including discount rates used to value certain liabilities, expected return on plan assets set aside to fund these costs, rate of compensation increases, employee turnover rates, retirement rates, mortality rates and other factors. We update these estimates on an annual basis or more frequently upon the occurrence of significant events. These accounting estimates bear the risk of change due to the uncertainty associated with each estimate, as well as the fact that these estimates are difficult to measure. Different estimates used by management could result in our recognizing different amounts of expense over different periods of time.

Due to the specialized and statistical nature of these calculations which attempt to anticipate future events, we engage third-party specialists to assist management in evaluating our assumptions as well as appropriately measuring the costs and obligations associated with these employee benefits. The discount rate and expected return on plan assets are primarily based on investment yields available and the historical performance of our plan assets, respectively. These elements are critical accounting estimates because they are subject to management's judgment and can materially affect net income.

Our expected long-term rate of return on plan assets is reviewed annually based on actual returns, economic trends 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. Holding other assumptions constant, a 25 basis point decrease in the discount rate used for our plans would have a \$1.0 million increase in the projected benefit obligations as of December 31, 2018.

Accounting for Income Taxes

Prior to the Separation, our income tax expense and deferred tax balances have been estimated as if we had filed income tax returns on a stand-alone basis separate from Dover. Income taxes payable computed under the stand-alone return basis are classified within "Net parent investment in Apergy" at each balance sheet date prior to the Separation since Dover is legally liable for the tax. Accordingly, changes in income taxes payable prior to the Separation are recorded as a component of "Distributions to Dover Corporation, net" in financing activities in the consolidated statements of cash flows. As a stand-alone entity, our deferred taxes and effective tax rates may differ from those of Dover for periods prior to the Separation.

Our income tax expense, deferred tax assets and liabilities, and reserves for uncertain tax positions reflect management's best assessment of estimated future taxes to be paid. We are subject to income taxes in the United States and certain foreign jurisdictions. Significant judgments and estimates are required in determining our consolidated income tax expense.

In determining our current income tax provision, we assess temporary differences resulting from differing treatments of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are recorded in our consolidated balance sheets. Deferred tax assets and liabilities are measured using the tax rates that are expected to apply to taxable income for the years in which those tax assets and liabilities are expected to be realized or settled. When we maintain deferred tax assets, we must assess the likelihood that these assets will be recovered through adjustments to future taxable income. To the extent we believe recovery is not likely, we establish a valuation allowance to reduce the asset to a value we believe will be recoverable based on our expectation of future taxable income. We believe the accounting estimate related to the valuation allowance is a critical accounting estimate because it is susceptible to change from period to period, requires management to make assumptions about our future income over the lives of the deferred tax assets, and because the impact of increasing or decreasing the valuation allowance is potentially material to our results of operations.

The calculation of our income tax expense involves dealing with uncertainties in the application of complex tax laws and regulations in numerous jurisdictions in which we operate. We recognize tax benefits related to uncertain tax positions when, in our judgment, it is more likely than not that such positions will be sustained on examination, including resolutions of any related appeals or litigation, based on the technical merits. We adjust our liabilities for uncertain tax positions when our judgment changes as a result of new information previously unavailable. We routinely monitor the potential impact of these situations. We had no reserves recorded for uncertain tax positions as of December 31, 2018 or 2017.

Reserves related to tax accruals and valuations related to deferred tax assets can be impacted by changes in tax codes and rulings, changes in statutory tax rates and our future taxable income levels. The Tax Reform Act, enacted on December 22, 2017, significantly changed U.S. tax law by, among other things, lowering corporate income tax rates, implementing a territorial tax system and imposing a 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 through the year ended December 31, 2017. In 2017, we 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 our consolidated financial statements for the year ended December 31, 2017. Refer to Note 15 to our consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K for additional information related to our accounting for the Tax Reform Act. In 2018, we did not make any adjustments to our estimates recorded in 2017 and finalized our accounting during the fourth quarter of 2018.

Stock-Based Compensation

Prior to the Separation, our employees participated in Dover's stock-based compensation plans. For periods prior to the Separation, stock-based compensation expense has been allocated to Apergy based on the awards and terms previously granted to our employees. The principal awards issued under the Dover stock-based compensation plans included stock-settled stock appreciation rights ("SARs"), restricted stock units and performance share awards. The cost of such awards is measured at the grant date based on the fair value of the award. We used the Black-Scholes valuation model to estimate the fair value of SARs and stock options granted to employees prior to the Separation. The model required that we estimate the expected life of the SAR or option, expected forfeitures and the volatility of Dover's stock using historical data. Refer to Note 17 to our consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K for additional information related to our stock-based compensation. In 2018, we did not issue any SARs or stock options. All stock-based compensation awards in 2018 were restricted stock units and performance share awards.

Recently Issued Accounting Standards

Refer to Note 2 to our consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to certain market risks, including fluctuations in commodity prices, foreign currency exchange rates and interest rates. After the Separation from Dover, we have not utilized derivative financial instruments to manage or mitigate our exposure to these risks. Also, we do not use derivative financial instruments where the objective is to generate profits solely from trading activities.

Commodity Price Risk

We use a variety of raw materials, primarily metals and semi-processed or finished components, that are generally available from various sources. Commodity pricing for metals, such as nickel, chrome, molybdenum, vanadium, manganese and steel scrap, fluctuate with the market. As a result, our earnings are exposed to commodity market price fluctuations. Although some cost increases may be recovered through increased prices to customers, we attempt to control such costs through fixed-price contracts with suppliers and various other programs, such as our global supply chain activities.

Foreign Currency Risk

We conduct operations around the world in a number of different currencies. Many of our foreign subsidiaries have designated the local currency as their functional currency. Our earnings are therefore subject to change due to fluctuations in foreign currency exchange rates when the earnings in foreign currencies are translated into U.S. dollars. We do not hedge this translation impact on earnings. A 10% increase or decrease in the average exchange rates of all foreign currencies would have changed our revenue and income before income taxes by approximately 1.4% and 2.3%, respectively, for the year ended December 31, 2018.

When transactions are denominated in currencies other than our subsidiaries' respective functional currencies, both with external parties and intercompany relationships, these transactions result in increased exposure to foreign currency exchange effects. Currently, we do not manage these exposures through the use of derivative instruments. Consequently, significant changes in foreign currency exchange rates, particularly the Canadian Dollar, the Australian Dollar, the Argentinian Peso, the Colombian Peso and the Omani Rial, could have negative impacts on our reported results of operations.

Interest Rate Risk

Our use of fixed- or variable-rate debt directly exposes us to interest rate risk. Fixed-rate debt, such as the senior notes, exposes us to changes in the fair value of our debt due to changes in market interest rates. Fixed-rate debt also exposes us to the risk that we may need to refinance maturing debt with new debt at higher rates, or that we may be obligated to pay rates higher than the current market rate. Variable-rate debt, such as our term loan or borrowings under our revolving credit facility, exposes us to short-term changes in market rates that impact our interest expense.

As of December 31, 2018, we had unhedged variable rate debt of \$370.0 million with an interest rate of 5.06%. Using sensitivity analysis to measure the impact of a change in the interest rate, a 10% adverse movement in the interest rate, or 51 basis points, would result in an increase to interest expense of \$1.9 million on an annualized basis.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Apergy Corporation:

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Apergy Corporation and its subsidiaries (the "Company") as of December 31, 2018 and 2017, and the related consolidated statements of income (loss), comprehensive income (loss), changes in stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2018, including the related notes and financial statement schedule listed in the index appearing under Item 15(a) (2) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018 in conformity with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for certain cash receipts and cash payments in 2018.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the 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 of these consolidated financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the 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. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Houston, Texas February 27, 2019

We have served as the Company's auditor since 2017.

APERGY CORPORATION CONSOLIDATED STATEMENTS OF INCOME (LOSS)

	Years Ended December 31,						
(in thousands, except per share data)		2018		2017		2016	
Product revenue	\$	1,085,471	\$	919,669	\$	673,447	
Service revenue		83,155		63,386		50,816	
Lease and other revenue		48,020		27,411		27,074	
Total revenue		1,216,646		1,010,466		751,337	
Cost of goods and services		800,347		689,990		556,066	
Gross profit		416,299		320,476		195,271	
Selling, general and administrative expense		262,625		218,558		204,383	
Interest expense, net		27,440		753		477	
Other expense, net		2,943		10,377		9,354	
Income (loss) before income taxes		123,291		90,788		(18,943)	
Provision for (benefit from) income taxes		28,796		(21,876)		(8,043)	
Net income (loss)		94,495		112,664		(10,900)	
Net income attributable to noncontrolling interest		454		930		1,851	
Net income (loss) attributable to Apergy	\$	94,041	\$	111,734	\$	(12,751)	
Earnings (loss) per share attributable to Apergy: *							
Basic	\$	1.22	\$	1.44	\$	(0.16)	
Diluted	\$	1.21	\$	1.43	\$	(0.16)	
Weighted-average shares outstanding: *							
Basic		77,342		77,340		77,340	
Diluted		77,692		77,890		77,340	

* See Note 4—Earnings Per Share.

The accompanying notes are an integral part of the consolidated financial statements.

APERGY CORPORATION CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	Years Ended December 31,							
(in thousands)		2018		2017	2016			
Net income (loss)	\$	94,495 \$ 112,664 \$				(10,900)		
Other comprehensive income (loss), net of tax:								
Foreign currency translation adjustments ⁽¹⁾		(14,210)		4,385		925		
Pension and other post-retirement benefit plans:								
Net actuarial gain (loss) arising during period		856		2,598		(123)		
Reclassification adjustment for net actuarial loss included in net income		247		257		234		
Reclassification adjustment for prior service costs included in net income		—		1		1		
Reclassification adjustment for settlement losses included in net income		353				_		
Total pension and other post-retirement benefit plans ⁽²⁾		1,456		2,856		112		
Other comprehensive income (loss)		(12,754)		7,241		1,037		
Comprehensive income (loss)		81,741		119,905		(9,863)		
Comprehensive income attributable to noncontrolling interest	ve income attributable to noncontrolling interest 454 930					1,851		
Comprehensive income (loss) attributable to Apergy	\$	81,287	\$	118,975	\$	(11,714)		

⁽¹⁾ Net of income tax (expense) benefit of nil for the years ended December 31, 2018, 2017 and 2016, respectively.

(2) Net of income tax (expense) benefit of \$352, \$971 and \$42 for the years ended December 31, 2018, 2017 and 2016, respectively.

The accompanying notes are an integral part of the consolidated financial statements.

APERGY CORPORATION CONSOLIDATED BALANCE SHEETS

(in thousands)	I	December 31, 2018	December 31, 2017
Assets			
Cash and cash equivalents	\$	41,832	\$ 23,712
Receivables, net of allowances of \$5,178 in 2018 and \$4,753 in 2017		249,948	201,449
Inventories, net		218,319	201,402
Prepaid expenses and other current assets		20,211	14,912
Total current assets		530,310	441,475
Property, plant and equipment, net		244,328	213,562
Goodwill		904,985	910,088
Intangible assets, net		283,688	338,510
Other non-current assets		8,445	2,980
Total assets		1,971,756	1,906,615
Liabilities and Equity			
Accounts payable		131,058	98,826
Accrued compensation and employee benefits		40,546	30,289
Accrued expenses and other current liabilities		30,391	21,375
Total current liabilities		201,995	150,490
Long-term debt		666,108	5,806
Deferred income taxes		101,724	96,985
Other long-term liabilities		20,402	12,949
Total liabilities		990,229	266,230
Stockholders' equity:			
Common stock (2.5 billion shares authorized, \$0.01 par value) 2018—77.4 million shares issued and outstanding		774	_
Capital in excess of par value of common stock		965,372	—
Retained earnings		55,829	_
Net parent investment in Apergy			1,662,052
Accumulated other comprehensive loss		(42,906)	(26,416)
Total stockholders' equity		979,069	1,635,636
Noncontrolling interest		2,458	4,749
Total equity		981,527	1,640,385
Total liabilities and equity	\$	1,971,756	\$ 1,906,615

The accompanying notes are an integral part of the consolidated financial statements.

APERGY CORPORATION CONSOLIDATED STATEMENTS OF CASH FLOWS

	Yea	r 31,		
(in thousands)	2018	2017		2016
Cash provided (required) by operating activities:				
Net income (loss)	\$ 94,495	\$ 112,664	\$	(10,900)
Adjustments to reconcile net income (loss) to net cash provided (required) by operating activities:				
Depreciation	72,569	59,161		56,125
Amortization	51,892	53,701		55,987
Stock-based compensation	5,375	2,236		2,293
Gain on sale of fixed assets and business, net	(1,173)	(934)		(366)
Impairment of fixed assets	990	3,581		_
Deferred income taxes	1,914	(73,268)		(19,994)
Employee benefit plan expense	3,340	1,064		1,128
Other	5,563	(5,188)		(858)
Changes in operating assets and liabilities (net of effects of acquisitions and foreign exchange):				
Receivables	(53,890)	(61,573)		26,898
Inventories	(38,708)	(14,015)		32,912
Prepaid expenses and other current assets	(5,422)	(5,116)		3,156
Accounts payable	35,185	29,802		(9,874)
Accrued compensation and employee benefits	8,454	5,616		(2,122)
Accrued expenses and other current liabilities	14,004	(311)		(1,387)
Leased assets and other	(30,688)	(31,370)		(7)
Net cash provided by operating activities	163,900	76,050		132,991
	· · · · ·			
Cash provided (required) by investing activities:				
Capital expenditures	(57,918)	(36,654)		(26,099)
Proceeds from sale of fixed assets	1,187	3,547		2,526
Proceeds from sale of business	2,473			_,5_0
Acquisition (net of cash and cash equivalents acquired)		(8,842)		
Addition to intangible assets		(0,012)		(3,700)
Purchase price adjustments on acquisition	53	_		(0,700)
Net cash required by investing activities	(54,205)	(41,949)		(27,273)
iver cash required by investing activities	(34,203)	(41,545)		(27,273)
Cash provided (required) by financing activities:				
Proceeds from long-term debt, net of discounts	713,963			
Payment of debt issue costs	(16,006)	_		
Repayment of long-term debt	(45,000)	(500)		_
		(599)		(94.25.4)
Distributions to Dover Corporation, net	(736,557)	(31,192)		(84,254)
Distribution to noncontrolling interest	(2,720)	(1,212)		(1,727)
Payment of capital lease obligations	(4,518)	(3,690)		(4,037)
Net cash required by financing activities	(90,838)	(36,693)		(90,018)
Effect of exchange rate changes on cash and cash equivalents	(737)	277		(90)
Net increase (decrease) in cash and cash equivalents	18,120	(2,315)		15,610
Cash and cash equivalents at beginning of period	23,712	26,027		10,417
Cash and cash equivalents at end of period	\$ 41,832	\$ 23,712	\$	26,027
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The accompanying notes are an integral part of the consolidated financial statements.

