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

FORM 10-K

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

For the Fiscal Year Ended December 31, 2019

OR

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

For the transition period from __________ to __________

Commission File Number 001-35504

FORUM ENERGY TECHNOLOGIES, INC.

(Exact name of registrant as specified in its charter)

Delaware	**61-1488595**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*

10344 Sam Houston Park Drive	**Suite 300**	**Houston**	**Texas**	**77064**
(Address of Principal Executive Offices)				*(Zip Code)*

Registrant's telephone number, including area code: (713) 351-7900

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

Common stock, $0.01 par value	**FET**	**New York Stock Exchange**
(Title of Each Class)	(Trading Symbol)	(Name of Each Exchange on Which Registered)

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

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

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

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☑ No ☐

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

Large accelerated filer	☐	Accelerated filer	☑	Non-accelerated filer	☐
Smaller reporting company	☐	Emerging growth company	☐		

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

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

The aggregate market value of Common Stock held by non-affiliates on June 28, 2019, determined using the per share closing price on the New York Stock Exchange Composite tape of $3.42 on June 28, 2019, was approximately $280.5 million. For this purpose, our executive officers and directors and SCF Partners L.P. and its affiliates are considered affiliates.

As of February 24, 2020, there were 110,513,007 common shares outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of our Proxy Statement for the 2020 Annual Meeting of Stockholders are incorporated by reference into Part III of this report.

Forum Energy Technologies, Inc.

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PART I

Item 1. Business

Forum Energy Technologies, Inc., a Delaware corporation ("Forum," the "Company," "we" or "us"), is a global oilfield products company, serving the drilling, downhole, subsea, completions, and production sectors of the oil and natural gas industry. Our common shares are listed on the New York Stock Exchange ("NYSE") under the symbol "FET." Our principal executive offices are located at 10344 Sam Houston Park Drive, Houston, Texas 77064, our telephone number is (713) 351-7900, and our website is www.f-e-t.com. Our Annual Reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, and all amendments thereto, are available free of charge on our website as soon as reasonably practicable after such reports are electronically filed with or furnished to the Securities and Exchange Commission ("SEC"). These reports are also available on the SEC's website at www.sec.gov. Information contained on or accessible from our website is not incorporated by reference into this Annual Report on Form 10-K and should not be considered part of this report or any other filing that we make with the SEC.

Overview

We are a global oilfield products company, serving the drilling, downhole, subsea, completions and production sectors of the oil and natural gas industry. We design, manufacture and distribute products and engage in aftermarket services, parts supply and related services that complement our product offering. The Company's products include highly engineered capital equipment as well as products that are consumed in the drilling, well construction, production and transportation of oil and natural gas. Our product offering includes a mix of frequently replaced consumable products and highly engineered capital products. Our consumable products are used in drilling, well construction and completions activities, within the supporting infrastructure, and at processing centers and refineries. Our engineered capital products are directed at: drilling rig equipment for new rigs, upgrades and refurbishment projects; subsea construction and development projects; pressure pumping equipment; the placement of production equipment on new producing wells; and downstream capital projects. In 2019, over 80% of our revenue was derived from consumable products and activity-based equipment, while the balance was primarily derived from capital products with a small amount from rental and other services.

We seek to design, manufacture and supply high quality reliable products that create value for our diverse customer base, which includes, among others, oil and natural gas operators, land and offshore drilling contractors, oilfield service companies, subsea construction and service companies, and pipeline and refinery operators.

In the first quarter of 2019, we changed our reporting segments to align with business activity drivers and the manner in which management reviews and evaluates operating performance. Forum now operates in the following three reporting segments: Drilling & Downhole, Completions and Production, and we believe that this reporting segment structure better aligns with the key phases of the well cycle and provides improved operating efficiencies. Prior to this change, we operated in three business segments: Drilling & Subsea, Completions, and Production & Infrastructure. We moved the Downhole product line from Completions to Drilling & Subsea to form the new Drilling & Downhole segment. Completions retained the Stimulation & Intervention and Coiled Tubing product lines. Finally, we renamed Production & Infrastructure the Production segment. Our historical results of operations have been recast to retrospectively reflect these changes in accordance with generally accepted accounting principles.

We incorporate by reference the segment and geographic information for the last three years set forth in Note 17 *Business Segments*, and the information with respect to acquisitions is set forth in Note 4 *Acquisitions & Dispositions*.

Drilling & Downhole segment

In our Drilling & Downhole segment, we design, manufacture and supply products and provide related services to the drilling, downhole and subsea markets. Through this segment, we offer drilling technologies, including capital equipment and a broad line of products consumed in the drilling process; downhole technologies, including cementing and casing tools, protection products for artificial lift equipment and cables; and subsea technologies, including robotic vehicles and other capital equipment, specialty components and tooling, a broad suite of complementary subsea technical services, and products used in pipeline infrastructure.

There are several factors that drive demand for our Drilling & Downhole segment. Our Drilling Technologies product line is influenced by global drilling activity; the level of capital investment in drilling rigs; rig upgrades and equipment replacement as drilling contractors modify their existing rigs to increase capability or improve efficiency and safety; and the number of rigs in use and the severity of the conditions under which they operate. Our Downhole Technologies product line is impacted by the level of well completion activity and complexity of well construction and completion.

Demand for our subsea products is impacted by global offshore activity, defense spending, subsea equipment and pipeline installation, repair and maintenance spending, and growth in offshore resource development.

Drilling Technologies. We provide both drilling capital equipment and consumables, with a focus on products that enhance our customers' handling of tubulars and drilling fluids on the drilling rig. Our product offering includes powered and manual tubular handling equipment; customized offline crane systems; drilling data acquisition management systems; pumps, pump parts, valves, and manifolds; drilling fluid end components; a broad line of items consumed in the drilling process; and digital monitoring products.

Drilling capital equipment. We design and manufacture a range of powered and manual tubular handling tools used on onshore and offshore drilling rigs. Our Forum B+V Oil Tools and Wrangler™ branded tools reduce direct human involvement in the handling of pipe during drilling operations, improving safety, speed and efficiency of operations. Our tubular handling tools include elevators, clamps, slip handles, tong handles, powered slips, spiders and kelly spinners. Our hydraulic catwalks mechanize the lifting and lowering of tubulars to and from the drill floor, eliminating or reducing the need for traditional drill pipe and casing "pick-up and lay-down" operations with associated personnel. In addition, our make-up and break-out tools, called Floorhand™ and Wrangler Roughneck™, automate a potentially dangerous rig floor task and improve rig drilling speed and safety. In addition, we design and manufacture a range of rig-based offline activity cranes and multi-purpose cranes.

In addition to powered tubular handling equipment, we design and manufacture drilling manifold systems and high pressure piping packages. Finally, we repair and service drilling equipment for both land and offshore rigs. Many of our service employees work in the field to address problems at the rig site.

Consumable products. We manufacture a range of consumable products used on drilling rigs, well servicing rigs, and hydraulic fracturing systems. Our consumable products include valves, centrifugal pumps, mud pump fluid end components, mud pump modules, rig sensors, inserts, and dies. We are also a supplier of oilfield bearings to original equipment manufacturers and repair businesses for use in drilling and well stimulation equipment.

Downhole Technologies. We manufacture a broad line of downhole products that are consumed during the well construction, completion and production phases of a well's lifecycle.

Downhole protection systems. We offer a full range of downhole protection solutions and artificial lift accessories through our various brands such as Cannon Services™ and Multilift. The Cannon Services clamp, Forum cast clamp and protection products are used to shield downhole control lines, cables and gauges during installation and to provide protection during production enhancement operations. We design and manufacture a full range of downhole protection solutions for electrical submersible pump ("ESP") cabling, encapsulated control lines, sub-surface safety valves and permanent downhole gauges. We provide both standard and customized protection systems, and we utilize a range of materials in our products for various downhole environments. SandGuard™ and Cyclone™ completion tools extend the useful life of an ESP by protecting it against sand and other solids after shutdown. Forum GasGuard™ breaks down gas slugs, creating an uninterrupted flow of liquid through an ESP.

Casing and cementing tools. Through our Davis-Lynch™ branded downhole well construction operations, we design and manufacture products used in the construction of oil and natural gas wells. We design and manufacture a full range of centralizers, float equipment, stage cementing tools, inflatable packers, flotation collars, cementing plugs, mudline suspension and surge reduction equipment. Our products are used globally in the construction of onshore and offshore wells.

Other downhole products. We manufacture a line of downhole composite plugs, which are primarily used for zonal isolation during multi-stage hydraulic fracturing in horizontal and vertical wells.

Our primary customers in this product line are oil and natural gas producers, and service companies providing completions, artificial lift and other intervention services to producers.

Subsea Technologies. We design and manufacture capital equipment and specialty components used in the subsea sector and provide a broad suite of complementary subsea technical services. We have a core focus on the design and manufacture of remotely operated vehicle ("ROV") systems, other specialty subsea vehicles, and rescue submarines, as well as critical components of these vehicles. Many of our related technical services complement our vehicle offerings.

Subsea vehicles. We are a leading designer and manufacturer of a wide range of ROVs that we supply to the offshore subsea construction, observation and related service markets. The market for subsea ROVs can be segmented into three broad classes of vehicles based on size and category of operations: (1) large work-class vehicles and trenchers for subsea construction and installation activities, (2) drilling-class vehicles deployed from and for use around an offshore rig and (3) observation-class vehicles for inspection and light manipulation. We are a leading provider of work-class and observation class vehicles.

We design and manufacture large work-class ROVs through our Perry® brand. These vehicles are principally used in deepwater construction applications with the largest vehicles providing up to 250 horsepower, exceeding 1,200 pounds of payload capacity and having the capability to work in depths up to 5,000 meters. In addition to work-class ROVs, we design and manufacture large subsea trenchers that travel along the sea floor for digging, installation and burial operations. The largest of these subsea trenchers provides up to 1,500 horsepower and is able to cut over three meters deep into the seafloor to lay pipelines, power cables or communications cables.