APERGY CORPORATION CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

	C	ommo	on stock							
(in thousands)	Par Value		Capital in excess of par value	Retained Earnings		Net Parent Investment in Apergy	Accum. Other Comp. Loss	contr	on- olling erest	Total
December 31, 2015	\$	_	\$ —	\$	- \$	1,674,559	\$ (34,694)	\$	5,128	\$ 1,644,993
Net income (loss)		—			-	(12,751)	—		1,851	(10,900)
Other comprehensive income		_	_	_	_	_	1,037		_	1,037
Distributions to noncontrolling interest		_	_	_	_	_	_		(1,727)	(1,727)
Net transfers to Dover		—	—	_	-	(81,964)	—		—	(81,964)
Other							 		(221)	 (221)
December 31, 2016						1,579,844	 (33,657)		5,031	 1,551,218
Net income						111,734	 _		930	112,664
Other comprehensive income		_	_	_	_	_	7,241			7,241
Distributions to noncontrolling interest		_	_	_	_	_			(1,212)	(1,212)
Net transfers to Dover		—			-	(29,526)	 —			 (29,526)
December 31, 2017		_			-	1,662,052	(26,416)		4,749	1,640,385
Cumulative effect of accounting changes (Note 2)						1,315	 (1,315)			
Net income			_	55,829	9	38,212	(1,010)		454	94,495
Other comprehensive loss		_	_		_		(12,754)			(12,754)
Net transfers to/from Dover		_	_	_	_	(740,269)	(2,421)		_	(742,690)
Reclassification of net parent investment in Apergy		_	961,310	_	_	(961,310)	_		_	_
Issuance of common stock		773	(773)	_	_	_	_		_	_
Stock-based compensation		1	4,835	_	_	_			_	4,836
Distributions to noncontrolling interest		_	_	_	_				(2,720)	(2,720)
Other		—				_	 		(25)	 (25)
December 31, 2018	\$	774	\$ 965,372	\$ 55,829	9 \$		\$ (42,906)	\$	2,458	\$ 981,527

The accompanying notes are an integral part of the consolidated financial statements.

APERGY CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1—BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Apergy Corporation is a leading provider of highly engineered equipment and technologies that help companies drill for and produce oil and gas safely and efficiently around the world. Our products provide efficient functioning throughout the lifecycle of a well—from drilling to completion to production. We report our results of operations in the following reporting segments: Production & Automation Technologies and Drilling Technologies. Our Production & Automation Technologies segment offerings consist of artificial lift equipment and solutions, including rod pumping systems, electric submersible pump systems, progressive cavity pumps and drive systems and plunger lifts, as well as a full automation and digital offering consisting of equipment, software and Industrial Internet of Things solutions for downhole monitoring, wellsite productivity enhancement and asset integrity management. Our Drilling Technologies segment offerings provide market leading polycrystalline diamond cutters and bearings that result in cost effective and efficient drilling.

Separation and Distribution

On April 18, 2018, the Dover Board of Directors approved the separation of entities conducting its upstream oil and gas energy business within Dover Corporation's ("Dover") Energy segment (the "Separation") into an independent, publicly traded company named Apergy Corporation. Apergy Corporation was incorporated in Delaware on October 10, 2017, under the name Wellsite Corporation and was renamed Apergy Corporation on February 2, 2018. Apergy Corporation was formed for the purpose of holding entities, assets and liabilities conducting Dover's upstream oil and gas business within Dover's Energy segment. In accordance with the separation and distribution agreement, the two companies were separated by Dover distributing to Dover's stockholders all 77,339,828 shares of common stock of Apergy on May 9, 2018. Each Dover shareholder received one share of Apergy stock for every two shares of Dover stock held at the close of business on the record date of April 30, 2018. In conjunction with the Separation, Dover received a private letter ruling from the Internal Revenue Service to the effect that, based on certain facts, assumptions, representations and undertakings set forth in the ruling, for U.S. federal income tax purposes, the distribution of Apergy common stock was not taxable to Dover or U.S. holders of Dover common stock, except in respect to cash received in lieu of fractional share interests. Following the Separation, Dover retained no ownership interest in Apergy, and each company, as of May 9, 2018, has separate public ownership, boards of directors and management. A registration statement on Form 10, as amended, describing the Separation was filed by Apergy with the U.S. Securities and Exchange Commission ("SEC") and was declared effective on April 19, 2018. On May 9, 2018, Apergy common stock began "regular-way" trading on the New York Stock Exchange under the "APY" symbol.

Basis of Presentation

Our consolidated financial statements were prepared in U.S. dollars and in accordance with U.S. generally accepted accounting principles ("GAAP").

Prior to the Separation, our results of operations, financial position and cash flows were derived from the consolidated financial statements and accounting records of Dover and reflect the combined historical results of operations, financial position and cash flows of certain Dover entities conducting its upstream oil and gas energy business within Dover's Energy segment, including an allocated portion of Dover's corporate costs. These financial statements have been presented as if such businesses had been combined for all periods prior to the Separation. All intercompany transactions and accounts within Dover were eliminated. The assets and liabilities were reflected on a historical cost basis since all of the assets and liabilities presented were wholly owned by Dover and were transferred within the Dover consolidated group. The statements of income (loss) also include expense allocations for certain corporate functions historically performed by Dover and not allocated to its operating segments, including corporate executive management, human resources, information technology, facilities, tax, shared services, finance and legal, including the costs of salaries, benefits and other related costs. These expense allocations were based on direct usage or benefit where identifiable, with the remainder allocated on the basis of revenue, headcount or other measures. These pre-Separation combined financial statements may not include all of the actual expenses that would have been incurred had we been a stand-alone public company during the periods presented prior to the Separation. Actual costs that would have been incurred if we had been a stand-alone public company would depend on a variety of factors, including organizational structure and strategic decisions made in various areas, including information technology and infrastructure.

Prior to the Separation, transactions between Apergy and Dover, with the exception of transactions discussed in Note 3—Related Party Transactions, are reflected in the combined balance sheet as of December 31, 2017, as part of "Net parent investment in Apergy" and in the combined statements of cash flows as a financing activity in "Distributions to Dover Corporation, net." See Note 3—Related Party Transactions for additional information.

No portion of Dover's third-party debt was historically held by an Apergy entity or was transferred to Apergy; therefore, no third-party debt was included in the combined balance sheet as of December 31, 2017, and no interest expense was presented in the combined statements of income (loss) for each of the periods presented prior to the Separation. Intercompany notes payable to Dover of \$224.5 million as of December 31, 2017, were presented within "Net parent investment in Apergy" in our combined balance sheet because the notes were not settled in cash. Accordingly, no interest expense related to intercompany debt was presented in the combined statements of income (loss) for each of the periods presented prior to the Separation. Additionally, our U.S. cash was historically pooled to Dover through intercompany advances and consequently is not reflected on our combined balance sheet as of December 31, 2017.

All financial information presented after the Separation represents the consolidated results of operations, financial position and cash flows of Apergy. Accordingly, our results of operations and cash flows consist of the consolidated results of Apergy from May 9, 2018 to December 31, 2018, and the combined results of operations and cash flows for periods prior to May 9, 2018. Our balance sheet as of December 31, 2018, reflects the consolidated balances of Apergy while the December 31, 2017, balance sheet reflects the combined balances of the Dover upstream oil and gas energy businesses that were transferred to Apergy. Our management believes the assumptions underlying these consolidated financial statements, including the assumptions regarding the allocation of corporate expenses from Dover for periods prior to the Separation, are reasonable.

The legal transfer of the upstream oil and gas energy businesses from Dover to Apergy occurred on May 9, 2018; however, for ease of reference, and unless otherwise stated or the context otherwise requires, all references to "Apergy Corporation," "Apergy," "we," "us" or "our" refer (i) prior to the Separation, to the Apergy businesses, consisting of entities, assets and liabilities conducting the upstream oil and gas business within Dover's Energy segment and (ii) after the Separation, to Apergy Corporation and its consolidated subsidiaries.

Significant Accounting Policies

Use of estimates—The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates. Such estimates include, but are not limited to, net realizable value of inventories, pension and post-retirement plans, future cash flows associated with impairment testing of goodwill, indefinite-lived intangible assets and other long-lived assets, estimates related to income taxes and estimates related to contingencies.

Cash and cash equivalents—Cash equivalents are highly liquid, short-term investments with original maturities of three months or less from their date of purchase.

Receivables, net of allowances—An allowance for doubtful accounts is provided on receivables equal to the estimated uncollectible amounts. This estimate is based on historical collection experience, current economic and market conditions and a review of the current status of each customer's trade accounts receivable.

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 the lower of cost, determined on the last-in, first-out (LIFO) basis, or market. Under the LIFO method, the cost assigned to items sold is based on the cost of the most recent items purchased. As a result, the costs of the first items purchased remain in inventory and are used to value ending inventory.

Property, plant and equipment—Property, plant and equipment is recorded at cost. Depreciation is provided on the straight-line basis over the estimated useful lives of our assets as follows: buildings and improvements 5 to 31.5 years; machinery and equipment 3 to 7 years; furniture and fixtures 3 to 7 years; vehicles 3 years; and software 3 to 10 years. Expenditures for maintenance and repairs are expensed as incurred. Gain and losses are realized upon the sale or disposition of assets and are recorded in selling, general and administrative expense on our consolidated statements of income (loss).

Impairment of property, plant and equipment—Property, plant and equipment are reviewed for impairment whenever events or changes in circumstances indicate the carrying value of the long-lived asset may not be recoverable. The carrying value of a long-lived asset is not recoverable if it exceeds the sum of undiscounted cash flows expected to result from the use and eventual disposition of the asset. If it is determined that an impairment loss has occurred, the impairment loss is measured as the amount by which the carrying value of the long-lived asset exceeds its fair value.

Goodwill and other intangible assets—Goodwill is not subject to amortization but is tested for impairment on an annual basis or more frequently if impairment indicators arise. We have established October 1st as the date of our annual test for impairment of goodwill. A quantitative test is used to determine the 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. We use 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 carrying amount of a reporting unit exceeds its fair value, an impairment loss will be recognized in an amount equal to that excess, limited to the total amount of goodwill allocated to the reporting unit.

Our finite-lived acquired intangible assets are amortized on a straight-line basis over their estimated useful lives, which generally range from 5 to 15 years. Intangible assets are reviewed for impairment whenever events or changes in circumstances indicate the carrying amount of the intangible asset may not be recoverable. The carrying amount of an intangible asset is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. If it is determined that an impairment loss has occurred, the loss is measured as the amount by which the carrying amount of the intangible asset exceeds its fair value. We have one intangible asset with an indefinite life which is tested annually for impairment using an income-based valuation method.

Revenue Recognition—Prior to January 1, 2018, revenue was recognized when all of 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. Beginning in 2018, and in connection with the adoption of ASC Topic 606, revenue is recognized to depict the transfer of control of the related goods and services to the customer. Estimates are used to determine the amount of variable consideration in contracts, the determination of the standalone selling price among separate performance obligations, as well as the determination of the measure of progress for contracts where revenue is recognized over time. Some contracts with customers include variable consideration primarily related to volume rebates. We estimate variable consideration at the most likely amount to determine the total consideration which we expect 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. Our estimates of variable consideration and the determination of whether to include estimated amounts in the transaction price are largely based on an assessment of our anticipated performance and all information that is reasonably available.

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. Software product revenue is recorded when the software product is shipped to the customer or over the term of the contract on a subscription based model. Service revenue is recognized as the services are performed. Leasing revenue is recognized ratably over the lease term under current lease guidance and the leased asset is included in property, plant and equipment. In limited cases, revenue arrangements with customers require delivery, installation, testing, or other acceptance provisions to be satisfied before revenue is recognized.

Refer to Note 2 for additional information related to practical expedients and elections made under ASC Topic 606.

Shipping and handling costs—Shipping and handling costs are recorded as cost of goods and services in our consolidated statements of income (loss). Shipping and handling costs billed to customers are recorded as a component of revenue.

Stock-based compensation—Prior to the Separation, our employees participated in Dover's stock-based compensation plans. Stock-based compensation was allocated to us by Dover based on the awards and terms previously granted to our employees.

The cost of stock-based awards is measured at the grant date and are based on the fair value of the award. At the time of grant, we estimate 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 and is included in selling, general and administrative expense in our consolidated statements of income (loss). 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.

Employee benefit plans—Prior to the Separation, Apergy participated in defined benefit plans and non-qualified supplemental retirement plans sponsored by Dover that were accounted for as multi-employer plans in the consolidated financial statements. Apergy also sponsored a defined benefit plan and non-qualified plan during the pre-Separation period. These plans were accounted for as single employer plans in the consolidated financial statements.

Research and development costs—Research and development costs are expensed as incurred and amounted to \$16.0 million, \$18.5 million and \$16.5 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Income Taxes—Prior to the Separation, our operations were historically included in Dover's consolidated federal tax return and certain combined state returns. The income tax expense in our consolidated financial statements for these pre-Separation periods was determined on a stand-alone return basis which requires the recognition of income taxes using the liability method. Under this method, we assume to have historically filed a return separate from Dover, reporting our taxable income or loss and paying applicable tax based on our separate taxable income and associated tax attributes in each tax jurisdiction. Income taxes payable at December 31, 2017, computed under the stand-alone return basis are classified in "Net parent investment in Apergy" on our consolidated balance sheet since Dover is legally liable for the tax. Accordingly, changes in income taxes on the separate return basis requires considerable judgment and the use of both estimates and allocations. As a result, our effective tax rate and deferred tax balances will significantly differ from those in the periods prior to the Separation. Additionally, our deferred tax balances as calculated on the separate return basis will differ from the deferred tax balances of Dover.

The Tax Reform Act, enacted on December 22, 2017, significantly changed U.S. tax law by, among other things, lowering corporate income tax rates, implementing a territorial tax system and imposing a 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 through the year ended December 31, 2017. The Global Intangible Low-Taxed Income ("GILTI") provisions require us to include in our U.S. income tax return foreign subsidiary earnings in excess of an allowable return on the foreign subsidiary's tangible assets. We have elected to account for GILTI tax in the period in which it is incurred, and therefore did not provide any deferred tax impacts of GILTI in our combined financial statements for the year ended December 31, 2017.

On December 22, 2017, the SEC staff issued guidance to address the application of GAAP in situations when a registrant does 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. We 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 our combined financial statements for the year ended December 31, 2017. In 2018, we did not make any adjustments to our estimates recorded in 2017 and finalized our accounting during the fourth quarter of 2018.

We record interest and penalties related to unrecognized tax benefits as a component of our provision for income taxes.

Earnings per share ("EPS")—Basic EPS is computed using the weighted-average number of common shares outstanding during the year. We use the treasury stock method to compute diluted EPS which gives effect to the potential dilution of earnings that could have occurred if additional shares were issued for awards granted under our incentive compensation and stock plan. The treasury stock method assumes proceeds that would be obtained upon exercise of awards granted under our incentive compensation and stock plan are used to purchase outstanding common stock at the average market price during the period.

Fair value measurements—We record our financial assets and financial liabilities at fair value. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in an orderly transaction between market participants at the reporting date. The fair value framework requires the categorization of assets and liabilities into three levels based upon the assumptions (inputs) used to price the assets or liabilities, with the exception of certain assets and liabilities measured using the net asset value practical expedient, which are not required to be leveled. Level 1 provides the most reliable measure of fair value, whereas Level 3 generally requires significant management judgment. The three levels are defined as follows:

- Level 1: Unadjusted quoted prices in active markets for identical assets and liabilities.
- Level 2: Observable inputs other than quoted prices included in Level 1. For example, quoted prices for similar assets or liabilities in active markets or quoted prices for identical assets or liabilities in inactive markets.
- Level 3: Unobservable inputs reflecting management's own assumptions about the assumptions market participants would use in pricing the asset or liability.

Derivative financial instruments—Prior to the Separation, we used derivative financial instruments to hedge our exposure to foreign currency exchange rate risk. For derivatives hedging the fair value of assets or liabilities, the changes in fair value of both the derivatives and the hedged items are recorded in earnings. We do not enter into derivative financial instruments for speculative purposes.