Our Forum Sub-Atlantic® branded observation-class vehicles are electrically powered and are principally used for inspection, survey and light manipulation, and serve a wide range of industries.

Designed primarily for the defense market, our subsea rescue vehicles are designed for a range of tasks including submarine rescue operations, diver support, seabed survey, port security, under hull search and a variety of other tasks.

Our subsea vehicle customers are primarily large offshore construction companies, including non-oil and natural gas entities, such as a range of governmental organizations including navies, maritime science and geoscience research organizations, offshore wind power companies, and other industries operating in marine environments.

Subsea products and technical services. In addition to subsea vehicles, we are a leading manufacturer of subsea products and components. We design and manufacture a group of products that are used in and around the ROV. For example, we manufacture Dynacon® branded ROV launch and recovery systems, Syntech® branded syntactic foam buoyancy components, Sub-Atlantic® branded ROV thrusters, and a wide range of hydraulic power units and valve packs. We design and manufacture these ROV components for incorporation into our own vehicles as well as for sale to other ROV manufacturers. We also provide a broad suite of subsea tooling, both industry standard and custom designed. In addition to vehicle-related subsea products, we provide a broad suite of subsea technical services.

Subsea rental. On January 3, 2018, we contributed our Forum Subsea Rentals (“FSR”) business into Ashtead Technology, in exchange for a 40% interest in the combined business. The transaction created a market leading independent provider of subsea survey and ROV equipment rental services. Our interest in the combined business was presented in our consolidated financial statements as an equity method investment in the Drilling and Downhole segment. On September 3, 2019, we sold our aggregate 40% interest in Ashtead to the majority owners of Ashtead. Refer to Note 4 *Acquisitions & Dispositions* for additional information.

Completions segment

In our Completions segment, we design, manufacture and supply products and provide related services to the coiled tubing, stimulation and intervention markets. Through this segment, we offer stimulation and intervention technologies, including hydraulic fracturing pumps, pump consumables, cooling systems, flow iron, wireline cable and pressure control equipment as well as related recertification and refurbishment services. We also offer coiled tubing products, including coiled tubing strings and coiled line pipe.

There are several factors driving demand for our Completions segment. Our Stimulation & Intervention and Coiled Tubing product lines are impacted by the use of hydraulic fracturing to develop oil and natural gas reserves in shale or tight sand basins across North America and the level of workover and intervention activity.

Stimulation and Intervention. We provide a broad range of high pressure pumps and flow equipment used by well stimulation, or pressure pumping, companies during stimulation, intervention (principally plug and perforation activity) and flowback processes. We design and manufacture power end and fluid end assemblies, industrial heat exchanger and cooling systems, manifolds and manifold trailers, and treating iron. Frequent refurbishment and recertification of flow equipment is critical to ensuring the reliable and safe operation of a pressure pumping company’s fleet. We perform these services at various locations throughout North America and seek to position our stocking and service locations in proximity to our customers’ operations.

We also manufacture pressure control products that are used for well intervention operations and sold to oilfield service companies and equipment rental companies both domestically and internationally including blowout preventers for coiled tubing and wireline units and our Hydraulic Latch Assembly which is used to facilitate efficient zipper fracturing operations. In addition, we manufacture electro-mechanical wireline cables as well as innovative EnviroLite (greaseless) cables. We also conduct aftermarket refurbishment and recertification services for pressure control equipment.

Our primary customers in the Stimulation and Intervention product line are pressure pumping and flowback service companies, although we also generate sales to original equipment manufacturers of pressure pumping units.

Coiled Tubing. We manufacture Global Tubing® branded coiled tubing strings and coiled line pipe and provide related services. Coiled tubing strings are consumable components of coiled tubing units that perform well completion and intervention activities. Our coiled line pipe offering serves as an alternative to conventional line pipe in onshore and subsea applications.

Our primary customers in the Coiled Tubing product line are service companies that provide coiled tubing services globally.

Production segment

In our Production segment, we design, manufacture and supply products and provide related equipment and services to the production and infrastructure markets. Through this segment, we supply production equipment, including well site production and process equipment, and a broad range of industrial and process valves.

The level of spending to bring new wells on production, including the related infrastructure, is the primary driver for our Production segment. Our Production Equipment product line also has exposure to the amount of spending on midstream and downstream projects, as it offers products that go from the well site to inside the refinery fence. Our Valve Solutions product line is impacted by the level of infrastructure additions, upgrades and maintenance activities across the oil and natural gas industry, including the upstream, midstream and downstream sectors. In addition, our valves are used in the power, process, petrochemical and mining industries.

Production Equipment. Our Production Equipment product line provides engineered process systems and field services for capital equipment used at the wellsite and for production processing in the U.S. Once a well has been drilled, completed and brought on stream, we provide the well operator or producer with the process equipment necessary to make the oil or natural gas ready for transmission. We engineer, fabricate and install separators, packaged production systems and American Society of Mechanical Engineers ("ASME") and American Petroleum Institute ("API") coded pressure vessels, skidded vessels with gas measurement, modular process plants, header and manifold skids, process and flow control equipment and separators to help clean and process oil or natural gas as it travels from the wellhead and along the transmission line to the refinery. Our customers are principally oil and natural gas operators or producers.

We also design and provide process oil treatment equipment, including desalters and dehydrators, used in refineries and other process applications worldwide. We have a team of technicians and field service engineers for repair and installation, and we supply a broad range of replacement parts for our equipment and other manufacturers. This equipment removes sand, water and suspended solids from hydrocarbons prior to their transmission or refining.

Valve Solutions. We design, manufacture and provide a wide range of industrial valves that principally serve the upstream, midstream and downstream markets of the oil and natural gas industry. To a lesser extent, our valves serve general industrial, power and process industry customers as well as the mining industry. We provide ball, gate, globe, check and butterfly valves across a range of sizes and applications.

We market our valves to our customers and end users through our recognized brands: PBV®, DSI®, Quadrant®, Accuseal®, and ABZ®. Much of our production is sold through distribution supply companies, with our marketing efforts targeting end users for pull through of our valve products. Our global sales force and representatives cover approximately 30 countries, with local sales and distribution in Canada. Our Canadian operations provide significant exposure to the heavy oil projects.

Our manufacturing and supply chain systems enable us to design and produce high-quality engineered valves, as well as provide standardized products, while maintaining competitive pricing and minimizing capital requirements. We also utilize our international manufacturing partners to produce components and completed products for a number of our other valve brands.

Depending on the product, our valves are manufactured to conform to the standards of one or more of the API, American National Standards Institute, American Bureau of Shipping, and International Organization for Standardization and/or

other relevant standards governing the design and manufacture of industrial valves. Through our Valve Solutions product line, we participate in the API's standard-setting process.

Business history

Forum was incorporated in 2005 and formed through a series of acquisitions. In August 2010, Forum Oilfield Technologies, Inc. was renamed Forum Energy Technologies, Inc., when four other companies were merged into Forum. On April 17, 2012, we completed our initial public offering.

Backlog

As we provide a mix of consumable products, capital goods, and repair parts and services, a majority of our business does not require lengthy lead times. The majority of the orders and commitments included in our backlog as of December 31, 2019 were scheduled to be delivered within six months. Our backlog was approximately $173 million at December 31, 2019 and approximately $276 million at December 31, 2018. Substantially all of the projects currently in our backlog are subject to change and/or termination at the option of the customer. In the case of a change or termination, the customer is generally required to pay us for work performed and other costs necessarily incurred as a result of the change or termination. It is difficult to predict how much of our current backlog will be delayed or terminated, or subject to changes, as well as our ability to collect termination or change fees.

Our consumable and repair products are predominantly off-the-shelf items requiring short lead-times, generally less than six months, and our related refurbishment or other services are also not contracted with significant lead time. The composition of our backlog is reflective of our mix of capital equipment, consumable products, aftermarket and other related items. Our bookings, which consist of written orders or commitments for our products or related services, during the years ended December 31, 2019 and 2018 were approximately $863 million and $1,116 million, respectively.

Customers

No customer represented more than 10% of consolidated revenue in any of the last three years.

Seasonality

A substantial portion of our business is not significantly impacted by seasonality. We do, however, generally experience lower sales and profitability in the fourth quarter due to a decrease in working days caused by calendar year-end holidays, and manufacturing and shipping delays caused by weather. In addition, given the geographic proximity of a number of our facilities to the Gulf Coast, we are subject to business interruptions caused by hurricanes and tropical storms. A small portion of the revenue we generate from select Canadian operations often benefits from higher first quarter activity levels, as operators take advantage of the winter freeze to gain access to remote drilling and production areas. Revenue exposed to this type of seasonality, however, comprised less than 5% of our overall revenue in 2019.

Competition

The markets in which we operate are highly competitive. We compete with a number of companies, some of which have greater financial and other resources than we do. The principal competitive factors in our markets are product quality and performance, price, breadth of product offering, availability of products and services, distribution capabilities, responsiveness to customer needs, reputation for service and intellectual property rights. We believe our products and services in each segment are at least comparable in price, quality, performance and dependability with our competitors' offerings. We seek to differentiate ourselves from our competitors by providing a rapid response to the needs of our customers, a high level of customer service, and innovative product development initiatives. Some of our competitors expend greater amounts of money on formal research and engineering efforts than we do. We believe, however, that our product development efforts are enhanced by the investment of management time we make to improve our customer service and to work with our customers on their specific product needs and challenges.

Although we have no single competitor across all of our product lines, the companies we compete with across the greatest number of our product lines include Cameron International Corporation (a subsidiary of Schlumberger), Gardner Denver Holdings, Inc., National Oilwell Varco, Inc., TechnipFMC plc, Tenaris S.A., Weatherford International, Ltd., and Weir SPM, a subsidiary of The Weir Group.