Foreign currency—Financial statements of operations for which the U.S. dollar is not the functional currency, and are located in non-highly inflationary countries, are translated into U.S. dollars prior to consolidation. Assets and liabilities are translated at the exchange rate in effect at the balance sheet date, while income statement accounts are translated at the weighted-average monthly exchange rates. For these operations, translation gains and losses are recorded as a component of accumulated other comprehensive income (loss) in stockholders' equity until the foreign entity is sold or liquidated. Assets and liabilities of an entity that are denominated in currencies other than an entity's functional currency are remeasured into the functional currency using end of period exchange rates or historical rates when applicable to certain balances. Gains and losses related to these re-measurements are recorded in our consolidated statements of income (loss) as a component of "other expense, net".

Revisions—We revised our previously issued financial statements for the years ended December 31, 2017 and December 31, 2016, to correct immaterial errors related to statement of cash flow presentation of capital leases, as well as other previously identified immaterial errors. The effect of the revisions on our statement of cash flows for the year ended December 31, 2017 was as follows: (i) cash provided by operating activities decreased \$0.9 million from \$76.9 million to \$76.1 million, (ii) cash required by investing activities decreased \$4.6 million from \$46.5 million to \$41.9 million, and (iii) cash required by financing activities increased \$3.7 million from \$33.0 million to \$36.7 million. The effect of the revisions on our statement of cash flows for the year ended December 31, 2016 was as follows: (i) cash provided by operating activities increased \$3.3 million from \$129.7 million to \$133.0 million, (ii) cash required by investing activities increased \$0.8 million from \$28.0 million, and (iii) cash required by financing activities increased \$4.0 million from \$28.0 million to \$27.3 million, and (iii) cash required by financing activities increased \$4.0 million from \$28.0 million to \$27.3 million, and (iii) cash required by financing activities increased \$4.0 million from \$28.0 million to \$27.3 million, and (iii) cash required by financing activities increased \$4.0 million from \$28.0 million to \$27.3 mill

The effect of the revision on our previously issued 2017 consolidated financial statements resulted in an increase to gross profit, income before income taxes and net income of \$2.0 million, \$1.5 million, and \$1.1 million, respectively. In addition, total assets and total liabilities increased by \$1.8 million and \$1.9 million, respectively, with a decrease to total equity of \$0.1 million. The effect of the revision on our previously issued 2016 consolidated financial statements was immaterial.

We evaluated the materiality of the correction in accordance with GAAP and other guidance of the SEC and concluded the errors are immaterial to all prior periods impacted. While the adjustments were immaterial, we elected to revise our previously reported amounts.

Reclassifications—Certain prior-year amounts have been reclassified to conform to the current year presentation.

NOTE 2-NEW ACCOUNTING STANDARDS

Recently Adopted Accounting Standards

Effective January 1, 2018, we early adopted Financial Accounting Standards Board ("FASB") Accounting Standards Update ("ASU") No. 2018-02, "Income Statement—Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income." This update allows for the reclassification from accumulated other comprehensive income ("AOCI") to equity for stranded deferred income tax effects resulting from the Tax Reform Act. We elected to reclassify these stranded deferred income tax effects which amounted to \$1.3 million. The stranded deferred income tax effects were specifically identified with our employee benefit plans and were the result of the reduction in the corporate income tax rate against the corresponding deferred income taxes in AOCI.

Effective January 1, 2018, we adopted ASU 2017-07, "*Compensation—Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost.*" This update changes the income statement presentation of defined benefit and post-retirement benefit plan expense by requiring separation between operating expense (service cost component of net periodic benefit cost) and non-operating expense (all other components of net periodic benefit cost, including interest cost, amortization of prior service cost, curtailments and settlements, etc.). The operating expense component is reported with similar compensation costs while the non-operating components are reported in "other expense, net" in the consolidated statements of income (loss). The adoption of this update was not material to the periods presented. We utilized a practical expedient which allows an entity to use amounts previously disclosed in its pension and other post-retirement benefits disclosures for any prior period as the estimation basis for applying the required retrospective presentation requirements.

Effective January 1, 2018, we adopted ASU 2017-01, "*Business Combinations (Topic 805): Clarifying the Definition of a Business*" which clarifies the definition of a business and assists entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. Under this guidance, when substantially all of the fair value of gross assets acquired is concentrated in a single asset (or group of similar assets), the assets acquired would not represent a business. In addition, in order to be considered a business, an acquisition would have to include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create an output. The update also narrows the definition of outputs by more closely aligning it with how outputs are described in guidance for revenue recognition. The adoption of this ASU did not have a material impact on our financial statements.

Effective January 1, 2018, we adopted ASU 2016-15, "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments." This update clarifies how certain cash receipts and cash payments should be presented and classified in the statement of cash flows. Specifically, the update clarifies that when cash receipts and cash payments have aspects of more than one class of cash flows and cannot be separated, classification will depend on the predominant source or use. We adopted this guidance retrospectively. For the years ended December 31, 2017 and 2016, the impact of this adoption resulted in a \$14.5 million and \$1.1 million increase in net cash provided by operating activities and a corresponding increase to net cash required by investing activities on our statements of cash flows related to cash expenditures for certain leased assets.

Effective January 1, 2018, we adopted ASU 2014-09, *"Revenue from Contracts with Customers (Topic 606)."* The update introduces a new five-step revenue recognition model in which an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The update also requires quantitative and qualitative disclosures to enable users to understand the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. We applied the provisions of the ASU to contracts that were not completed as of January 1, 2018. We adopted the new guidance using the modified retrospective method and identified no cumulative effect adjustment to our total net investment balance as of January 1, 2018. The impact of adopting the new standard was not material to our financial statements for the year ended December 31, 2018.

We have applied the following practical expedients or elections under the new standard:

- We elected to omit disclosure of unsatisfied performance obligations for (i) contracts with an original expected length of one year or less and (ii) contracts for which we recognize revenue at the amount to which we have the right to invoice for services performed.
- We applied the practical expedient to not capitalize 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 consolidated statements of income (loss).
- We 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 we transfer a promised good or service to a customer, and when the customer pays for that good or service, will be one year or less.
- We elected to exclude 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) from the determination of the transaction price. As a result, our accounting policy of reporting revenue net of these taxes was not changed under the new standard.
- We elected to account for shipping and handling activities performed after control of a good has been transferred to the customer as a contract fulfillment cost. As a result, our accounting policy related to shipping and handling was not changed under the new standard.

See Note 13—Revenue for additional information.

Recently Issued Accounting Standards

In February 2016, the FASB issued ASU No. 2016-02, "*Leases (Topic 842)*." This update requires that a lessee recognize in the statement of financial position a liability for future lease payments and a right-of-use asset representing its right to use the underlying asset for the lease term. For leases with a term of 12 months or less, a lessee is permitted to make an accounting policy election by class of underlying asset not to recognize lease assets and lease liabilities. Similar to current guidance, the update continues to differentiate between finance leases and operating leases; however, this distinction now primarily relates to differences in the manner of expense recognition over time and in the classification of lease payments in the statement of cash flows. Additionally, lessors will be required to classify leases as sales-type, finance or operating, with classification affecting the pattern of income recognition. Classification for both lessees and lessors will be based on an assessment of whether risks and rewards as well as substantive control have been transferred through a lease contract. The guidance became effective for us on January 1, 2019. Early adoption is permitted. We adopted this standard on January 1, 2019, using the modified retrospective method, which will result in a cumulative catch-up adjustment to retained earnings.

After the Separation from Dover, we developed a project plan and established a cross-functional team to continue the process of implementing the new guidance, which included an evaluation of the work performed by Dover prior to the Separation. We have completed our plan including gathering information on all leases, surveying our businesses, assessing our portfolio of leases and compiling a central repository of active leases. During 2018, we completed diagnostic reviews of certain sampled leases to support our policy elections. Additionally, we have configured and implemented a new lease software system. We expect \$30 million to \$35 million of operating leases to be recorded on our consolidated balance sheet at adoption. We have evaluated our policy elections and considerations under the new lease guidance, including the use of practical expedients. We will elect to utilize the package of transition practical expedients. Additionally, for new leases we will elect to account for each lease component and its associated non-lease components as a single lease component. We are in the process of updating our internal control and business processes.

In June 2016, the FASB issued ASU 2016-13, "*Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments.*" The update amends the impairment model to utilize an expected loss methodology in place of the currently used incurred loss methodology, which may result in earlier recognition of losses related to financial instruments. The guidance will be effective for us on January 1, 2020. Early adoption is permitted for annual periods beginning after December 15, 2018. We do not expect the adoption of this update to have a material impact on our financial statements.



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 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 amendments in this update are effective for interim and annual periods beginning on January 1, 2020, with early adoption permitted. The amendments in this update should be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption. We are in the process of assessing the impacts the guidance will have on our financial statements.

NOTE 3—RELATED PARTY TRANSACTIONS

Dover Corporation

Prior to the Separation, Dover provided certain services to us, including corporate executive management, human resources, information technology, facilities, tax, shared services, finance and legal services. Dover continued to provide us certain of these services on a temporary basis following the Separation under a transition services agreement. Under the transition services agreement, Apergy paid a fee to Dover for services under the transition services agreement, which fee was intended to allow Dover to recover all of its direct and indirect costs generally without profit. The transition services agreement was terminated on January 31, 2019, consistent with the initial term provided within the agreement.

Financial information presented prior to the Separation does not include all the expenses that would have been incurred had Apergy been a stand-alone public company. The corporate expenses allocated by Dover to these financial statements were \$7.4 million, \$23.0 million, and \$19.5 million for the years ended December 31, 2018, 2017, and 2016, respectively, which were recorded in "Selling, general and administrative expense" in the consolidated statements of income (loss).

For periods prior to the Separation, transactions between Apergy and Dover, with the exception of transactions discussed below with Dover's affiliates, are reflected in "Net parent investment in Apergy" in the combined balance sheet as of December 31, 2017, and in "Distributions to Dover Corporation, net" in the consolidated statements of cash flows for the years ended December 31, 2018, 2017, and 2016, as a financing activity. Accounts receivable, accounts payable and revenue with Dover and its affiliates were not material for the periods presented. We recognized royalty expense of \$2.3 million, \$9.8 million, and \$7.4 million for the years ended December 31, 2016, respectively, related to the use of Dover's intellectual property and patents which are included in "Other expense, net" in the consolidated statements of income (loss). On April 1, 2018, patents and other intangibles owned by Dover related to our operations transferred to Apergy, and consequently, Apergy no longer incurred royalty charges related to these assets from Dover.

Noncontrolling Interest

For the years ended December 31, 2018, 2017, and 2016, we declared and paid \$2.7 million, \$1.2 million and \$1.7 million, respectively, of distributions to the noncontrolling interest holder in Apergy Middle East Services LLC, a subsidiary in the Sultanate of Oman. We have a commission arrangement with our noncontrolling interest for 5% of certain annual product sales.

NOTE 4-EARNINGS PER SHARE

On May 9, 2018, 77,339,828 shares of our common stock were distributed to Dover stockholders in conjunction with the Separation. See Note 1—Basis of Presentation and Summary of Significant Accounting Policies for additional information. For comparative purposes, and to provide a more meaningful calculation of weighted-average shares outstanding, we have assumed the shares issued in conjunction with the Separation to be outstanding as of the beginning of each period prior to the Separation. In addition, we have assumed the potential dilutive securities outstanding as of May 8, 2018, were outstanding and fully dilutive in each of the periods with positive income prior to the Separation.

A reconciliation of the number of shares used for the basic and diluted earnings per share calculation was as follows:

	Years Ended December 31,								
(in thousands, except per share data)		2018		2017	2016				
Net income (loss) attributable to Apergy	\$	94,041	\$	5 111,734		(12,751)			
Weighted-average number of shares outstanding		77,342		77,340		77,340			
Dilutive effect of stock-based compensation		350		550		_			
Total shares and dilutive securities		77,692		77,890		77,340			
Basic earnings (loss) per share attributable to Apergy	\$	1.22	\$	1.44	\$	(0.16)			
Diluted earnings (loss) per share attributable to Apergy	\$	1.21	\$	1.43	\$	(0.16)			

NOTE 5—ACQUISITIONS

In October 2017, Apergy acquired 100% of the voting stock of PCP Oil Tools S.A. and Ener Tools S.A. ("PCP Tools"), a supplier of progressive cavity pump products and services for total consideration of \$8.8 million, net of cash acquired. This acquisition is a part of our Production & Automation Technologies segment and broadens our ability to supply customers in Argentina. We recorded non-deductible goodwill of \$5.1 million, customer intangible assets of \$4.5 million, and net working capital that is not material to the consolidated financial statements. The goodwill recorded as a result of the acquisition reflects the benefits expected to be derived from product line expansion and operational synergies. The intangible assets acquired are being amortized over nine years. Results of operations of the acquired business have been included in our consolidated financial statements from the acquisition date. Pro forma results of operations have not been presented as the effects of the acquisition are not material to our consolidated financial statements.

NOTE 6—INVENTORIES

Inventories consisted of the following:

(in thousands)	December 31, 2018	Decembe	er 31, 2017
Raw materials	\$ 52,057	\$	45,408
Work in progress	11,416		10,879
Finished goods	180,624		167,227
	244,097		223,514
LIFO and valuation adjustments	(25,778)		(22,112)
Inventories, net	\$ 218,319	\$	201,402

As of December 31, 2018 and 2017, approximately 24% and 28%, respectively, of our total net inventories were accounted for using the LIFO method. The current replacement costs of LIFO inventories exceeded their carrying value by approximately \$12.9 million and \$10.6 million at December 31, 2018 and 2017, respectively. There were no reductions to the base LIFO inventories in 2018 or 2017.

NOTE 7—PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consisted of the following:

(in thousands)	December 31, 2018	D	ecember 31, 2017
Land	\$ 13,607	\$	13,557
Buildings and improvements	105,036		99,233
Machinery, equipment and other	518,029		447,991
	636,672		560,781
Accumulated depreciation	(392,344)		(347,219)
Property, plant and equipment, net	\$ 244,328	\$	213,562

Depreciation expense was \$72.6 million, \$59.2 million and \$56.1 million for the years ended December 31, 2018, 2017, and 2016, respectively.

NOTE 8—GOODWILL AND INTANGIBLE ASSETS

Goodwill

The carrying amount, including changes therein, of goodwill by reporting segment was as follows:

(in thousands)	Production & Automation Technologies	Drilling Technologies	Total
December 31, 2016	\$ 801,443	\$ 101,136	\$ 902,579
Acquisitions	5,053	—	5,053
Foreign currency translation	2,456	—	2,456
December 31, 2017	808,952	101,136	910,088
Purchase price adjustment ⁽¹⁾	(53)	—	(53)
Foreign currency translation	(5,050)	—	(5,050)
December 31, 2018	\$ 803,849	\$ 101,136	\$ 904,985

⁽¹⁾ Purchase price adjustment related to our 2017 acquisition of PCP Oil Tools S.A. and Ener Tools S.A.

We recorded \$5.1 million of acquired goodwill in 2017. See Note 5—Acquisitions for additional information. We did not recognize any impairment for the years ended December 31, 2018 and 2017, as the fair values of our reporting units exceeded their carrying amounts.