Patents, trademarks and other intellectual property

We currently hold multiple U.S. and international patents and trademarks and have a number of pending patent and trademark applications. Although in the aggregate our patents, trademarks and licenses are important to us, we do not regard any single patent, trademark or license as material to our business as a whole.

Raw materials

We acquire component parts, products and raw materials from suppliers, including foundries, forge shops, and original equipment manufacturers. The prices we pay for our raw materials may be affected by, among other things, energy, steel and other commodity prices, tariffs and duties on imported materials and foreign currency exchange rates. Certain of our component parts, products or raw materials, such as bearings, are only available from a limited number of suppliers. Please see “Risk factors—Risks related to our business—We are subject to the risk of supplier concentration.”

We may not be able to continue to purchase raw materials on a timely basis or at acceptable prices. We generally try to purchase raw materials from multiple suppliers so that we are not dependent on any one supplier, but this is not always possible.

Working capital

We fund our business operations through a combination of available cash and cash equivalents, short-term investments, and cash flow generated from operations. In addition, our senior secured revolving credit facility (the “Credit Facility”) is available for working capital needs. For a summary of our Credit Facility, please read “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources.”

Inventory

An important consideration for many of our customers in selecting a vendor is timely availability of the product. Customers may pay a premium for earlier or immediate availability because of the cost of delays in critical operations. We stock our consumable products in regional warehouses around the world so that these products are available for our customers when needed. This availability is especially critical for certain consumable products, causing us to carry substantial inventories for these products. For critical capital items in which demand is expected to be strong, we often build certain items before we have a firm order. Our having such goods available on short notice can be of great value to our customers. We also stock raw materials and components in order to be in a position to build products in response to market demand.

We typically offer our customers payment terms of 30 days, although during downturns in activity, customers often take 60 days or more to settle accounts. For sales into certain countries or for select customers, we might require payment upfront or credit support through a letter of credit. For longer term projects, we typically require progress payments as important milestones are reached. On average, we collect our receivables in about 60 days from shipment resulting in a substantial investment in accounts receivable. Likewise, standard terms with our vendors are 90 days. For critical items sourced from significant vendors, we have settled accounts more quickly, sometimes in exchange for early payment discounts.

Environmental, transportation, health and safety regulation

Our operations are subject to numerous stringent and complex laws and regulations governing the discharge of materials into the environment, health and safety aspects of our operations, or otherwise relating to human health and environmental protection. We also operate vehicles that are subject to federal and state transportation regulations. Failure to comply with these laws or regulations or to obtain or comply with permits 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.

The trend in environmental regulation has been to impose increasingly stringent restrictions and limitations on activities that may impact the environment, and thus, any changes in environmental laws and regulations or in enforcement policies that result in more stringent and costly waste handling, storage, transport, disposal, or remediation requirements could have a material adverse effect on our operations and financial position. Moreover, accidental releases or spills of regulated substances may occur in the course of our operations, and if so, we may incur significant costs and liabilities as a result of such releases or spills, including any third party claims for damage to property, natural resources or persons.

The following is a summary of the more significant existing environmental, health and safety laws and regulations to which our business operations are subject and for which compliance may have a material adverse impact on our capital expenditures, results of operations or financial position.

Hazardous substances and waste

The Resource Conservation and Recovery Act (the “RCRA”) and comparable state statutes, regulate the generation, transportation, treatment, storage, disposal and cleanup of hazardous and non-hazardous wastes. Under the auspices of the Environmental Protection Agency (the “EPA”), the individual states administer some or all of the provisions of the RCRA, sometimes in conjunction with their own, more stringent requirements. We are required to manage the transportation, storage and disposal of hazardous and non-hazardous wastes in compliance with the RCRA.

The Comprehensive Environmental Response, Compensation, and Liability Act (the “CERCLA”), also known as the Superfund law, imposes joint and several liability, without regard to fault or legality of conduct, on classes of persons who are considered to be responsible for the release of a hazardous substance into the environment. These persons include the owner or operator of the site where the release occurred, and anyone who disposed or arranged for the disposal of a hazardous substance released at the site. We currently own, lease, or operate numerous properties that have been used for manufacturing and other operations for many years. We also contract with waste removal services and landfills. These properties and the substances disposed or released on them may be subject to the CERCLA, RCRA and analogous state laws. Under such laws, we could be required to remove previously disposed substances and wastes, remediate contaminated property, or perform remedial operations to prevent future contamination. In addition, it is not uncommon for neighboring landowners and other third-parties to file claims for personal injury and property damage allegedly caused by hazardous substances released into the environment.

Water discharges

The Federal Water Pollution Control Act (the “Clean Water Act”) and analogous state laws impose restrictions and strict controls with respect to the discharge of pollutants, including spills and leaks of oil and other substances, into waters of the U.S. The discharge of pollutants into regulated waters is prohibited, except in accordance with the terms of a permit issued by the EPA or an analogous state agency. A responsible party includes the owner or operator of a facility from which a discharge occurs. The Clean Water Act and analogous state laws provide for administrative, civil and criminal penalties for unauthorized discharges and, together with the Oil Pollution Act of 1990, impose rigorous requirements for spill prevention and response planning, as well as substantial potential liability for the costs of removal, remediation, and damages in connection with any unauthorized discharges.

Air emissions

The Federal Clean Air Act (the “Clean Air Act”) and comparable state laws regulate emissions of various air pollutants through air emissions permitting programs and the imposition of other emission control requirements. In addition, the EPA has developed, and continues to develop, stringent regulations governing emissions of toxic air pollutants at specified sources. Non-compliance with air permits or other requirements of the Clean Air Act and associated state laws and regulations can result in the imposition of administrative, civil and criminal penalties, as well as the issuance of orders or injunctions limiting or prohibiting non-compliant operations.

Climate change

In December 2009, the EPA determined that emissions of carbon dioxide, methane and other “greenhouse gases” (“GHGs”) present an endangerment to public health and the environment because emissions of such gases are, according to the EPA, contributing to warming of the earth’s atmosphere and other climatic changes. Based on these findings, the EPA has begun adopting and implementing regulations to restrict emissions of greenhouse gases under existing provisions of the Clean Air Act.

In addition, the U.S. Congress has from time to time considered adopting legislation to reduce emissions of greenhouse gases and almost one-half of the states have already taken legal measures to reduce emissions of greenhouse gases primarily through the planned development of greenhouse gas emission inventories and/or regional greenhouse gas cap and trade programs. Most of these cap and trade programs work by requiring major sources of emissions, such as electric power plants, or major producers of fuels, such as refineries and gas processing plants, to acquire and surrender emission allowances. The number of allowances available for purchase is reduced each year in an effort to achieve the overall greenhouse gas emission reduction goal. In April 2016, the U.S. signed the Paris Agreement, which requires member countries to review and “represent a progression” in their nationally determined contributions, which set GHG emission reduction goals, every five years. In June 2017, President Trump announced that the U.S. will

withdraw from the Paris Agreement unless it is renegotiated. The State Department informed the United Nations of the U.S. withdrawal in August 2017. However, the earliest effective date of this withdrawal pursuant to the terms of the Paris Agreement is November 2020.

The adoption of legislation or regulatory programs to reduce emissions of greenhouse gases could require us to incur increased operating costs, such as costs to purchase and operate emissions control systems, to acquire emissions allowances or comply with new regulatory or reporting requirements. Any such legislation or regulatory programs could also increase the cost of consuming, and thereby reduce demand for, the oil and natural gas produced by our customers. Consequently, legislation and regulatory programs to reduce emissions of greenhouse gases could have an adverse effect on our business, financial condition and results of operations. Finally, it should be noted that some scientists have concluded that increasing concentrations of greenhouse gases in the earth's atmosphere may produce climate changes that have significant physical effects, such as increased frequency and severity of storms, droughts, and floods and other climatic events. If any such effects were to occur, they could have an adverse effect on our business, financial condition, results of operations and cash flow. For more information, please read "Risk Factors-Climate change legislation or regulations restricting emissions of greenhouse gases could increase our operating costs or reduce demand for our products."

Hydraulic fracturing

A significant percentage of our customers' oil and natural gas production is being developed from unconventional sources, such as hydrocarbon shales. These formations require hydraulic fracturing completion processes to release the oil or natural gas from the rock so that it can flow through the formations. Hydraulic fracturing involves the injection of water, sand and chemicals under pressure into the formation to stimulate production. A number of federal agencies, including the EPA and the U.S. Department of Energy, are analyzing, or have been requested to review, a variety of environmental issues associated with shale development, including hydraulic fracturing. Moreover, various political groups are requesting a ban on hydraulic fracturing on federal lands. In addition, some states have adopted, and other states are considering adopting, regulations that could impose more stringent disclosure and/or well construction requirements on hydraulic fracturing operations. Local governments may also seek to adopt ordinances within their jurisdictions regulating the time, place and manner of drilling activities in general or hydraulic fracturing activities in particular, in some cases banning hydraulic fracturing entirely. We cannot predict whether any such legislation will ever be enacted and if so, what its provisions would be. If additional levels of regulation and permits were required through the adoption of new laws and regulations at the federal or state level, that could lead to delays, increased operating costs and process prohibitions for our customers that could reduce demand for our products and services, which would have a material adverse impact on our revenues, results of operations and cash flows. For more information, please read "Risk Factors-Potential legislation or regulations restricting the use of hydraulic fracturing could reduce demand for our products."

Employee health and safety

We are subject to a number of federal and state laws and regulations, including the federal Occupational Safety and Health Act ("OSHA") and comparable state statutes, establishing requirements to protect the health and safety of workers. In addition, the OSHA hazard communication standard, the EPA community right-to-know regulations under Title III of the federal Superfund Amendment and Reauthorization Act and comparable state statutes require that information be maintained concerning hazardous materials used or produced in our operations and that this information be provided to employees, state and local government authorities and the public. Substantial fines and penalties can be imposed and orders or injunctions limiting or prohibiting certain operations may be issued in connection with any failure to comply with laws and regulations relating to worker health and safety. For more information, please read "Risk Factors-Potential legislation or regulations restricting the use of hydraulic fracturing could reduce demand for our products."