Intangible Assets

The components of our definite- and indefinite-lived intangible assets were as follows:

	December 31, 2018					December 31, 2017						
(in thousands)	 Gross Carrying Amount		Accumulated Amortization		Net Carrying Amount		Gross Carrying Amount		Carrying Accumulated		Net Carrying Amount	
Definite-lived intangible												
assets:												
Customer intangibles	\$ 568,643	\$	319,827	\$	248,816	\$	572,415	\$	276,655	\$	295,760	
Trademarks	36,296		21,575		14,721		36,312		17,821		18,491	
Patents	38,141		23,568		14,573		38,679		20,449		18,230	
Unpatented technologies	9,700		9,700		—		9,700		9,700			
Drawings and manuals	3,000		2,142		858		3,067		2,109		958	
Other	5,268		4,148		1,120		5,382		3,911		1,471	
	661,048		380,960		280,088		665,555		330,645		334,910	
Indefinite-lived intangible assets:												
Trademarks	3,600				3,600		3,600				3,600	
Total	\$ 664,648	\$	380,960	\$	283,688	\$	669,155	\$	330,645	\$	338,510	

We recorded \$4.5 million of acquired customer intangible assets in 2017. See Note 5—Acquisitions for additional information. Changes to the gross carrying amount of intangible assets during the year ended December 31, 2018 were the result of foreign currency translation adjustments.

Amortization expense related to the our intangible assets was \$51.9 million, \$53.7 million and \$56.0 million for the years ended December 31, 2018, 2017 and 2016, respectively. Estimated future amortization expense related to intangible assets held as of December 31, 2018, is as follows:

(in thousands)	Estimated Amortization
2019	\$ 51,073
2020	49,623
2021	48,795
2022	47,323
2023	33,452

NOTE 9—WARRANTY

Estimated warranty claims are provided for at the time of sale and are based on historical costs and historical and current claims experience. See Note 13— Revenue for further information regarding product warranties. Warranty cost and accrual information is as follows:

	Years Ended December 31,								
(in thousands)		2018		2017		2016			
Balance at beginning of year	\$	3,070	\$	4,666	\$	4,421			
Expenses for warranties		3,015		309		2,109			
Claims paid		(3,320)		(1,896)		(1,518)			
Other adjustments, including foreign currency translation		(80)		(9)		(346)			
Balance at end of year	\$	2,685	\$	3,070	\$	4,666			

NOTE 10-DEBT

Long-term debt consisted of the following:

(in thousands)	De	cember 31, 2018	December 31, 2017
Revolving credit facility	\$	—	\$ —
Term loan facility		370,000	—
6.375% Senior Notes due 2026		300,000	—
Capital lease obligations		7,485	5,806
Total		677,485	 5,806
Net unamortized discounts and issuance costs		(11,377)	—
Total long-term debt	\$	666,108	\$ 5,806

Senior Notes

On May 3, 2018, and in connection with the Separation, we completed the private placement of \$300.0 million in aggregate principal amount of 6.375% senior notes due May 2026 ("Senior Notes"). Interest on the Senior Notes is payable semi-annually in arrears on May 1 and November 1 of each year, commencing on November 1, 2018. Net proceeds of \$293.8 million from the offering were utilized to partially fund the \$700.0 million cash payment to Dover at the Separation and to pay fees and expenses incurred in connection with the Separation.

The terms of the Senior Notes are governed by the indenture dated as of May 3, 2018, between Apergy and Wells Fargo Bank, N.A., as trustee, and are guaranteed, on a senior unsecured basis, by the subsidiary guarantors of our senior secured credit facilities as described below. At any time prior to May 1, 2021, we may redeem all or part of the Senior Notes at a redemption price equal to 100% of the principal amount of the Senior Notes redeemed plus a premium, as defined in the indenture, plus accrued and unpaid interest. Beginning on or after May 1, 2021, we may redeem the Senior Notes, in whole or in part, at certain tiered redemption prices as defined in the indenture, plus accrued and unpaid interest. The Senior Notes are our senior unsecured obligations. The Senior Notes rank equally in right of payment with our future and existing senior debt but are effectively subordinated to our future and existing debt to the extent of the assets securing such senior debt. The Senior Notes rank senior in right of payment to all of our future subordinated debt.

A registration statement was filed with the SEC on November 15, 2018, related to a registered offer to exchange the Senior Notes for an issue of SECregistered notes ("exchange notes"). The exchange offer was completed in December 2018 with full participation. The terms of the exchange notes in the exchange offer were substantially identical to the outstanding Senior Notes, except that the exchange notes are registered under the Securities Act of 1933, as amended, do not have any transfer restrictions, and do not have registration rights or additional interest provisions.

Senior Secured Credit Facilities

On May 9, 2018, we entered into a credit agreement ("credit agreement") governing the terms of our senior secured credit facilities, consisting of (i) a 7-year senior secured term loan B facility ("term loan facility") and (ii) a 5-year senior secured revolving credit facility ("revolving credit facility," and together with the term loan facility, the "senior secured credit facilities"), with JPMorgan Chase Bank, N.A. as administrative agent. The net proceeds of the senior secured credit facilities were used (i) to pay fees and expenses in connection with the Separation, (ii) partially fund the cash payment to Dover and (iii) provide for working capital and other general corporate purposes. The senior secured credit facilities are jointly and severally guaranteed by Apergy and certain of Apergy's wholly owned U.S. subsidiaries ("guarantors"), on a senior secured basis, and are secured by substantially all tangible and intangible assets of Apergy and the guarantors, except for certain excluded assets.

At our election, outstanding borrowings under the senior secured credit facilities will accrue interest at a per annum rate of (i) LIBOR plus a margin or (ii) a base rate plus a margin. Interest on borrowings in which interest is accrued based on LIBOR plus an applicable margin is payable in three month increments. Interest on borrowings in which interest is accrued at a base rate plus an applicable margin is payable on the last business day of each quarter. The senior secured credit facilities contain a number of customary covenants that, among other things, limit or restrict the ability of Apergy and the restricted subsidiaries to, subject to certain qualifications and exceptions, perform certain activities which include, but are not limited to (i) incur additional indebtedness, (ii) make acquisitions and (iii) pay dividends or other payments in respect of our capital stock. Additionally, Apergy will be required to maintain (a) a minimum interest coverage ratio, as defined in the credit agreement, of 2.75 to 1.00 and (b) a maximum total leverage ratio, as defined in the credit agreement, of 4.00 to 1.00 through the fiscal quarter ending June 30, 2019, then 3.75 to 1.00 through the fiscal quarter ending June 30, 2020, then 3.50 to 1.00 threeafter.

Term Loan Facility. The term loan facility had an initial commitment of \$415.0 million. The full amount of the term loan facility was funded on May 9, 2018. Amounts borrowed under the term loan facility that are repaid or prepaid may not be re-borrowed. The term loan facility matures in May 2025. Net proceeds of \$408.7 million from the term loan facility were utilized to partially fund the cash payment to Dover at the Separation and to pay fees and expenses incurred in connection with the Separation.

The term loan is subject to mandatory amortization payments of 1% per annum of the initial commitment of \$415.0 million paid quarterly. Additionally, subject to certain exceptions, the term loan facility is subject to mandatory prepayments, including the amount equal to: 100% of the net cash proceeds of all non-ordinary course asset sales subject to (i) reinvestment periods and (ii) step-downs to 75% and 50% based on certain leverage targets; and 50% of excess cash flow, as defined in the credit agreement, with step-downs to 25% and 0% based on certain leverage targets. Apergy may voluntarily prepay amounts outstanding under the term loan facility in whole or in part at any time without premium or penalty, as defined in the credit agreement.

Revolving Credit Facility. The revolving credit facility consists of a 5-year senior secured facility with aggregate commitments in an amount equal to \$250.0 million, of which up to \$50.0 million is available for the issuance of letters of credit. Amounts repaid under the revolving credit facility may be re-borrowed. The revolving credit facility matures in May 2023.

As of December 31, 2018, aggregate contractual future principal payments on long-term debt are as follows:

(in thousands)	Principal	l Payments ⁽¹⁾
2019	\$	—
2020		—
2021		—
2022		—
2023		—
Thereafter		670,000
Total	\$	670,000

(1) Principal payments included relate to our term loan facility and senior notes. See Note 11—Commitment and Contingencies for future payments related to capital lease obligations.

NOTE 11—COMMITMENT AND CONTINGENCIES

Lease Commitments

We lease certain facilities and equipment under operating leases, many of which contain renewal options. Rent expense, net of sublease rental income, for our operating leases was \$16.8 million, \$15.6 million and \$16.7 million for the years ended December 31, 2018, 2017 and 2016, respectively.

As of December 31, 2018, future minimum rental payments under noncancellable operating and capital leases were:

(in thousands)	0	Operating		Capital
2019	\$	14,781	\$	4,447
2020		12,768		2,636
2021		11,240		987
2022		10,951		97
2023		10,268		22
Thereafter		8,734		25
Total	\$	68,742	\$	8,214

Guarantees and Indemnifications

We have provided indemnities in connection with sales of certain businesses and assets, including representations and warranties, covenants 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.

In connection with the Separation, we entered into agreements with Dover that govern the treatment between Dover and us of certain indemnification matters and litigation responsibility. Generally, the separation and distribution agreement provides for cross-indemnities principally designed to place financial responsibility for the obligations and liabilities of our business with us and to place financial responsibility for the obligations and liabilities of Dover's business with Dover. The separation and distribution agreement also establishes procedures for handling claims subject to indemnification and related matters. In addition, pursuant to the tax matters agreement, we have agreed to indemnify Dover and its affiliates against any and all tax-related liabilities incurred by them relating to the Separation and/or certain related transactions to the extent caused by an acquisition of Apergy stock or assets or by any other action or failure to act undertaken by Apergy or its affiliates.

As of December 31, 2018 and 2017, we had \$3.6 million and \$8.1 million, respectively, of outstanding letters of credit, surety bonds and guarantees which expire at various dates through 2020. These financial instruments are primarily maintained as security for insurance, warranty and other performance obligations. Generally, we would only be liable for the amount of these letters of credit in the event of default in the performance of our obligations, the probability of which we believe is remote.

Litigation

Environmental matters that are probable and estimable were not material as of December 31, 2018 and 2017. Environmental matters relate to ongoing remedial activities performed in cooperation with regulatory authorities.

We are a party to a number of legal proceedings incidental to our businesses. These proceedings primarily involve claims by private parties alleging injury arising out of use of our products, patent infringement, employment matters, and commercial disputes. We review the probable outcome of such proceedings, the costs and expenses reasonably expected to be incurred and accrued to-date, and the availability and extent of insurance coverage. We accrue a liability for legal matters that are probable and estimable, and as of December 31, 2018 and 2017, these liabilities were not material. Management is unable to predict the ultimate outcome of these actions because of the inherent uncertainty of litigation. However, management believes the most probable, ultimate resolution of these matters will not have a material adverse effect on our consolidated financial position, results of operations or cash flows.

NOTE 12—STOCKHOLDERS' EQUITY

Capital stock—The following is a summary of our capital stock activity:

(in thousands)	Common Stock
December 31, 2017	
Issuance of common stock at the Separation	77,340
Shares issued—share-based compensation	13
December 31, 2018	77,353

We have 250 million shares of preferred stock authorized, with a par value of \$0.01 per share. No shares of preferred stock were outstanding as of December 31, 2018 or 2017.

Accumulated other comprehensive loss—Accumulated other comprehensive loss consisted of the following:

(in thousands)	Foreign Currency Translation	Defined Pension and Other Post-Retirement Benefits	Accumulated Other Comprehensive Loss
December 31, 2016	\$ (26,321)	\$ (7,336)	\$ (33,657)
Other comprehensive income before reclassifications, net of tax	4,385	2,598	6,983
Reclassification adjustment for net losses included in net income, net of tax	_	258	258
Other comprehensive income, net of tax	4,385	2,856	7,241
December 31, 2017	(21,936)	(4,480)	(26,416)
Reclassification adjustment for cumulative effect of change in accounting principle	_	(1,315)	(1,315)
Net transfer from Dover	—	(2,421)	(2,421)
Other comprehensive income (loss) before reclassifications, net of tax	(14,210)	856	(13,354)
Reclassification adjustment for net losses included in net income, net of tax	_	600	600
Other comprehensive income (loss), net of tax	(14,210)	1,456	(12,754)
December 31, 2018	\$ (36,146)	\$ (6,760)	\$ (42,906)

Reclassifications from accumulated comprehensive loss—Reclassification adjustments from accumulated other comprehensive loss to net income related to defined pension and other post-retirement benefits consisted of the following:

	Yea	Affected line items on the consolidated																																								
(in thousands)	 2018		2017	2016		2016		2016		2016		2016		2016		2016		2016		2016		2016		2016		2016		2016		2016		2016		2016		2016		2016		2016		statements of income (loss)
Amortization of actuarial loss and net transition obligation ⁽¹⁾	\$ 330	\$	397	\$	362	Other expense, net																																				
Amortization of prior service cost ⁽¹⁾	1		2		2	Other expense, net																																				
Settlement loss ⁽¹⁾	479				—	Other expense, net																																				
	 810		399		364	Income (loss) before income taxes																																				
	(210)		(141)	(129)		(129)		(129)		(129)		(129)		(129)		(129)		(129)		(129)		(129)		(129)		(141)		Provision for (benefit from) income taxes														
	\$ 600	\$	258	\$ 235		\$ 235		Net income (loss)																																		

(1) These accumulated comprehensive loss components are included in the computation of net periodic benefit cost (See Note16—Employee Benefit Plans for additional information).

NOTE 13—REVENUE

Our revenue is substantially generated from product sales. For the year ended December 31, 2018, approximately 89% of our revenue was generated from product sales. Our remaining revenue was derived from services and leases, which represented approximately 7% and 4%, respectively, of total revenue for the year ended December 31, 2018. Product revenue is derived from the sale of drilling and production equipment. Service revenue is earned as technical advisory assistance and field services related to our products are provided. Lease revenue is derived from rental income of leased production equipment and is recognized ratably over the lease term.

The majority of our revenue is short cycle in nature, with shipments occurring within a year from the customer order date. A small portion of our revenue is derived from contracts extending over one year. Our payment terms generally range between 30 to 90 days and vary by the location of our businesses and the types and volumes of products manufactured and sold, among other factors. Costs incurred to obtain a customer contract is not material to us.

Disaggregation of Revenue

Revenue disaggregated by end market in each of our reporting segments was as follows:

	Years Ended December 31,											
(in thousands)	2018 2017 ⁽¹⁾ 20											
Drilling Technologies	\$	285,565		285,565		285,565		285,565		227,653	\$	113,320
Production & Automation Technologies:												
Artificial lift		724,554		602,287		499,033						
Digital products		117,801		82,093		65,351						
Other production equipment		91,232		103,564		75,182						
Intra-segment eliminations		(2,506)		(5,131)		(1,549)						
		931,081		782,813		638,017						
Total revenue	\$	1,216,646	\$	1,010,466	\$	751,337						

Revenue disaggregated by geography was as follows:

	Years Ended December 31,						
(in thousands)		2018		2017 ⁽¹⁾		2016 ⁽¹⁾	
United States	\$	957,657	\$	770,822	\$	559,266	
Canada		79,816		79,186		54,714	
Middle East		53,516		48,899		54,767	
Europe		38,669		28,112		19,935	
Latin America		33,976		34,350		23,580	
Asia-Pacific		17,605		20,072		17,570	
Other		35,407		29,025		21,505	
Total revenue	\$	1,216,646	\$	1,010,466	\$	751,337	

(1) Revenue for the years ended December 31, 2017 and 2016, are presented in accordance with accounting standards in effect prior to our adoption of ASU No. 2014-09 on January 1, 2018. See Note 2 for further discussion regarding our adoption of ASU No. 2014-09.