Offshore regulation

Events in recent years have heightened environmental and regulatory concerns about the offshore oil and natural gas industry. From time to time, governing bodies may propose and have enacted legislation or regulations that may materially limit or prohibit offshore drilling in certain areas. If laws are enacted or other governmental actions are taken that delay, restrict or prohibit offshore operations in our customers' expected areas of operation, our business could be materially adversely affected. New or newly interpreted regulations and other regulatory initiatives by U.S. governmental agencies have created significant uncertainty regarding the outlook for offshore activity in the U.S. Gulf of Mexico and possible implications for regions outside of the U.S. Gulf of Mexico. Third party challenges to industry operations in the U.S. Gulf of Mexico may also serve to further delay or restrict activities. If the new regulations, operating procedures and possibility of increased legal liability are viewed by our current or future customers as a significant impairment to expected profitability on projects, then they could discontinue or curtail their offshore operations thereby reducing demand for our offshore products and services.

We also operate in non-U.S. jurisdictions, which may impose similar regulations, prohibitions or liabilities.

Operating risk and insurance

We maintain insurance coverage of types and amounts that we believe to be customary and reasonable for companies of our size and with similar operations. In accordance with industry practice, however, we do not maintain insurance coverage against all of the operating risks to which our business is exposed. Therefore, there is a risk our insurance program may not be sufficient to cover any particular loss or all losses. Currently, our insurance program includes coverage for, among other things, general liability, umbrella liability, sudden and accidental pollution, personal property, vehicles, workers' compensation, and employer's liability coverage.

Employees

As of December 31, 2019, we had approximately 2,300 employees. Of our total employees, approximately 1,800 were in the U.S., 200 were in the United Kingdom, 100 were in Germany, 100 were in Canada and 100 were in all other locations. We are not a party to any collective bargaining agreements, other than in our Hamburg, Germany and Monterrey, Mexico facilities. We consider our relations with our employees to be satisfactory.

Item 1A. Risk Factors

Risks related to our business

We derive a substantial portion of our revenues from companies in or affiliated with the oil and natural gas industry, a historically cyclical industry, with levels of activity that are significantly affected by the levels and volatility of oil and natural gas prices. As a result, this cyclicality has caused, and will continue to cause fluctuations in our revenues and results of our operations.

We have experienced, and will continue to experience, fluctuations in revenues and operating results due to economic and business cycles. The willingness of oil and natural gas operators to make capital expenditures to explore for and produce oil and natural gas, the need of oilfield services companies to replenish consumable parts and the willingness of these customers to invest in capital equipment depends largely upon prevailing industry conditions that are influenced by numerous factors over which we have no control. Such factors include:

- supply of and demand for oil and natural gas;
- prices, and expectations about future prices, of oil and natural gas;
- ability or willingness of the Organization of Petroleum Exporting Countries ("OPEC") and other major producers to set and maintain production limits;
- cost of exploring for, developing, producing and delivering oil and natural gas;
- levels of drilling and completions activity;
- expected decline in rates of current and future production, or faster than anticipated declines in production;
- discovery rates of new oil and natural gas reserves;
- ability of our customers to access new markets or areas of production or to continue to access current markets, including as a result of trade restrictions;
- weather conditions, including hurricanes, that can affect oil and natural gas operations over a wide area;
- natural disasters, catastrophes or other events resulting in severe property damage;
- more stringent environmental regulations;
- prohibitions, moratoriums or similar limitations on drilling or hydraulic fracturing activity resulting in a cessation or disruption of operations;
- domestic and worldwide economic conditions;
- financial stability of our customers and other industry participants;
- political instability in oil and natural gas producing countries, including recent tensions between the United States and Middle East countries;
- shareholder activism or activities by non-governmental organizations to restrict the exploration, development and production of oil and natural gas;
- conservation measures and technological advances affecting energy consumption;
- price and availability of alternative energy resources and fuels;
- uncertainty in capital and commodities markets, and the ability of oil and natural gas companies to raise equity capital and debt financing;
- interest rates and the cost of capital; and
- merger and divestiture activity among oil and natural gas producers, drilling contractors and oilfield service companies.

The oil and natural gas industry experienced a prolonged reduction in the overall level of exploration and development activities in connection with the decline in commodity prices that began in 2014. As a result, there was a reduction in the demand for our products and services, downward pressure on the prices that we charge and ultimately an adverse impact on our business. A significant decrease in crude oil prices in the fourth quarter of 2018 was followed by a slight increase in 2019. It is uncertain whether commodity prices will maintain current levels, decline or increase in 2020. Furthermore, there can be no assurance that the demand or pricing for oil and natural gas will follow historic patterns or recover meaningfully in the near term. Declines in oil and natural gas prices, decreased levels of exploration,

development, and production activity, and the willingness of customers to invest in their equipment relative to historical norms may negatively affect:

- revenues, cash flows, and profitability;
- the ability to maintain or increase borrowing capacity;
- the ability to refinance our Senior Unsecured Notes;
- the ability to obtain additional capital to finance our business and the cost of that capital;
- the ability to collect outstanding amounts from our customers; and
- the ability to attract and retain skilled personnel to maintain our business or that will be needed in the event of an upturn in the demand for our products.

The markets in which we operate are highly competitive, and some of our competitors hold substantial market share and have substantially greater resources than we do. Furthermore, some of our product lines have a number of regional or local competitors. We may not be able to compete successfully in this environment.

The markets in which we operate are highly competitive and our products and services are subject to competition from significantly larger businesses. We have several competitors that are large national and multinational companies that have longer operating histories, greater financial, technical and other resources and greater name recognition than we do. In addition, we compete with many smaller companies 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. In addition, several of our competitors provide a much broader array of services, and have a stronger presence in more geographic markets. Our larger competitors are able to use their size and purchasing power to seek economies of scale and pricing concessions. Furthermore, some of our customers are our competitors and have in the past ceased buying from us, and may do the same in the future. We also have competitors outside of the U.S. with lower structural costs due to labor and raw material cost in and around their manufacturing centers, and prices based on foreign currencies. Accordingly, currency fluctuations may cause U.S. dollar-priced products to be less competitive than our competitors' products that are priced in other currencies. Moreover, our competitors may utilize available capacity during a period of depressed energy prices to gain market share.

New competitors have also entered the markets in which we compete. We consider product quality, price, breadth of product offering, availability of products and services, performance, distribution capabilities, responsiveness to customer needs and reputation for service to be the primary competitive factors. Competitors may be able to offer more attractive pricing, duplicate strategies, or develop enhancements to products that offer performance features that are superior to our products. In addition, we may not be able to retain key employees of entities that we acquire in the future and those employees may choose to compete against us following a contractually agreed period of non-competition that is permitted under the law. Competitive pressures, including those described above, and other factors could adversely affect our competitive position, resulting in a loss of market share or decreases in prices. For more information about our competitors, please read "Business—Competition."

Given the uncertainty related to long-term commodity prices and associated customer demand, we hold excess or obsolete inventory and have experienced a reduction in gross margins and financial results.

We cannot accurately predict what or how many products our customers will need in the future. Orders are placed with our suppliers based on forecasts of customer demand and, in some instances, we may establish buffer inventories to accommodate anticipated demand. At certain times, we have built capital equipment before receiving customer orders, and we have kept our standardized downhole protection systems and certain of our flow iron products in stock and readily available for delivery on short notice from customers. Our forecasts of customer demand are based on multiple assumptions, which have introduced errors into the estimates. In addition, many of our suppliers, such as those for certain of our standardized valves, require a longer lead time to provide products than our customers demand for delivery of our finished products. If we underestimate customer demand or if insufficient manufacturing capacity is available, we would miss revenue opportunities and potentially lose market share and damage our customer relationships. Conversely, if we overestimate customer demand, we would allocate resources to the purchase of material or manufactured products that we are not be able to sell when we expect to, if at all. As a result, we would hold excess or obsolete inventory, which would reduce gross margin and adversely affect financial results upon writing down the value of inventory. In addition, any future significant cancellations or deferrals of product orders or the return of previously sold products could materially and adversely affect profit margins, increase product obsolescence and restrict our ability to fund our operations.

We may not realize revenue on our current backlog due to customer order reductions, cancellations or acceptance delays, which may negatively impact our financial results.

Uncertainty regarding demand for our customers' services has resulted in order reductions, cancellations and acceptance delays in the past, and we may experience more of these in the future. We may be unable to collect revenue for all of the orders reflected in our backlog, or we may be unable to collect cancellation penalties, to the extent we have the right to impose them, or the revenues may be pushed into future periods. In addition, customers who are more highly leveraged or otherwise unable to pay their creditors in the ordinary course of business may become insolvent or be unable to operate as a going concern. We may be unable to collect amounts due or damages we are awarded from these customers, and our efforts to collect such amounts may damage our customer relationships. Our results of operations and overall financial condition may be negatively impacted by a reduction in revenue as a result of these circumstances.

The coronavirus outbreak in China could adversely affect our results of operations.

During January 2020, a strain of coronavirus was reported to have surfaced in Wuhan, China. In an effort to halt the outbreak, the Chinese government placed significant restrictions on travel within China and closed certain businesses in the region, and governments and other parties outside of China have halted or sharply curtailed the movement of people, goods and services to and from China. Certain of our key suppliers, including for our valves and coiled tubing product offerings, are located in China. In addition, we view China as a growth market for our intervention product offering. The coronavirus outbreak is adversely impacting our operations. If the impact of the coronavirus outbreak continues for an extended period, it could materially adversely impact our supply chain and the growth of our revenues from China. In addition, concerns about the coronavirus and its potential impact on the Chinese and global economy are creating uncertainty about the overall demand for oil, which could have negative implications for the demand of our products. At this point, we cannot accurately predict what effects these conditions will have on our business, which will depend on, among other factors, the ultimate geographic spread of the virus, the duration of the outbreak and travel restrictions and business closures imposed by the Chinese government or by others with respect to China.

Tariffs imposed by the United States government could continue to adversely affect our results of operations.

The President of the United States has issued proclamations imposing tariffs on imports of selected products, including those sourced from China. In particular, the U.S. government has imposed global tariffs on certain imported steel and aluminum products pursuant to Section 232 of the Trade Expansion Act of 1962, as well as tariffs on $370 billion worth of Chinese imports pursuant to Section 301 of the Trade Act of 1974. In response, China and other countries have imposed retaliatory tariffs on a wide range of U.S. products, including those containing steel and aluminum. Our efforts to mitigate the impact of these tariffs on raw materials through the diversification of our supply chain may not be sufficiently successful. Furthermore, a prolonged imposition of tariffs on our goods could have a significant adverse effect on our results of operations.

The industry in which we operate is undergoing continuing consolidation that may impact our results of operations.

Some of our largest customers have consolidated and are using their size and purchasing power to achieve economies of scale and pricing concessions. This consolidation could result in reduced capital spending by such customers or decreased demand for our products and services. If we cannot maintain sales levels for customers that have consolidated or replace such revenues with increased business activities from other customers, this consolidation activity could have a significant negative impact on our results of operations or financial condition. We are unable to predict what effect consolidations in the industry may have on prices, capital spending by customers, selling strategies, competitive position, customer retention or our ability to negotiate favorable agreements with customers.

A portion of our business is driven by our customers' spending on capital equipment such as drilling rigs. As a result of a greater focus by our customers on maintaining capital discipline, spending has declined and may remain at a low level despite any increase in commodity prices.

In recent years, there has been an oversupply of capital equipment in the oil and natural gas industry and a corresponding reduction in the demand for construction of these products. More recently, our customers and their investors have adopted business strategies placing significant emphasis on capital discipline that may limit the level of their future spending. As a result, we cannot provide any assurance that our capital equipment sales will increase if there is an increase in commodity prices.

Technological advances have rendered drilling more efficient, reducing the amount of capital equipment required to drill the same number of wells and the demand for our products.

New techniques and technological advances have reduced the number of days required to drill wells. The number of days required for a drilling rig to be on a site to drill a well has in many areas been reduced by at least half over the last several years. This has exacerbated the oversupply of drilling rigs and is likely to lengthen the time until significant capital investment is required by our drilling company customers. These advances are also expected to result in a lower overall level of capital investment when the current generation of drilling rigs is required to be replaced.

We may be impacted by disruptions in the political, regulatory, economic and social conditions of the foreign countries in which we are expected to conduct business.

Instability and unforeseen changes in the international markets in which we conduct business, including economically and politically volatile areas such as North Africa, the Middle East, Latin America and the Asia Pacific region, could cause or contribute to factors that have an adverse effect on the demand for the products and services we provide. For example, we have previously transferred management and operations from certain Latin American countries, due to the presence of political turmoil, to other countries in the region that are more politically stable.

In addition, worldwide political, economic, and military events have contributed to oil and natural gas price volatility and are likely to continue to do so in the future. Depending on the market prices of oil and natural gas, oil and natural gas exploration and development companies may cancel or curtail their drilling programs, thereby reducing demand for our products and services.

Our common stock price has been volatile, and we expect it to continue to remain volatile in the future.

The market price of common stock of companies engaged in the oil and natural gas equipment manufacturing and services industry has been volatile. Likewise, the market price of our common stock has varied significantly in the past. For example, in 2019, the market price of our common stock reached a high of $7.00 per share on February 12, 2019 and a low of $0.88 per share on November 18, 2019. We expect it to continue to remain volatile given the cyclical nature of our industry.

We may be adversely affected by developments relating to the U.K.'s departure from the European Union.

The U.K. held a referendum on June 23, 2016 in which a majority voted for the U.K.'s withdrawal from the European Union ("EU"), which is commonly referred to as Brexit. As a result of this vote, a process of negotiation began to determine the terms of Brexit, which resulted in the EU-U.K. Withdrawal Agreement. The U.K. withdrew from the EU on January 31, 2020, consistent with the terms of the EU-U.K. Withdrawal Agreement. The terms of that agreement provide for a "transition period", from January 31, 2020 to December 31, 2020, during which the trading relationship between the EU and the U.K. will remain the same while the U.K. and the EU try to negotiate an agreement regarding their future trading relationship. The effects of the Brexit vote and the perceptions as to the impact of the withdrawal of the U.K. from the EU may adversely affect business activity and economic and market conditions in the U.K., the Eurozone, and globally and could contribute to instability in global financial and foreign exchange markets, including volatility in the value of the pound sterling and the euro. In addition, Brexit could lead to additional political, legal and economic instability in the EU. Any of these effects of Brexit, and others we cannot anticipate, could adversely affect the value of our assets in the U.K., as well as our business, financial condition, results of operations and cash flows.

We have a significant amount of indebtedness. Our leverage and debt service obligations restrict our operations and make us more vulnerable to adverse economic conditions.

We currently have a substantial amount of indebtedness, including $400.0 million of 6.25% senior unsecured notes due October 2021. Our level of indebtedness and restrictions in our debt agreements have significant consequences for our future prospects, including limiting our liquidity and flexibility in obtaining additional financing. In addition, we may have difficulty making debt service payments on our indebtedness as such payments become due. Furthermore, our $300.0 million Credit Facility, which had no outstanding balance as of December 31, 2019, will mature prior to the maturity date of our Senior Notes. Our level of indebtedness and the terms of our debt agreements affect our operations in several ways, including the following:

- requiring us to dedicate a substantial portion of our cash flow from operations to servicing existing debt obligations;
- increasing our vulnerability to general adverse economic and industry conditions;
- limiting our ability to borrow funds, dispose of assets, pay dividends and make certain investments;
- reducing our flexibility to plan for, and react to, changes in the economy and in our industry; and

- impairing our ability to obtain additional financing in the future for working capital, capital expenditures, acquisitions or other general corporate purposes.

Our ability to pay our expenses, and fund our working capital needs and debt obligations, will depend on our future performance, which will be affected by financial, business, economic, regulatory and other factors that are outside of our control. As a result of these factors, our business may not generate sufficient cash flow from operations to enable us to meet our debt obligations. In addition, under the terms of our Credit Facility, any failure to comply with the financial or other covenants of our indebtedness would result in an event of default, which would cause some or all of our indebtedness to become immediately due and payable and have a material adverse effect on our business, financial condition and results of operations.

The indenture governing our notes and our Credit Facility contain operating and financial restrictions that restrict our business and financing activities.

Our indenture and Credit Facility contain, and any future indebtedness we incur may contain, a number of restrictive covenants that will impose significant operating and financial restrictions on us, including restrictions on our ability to, among other things:

- pay dividends on, purchase or redeem our common stock;
- make certain investments;
- incur or guarantee additional indebtedness or issue certain types of equity securities;
- create certain liens;
- sell assets, including equity interests in our restricted subsidiaries;
- redeem or prepay subordinated debt;
- restrict dividends or other payments of our restricted subsidiaries;
- consolidate, merge or transfer all or substantially all of our assets;
- engage in transactions with affiliates;
- create unrestricted subsidiaries; or
- execute our acquisition strategy.

Our Credit Facility also contains covenants, which, among other things, require us in certain circumstances, on a consolidated basis, to maintain specified financial ratios or conditions. As a result of these covenants, we will be limited in the manner in which we conduct our business, and we may be unable to engage in favorable business activities or finance future operations or capital needs. Our ability to borrow under the Credit Facility and comply with some of the covenants, ratios or tests contained in our indenture and Credit Facility may be affected by events beyond our control. If market or other economic conditions deteriorate, and there is a decrease in our accounts receivable and inventory, our ability to borrow under our Credit Facility will be reduced and our ability to comply with these covenants, ratios or tests may be impaired. A failure to comply with the covenants, ratios or tests would result in an event of default, which, if not cured or waived, would cause some or all of our indebtedness to become immediately due and payable and have a material adverse effect on our business, financial condition and results of operations.

A further downgrade in our credit ratings could negatively impact our cost of and ability to access the capital and credit markets.

Major U.S. credit rating agencies have recently downgraded our senior unsecured debt ratings and we continue to be at risk for further downgrades. Our ability to access the capital and credit markets or to otherwise obtain sufficient financing is adversely affected by the current credit ratings of our senior unsecured debt by major U.S. credit rating agencies. These ratings, or further downgrades, may increase the cost of future debt, and potentially require us to post letters of credit for certain obligations.

Our exposure to currency exchange rate fluctuations may result in fluctuations in our cash flows and could have an adverse effect on our results of operations.

Fluctuations in currency exchange rates could be material to us depending upon, among other things, our manufacturing locations and the sourcing for our raw materials and components. In particular, we are sensitive to fluctuations in currency exchange rates between the U.S. dollar and each of the Canadian dollar, the British pound sterling, the Euro, and, to a lesser degree, the Mexican peso, the Chinese yuan, the Singapore dollar, and the Saudi riyal. There may be instances in which costs and revenue will not be matched with respect to currency denomination. As a result, to

the extent that we continue our expansion on a global basis, management expects that increasing portions of revenue, costs, assets and liabilities will be subject to fluctuations in foreign currency valuations. We may experience economic loss and a negative impact on earnings or net assets solely as a result of foreign currency exchange rate fluctuations. Further, the markets in which we operate could restrict the removal or conversion of the local currency, resulting in our inability to hedge against these risks.

Our ability to access the capital and credit markets to raise capital on favorable terms is limited by our debt level and industry conditions.