Revenue is attributed to regions based on the location of our direct customer, which in some instances is an intermediary and not necessarily the end user.



Performance Obligations

The majority of our contracts have a single performance obligation which represents, in most cases, the equipment or product sold to the customer. Some contracts include multiple performance obligations such as a product and the related installation, extended warranty and/or maintenance services. For contracts with multiple performance obligations, we allocate the transaction price to each performance obligation based on the estimated relative standalone selling prices of the promised goods or services underlying each performance obligation. We typically use observable prices to determine the stand-alone selling price of a performance obligation and utilize a cost plus margin approach when observable prices are not available.

Substantially all of our performance obligations are recognized at a point in time and are primarily related to our product revenue derived from the sale of drilling and production equipment. 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. Revenue is recognized over time for our service and lease offerings. Service revenue is recognized over time as we provide technical advisory assistance and field services related to our products.

Warranties

The majority of our contracts contain standard warranties in connection with the sale of a product to a customer which provide a customer assurance that the related product will function for a period of time as the parties intended. In addition to our standard warranties, we also offer extended warranties to our customers. Warranties provided as part of our product offerings are analyzed to determine whether they represent a distinct service, and if so, are recognized as service revenue over the related warranty period.

Remaining performance obligations

As of December 31, 2018, we did not have any contracts with an original length of greater than a year from which revenue is expected to be recognized in the future related to performance obligations that are unsatisfied (or partially unsatisfied).

Contract balances

The beginning and ending contract asset and contract liability balances from contracts with customers were as follows:

(in thousands)	December 31, 2018	January 1, 2018
Contract assets	\$ 4,571	\$ 4,733
Contract liabilities - current	5,863	3,912

Contract assets primarily relate to our right to consideration for work completed but not billed at the reporting date and are recorded in "prepaid expenses and other current assets" on our consolidated balance sheets. Contract assets are transferred to receivables when the right to consideration becomes unconditional. Contract liabilities relate to our obligation to transfer goods or services to a customer for which we have received advance consideration (or an amount of consideration is due) from the customer. Current contract liabilities are recorded in other "accrued expenses and other current liabilities" on our consolidated balance sheets.

NOTE 14—RESTRUCTURING

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

	Years Ended December 31,					
(in thousands)	2018 2017					2016
Production & Automation Technologies	\$	5,632	\$	6,921	\$	12,757
Drilling Technologies						2,405
Total	\$	5,632	\$	6,921	\$	15,162
Cost of goods and services	\$	4,693	\$	6,332	\$	9,465
Selling, general and administrative expense		939		589		5,697
Total	\$	5,632	\$	6,921	\$	15,162

Restructuring charges incurred during years ended December 31, 2018, 2017, and 2016, included the following programs, which were substantially completed during those three years:

Production & Automation Technologies. Production & Automation Technologies incurred restructuring charges of \$5.6 million, \$6.9 million and \$12.8 million during the years ended December 31, 2018, 2017 and 2016, respectively, related to various programs, primarily focused on facility consolidations, exit of certain nonstrategic product lines, including related impairments of fixed assets, and workforce reductions. The 2018 and 2017 programs were initiated to continue to optimize our operations as the market recovered and the 2016 programs were initiated to better align the cost base with the significantly lower demand environment.

Drilling Technologies. Drilling Technologies recorded \$2.4 million in restructuring charges during the year ended December 31, 2016, related to various programs, primarily focused on workforce reductions to better align the cost base with the significantly lower demand environment.

Our liability balances for restructuring and other exit activities were \$1.0 million and \$2.6 million as of December 31, 2018 and December 31, 2017, respectively, and primarily consist of ongoing lease commitment obligations for facilities closed in prior periods and employee severance and related benefits. As of December 31, 2018, our restructuring initiatives are complete and our liability balances for restructuring and other exit activities are expected to be mostly settled by mid-2019.

NOTE 15—INCOME TAXES

Prior to the Separation, the operations of Apergy were included in Dover's U.S. combined federal and state income tax returns. Income tax expense and deferred tax balances are presented in these financial statements as if Apergy filed its own tax returns in each jurisdiction. These statements include tax losses and tax credits that may not reflect tax positions taken by Dover. In many cases, tax losses and tax credits generated by Apergy have been utilized by Dover.

Components of income (loss) before income taxes—Domestic and foreign components of income (loss) before income taxes were as follows:

	Years Ended December 31,							
(in thousands)		2018		2017		2016		
Domestic	\$	106,172	\$	68,356	\$	(26,035)		
Foreign		17,119		22,432		7,092		
Income (loss) before income tax	\$	123,291	\$	90,788	\$	(18,943)		

Provision for (benefit from) income taxes—The provision for (benefit from) income taxes consisted of:

Years Ended December 31,						
	2018		2017		2016	
\$	21,386	\$	42,693	\$	8,872	
	1,559		4,257		1,995	
	7,139		6,176		971	
	30,084		53,126		11,838	
	(2,255)		(73,544)		(19,161)	
	3,466		(1,361)		(771)	
	(2,499)		(97)		51	
	(1,288)		(75,002)		(19,881)	
\$	28,796	\$	(21,876)	\$	(8,043)	
	\$	2018 \$ 21,386 1,559 7,139 30,084 (2,255) 3,466 (2,499) (1,288)	2018 \$ 21,386 \$ 1,559 1,559 7,139 30,084 30,084 - (2,255) 3,466 (2,499) - (1,288) -	2018 2017 \$ 21,386 \$ 42,693 1,559 4,257 7,139 6,176 30,084 53,126 (2,255) (73,544) 3,466 (1,361) (2,499) (97) (1,288) (75,002)	2018 2017 \$ 21,386 \$ 42,693 \$ 1,559 4,257 1	

Effective income tax rate reconciliation—The effective income tax rate was different from the statutory U.S. federal income tax rate due to the following:

	Years Ended December 31,							
	2018	2017	2016					
Statutory U.S. federal income tax rate	21.0 %	35.0 %	35.0 %					
Net difference resulting from:								
State and local taxes, net of federal income tax benefit	3.3	2.1	(3.9)					
Foreign derived intangible income	(1.9)	—	_					
Foreign operations tax effect	0.8	(2.8)	7.8					
Research and experimentation tax credits	(0.6)	(0.7)	2.3					
Domestic manufacturing deduction	—	(4.4)	6.2					
Nondeductible expenses	0.7	0.7	(3.3)					
ESOP dividends	(0.1)	(0.2)	2.9					
Branch income	—	1.1	(2.9)					
Changes due to the Tax Reform Act	—	(54.3)	—					
Other	0.2	(0.6)	(1.6)					
Effective income tax rate	23.4 %	(24.1)%	42.5 %					

Deferred tax assets and liabilities—Significant components of deferred tax assets and liabilities were as follows:

(in thousands)	Decem	ber 31, 2018	December 31, 2017		
Deferred tax assets attributable to:					
Accrued compensation	\$	7,535	\$	4,568	
Accrued expenses, principally for state income taxes, interest and warranty		1,156		846	
Net operating loss and other carryforwards		766		1,280	
Accounts receivable, principally due to allowance for doubtful accounts		973		827	
Long-term liabilities, principally warranty and exit cost		505		678	
Other assets		374		132	
Deferred tax assets		11,309		8,331	
Valuation allowance		(722)		(1,280)	
Deferred tax assets, net of valuation allowance	\$	10,587	\$	7,051	
Deferred tax liabilities attributable to:					
Inventories	\$	(2,061)	\$	(3,687)	
Intangible assets, including goodwill		(83,436)		(83,669)	
Property, plant and equipment		(25,520)		(16,134)	
Deferred tax liabilities		(111,017)		(103,490)	
Net deferred tax liabilities	\$	(100,430)	\$	(96,439)	
Other non-current assets	\$	1,294	\$	546	
Deferred income taxes		(101,724)		(96,985)	
	\$	(100,430)	\$	(96,439)	

Net operating loss carryforwards. As of December 31, 2018, our deferred tax asset balance included non-U.S. net operating loss carryforwards of \$0.4 million. This entire balance as of December 31, 2018, is available to be carried forward and will expire during the years 2024 through 2038. We maintain valuation allowances by jurisdiction against the full amount of our net operating loss carryforwards as it is more likely than not that these assets will not be realized.

Foreign tax credit carryforwards. As of December 31, 2018, our deferred tax asset balance included U.S. foreign tax credit carryforwards of \$0.3 million. This entire balance as of December 31, 2018, is available to be carried forward and will expire during 2029. We maintain a valuation allowance against the full amount of our U.S. foreign tax credit carryforwards as it is more likely than not that these assets will not be realized.

Tax Reform Act. The Tax Reform Act, enacted on December 22, 2017, 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 \$53.2 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. We recorded a provisional tax expense related to the deemed repatriation of \$3.9 million during the year ended December 31, 2017. We completed our accounting for the income tax effects of the Tax Reform Act in 2018 with no change to the provisional amounts recorded during the year ended December 31, 2017. During the year ended December 31, 2018, we made cash distributions to the U.S from non-U.S. subsidiaries of \$16.0 million, which did not result in any withholding tax expense. See Note 1—Basis of Presentation and Summary of Significant Accounting Policies regarding assumptions used to estimate our income tax expense and deferred tax balances in the periods prior to the Separation.

The GILTI provisions of the Tax Reform Act require us to include in our U.S. income tax return foreign subsidiary earnings in excess of an allowable return on the foreign subsidiary's tangible assets. We are subject to incremental U.S. tax on GILTI income beginning in 2018, resulting in a tax expense of \$0.2 million for the year ended December 31, 2018, due to expense allocations required by the U.S. foreign tax credit rules. We elected to account for GILTI tax in the period in which it is incurred, and therefore did not provide any deferred tax impacts of GILTI in our combined financial statements for the year ended December 31, 2017.

Unrecognized tax benefits. We file federal, state, and local tax returns in the United States as well as foreign tax returns. We are routinely audited by the tax authorities in these jurisdictions, and a number of audits are currently underway. We are no longer subject to examinations of our U.S. federal income tax returns for years through 2014. All significant state, local and international matters have been concluded for years through 2012. We believe all income tax uncertainties have been properly accounted. We have not recorded a liability for uncertain tax positions as of December 31, 2018 and 2017.

NOTE 16-EMPLOYEE BENEFIT PLANS

Prior to the Separation, certain of our employees participated in defined benefit and non-qualified plans sponsored by Dover, which included participants of other Dover subsidiaries. For periods prior to the Separation, we accounted for such plans as multi-employer benefit plans and recorded a proportionate share of the cost in our consolidated statements of income (loss). For the years ended December 31, 2018, 2017 and 2016, costs associated with these multi-employer plans amounted to \$1.6 million, \$4.6 million, respectively.

Dover provided a defined benefit pension plan for its eligible U.S. employees and retirees ("U.S. Pension Plan"). As such, the portion of Apergy's liability associated with the U.S. Pension Plan is not reflected in our consolidated balance sheet as of December 31, 2017, and was not recorded at Separation as this obligation will be maintained and serviced by Dover. Shortly before the Separation, Apergy participants in the U.S. Pension Plan (other than Norris USW participants) fully vested in their benefits, and all participants ceased accruing benefits. In addition, Apergy did not assume any funding requirements or obligations related to the U.S. Pension Plan upon the Separation. Norris USW participants were moved to a new pension plan and continued to accrue benefits.

Dover also provided a defined benefit pension plan for its eligible salaried non-U.S. employees and retirees in Canada ("Canada Salaried Pension Plan"). As such, the portion of Apergy's liability associated with the Canada Salaried Pension Plan is not reflected in our consolidated balance sheet as of December 31, 2017, as this obligation was maintained and serviced by Dover. The Canada Salaried Pension Plan, including all assets and liabilities, was transferred to Apergy at the Separation. Shortly before the Separation, all non-Apergy participants in this plan ceased accruing benefits or were permitted to make contributions, as applicable. The non-Apergy participants may elect a lump sum cash payment post Separation that will be the responsibility of Apergy and will be funded out of the plan assets.

Dover provided to certain U.S. management employees, through non-qualified plans, supplemental retirement benefits in excess of qualified plan limits imposed by federal tax law. As of January 1, 2018, Apergy participants in these non-qualified plans no longer accrued benefits nor were permitted to make contributions, as applicable. We assumed the funding requirements and related obligations attributable to Apergy employees related to these non-qualified plans upon the Separation. The non-qualified plans are unfunded and contributions are made as benefits are paid.

At the Separation, we recognized \$6.1 million of liabilities and \$2.4 million of accumulated other comprehensive loss, net of tax, related to plans previously accounted for as multi-employer plans prior to the Separation.

We sponsor non-qualified plans covering certain U.S. employees and retirees. The plans provide supplemental retirement benefits in excess of qualified plan limits imposed by federal tax law. The plans are closed to new hires and all benefits under the plans are frozen.

Obligations and Funded Status

The funded status of our benefit plans, together with the associated balances recognized in our consolidated balance sheets as of December 31, 2018 and 2017, were as follows:

	Pensions					Other post-reti	rement benefits		
(in thousands)		2018		2017	2018			2017	
Projected benefit obligation at January 1	\$	3,881	\$	3,512	\$	14,197	\$	18,600	
Service cost		598		106		—		_	
Interest cost		455		137		448		621	
Benefits paid		(370)		(99)		(1,022)		(1,710)	
Actuarial gain		(530)		(22)		(562)		(3,314)	
Liabilities assumed from the Separation		14,348				_		_	
Settlements and curtailments		(1,763)		_					
Foreign currency translation and other		(671)		247		_		_	
Projected benefit obligation at December 31		15,948		3,881		13,061		14,197	
Fair value of plan assets at January 1		3,993		3,391					
Actual return on plan assets		(76)		290		_		_	
Company contributions		4,740		166		1,022		1,710	
Benefits paid		(370)		(99)		(1,022)		(1,710)	
Assets assumed from the Separation		9,227		_					
Settlements and curtailments		(1,763)		—				_	
Foreign currency translation and other		(621)		245					
Fair value of plan assets at December 31		15,130		3,993					
Funded (unfunded) status at December 31	\$	(818)	\$	112	\$	(13,061)	\$	(14,197)	
					_				
Other non-current assets	\$	146	\$	112	\$		\$		
Accrued compensation and employee benefits		_		_		(1,598)		(1,547)	
Other long-term liabilities		(964)				(11,463)		(12,650)	
Funded (unfunded) status	\$	(818)	\$	112	\$	(13,061)	\$	(14,197)	
		<u> </u>				<u> </u>			
Accumulated benefit obligations	\$	14,076	\$	3,881	\$	13,061	\$	14,197	



The following table summarizes the pre-tax amounts in accumulated other comprehensive (income) loss as of December 31, 2018 and 2017 that have not been recognized as components of net periodic benefit cost:

		Pens	sions			Other post ben	-retir efits	ement
(in thousands)	2018 2017				2018		2017	
Pre-tax amounts recognized in accumulated other comprehensive loss								
(income):								
Unrecognized net actuarial loss	\$	3,586	\$	1,449	\$	5,685	\$	6,078
Unrecognized prior service cost		25		40		—		—
Unrecognized net transition asset		(8)		(20)		—		—
Accumulated other comprehensive loss	\$	3,603	\$	1,469	\$	5,685	\$	6,078

The following table summarizes the accumulated benefit obligations and fair values of plan assets where the accumulated benefit obligation exceeds the fair value of plan assets as of December 31, 2018 and 2017:

(in thousands)	2018	2017
Aggregate accumulated benefit obligation	\$ 16,783	\$ _
Aggregate fair value of plan assets	3,672	

Net Periodic Benefit Cost

Components of the net periodic benefit cost were as follows:

			Pensions			Other post-retirement benefits					
(in thousands)	 2018	2017		2016		2018		2017			2016
Service cost	\$ 598	\$	106	\$	102	\$		\$	_	\$	
Interest cost	455		137		129		448		621		719
Expected return on plan assets	(593)		(198)		(186)				—		
Amortization of prior service cost	1		2		2		_		—		_
Amortization of actuarial loss	127		68		58		202		330		305
Amortization of transition obligation	1		(1)		(1)		_		—		_
Settlement loss	479		_		_				—		
Other			—						(1)		
Net periodic benefit cost	\$ 1,068	\$	114	\$	104	\$	650	\$	950	\$	1,024

Included in accumulated other comprehensive loss at December 31, 2018, are noncash, pre-tax charges which have not yet been recognized in net periodic benefit cost. The estimated amounts expected to be amortized from the portion of each component of accumulated other comprehensive loss as a component of net periodic benefit cost, during the next fiscal year are as follows:

(in thousands)	Pensions	Other post-retirement benefits
Net actuarial loss	\$ 158	\$ 200
Prior service cost	1	—
Transition obligation	3	—

Assumptions

The following weighted-average assumptions were used to determine the benefit obligations:

	Pension	ns	Other post-retire	ment benefits
	2018	2017	2018	2017
Discount rate	3.90%	3.50%	4.10%	3.35%

The following weighted-average assumptions were used to determine the net periodic benefit cost:

		Pensions	Other post-retirement benefits					
	2018	2017	2016	2018	2017			
Discount rate	3.68%	3.75%	4.00%	3.35%	3.55%			
Expected return on plan assets	4.80%	5.50%	5.75%					

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. We have retained professional investment managers to manage the plans' assets and implement the investment process. The investment managers 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 asset return objective is to achieve, as a minimum over time, the passively managed return earned by market index funds, weighted in the proportions outlined by the asset class exposures identified in the plans' strategic allocation.