Our ability to access the capital and credit markets is limited by, among other things, oil and natural gas prices, our existing capital structure, our credit ratings, the state of the economy, the health of the drilling and overall oil and natural gas industry, trends among investors to avoid companies associated with the production of hydrocarbon products, and the liquidity of the capital markets. Many of the factors that affect our ability to access capital markets are outside of our control. Recent trends and conditions in the capital and credit markets with respect to the energy sector limit our ability to access these markets or may significantly increase our cost of capital. Low levels of exploration and drilling activity have caused and may continue to cause lenders to increase the interest rates under our credit facilities, enact tighter lending standards, refuse to refinance existing debt on acceptable terms or at all and may reduce or cease to provide funding. If we are unable to access the capital or credit markets on terms acceptable to us, it could have a material adverse effect on our business, financial condition, results of operations, cash flows and liquidity, particularly in respect of our ability to repay or refinance our debt, including our senior notes due October 2021.

During the years ended December 31, 2019, 2018 and 2017 we incurred impairment charges, and we may incur additional impairment charges in the future.

For the years ended December 31, 2019, 2018 and 2017, we recognized goodwill impairments totaling $471.0 million, $298.8 million, and $68.0 million, respectively, which are included in “Impairments of goodwill, intangible assets, property and equipment” in the consolidated statements of comprehensive loss. Following these impairment charges, there is no remaining goodwill balance for any of our reporting units.

We evaluate our long-lived assets, including property and equipment and intangible assets with definite lives, for potential impairment whenever events or changes in circumstances indicate that the carrying amount of a long-lived asset may not be recoverable. In performing our review for impairment, future cash flows expected to result from the use of the asset and its eventual value upon disposal are estimated. If the undiscounted future cash flows are less than the carrying amount of the assets, there is an indication that the asset may be impaired. The amount of the impairment is measured as the difference between the carrying value and the estimated fair value of the asset. The fair value is determined either through the use of an external valuation, or by means of an analysis of discounted future cash flows based on expected utilization.

For the year ended December 31, 2019, we recognized property and equipment impairment charges totaling $7.9 million. For the years ended December 31, 2019, 2018 and 2017, we recognized intangible asset impairment charges totaling $53.5 million, $64.7 million and $1.1 million, respectively. These charges are included in “Impairments of goodwill, intangible assets, property and equipment” in the consolidated statements of comprehensive loss. See Note 6 *Property and Equipment* and Note 7 *Goodwill and Intangible Assets* for further information related to these charges.

If we determine that the carrying value of our long-lived assets is less than their fair value, we would be required to record additional charges in the future, which could adversely affect our financial condition and results of operations.

Our executive officers and certain key personnel are critical to our business and these officers and key personnel may not remain with us in the future.

Our future success depends in substantial part on our ability to hire and retain our executive officers and other key personnel. In particular, we are highly dependent on our executive officers. These individuals possess extensive expertise, talent and leadership, and they are critical to our success. The diminution or loss of the services of these individuals, or other integral key personnel affiliated with entities that we acquire in the future, could have a material adverse effect on our business. Furthermore, we may not be able to enforce all of the provisions in the agreements we have entered into with our executive officers and such agreements may not otherwise be effective in retaining such individuals.

We may be unable to employ a sufficient number of skilled and qualified workers.

The delivery of our products and services requires personnel with specialized skills and experience. Our ability to be productive and profitable depends upon our ability to employ and retain skilled workers. During periods of low activity in our industry, we have reduced the size of our labor force to match declining revenue levels, and other employees have chosen to leave in order to find more stable employment. This causes us to lose skilled personnel, the absence

of which could cause us to incur quality, efficiency and deliverability issues in our operations, or delay our response to an upturn in the market. During periods of increasing activity in our industry, our ability to expand our operations depends in part on our ability to increase the size of our skilled labor force. In addition, during those periods, the demand for skilled workers is high, the supply is limited and the cost to attract and retain qualified personnel increases, especially for skilled workers. For example, we have in the past experienced shortages of engineers, mechanical assemblers, machinists and welders, which in some instances slowed the productivity of certain of our operations. Furthermore, a significant increase in the wages paid by competing employers could result in a reduction of our skilled labor force, increases in the wage rates that we must pay, or both. If any of these events were to occur, our ability to respond quickly to customer demands may be inhibited and our growth potential could be impaired.

We rely on relationships with key suppliers to operate and maintain our business.

Certain of our product lines depend on a limited number of third party suppliers. In some cases, the suppliers own the intellectual property rights to the products we sell, or possess the technology or specialized tooling required to manufacture them. As a result of this concentration in part of our supply chain, our business and operations may be negatively affected if our key suppliers were to experience significant disruptions affecting the price, quality, availability or timely delivery of their products, or if they were to decide to terminate their relationships with us. For example, we have a limited number of suppliers for our bearings product lines and certain of our valve product lines. The limited number of these suppliers can restrict the quantity and timeliness of customer deliveries. Recently, some of our suppliers have imposed more stringent payment terms and conditions on us based on our perceived risk as a counterparty. The partial or complete loss of any one of our key suppliers, or a significant adverse change in the relationship with any of these suppliers, through consolidation or otherwise, would limit our ability to manufacture and sell certain of our products.

Our business depends upon our ability to obtain key raw materials and specialized equipment from suppliers. Increased costs of raw materials and other components may result in increased operating expenses.

Should our suppliers be unable to provide the necessary raw materials or finished products or otherwise fail to deliver such materials and products timely and in the quantities required, resulting delays in the provision of products or services to customers could have a material adverse effect on our business. In particular, because many of our products are manufactured out of steel, we are particularly susceptible to fluctuations in steel prices. Our results of operations may be adversely affected by our inability to manage the rising costs and availability of raw materials and components used in our products.

If suppliers cannot provide adequate quantities of materials to meet customers' demands on a timely basis or if the quality of the materials provided does not meet established standards, we may lose customers or experience lower profitability.

Some of our customer contracts require us to compensate customers if we do not meet specified delivery obligations. We rely on suppliers to provide required materials and in many instances these materials must meet certain specifications. Managing a geographically diverse supply base poses inherently significant logistical challenges. Furthermore, the ability of third party suppliers to deliver materials to our specifications may be affected by events beyond our control. As a result, there is a risk that we could experience diminished supplier performance resulting in longer than expected lead times and/or product quality issues. For example, in the past, we have experienced issues with the quality of certain forgings used to produce materials utilized in our products. As a result, we were required to seek alternative suppliers for those forgings, which resulted in increased costs and a disruption in our supply chain. We have also been required in certain circumstances to provide better economic terms to some of our suppliers in exchange for their agreement to increase their capacity to satisfy our supply needs. The occurrence of any of the foregoing factors would have a negative impact on our ability to deliver products to customers within committed time frames.

We may not be able to satisfy technical requirements, testing requirements, code requirements or other specifications under contracts and contract tenders.

Many of our products are used in harsh environments and severe service applications. Our contracts with customers and customer requests for bids often set forth detailed specifications or technical requirements (including that they meet certain industrial code requirements, such as API, ASME or similar codes, or that our processes and facilities maintain ISO or similar certifications) for our products and services, which may also include extensive testing requirements. We anticipate that such code testing requirements will become more common in our contracts. We cannot assure that our products or facilities will be able to satisfy the specifications or requirements, or that we will be able to perform the full-scale testing necessary to prove that the product specifications are satisfied in future contract bids or under existing contracts, or that the costs of modifications to our products or facilities to satisfy the specifications and testing will not adversely affect our results of operations. If our products or facilities are unable to satisfy such

requirements, or we are unable to perform or satisfy any required full-scale testing, we may suffer reputational harm and our customers may cancel their contracts and/or seek new suppliers, and our business, results of operations or financial position may be adversely affected.

A failure or breach of our information technology infrastructure, including as a result of cyber attacks or failures of data protection measures, could adversely impact our business and results of operations and expose us to potential liabilities.

The efficient operation of our business is dependent on our information technology ("IT") systems. Accordingly, we rely upon the capacity, reliability and security of our IT hardware and software infrastructure and our ability to expand and update this infrastructure in response to our changing needs. Despite our implementation of security measures, our IT systems are vulnerable to computer viruses, natural disasters, incursions by intruders or hackers, failures in hardware or software, power fluctuations, cyber terrorists and other similar disruptions. In certain instances, our IT systems have failed to perform as anticipated, resulting in disruptions in operations and other adverse consequences. Should our IT systems materially fail in the future, it may result in numerous other adverse consequences, including reduced effectiveness and efficiency of our operations, inappropriate disclosure of confidential information, increased overhead costs, and loss of intellectual property, which could lead to liability to third parties or otherwise and have a material adverse effect on our business and results of operations. Our insurance may not protect us against such occurrences or our insurers may refuse to make payment. In addition, we may be required to incur significant costs to prevent damage caused by these disruptions or security breaches in the future.

In addition, recent laws and regulations governing data privacy and the unauthorized disclosure of confidential information, including the European Union General Data Protection Regulation and laws enacted in certain U.S. jurisdictions, pose increasingly complex compliance challenges and potentially elevate our costs. Any failure by us to comply with these laws and regulations, including as a result of a security or privacy breach, could result in significant penalties and liabilities for us. Additionally, if we acquire a company that has violated or is not in compliance with applicable data protection laws, we may incur significant liabilities and penalties as a result.

Our success depends on our ability to implement new technologies and services more efficiently and quickly than our competitors.

Our success depends on our ability to develop and implement new product designs and improvements that meet our customer's needs in a manner equal to or more effective than those offered by our competitors. If we are not able to continue to provide new and innovative services and technologies in a manner that allows us to meet evolving industry requirements at prices acceptable to our customers, our financial results would be negatively affected. In addition, some of our competitors are large national and multinational companies that we believe are able to devote greater financial, technical, manufacturing and marketing resources to research and develop more or better systems, services and technologies than we are able to do. Moreover, as a result of the currently depressed levels of customer activity, we may be unable to allocate sufficient amounts of capital to research and new product development activities, which may limit our ability to compete in the market and generate revenue.

Our success will be affected by the use and protection of our proprietary technology. Due to the limitations of our intellectual property rights, our ability to exclude others from the use of our proprietary technology may be reduced. Furthermore, we may be adversely affected by disputes regarding intellectual property rights.

Our success will be affected by our development and implementation of new product designs and improvements and by our ability to protect and maintain intellectual property assets related to these developments. Although in many cases our products are not protected by any registered intellectual property rights, in some cases we rely on a combination of patents and trade secret laws to establish and protect this proprietary technology.

We currently hold multiple U.S. and international patents and have several pending patent applications associated with our products and processes. Patent rights give the owner of a patent the right to exclude third parties from making, using, selling, and offering for sale the inventions claimed in the patents in the applicable country. Patent rights do not necessarily grant the owner of a patent the right to practice the invention claimed in a patent, but merely the right to exclude others from practicing the invention claimed in the patent. It is possible that a third party will design around our patents. Furthermore, patent rights have strict territorial limits. Some work is conducted in international waters and, therefore, does not fall within the scope of any country's patent jurisdiction. As a result, we would be limited in the degree to which we can enforce our patents against infringement occurring in international waters and other "non-covered" territories. Also, we do not have patents in every jurisdiction in which we conduct business and our patent portfolio will not protect all aspects of our business and may relate to obsolete or unusual methods, which would not prevent third parties from entering the same market.

In addition, by customarily entering into confidentiality and/or license agreements with our employees, customers and potential customers and suppliers, we attempt to limit access to and distribution of our technology. Our efforts to maintain information as trade secrets or proprietary technology are subject to determination by the U.S. judicial system and applicable international judicial systems and may not be successful. Furthermore, our rights in our confidential information, trade secrets, and confidential know-how will not prevent third parties from independently developing similar information. Publicly available information, including information in expired issued patents, published patent applications, and scientific literature, can also be used by third parties to independently develop technology. We cannot provide assurance that this independently developed technology will not be equivalent or superior to our proprietary technology.

From time to time, our competitors have infringed upon, misappropriated, circumvented, violated or challenged the validity or enforceability of our intellectual property. In the future, we may not be able to adequately protect or enforce our intellectual property rights. Our failure or inability to protect our proprietary information or successfully oppose intellectual property challenges against us could materially and adversely affect our competitive position. Moreover, third parties from time to time may initiate litigation against us by asserting that the conduct of our business infringes, misappropriates or otherwise violates their intellectual property rights. For example, in 2017, one of our subsidiaries filed an action seeking a declaratory judgment action of non-infringement against Tenaris Coiled Tubes, LLC. Tenaris subsequently filed counterclaims against our subsidiary and us alleging infringement on certain of its patents. We may not prevail in any such legal proceedings, and our products and services may be found to infringe, impair, misappropriate, dilute or otherwise violate the intellectual property rights of others. Any legal proceeding concerning intellectual property is likely to be protracted and costly and is inherently unpredictable, and could have a material adverse effect on our business, regardless of its outcome. Further, our intellectual property rights may not have the value expected and such value is expected to change over time as new products are designed and improved.

We may incur liabilities, fines, penalties or additional costs, or we may be unable to sell to certain customers if we do not maintain safe operations.

If we fail to comply with safety regulations or maintain an acceptable level of safety at our facilities, we will incur fines, penalties or other liabilities, or we may be held criminally liable. In addition, a portion of our work force is made up of newer employees who are less experienced and therefore more prone to injury. As a result, new employees require ongoing training and a higher degree of oversight. We incur additional costs to encourage training and ensure proper oversight of these shorter service employees. Moreover, we incur costs in connection with equipment upgrades, or other costs to facilitate our compliance with safety regulations. Failure to maintain safe operations or achieve certain safety performance metrics could disqualify us from doing business with certain customers, particularly major oil companies.

During periods of high market activity, if we cannot continue operating our manufacturing facilities at adequate levels, our results of operations could be adversely affected.

We operate a number of manufacturing facilities. The equipment and management systems necessary for such operations may break down, perform poorly or fail, resulting in fluctuations in manufacturing efficiencies. Such fluctuations may affect our ability to deliver quality products to our customers on a timely basis.

If we are unable to continue operating successfully overseas or to successfully expand into new international markets, our revenues may decrease.

For the year ended December 31, 2019, we derived approximately 30% of our revenue from sales outside the U.S. (based on product destination). In addition, one of our key growth strategies is to market products in international markets. We may not succeed in selling, marketing, branding, and distributing products to generate revenues in these new international markets.

If we fail to maintain an effective system of internal controls, we may not be able to accurately report our financial results or prevent fraud.

Effective internal control over financial processes and reporting are necessary for us to provide reliable financial reports that effectively prevent fraud and operate successfully. Our efforts to maintain internal control systems have not been successful in the past. The existence of a material weakness in the future or a failure of our internal controls could affect our ability to obtain financing or increase the cost of any such financing. The identification of a material weakness in the future could also cause investors to lose confidence in the reliability of our financial statements and could result in a decrease in the value of our common stock. In addition, the entities that we acquire in the future may not maintain effective systems of internal control or we may encounter difficulties integrating our system of internal controls with those of acquired entities. If we are unable to maintain effective internal controls and, as a result, fail to provide reliable financial reports and effectively prevent fraud, our reputation and operating results would be harmed.

Facility consolidations or expansions may subject us to risks of operating inefficiencies, construction delays and cost overruns.

We have consolidated and may continue to consolidate facilities to achieve operating efficiencies and reduce costs. These facility consolidations may be delayed and cause us to incur increased costs, product or service delivery delays, decreased responsiveness to customer needs, liabilities under terms and conditions of sale or other operational inefficiencies, or may not provide the benefits we anticipate. We may lose key personnel and operational knowledge that might lead to quality issues or delays in production.

In the future, we may grow our businesses through the construction of new facilities and expansions of our existing facilities. These projects, and any other capital asset construction projects that we may commence, are subject to similar risks of delay or cost overruns inherent in any construction project resulting from numerous factors, including the following:

- difficulties or delays in obtaining land;
- shortages of key equipment, materials or skilled labor;
- unscheduled delays in the delivery of ordered materials and equipment;
- unanticipated cost increases;
- weather interferences; and
- difficulties in obtaining necessary permits or in meeting permit conditions.

Our operations and our customers’ operations are subject to a variety of governmental laws and regulations that affect our and our customers’ costs, prohibit or curtail our customers’ operations in certain areas, limit the demand for our products and services or restrict our operations.

Our business and our customers’ businesses may be significantly affected by:

- federal, state and local U.S. and non-U.S. laws and other regulations relating to oilfield operations, worker safety and protection of the environment;
- changes in these laws and regulations; and
- the level of enforcement of these laws and regulations.

In addition, we depend on the demand for our products and services from the oil and natural gas industry. This demand is affected by changing taxes, price controls and other laws and regulations relating to the oil and natural gas industry in general. For example, the adoption of laws and regulations curtailing exploration and development drilling for oil and natural gas for economic or other policy reasons could adversely affect our operations by limiting demand for our products. In addition, some non-U.S. countries adopt regulations or practices that provide an advantage to local oil companies in bidding for oil leases, or require local companies to perform oilfield services currently supplied by international service companies. To the extent that such companies are not our customers, or we are unable to develop relationships with them, our business may suffer. We cannot determine the extent to which our future operations and earnings may be affected by new legislation, new regulations or changes in existing regulations.

Because of our non-U.S. operations and sales, we are also subject to changes in non-U.S. laws and regulations that encourage or require hiring of local contractors or require non-U.S. contractors to employ citizens of, or purchase supplies from, a particular jurisdiction. If we fail to comply with any applicable law or regulation, our business, results of operations or financial condition may be adversely affected.

Potential legislation or regulations restricting the use of hydraulic fracturing could reduce demand for our products.

Hydraulic fracturing is an important and common practice in the oil and natural gas industry which involves the injection of water, sand and chemicals under pressure into a formation to fracture the surrounding rock and stimulate production of hydrocarbons. Certain environmental advocacy groups have suggested that additional federal, state and local laws and regulations may be needed to more closely regulate the hydraulic fracturing process, and have made claims that hydraulic fracturing techniques are harmful to surface water and drinking water resources. Various governmental entities (within and outside the U.S.) are in the process of studying, restricting, regulating or preparing to regulate hydraulic fracturing, directly or indirectly.

For example, the EPA released the final results of its comprehensive research study on the potential adverse impacts that hydraulic fracturing may have on drinking water resources in December 2016. The EPA concluded that hydraulic fracturing activities can impact drinking water resources under some circumstances, including large volume spills and

inadequate mechanical integrity of wells. The EPA has asserted federal authority over hydraulic fracturing using fluids that contain “diesel fuel” under the federal Safe Drinking Water Act (“SDWA”) Underground Injection Control Program and has issued permitting guidance for hydraulic fracturing operations involving the use of diesel fuel in fracturing fluids in those states where the EPA is the permitting authority. Additionally, the Department of the Interior’s Bureau of Land Management (“BLM”) issued final rules to regulate hydraulic fracturing on federal lands in March 2015. These rules were struck down by a federal court in Wyoming in June 2016, but reinstated on appeal by the Tenth Circuit in September 2017. While this appeal was pending, BLM proposed a rule making in July 2017 to rescind these rules in their entirety. BLM published a final rule rescinding the 2015 rules on December 29, 2017. Several states filed judicial challenges to the BLM’s proposed rescission; however, these challenges were stayed by a federal court in April 2018 pending the finalization or withdrawal of the BLM’s February 2018 proposal. In September 2018, BLM published a final rule that largely adopted the February 2018 proposal and rescinded several requirements. The September 2018 rule was challenged in the U.S. District Court for the Northern District of California almost immediately after issuance. The challenge is still pending.