Our pension plan assets measured at fair value on a recurring basis are presented below. Refer to "Fair value measurements" in Note 1 to these consolidated financial statements for a description of the levels.

		Pensions														
			Decembe	2018		December 31, 2017										
(in thousands)	I	Level 1]	Level 2	I	Level 3		Total]	Level 1]	Level 2		Level 3		Total
Mutual funds	\$	4,775	\$	6,683	\$	_	\$	11,458	\$	2,399	\$	1,594	\$	_	\$	3,993
Cash and cash equivalents		3,672		—				3,672		—				—		—
Total	\$	8,447	\$	6,683	\$		\$	15,130	\$	2,399	\$	1,594	\$		\$	3,993

Mutual funds are categorized as either Level 1 or 2 depending on the nature of the observable inputs. We had no Level 3 plan assets as of December 31, 2018 and 2017. 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.

Expected contributions in 2019 are \$1.1 million. The non-qualified plans are unfunded and contributions are made as benefits are paid.

Estimated Future Benefit Payments

Estimated future benefit payments to retirees from our various pension and other post-retirement benefit plans are outlined in the table below. Actual benefit payments may differ from these expected payments.

			Other Post-re	etirement
(in thousands)	Pensi	ons	benefi	its
2019	\$	507	\$	1,598
2020		555		1,488
2021		757		1,333
2022		1,050		1,222
2023		586		1,123
2024-2028		3,889		3,997

Defined Contribution Plan

We offer a defined contribution retirement plan which covers the majority of our U.S. employees, as well as employees in certain other countries. Expense relating to defined contribution plans was \$9.6 million, \$8.2 million and \$6.4 million for the years ended December 31, 2018, 2017 and 2016, respectively.

NOTE 17-EQUITY AND CASH INCENTIVE PROGRAMS

Prior to the Separation, Dover granted share-based awards to its officers and other key employees, including certain Apergy individuals. The principal awards issued under Dover's stock-based compensation plans included stock options, stock-settled stock appreciation rights, restricted stock units and performance share awards. All awards granted under the program consisted of Dover common shares and are not necessarily indicative of the results that Apergy would have experienced as a stand-alone public company for the periods presented prior to the Separation. Effective with the Separation, outstanding Dover share-based awards, with the exception of outstanding Dover performance share awards that relate to performance periods ending after the Separation. Such performance share awards were cancelled effective with the Separation.

In connection with the Separation, the Board of Directors of Apergy adopted the Apergy Corporation 2018 Equity and Cash Incentive Plan ("2018 Plan"). The 2018 Plan was also approved by Dover in its capacity as the sole stockholder of Apergy at the time of adoption. A total of 6.5 million shares of common stock are reserved for issuance under the 2018 Plan, subject to customary adjustments arising from stock splits and other similar changes.

The 2018 Plan authorized the grant of stock options, stock-settled stock appreciation rights ("SARs"), restricted stock awards, restricted stock units, performance share awards, cash performance awards, directors' shares and deferred stock units. The Apergy Compensation Committee determines the exercise price for options and the base price of SARs, which may not be less than the fair market value of Apergy common stock on the date of grant. Generally, stock options or SARs vest after three years of service and expire at the end of ten years. Performance share awards vest if Apergy achieves certain pre-established performance targets based on specified performance criteria over a performance period of not less than three years.

Stock-based compensation expense is reported within "selling, general and administrative expense" in the consolidated statements of income (loss). Stock-based compensation expense relating to all stock-based incentive plans was as follows:

		Years Ended December 31,								
	2018			2017		2016				
Stock-based compensation expense	\$	5,375	\$	2,236	\$	2,293				
Tax benefit		(1,141)		(774)		(787)				
Stock-based compensation expense, net of tax	\$	4,234	\$	1,462	\$	1,506				

SARs

We did not issue SARs during 2018. In 2017 and 2016, SARs were granted by Dover and the fair value of each SAR granted was estimated on the grant date using a Black-Scholes option-pricing model utilizing the following assumptions:

	2017	2016
Risk-free interest rate	1.80%	1.05%
Dividend yield	2.27%	3.09%
Expected life (years)	4.6	4.6
Volatility	21.90%	26.17%
Grant price	\$ 79.28	\$ 57.25
Fair value at date of grant	\$ 12.63	\$ 9.25

A summary of activity relating to SARs outstanding for the year ended December 31, 2018, is as follows:

	SARs									
	Shares		Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)		Aggregate Intrinsic Value (in thousands)				
Outstanding at January 1, 2018	_	\$	—							
Converted	488,039		29.43							
Granted	—		—							
Forfeited / expired	(6,287)		28.62							
Exercised	(3,802)		31.55							
Outstanding at December 31, 2018	477,950		29.43	7.1	\$	529				
Exercisable at December 31, 2018	95,142	\$	31.15	5.2	\$	24				

Unrecognized compensation expense related to SARs not yet exercisable was \$0.4 million as of December 31, 2018, and is expected to be recognized over a weighted average period of 1.0 year.

Other information regarding the exercise of SARs is presented below:

(in thousands)	2018		2017		2016
SARs:					
Fair value of SARs that became exercisable	\$ 310	\$	1,239	\$	1,564
Aggregate intrinsic value of SARs exercised	40		2,787		799

Performance Share Awards - Dover

Performance shares granted by Dover were cancelled effective with the Separation. Performance share awards granted prior to the Separation were considered performance condition awards as attainment was 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 was analyzed each reporting period, and the related expense was adjusted based on expected attainment. The cumulative effect on current and prior periods of a change in expected attainment is recognized in stock-based compensation expense in the period of change.

The fair value and average attainment used in determining stock-based compensation expense of the performance shares issued in 2017 and 2016 are as follows:

Performance shares:	2017	2016		
Fair value per share at date of grant	\$ 79.28	\$	57.25	
Average attainment rate reflected in expense	0.0%		0.0%	

Performance Share Awards - Apergy

We granted 86,817 performance share awards during 2018 under the 2018 Plan. The performance share awards granted under the 2018 Plan vest if Apergy achieves certain pre-established performance targets based on specified performance criteria over a performance period of not less than three years. The performance targets for these awards are classified as a market vesting condition, therefore the compensation cost was calculated using the grant date fair market value, as estimated using a Monte Carlo simulation, and is not subject to change based on future events. The fair value used in determining stock-based compensation expense of the performance share awards issued in 2018 is as follows:

Performance shares:	2018
Fair value per share at date of grant	\$ 56.32

A summary of activity for the Apergy performance share awards for the year ended December 31, 2018, is as follows:

	Shares	Weighted- Average Grant-Date Fair Value
Unvested at January 1, 2018		\$ —
Granted	86,817	56.32
Vested	—	—
Unvested at December 31, 2018	86,817	\$ 56.32

Unrecognized compensation expense related to unvested performance share awards as of December 31, 2018, was \$3.9 million, which will be recognized over a weighted average period of 2.4 years.

Restricted Stock Units

Restricted stock units may be granted at no cost to certain officers and key employees. Restricted stock units generally vest over a three-or-four-year period.

A summary of activity for restricted stock units for the year ended December 31, 2018, is as follows:

	Shares	Weighted- Average Grant-Date Fair Value
Unvested at January 1, 2018		\$ —
Converted	61,717	30.26
Granted	368,848	43.63
Forfeited	(3,065)	37.45
Vested	(12,660)	36.93
Unvested at December 31, 2018	414,840	\$ 41.91

Unrecognized compensation expense relating to unvested restricted stock as of December 31, 2018, was \$13.4 million, which will be recognized over a weighted average period of 1.9 years.

NOTE 18—FAIR VALUE MEASUREMENTS

We had no outstanding derivative contracts as of December 31, 2018 and 2017. Other assets and liabilities measured at fair value on a recurring basis as of December 31, 2018 and 2017, were not significant; thus, no fair value disclosures are presented.

The fair value, based on Level 1 quoted market rates, of our Senior Notes was approximately \$294.0 million as of December 31, 2018, as compared to the \$300.0 million face value of the debt. The fair value, based on Level 2 quoted market rates, of our term loan facility was approximately \$358.4 million as of December 31, 2018, as compared to the \$370.0 million face value of the debt.

The carrying amounts of cash and cash equivalents, trade receivables, and accounts payable, as well as amounts included in other current assets and other current liabilities that meet the definition of financial instruments, approximate fair value due to their short-term nature.

Credit Risk

By their nature, financial instruments involve risk, including credit risk, for non-performance by counterparties. Financial instruments that potentially subject us to credit risk primarily consist of trade receivables. We manage the credit risk on financial instruments by transacting only with what management believes are financially secure counterparties, requiring credit approvals and credit limits, and monitoring counterparties' financial condition. Our maximum exposure to credit loss in the event of non-performance by the counterparty is limited to the amount drawn and outstanding on the financial instrument. Allowances for losses on trade receivables are established based on collectability assessments.

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NOTE 19—SEGMENT INFORMATION

We report our results of operations in the following reporting segments: Production & Automation Technologies and Drilling Technologies. Management's determination of our reporting segments was made on the basis of our strategic priorities within each segment and corresponds to the manner in which our chief operating decision maker reviews and evaluates operating performance to make decisions about resources to be allocated to the segment. In addition to our strategic priorities, segment reporting is also based on differences in the products and services we provide.

Our reporting segments are:

- Production & Automation Technologies—designs, manufactures, markets and services a full range of artificial lift equipment, end-to-end digital
 automation solutions, as well as other production equipment. Production & Automation Technologies' products are sold under a collection of brands
 including Harbison-Fischer, Norris, Alberta Oil Tool, Oil Lift Technology, PCS Ferguson, Pro-Rod, Upco, Unbridled ESP, Norriseal-Wellmark,
 Quartzdyne, Spirit, Theta, Timberline and Windrock.
- Drilling Technologies—designs, manufactures and markets polycrystalline diamond cutters and bearings for use in oil and gas drill bits under the US Synthetic brand.

Segment revenue and segment operating profit

	Years Ended December 31,						
(in thousands)		2018	2017			2016	
Segment revenue:							
Production & Automation Technologies	\$	931,081	\$	782,813	\$	638,017	
Drilling Technologies		285,565		227,653		113,320	
Total revenue	\$	1,216,646	\$	1,010,466	\$	751,337	
Income (loss) before income taxes:							
Segment operating profit (loss):							
Production & Automation Technologies	\$	75,918	\$	26,890	\$	(21,744)	
Drilling Technologies		98,620		74,317		8,397	
Total segment operating profit (loss)		174,538		101,207		(13,347)	
Corporate expense and other ⁽¹⁾		23,807		9,666		5,119	
Interest expense, net		27,440		753		477	
Income (loss) before income taxes	\$	123,291	\$	90,788	\$	(18,943)	

(1) Corporate expense and other includes costs not directly attributable or allocated to our reporting segments such as corporate executive management and other administrative functions, costs related to our Separation from Dover and the results attributable to our noncontrolling interest.

		er 31,		
(in thousands)		2018		2017
Production & Automation Technologies	\$	1,699,820	\$	1,685,622
Drilling Technologies		230,977		220,993
Corporate		40,959		
Total assets	\$	1,971,756	\$	1,906,615

Geographic segment information

	December 31,						
(in thousands)		2018		2017			
Long-lived assets:							
United States	\$	233,809	\$	199,909			
Middle East		3,616		5,189			
Canada		6,299		7,587			
Australia		254		336			
Latin & South America		350		541			
Total long-lived assets	\$	244,328	\$	213,562			

See Note 13—Revenue for information related to revenue by geography and end markets.

Other business segment information

		Capital Expenditures Years Ended December 31,					Depreciation & Amortization Years Ended December 31,					
(in thousands)	2018			2017		2016 2018		2018 2017				2016
Production & Automation												
Technologies	\$	45,190	\$	28,483	\$	21,961	\$	112,955	\$	100,912	\$	99,664
Drilling Technologies		11,123		8,171		4,138		11,037		11,950		12,448
Corporate		1,605		—		—		469				
Total	\$	57,918	\$	36,654	\$	26,099	\$	124,461	\$	112,862	\$	112,112

NOTE 20—CONDENSED CONSOLIDATING FINANCIAL INFORMATION

Apergy Corporation has senior notes outstanding, the payment obligations of which are fully and unconditionally guaranteed by certain 100-percent-owned subsidiaries of Apergy on a joint and several basis. The following financial information presents the results of operations, financial position and cash flows for:

- Apergy Corporation (issuer)
- 100-percent-owned guarantor subsidiaries
- All other non-guarantor subsidiaries
- Adjustments and eliminations necessary to present Apergy results on a consolidated basis.

This condensed consolidating financial information should be read in conjunction with the accompanying consolidated financial statements and related notes.

		Year	Ended December 31	l , 2018	
(in thousands)	Apergy Corporation	Subsidiary Guarantors	Subsidiary Non-guarantors	Adjustments and eliminations	Total
Product revenue	\$ —	\$ 961,082	\$ 124,389	\$ —	\$ 1,085,471
Service revenue	—	56,996	26,159	—	83,155
Lease, related party and other revenue	—	71,977	19,725	(43,682)	48,020
Total revenue		1,090,055	170,273	(43,682)	1,216,646
Cost of goods and services	—	696,044	147,280	(42,977)	800,347
Gross profit		394,011	22,993	(705)	416,299
Selling, general and administrative expense	1,614	239,360	21,651	—	262,625
Interest expense, net	26,973	425	42	—	27,440
Other expense, net	—	1,322	1,620	1	2,943
Income (loss) before income taxes and equity in earnings of affiliates	(28,587)	152,904	(320)	(706)	123,291
Provision for (benefit from) income taxes	(8,727)	37,193		(148)	28,796
Income (loss) before equity in earnings of affiliates Equity in earnings of affiliates	(19,860) 113,901	115,711 27,121	(798) 46,802	(558) (187,824)	94,495
Net income	94,041	142,832	46,004	(188,382)	94,495
Net income attributable to noncontrolling interest	—	—	454	—	454
Net income attributable to Apergy	\$ 94,041	\$ 142,832	\$ 45,550	\$ (188,382)	\$ 94,041
Comprehensive income attributable to Apergy	\$ 81,287	\$ 141,528	\$ 34,098	\$ (175,626)	\$ 81,287

	Year Ended December 31, 2017													
(in thousands)		Apergy Corporation	Subsidiary Guarantors			Subsidiary Ion-guarantors		Adjustments and eliminations		Total				
Product revenue	\$		\$	797,504	\$	122,165	\$		\$	919,669				
Service revenue				35,205		28,181		—		63,386				
Lease, related party and other revenue				49,353		14,161		(36,103)		27,411				
Total revenue				882,062		164,507		(36,103)		1,010,466				
Cost of goods and services				585,385		140,516		(35,911)		689,990				
Gross profit				296,677		23,991		(192)		320,476				
Selling, general and administrative expense				199,882		18,676				218,558				
Interest expense, net				724		29				753				
Other expense, net				10,169		208		_		10,377				
Income before income taxes and equity in earnings of affiliates		_		85,902		5,078		(192)		90,788				
Benefit from income taxes				(10,272)		(11,537)		(67)		(21,876)				
Income before equity in earnings of affiliates				96,174		16,615		(125)		112,664				
Equity in earnings of affiliates		111,734		23,426		12,334		(147,494)		—				
Net income		111,734		119,600		28,949		(147,619)		112,664				
Net income attributable to noncontrolling interest				—		930		_		930				
Net income attributable to Apergy	\$	111,734	\$	119,600	\$	28,019	\$	(147,619)	\$	111,734				
Comprehensive income attributable to Apergy	\$	118,975	\$	122,480	\$	32,381	\$	(154,861)	\$	118,975				

Year Ended December 31, 2016 Adjustments Subsidiary Apergy Subsidiary and Corporation Guarantors **Non-guarantors** eliminations Total (in thousands) \$ \$ \$ \$ 673,447 Product revenue 577,351 96,096 \$ Service revenue 24,215 26,601 50,816 Lease, related party and other revenue 42,826 19,917 (35, 669)27,074 142,614 **Total revenue** 644,392 (35,669) 751,337 459,522 132,350 Cost of goods and services (35,806) 556,066 **Gross profit** 184,870 10,264 137 195,271 Selling, general and administrative expense 182,866 21,517 204,383 ____ Interest expense, net 465 12 477 _ Other expense, net 9,163 191 9,354 ____ Loss before income taxes and equity in loss of 137 (18,943) (7, 624)(11, 456)affiliates _____ Benefit from income taxes (2,750) (5,341) 48 (8,043) ____ Loss before equity in loss of affiliates 89 (4,874) (6,115) (10,900)Equity in loss of affiliates 44,693 (12,751) (23,669) (8,273) Net loss (12,751) (28,543) (14,388) 44,782 (10,900)Net income attributable to noncontrolling interest 1,851 1,851 Net loss attributable to Apergy \$ (12,751) \$ (28,543) \$ (16,239) \$ 44,782 \$ (12,751) \$ Comprehensive loss attributable to Apergy (11,714)(28,538) \$ (15,205) \$ 43,743 \$ (11,714) \$

	December 31, 2018												
(in thousands)	Apergy Corporation	Subsidiary Guarantors	Subsidiary Non-guarantors	Adjustments and eliminations	Total								
Assets													
Cash and cash equivalents	\$ 108	\$ 27,533	\$ 14,191	\$	\$ 41,832								
Receivables	1,743	230,230	35,019	(17,044)	249,948								
Inventories, net	—	189,015	30,936	(1,632)	218,319								
Prepaid expenses and other current assets	24,583	17,064	3,106	(24,542)	20,211								
Total current assets	26,434	463,842	83,252	(43,218)	530,310								
Property, plant and equipment, net	—	231,373	12,955	—	244,328								
Goodwill	—	633,771	271,214	—	904,985								
Advances due from affiliates	600,802	14,185	82,889	(697,876)	—								
Investment in subsidiaries	1,013,869	687,691	545,298	(2,246,858)	_								
Intangible assets, net	—	198,531	85,157	—	283,688								
Other assets	3,996	2,371	2,078	—	8,445								
Total assets	1,645,101	2,231,764	1,082,843	(2,987,952)	1,971,756								
Liabilities and Equity													
Accounts payable	22	114,745	33,335	(17,044)	131,058								
Accrued compensation and employee benefits	_	35,278	5,268	_	40,546								
Accrued expenses and other current liabilities	4,929	46,722	4,914	(26,174)	30,391								
Total current liabilities	4,951	196,745	43,517	(43,218)	201,995								
Advances due to affiliates	_	683,700	14,176	(697,876)	_								
Long-term debt	658,623	7,363	122	_	666,108								
Deferred income taxes	_	81,296	20,428	_	101,724								
Other long-term liabilities	—	19,441	961	—	20,402								
Total liabilities	663,574	988,545	79,204	(741,094)	990,229								
Equity:													
Stockholders' capital	981,527	1,250,573	1,036,733	(2,246,858)	1,021,975								
Accumulated other comprehensive loss	—	(7,354)	(35,552)	—	(42,906)								
Total stockholders' equity	981,527	1,243,219	1,001,181	(2,246,858)	979,069								
Noncontrolling interest			2,458		2,458								
Total equity	981,527	1,243,219	1,003,639	(2,246,858)	981,527								
Total liabilities and equity	\$ 1,645,101	\$ 2,231,764	\$ 1,082,843	\$ (2,987,952)	\$ 1,971,756								

	December 31, 2017												
(in thousands)		Apergy orporation	Subsidiary Guarantors			Subsidiary n-guarantors		djustments and liminations		Total			
Assets													
Cash and cash equivalents	\$		\$	5,763	\$	17,949	\$	—	\$	23,712			
Receivables		—		170,788		34,335		(3,674)		201,449			
Inventories, net		_		174,842		27,488		(928)		201,402			
Prepaid expenses and other current assets		_		12,864		2,048				14,912			
Total current assets		—		364,257		81,820		(4,602)		441,475			
Property, plant and equipment, net		—		197,309		16,253		—		213,562			
Goodwill		—		633,734		276,354		—		910,088			
Advances due from affiliates		—		10,299		60,109		(70,408)		—			
Investment in subsidiaries		1,640,385		801,915		388,994		(2,831,294)		—			
Intangible assets, net		—		234,795		103,715		—		338,510			
Other assets		—		2,129		851		—		2,980			
Total assets		1,640,385		2,244,438		928,096		(2,906,304)		1,906,615			
Liabilities and Equity													
Accounts payable		_		83,866		18,634		(3,674)		98,826			
Accrued compensation and employee benefits		_		24,875		5,414				30,289			
Accrued expenses and other current liabilities		_		13,711		7,989		(325)		21,375			
Total current liabilities		_		122,452		32,037		(3,999)		150,490			
Long-term debt		_		5,772		34				5,806			
Deferred income taxes		_		75,075		21,910				96,985			
Other long-term liabilities				73,057		10,300		(70,408)		12,949			
Total liabilities		_		276,356		64,281		(74,407)		266,230			
Equity:													
Stockholders' capital		1,640,385		1,972,819		880,745		(2,831,897)		1,662,052			
Accumulated other comprehensive loss		_		(4,737)		(21,679)		—		(26,416)			
Total stockholders' equity		1,640,385		1,968,082		859,066		(2,831,897)		1,635,636			
Noncontrolling interest		_		_		4,749		_		4,749			
Total equity		1,640,385		1,968,082		863,815		(2,831,897)		1,640,385			
Total liabilities and equity	\$	1,640,385	\$	2,244,438	\$	928,096	\$	(2,906,304)	\$	1,906,615			

	Year Ended December 31, 2018													
(in thousands)	C	Apergy orporation		Subsidiary Guarantors	N	Subsidiary on-guarantors		Adjustments and eliminations		Total				
Cash provided (required) by operating activities	\$	(51,728)	\$	200,907	\$	15,720	\$	(999)	\$	163,900				
Cash provided (required) by investing activities:														
Capital expenditures		—		(55,070)		(2,848)		—		(57,918)				
Proceeds from sale of property, plant and equipment		_		1,127		60		_		1,187				
Proceeds from sale of business				2,473		—		—		2,473				
Purchase price adjustments on acquisition		_				53		—		53				
Net cash required by investing activities		_		(51,470)		(2,735)				(54,205)				
Cash provided (required) by financing activities:														
Proceeds from long-term debt, net of discounts		713,963						—		713,963				
Payment of debt issue costs		(16,006)				—		—		(16,006)				
Repayment of long-term debt		(45,000)		—		—		—		(45,000)				
Advances due to (from) affiliates		(600,802)		621,109		(20,307)		—		—				
Distributions to Dover Corporation, net		(319)		(744,258)		7,021		999		(736,557)				
Distribution to noncontrolling interest		_		_		(2,720)		_		(2,720)				
Payments on capital lease obligations				(4,518)						(4,518)				
Net cash provided (required) by financing activities		51,836		(127,667)		(16,006)		999		(90,838)				
Effect of exchange rate changes on cash and cash equivalents		_				(737)		_		(737)				
Net (increase) decrease in cash and cash equivalents		108		21,770		(3,758)		—		18,120				
Cash and cash equivalents at beginning of period		_		5,763		17,949		_		23,712				
Cash and cash equivalents at end of period	\$	108	\$	27,533	\$	14,191	\$		\$	41,832				

	Year Ended December 31, 2017													
(in thousands)	Apergy Corporation	Subsidiary Guarantors	Subsidiary Non-guarantors	Adjustments and eliminations	Total									
Cash provided by operating activities	\$ —	\$ 64,422	\$ 11,561	\$ 67	\$ 76,050									
Cash provided (required) by investing activities:														
Capital expenditures	_	(35,008)	(1,646)		(36,654)									
Acquisitions, net of cash and cash equivalents acquired	_	_	(8,842)	_	(8,842)									
Proceeds from sale of property, plant and equipment	_	3,433	114	_	3,547									
Net cash required by investing activities	_	(31,575)	(10,374)		(41,949)									
Cash provided (required) by financing activities:														
Change in borrowings, net	—	—	(599)		(599)									
Distributions to Dover Corporation, net	—	(27,124)	(4,001)	(67)	(31,192)									
Distribution to noncontrolling interest	—		(1,212)	—	(1,212)									
Payments on capital lease obligations		(3,690)			(3,690)									
Net cash required by financing activities		(30,814)	(5,812)	(67)	(36,693)									
Effect of exchange rate changes on cash and cash equivalents	_	_	277	_	277									
Net (increase) decrease in cash and cash equivalents		2,033	(4,348)		(2,315)									
Cash and cash equivalents at beginning of period		3,730	22,297		26,027									
Cash and cash equivalents at end of period	\$	\$ 5,763	\$ 17,949	\$	\$ 23,712									

			Year l	Ende	ed December 31	, 20 1	16	
(in thousands)		Apergy rporation	Subsidiary Guarantors		Subsidiary on-guarantors		Adjustments and eliminations	Total
Cash provided by operating activities	\$		\$ 107,060	\$	25,979	\$	(48)	\$ 132,991
Cash provided (required) by investing activities:								
Capital expenditures		_	(22,325)		(3,774)		_	(26,099)
Proceeds from sale of property, plant and equipment		_	2,245		281		_	2,526
Additions to intangible assets		_	(3,700)		_		_	(3,700)
Net cash required by investing activities		_	 (23,780)		(3,493)		_	 (27,273)
Cash provided (required) by financing activities:								
Distributions to Dover Corporation, net		—	(78,232)		(6,070)		48	(84,254)
Distribution to noncontrolling interest		—			(1,727)		—	(1,727)
Payments of capital lease obligations		—	(4,037)		—		—	(4,037)
Net cash required by financing activities			 (82,269)		(7,797)		48	 (90,018)
Effect of exchange rate changes on cash and cash equivalents	<u> </u>		 		(90)			 (90)
Net increase in cash and cash equivalents			1,011		14,599		—	15,610
Cash and cash equivalents at beginning of period			2,719		7,698			10,417
Cash and cash equivalents at end of period	\$		\$ 3,730	\$	22,297	\$		\$ 26,027

NOTE 21—CASH FLOW INFORMATION

Cash payments for income taxes, cash payments for interest incurred related to our debt, and non-cash capital lease additions are as follows:

	Yea	r 31,						
(in thousands)	2018	<u>8 2017 2016</u>						
Cash information:								
Cash paid for income taxes	\$ 27,191	\$	8,698	\$	7,285			
Cash paid for interest	21,899		—		—			
Non-cash information:								
Capital lease additions	4,428		4,557		755			

Lease Program

We continue to expand our ESP leased asset program in our Production & Automation Technologies segment. At the time of purchase, assets are recorded to inventory and are transferred to property, plant, and equipment when a customer contracts for an asset under our lease program. During the year ended December 31, 2018, we transferred \$97.0 million of inventory into property, plant, and equipment as a result of assets entering our lease program. The transfer of assets from inventory to property, plant, and equipment upon entering our lease program is accounted for as a non-cash activity within our consolidated statement of cash flows.

Expenditures for assets that are expected to be placed into our leased asset program and with a useful life of less than one year are reported in "leased assets and other" in the operating section of our consolidated statement of cash flows. Additionally, cash receipts related to the recovery of net book value from the sale of assets on lease are presented in "lease assets and other" in the operating section of our statement of cash flows.

Expenditures for assets that are expected to be placed into our lease asset program and with a useful life of greater than one year are reported in "capital expenditures" in the investing section of our consolidated statement of cash flows. During the years ended December 31, 2018, 2017, and 2016 we purchased \$26.7 million, \$14.5 million, and \$1.1 million, respectively, of assets with a useful life of greater than one year that are expected to be placed into our lease program.

Sale of Business

In October 2018, we closed on the sale of our Fisher Pump business and related property. Net proceeds of \$2.5 million were received upon the close of the transaction, resulting in a gain of \$1.3 million during the year ended December 31, 2018.



SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED)

	2018(1)							2017 ⁽¹⁾								
(in thousands, except per share data)	4th Qtr.		3rd Qtr.		2nd Qtr.		1st Qtr.		4th Qtr.		3rd Qtr.		2nd Qtr.		1st Qtr.	
Revenue	\$ 311,202	\$	316,468	\$	305,850	\$	283,126	\$	265,195	\$	258,832	\$	256,161	\$	230,278	
Gross profit	105,271		113,734		103,680		93,614		75,534		84,952		84,630		75,360	
Net income ⁽²⁾	22,732		25,494		22,075		24,194		61,225		18,820		19,033		13,586	
Net income attributable to Apergy ⁽²⁾	22,571		25,263		22,155		24,052		61,155		18,556		18,754		13,269	
Basic earnings per share ⁽³⁾	\$ 0.29	\$	0.33	\$	0.29	\$	0.31	\$	0.79	\$	0.24	\$	0.24	\$	0.17	
Diluted earnings per share ⁽³⁾	\$ 0.29	\$	0.33	\$	0.28	\$	0.31	\$	0.79	\$	0.24	\$	0.24	\$	0.17	

(1) We revised our previously issued financial statements to correct immaterial errors. See Note 1 for additional information.

(2) Includes a net tax benefit related to the Tax Reform Act during the three months ended December 31, 2017. See Note 15—Income Taxes for additional information.

⁽³⁾ On May 9, 2018, 77,339,828 shares of our common stock were distributed to Dover stockholders in conjunction with the Separation. For comparative purposes, we have assumed the shares issued in conjunction with the Separation to be outstanding as of the beginning of each period prior to the Separation. In addition, we have assumed the potential dilutive securities outstanding as of May 8, 2018, were outstanding and fully dilutive in each of the periods with positive income prior to Separation.

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

As of December 31, 2018, and under the direction of our principal executive officer and principal financial officer, we have evaluated the effectiveness of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act. Based upon this evaluation, our principal executive officer and principal financial officer have concluded as of December 31, 2018, that our disclosure controls and procedures were:

- i) effective in ensuring that information required to be disclosed in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms; and
- ii) effective in ensuring that information required to be disclosed in reports that we file or submit under the Exchange Act is accumulated and communicated to management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

There were no changes in internal controls over financial reporting identified in the evaluation for the quarter ended December 31, 2018, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act.

Management's Annual Report on Internal Control over Financial Reporting

This Annual Report on Form 10-K does not include a report of management's assessment regarding internal control over financial reporting or an attestation report of our independent registered accounting firm due to a transition period established by rules of the SEC for newly public companies.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information regarding our executive officers is presented in Part I, Item 1 of this Annual Report on Form 10-K.

The remaining information required by Part III, Item 10 of this Annual Report on Form 10-K is incorporated herein by reference from our Proxy Statement for the Annual Meeting of Stockholders to be held on May 9, 2019, which will be filed within 120 days after December 31, 2018 ("2019 Proxy Statement").*

ITEM 11. EXECUTIVE COMPENSATION

Information required by Part III, Item 11 of this Annual Report on Form 10-K is incorporated herein by reference from our 2019 Proxy Statement.*

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

Information required by Part III, Item 12 of this Annual Report on Form 10-K is incorporated herein by reference from our 2019 Proxy Statement.*

Additionally, equity plan compensation information is incorporated herein by reference from Part II, Item 5 of this Annual Report on Form 10-K.

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

Information required by Part III, Item 13 of this Annual Report on Form 10-K is incorporated herein by reference from our 2019 Proxy Statement.*

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Information required by Part III, Item 14 of this Annual Report on Form 10-K is incorporated herein by reference from our 2019 Proxy Statement.*

* Except for information or data specifically incorporated herein by reference under Items 10 through 14, other information in our 2019 Proxy Statement are not deemed to be a part of this Annual Report on Form 10-K.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

- (a) The following documents are filed as part of this Annual Report on Form 10-K:
 - 1. The following consolidated financial statements of Apergy Corporation and subsidiaries are filed as part of this Annual Report on Form 10-K under Part II, Item 8:

Report of Independent Registered Public Accounting Firm Consolidated Statements of Income (Loss) for the Years Ended December 31, 2018, 2017 and 2016 Consolidated Statements of Comprehensive Income (Loss) for the Years Ended December 31, 2018, 2017 and 2016 Consolidated Balance Sheets as of December 31, 2018 and 2017 Consolidated Statements of Cash Flows for the Years Ended December 31, 2018, 2017 and 2016 Consolidated Statements of Changes in Stockholders' Equity for the Years Ended December 31, 2018, 2017 and 2016 Notes to Consolidated Financial Statements

2. Financial Statement Schedule and related Report of Independent Registered Public Accounting Firm:

See "Schedule II—Valuation and Qualifying Accounts" and the related Report of Independent Registered Public Accounting Firm included herein. All other financial statement schedules are omitted because of the absence of conditions under which they are required or because information required is shown in the consolidated financial statements and notes thereto in Part II, Item 8 of this Annual Report on Form 10-K.

3. Exhibits:

See "Index of Exhibits" filed as part of this Annual Report on Form 10-K.

ITEM 16. FORM 10-K SUMMARY

None.

Schedule II—Valuation and Qualifying Accounts

Allowance for Doubtful Accounts	alance at ginning of Year	rged to Cost Expense ⁽¹⁾	ccounts ritten Off	Other	Ba	llance at End of Year
Year Ended December 31, 2018	\$ 4,753	\$ 2,007	\$ (1,489)	\$ (93)	\$	5,178
Year Ended December 31, 2017	5,634	954	(1,882)	47		4,753
Year Ended December 31, 2016	4,431	2,941	(1,469)	(269)		5,634

⁽¹⁾ Net of recoveries on previously reserved or written-off balances.

Deferred Tax Valuation Allowance		lance at inning of Year		Additions	Da	ductions		Other	В	alance at End of Year
	<u>_</u>		¢		c Re		<i>ф</i>		<i>•</i>	
Year Ended December 31, 2018	\$	1,280	\$	331	\$	(889)	\$		\$	722
Year Ended December 31, 2017		1,082		198		—		_		1,280
Year Ended December 31, 2016		64		1,018		—				1,082

LIFO Valuation Adjustments	Balance a Beginning Year		ged to Cost Expense	R	Reductions	Other	Ва	alance at End of Year
Year Ended December 31, 2018	\$ 10,5	556	\$ 2,311	\$	_	\$ _	\$	12,867
Year Ended December 31, 2017	9,3	381	1,175		—			10,556
Year Ended December 31, 2016	12,9	933	—		(3,552)	—		9,381

SIGNATURES

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

APERGY CORPORATION (Registrant)

Date: February 27, 2019

By: /s/ JAY A. NUTT

Jay A. Nutt Senior Vice President and Chief Financial Officer

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

Date	Signature
ebruary 27, 2019	/s/ SIVASANKARAN SOMASUNDARAM
	Sivasankaran Somasundaram President and Chief Executive Officer Director
	(Principal Executive Officer)
ebruary 27, 2019	/s/ JAY A. NUTT
	Jay A. Nutt Senior Vice President and Chief Financial Officer
	(Principal Financial Officer)
ebruary 27, 2019	/s/ MICHAEL D. WHITE
	Michael D. White Vice President, Corporate Controller and Chief Accounting Officer (Principal Accounting Officer)
ebruary 27, 2019	/s/ MAMATHA CHAMARTHI
	Mamatha Chamarthi Director
ebruary 27, 2019	/s/ KENNETH M. FISHER
	Kenneth M. Fisher Director
ebruary 27, 2019	/s/ GARY P. LUQUETTE
	Gary P. Luquette Director
February 27, 2019	/s/ DANIEL W. RABUN
	Daniel W. Rabun Chairman of the Board of Directors
ebruary 27, 2019	/s/ STEPHEN M. TODD
	Stephen M. Todd Director
ebruary 27, 2019	/s/ STEPHEN K. WAGNER
	Stephen K. Wagner Director

INDEX OF EXHIBITS

Incorporated by Reference

Exhibit	-			
No.	Exhibit Description	Form	Exhibit No.	Filing Date
<u>2.1</u>	<u>Separation and Distribution Agreement, dated May 9, 2018, by and between</u> Dover Corporation and Apergy Corporation.	8-K	2.1	May 11, 2018
<u>3.1</u>	Amended and Restated Certificate of Incorporation of Apergy Corporation.	8-K	3.1	May 11, 2018
<u>3.2</u>	Amended and Restated By-Laws of Apergy Corporation.	8-K	3.2	May 11, 2018
<u>4.1</u>	<u>Indenture, dated as of May 3, 2018, between Apergy Corporation, as Issuer, and Wells Fargo Bank, National Association, as Trustee.</u>	8-K	4.1	May 7, 2018
<u>4.2</u>	Form of 6.375% Senior Notes due 2026 (included as Exhibit 1 to the Indenture filed as Exhibit 4.1).	8-K	4.2	May 7, 2018
<u>4.3</u>	<u>Registration Rights Agreement, dated May 3, 2018, by and between Apergy</u> <u>Corporation and J.P. Morgan Securities LLC, for itself and on behalf of the</u> <u>several initial purchasers.</u>	8-K	4.3	May 7, 2018
<u>4.4</u>	<u>Effective Date Supplemental Indenture, dated as of May 9, 2018, among the Guarantors named therein and Wells Fargo Bank, National Association, as Trustee.</u>	8-K	4.1	May 11, 2018
<u>10.1</u>	<u>Employee Matters Agreement, dated May 9, 2018, by and between Dover</u> <u>Corporation and Apergy Corporation.</u>	8-K	10.1	May 11, 2018
<u>10.2</u>	<u>Tax Matters Agreement, dated May 9, 2018, by and between Dover Corporation</u> and Apergy Corporation.	8-K	10.2	May 11, 2018
<u>10.3</u>	<u>Transition Services Agreement, dated May 9, 2018, by and between Dover</u> <u>Corporation and Apergy Corporation.</u>	8-K	10.3	May 11, 2018
<u>10.4</u>	<u>Credit Agreement, dated May 9, 2018, among Apergy Corporation, as borrower,</u> <u>the lenders and issuing banks party thereto and JPMorgan Chase Bank, N.A., as</u> <u>administrative agent.</u>	8-K	10.4	May 11, 2018
<u>10.5+</u>	<u>Apergy Corporation 2018 Equity and Cash Incentive Plan.</u>	8-K	10.5	May 11, 2018
<u>10.6+</u>	Apergy Corporation Executive Officer Annual Incentive Plan.	8-K	10.6	May 11, 2018
<u>10.7+</u>	Apergy USA, Inc. Executive Deferred Compensation Plan.	8-K	10.7	May 11, 2018
<u>10.8+</u>	Apergy Corporation Executive Severance Plan.	8-K	10.8	May 11, 2018
<u>10.9+</u>	<u>Apergy Corporation Senior Executive Change-in-Control Severance Plan.</u>	8-K	10.9	May 11, 2018
<u>10.10+</u>	Form of award grant letter for restricted stock unit awards made under the <u>Apergy Corporation 2018 Equity and Cash Incentive Plan.</u>	8-K	10.10	May 11, 2018
<u>10.11+</u>	<u>Form of award grant letter for performance share awards made under the Apergy</u> <u>Corporation 2018 Equity and Cash Incentive Plan.</u>	8-K	10.11	May 11, 2018
<u>21.1</u> *	Subsidiaries of Apergy Corporation.			
<u>23.1</u> *	Consent of PricewaterhouseCoopers LLP, an independent registered public accounting firm.			
<u>31.1</u> *	<u>Certification of Chief Executive Officer Pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.</u>			
<u>31.2</u> *	<u>Certification of Chief Financial Officer Pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.</u>			
<u>32.1</u> **	Certification of Chief Executive Officer Under Section 906 of the Sarbanes- Oxley Act of 2002, 18 U.S.C. 1350.			
<u>32.2</u> **	<u>Certification of Chief Financial Officer Under Section 906 of the Sarbanes-Oxley</u> <u>Act of 2002, 18 U.S.C. 1350.</u>			

101.INS*	XBRL Instance Document	
101.SCH*	XBRL Taxonomy Extension Schema Document	
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document	
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document	
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document	
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document	

* Filed herewith

** Furnished herewith

+ Denotes compensatory plan

SUBSIDIARIES OF APERGY CORPORATION AS OF DECEMBER 31, 2018

Subsidiary	Jurisdiction of Formation
Accelerated Companies, LLC	Delaware
Accelerated Process Systems, Inc.	Texas
Accelerated Production Systems Limited	England and Wales, United Kingdom
Apergy (Delaware) Formation, Inc.	Delaware
Apergy Artificial Lift de México, S.A. de C.V.	Mexico
Apergy Artificial Lift International, LLC	Delaware
Apergy Artificial Lift Pty. Ltd	Australia
Apergy Artificial Lift S.A.	Argentina
Apergy Artificial Lift, LLC	Delaware
Apergy BMCS Acquisition Corp.	Delaware
Apergy Canada ULC	British Columbia, Canada
Apergy Energy Automation, LLC	Delaware
Apergy Energy India Private Limited	India
Apergy Energy (Kenya) Limited	Kenya
Apergy ESP Systems, LLC	Oklahoma
Apergy Funding Corporation	Delaware
Apergy International Operations, Inc.	Delaware
Apergy Luxembourg S.à.r.l.	Luxembourg
Apergy Middle East LLC	Oman
Apergy Middle East Services LLC	Oman
Apergy Minority Luxembourg S.à.r.l.	Luxembourg
Apergy PCS Holding LLC	Delaware
Apergy S.A.	Argentina
Apergy UK Limited	England and Wales, United Kingdom
Apergy USA, Inc.	Delaware
Dover Canada ULC Dover Canada S.R.I.	British Columbia, Canada
Ener Tools S.A.	Argentina
Harbison-Fischer, Inc.	Delaware
Honetreat Company	California
Norris Rods, Inc.	Delaware
Norriseal-Wellmark, Inc.	Delaware
NPS Services, Inc.	Delaware
Oil Lift Technology Inc.	British Columbia, Canada
Oil Lift Technology SAS	Columbia
Oil Lift Technology, Inc.	New Mexico
PCS Ferguson Canada Inc.	Alberta, Canada
PCS Ferguson, Inc.	Delaware
Pro Rod USA, Inc.	Delaware
Products Flange and Supply, Inc.	Texas
Pro-Rod Inc.	Alberta, Canada
Quartzdyne, Inc.	Delaware
Spirit Global Energy Solutions Canada Ltd.	Alberta, Canada
Spirit Global Energy Solutions, Inc.	Delaware

Theta Oilfield Services, Inc.	Delaware
UAC Corporation	Delaware
UPCO, Inc.	Oklahoma
US Synthetic Corporation	Delaware
Wellmark Holdings, Inc.	Delaware
Windrock, Inc.	Tennessee

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (No. 333-224926) of Apergy Corporation of our report dated February 27, 2019 relating to the financial statements and financial statement schedule, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP Houston, Texas February 27, 2019

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO RULE 13A-14(A) AND RULE 15D-14(A) OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, Sivasankaran Somasundaram, certify that:

- 1. I have reviewed this Annual Report on Form 10-K of Apergy Corporation (the "registrant");
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 27, 2019

/s/ SIVASANKARAN SOMASUNDARAM

Sivasankaran Somasundaram President and Chief Executive Officer (Principal Executive Officer)

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO RULE 13A-14(A) AND RULE 15D-14(A) OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, Jay A. Nutt, certify that:

- 1. I have reviewed this Annual Report on Form 10-K of Apergy Corporation (the "registrant");
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 27, 2019

/s/ JAY A. NUTT

Jay A. Nutt

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

CERTIFICATION OF CHIEF EXECUTIVE OFFICER UNDER SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002, 18 U.S.C. SECTION 1350

I, Sivasankaran Somasundaram, President and Chief Executive Officer of Apergy Corporation (the "Company"), do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

(a) The Annual Report on Form 10-K of the Company for the year ended December 31, 2018, as filed with the Securities and Exchange Commission (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(b) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 27, 2019

/s/ SIVASANKARAN SOMASUNDARAM

Sivasankaran Somasundaram

President and Chief Executive Officer (Principal Executive Officer)

CERTIFICATION OF CHIEF FINANCIAL OFFICER UNDER SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002, 18 U.S.C. SECTION 1350

I, Jay A. Nutt, Senior Vice President and Chief Financial Officer of Apergy Corporation (the "Company"), do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

(a) The Annual Report on Form 10-K of the Company for the year ended December 31, 2018, as filed with the Securities and Exchange Commission (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(b) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 27, 2019

/s/ JAY A. NUTT

Jay A. Nutt

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