In past sessions, Congress has considered, but not passed, the adoption of legislation to provide for federal regulation of hydraulic fracturing under the SDWA and to require disclosure of the chemicals used in the hydraulic fracturing process. Some states have adopted, and other states are considering adopting, legal requirements that could impose more stringent permitting, public disclosure or well construction requirements on hydraulic fracturing activities or impose bans or moratoria on these activities altogether. Local governments also may seek to adopt ordinances within their jurisdictions regulating the time, place and manner of drilling activities in general or hydraulic fracturing activities in particular, in some cases banning hydraulic fracturing entirely. For example, the Colorado state legislature passed a package of hydraulic fracturing regulations in April 2019. Under the new law, the state oil and natural gas agency must review well locations for environmental protection criteria. In addition, the legislation broadened the authority for local governments to further regulate or restrict hydraulic fracturing. In November 2019, the California governor’s office imposed new regulations on hydraulic fracturing, including a moratorium on all new hydraulic fracturing permits pending review by a panel of scientists. In February 2018, the Oklahoma Corporation Commission released a protocol that requires operators to suspend hydraulic fracturing well completion operations in response to certain levels of seismic activity.

If new or more stringent federal, state or local legal restrictions relating to the hydraulic fracturing process are adopted in areas where our oil and natural gas exploration and production customers operate, they could incur potentially significant added costs to comply with such requirements, experience delays or curtailment in the pursuit of exploration, development, and production activities, and perhaps even be precluded from drilling wells, some or all of which could adversely affect demand for our products and services from those customers.

Our financial results could be adversely impacted by changes in regulation of oil and natural gas exploration and development activity in response to significant environmental incidents.

The U.S. Department of the Interior implemented additional safety and certification requirements applicable to drilling activities in the U.S. Gulf of Mexico, imposed additional requirements with respect to exploration, development and production activities in U.S. waters and imposed a moratorium that delayed the approval of drilling plans and well permits in both deepwater and shallow-water areas due to the Macondo well incident. Although neither we nor our products were involved in the incident, the delays caused by the new regulations and requirements had an overall negative effect on drilling activity in U.S. waters, and to a certain extent, our financial results. Another similar environmental incident could result in similar drilling moratoria, and could result in increased federal, state, and international regulation of our and our customers’ operations that could negatively impact our earnings, prospects and the availability and cost of insurance coverage. Any additional regulation of the exploration and production industry as a whole could result in fewer companies being financially qualified to operate offshore or onshore in the U.S. or in non-U.S. jurisdictions, resulting in higher operating costs for our customers and reduced demand for our products and services.

Our tax position may be adversely affected by changes in tax laws relating to multinational corporations, or increased scrutiny by tax authorities.

We have operations in multiple countries that are subject to the jurisdiction of a significant number of taxing authorities. The final determination of our income tax liabilities involves the interpretation of local tax laws, tax treaties and related authorities in each jurisdiction, as well as the significant use of estimates and assumptions. The U.S. Congress and government agencies in non-U.S. jurisdictions where we, and our affiliates, do business have recently focused on issues related to the taxation of multinational corporations. We cannot predict whether any legislation or any regulatory or other administrative guidance could materially adversely affect us.

Our operations are subject to environmental and operational safety laws and regulations that may expose us to significant costs and liabilities.

Our operations are subject to numerous stringent and complex laws and regulations governing the discharge of materials into the environment, health and safety aspects of our operations, or otherwise relating to human health and environmental protection. These laws and regulations may, among other things, regulate the management and disposal of hazardous and nonhazardous wastes; require acquisition of environmental permits related to our operations; restrict the types, quantities, and concentrations of various materials that can be released into the environment; limit or prohibit operational activities in certain ecologically sensitive and other protected areas; regulate specific health and safety criteria addressing worker protection; require compliance with operational and equipment standards; impose testing, reporting and record keeping requirements; and require remedial measures to mitigate pollution from former and ongoing operations. Failure to comply with these laws and regulations or to obtain or comply with permits 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. Certain environmental laws may impose joint and several liability, without regard to fault or legality of conduct, on classes of persons who are considered to be responsible for the release of a hazardous substance into the environment. In addition, these risks may be greater for us because the companies we acquire or have acquired may not have allocated sufficient resources and management focus to environmental compliance, potentially requiring rehabilitative efforts during the integration process or exposing us to liability before such rehabilitation occurs.

The trend in environmental regulation has been to impose increasingly stringent restrictions and limitations on activities that may impact the environment. The implementation of new laws and regulations could result in materially increased costs, stricter standards and enforcement, larger fines and liability and increased capital expenditures and operating costs, particularly for our customers.

Our non-U.S. operations will subject us to special risks.

We are subject to various risks inherent in conducting business operations in locations outside of the U.S. These risks include changes in regional, political or economic conditions, local laws and policies, including taxes, trade protection measures, and unexpected changes in regulatory requirements governing the operations of companies that operate outside of the U.S. In addition, if a dispute arises from international operations, courts outside of the U.S. may have exclusive jurisdiction over the dispute, or we may not be able to subject persons outside of the U.S. to the jurisdiction of U.S. courts.

Our business operations worldwide are subject to a number of U.S. federal laws and regulations, including restrictions imposed by the U.S. Foreign Corrupt Practices Act (“FCPA”) as well as trade sanctions administered by the Office of Foreign Assets Control and the Commerce Department, as well as similar laws in non-U.S. jurisdictions that govern our operations by virtue of our presence or activities there.

We rely on a large number of agents in non-U.S. countries that have been identified as posing a high risk of corrupt activities and whose local laws and customs differ significantly from those in the U.S. In many countries, particularly in those with developing economies, it is common to engage in business practices that are prohibited by the regulations applicable to us. The U.S. Foreign Corrupt Practices Act and similar anti-corruption laws in other jurisdictions, including the UK Bribery Act 2010, (“anti-corruption laws”) prohibit corporations and individuals from engaging in certain activities to obtain or retain business or to influence a person working in an official capacity. We may be held responsible for violations by our employees, contractors and agents for violations of anti-corruption laws. We may also be held responsible for violations by an acquired company that occur prior to an acquisition, or subsequent to an acquisition but before we are able to institute our compliance procedures. In addition, our non-U.S. competitors that are not subject to the FCPA or similar anti-corruption laws may be able to secure business or other preferential treatment in such countries by means that such laws prohibit with respect to us. The UK Bribery Act 2010 is broader in scope than the FCPA, applies to public and private sector corruption, and contains no facilitating payments exception. A violation of any of these laws, even if prohibited by our policies, could have a material adverse effect on our business. Actual or alleged violations could damage our reputation, be expensive to defend, impair our ability to do business, and cause us to incur civil and criminal fines, penalties and sanctions.

Compliance with regulations relating to export controls, trade sanctions and embargoes administered by the countries in which we operate, including the U.S. Department of the Treasury’s Office of Foreign Assets Control (“OFAC”) and similar regulations in non-U.S. jurisdictions also pose a risk to us. We cannot provide products or services to certain countries, companies or individuals subject to trade sanctions of the U.S. and other countries. Furthermore, the laws and regulations concerning import activity, export record keeping and reporting, export controls and economic sanctions are complex and constantly changing. Any failure to comply with applicable legal and regulatory trading obligations

could result in criminal and civil penalties and sanctions, such as fines, imprisonment, debarment from governmental contracts, seizure of shipments and loss of import and export privileges.

Unionization efforts and labor regulations in certain areas in which we operate could materially increase our costs or limit our flexibility.

We are not a party to any collective bargaining agreements, other than in our Hamburg, Germany and Monterrey, Mexico facilities. We operate in certain states within the U.S. and in international areas that have a history of unionization and we may become the subject of a unionization campaign. If some or all of our workforce were to become unionized and collective bargaining agreement terms, including any renegotiation of our Hamburg, Germany and Monterrey, Mexico collective bargaining agreements, were significantly different from our current compensation arrangements or work practices, our costs could be increased, our flexibility in terms of work schedules and reductions in force could be limited, and we could be subject to strikes or work slowdowns, among other things.

We are subject to litigation risks that may not be covered by insurance.

In the ordinary course of business, we become the subject of claims, lawsuits and administrative proceedings seeking damages or other remedies concerning our commercial operations, products, employees and other matters, including occasional claims by individuals alleging exposure to hazardous materials as a result of our products or operations. Some of these claims relate to the activities of businesses that we have acquired, even though these activities may have occurred prior to our acquisition of such businesses. Our insurance does not cover all of our potential losses, and we are subject to various self-insured retentions and deductibles under our insurance. A judgment may be rendered against us in cases in which we could be uninsured or which exceed the amounts that we currently have reserved or anticipate incurring for such matters.

The number and cost of our current and future asbestos claims could be substantially higher than we have estimated and the timing of payment of claims could be sooner than we have estimated.

One of our subsidiaries has been and continues to be named as a defendant in asbestos related product liability actions. The actual amounts expended on asbestos-related claims in any year may be impacted by the number of claims filed, the nature of the allegations asserted in the claims, the jurisdictions in which claims are filed, and the number of settlements. As of December 31, 2019, our subsidiary has a net liability of $0.3 million for the estimated indemnity cost associated with the resolution of its current open claims and future claims anticipated to be filed during the next five years.

Due to a number of uncertainties, the actual costs of resolving these pending claims could be substantially higher than the current estimate. Among these are uncertainties as to the ultimate number and type of lawsuits filed, the amounts of claim costs, the impact of bankruptcies of other companies with asbestos suits or of our insurers, and potential legislative changes and uncertainties surrounding the litigation process from jurisdiction to jurisdiction and from case to case. In addition, future claims beyond the five-year forecast period are possible, but the accrual does not cover losses that may arise from such additional future claims. Therefore, any such future claims could result in a loss.

Significant costs are incurred in defending asbestos claims and these costs are recorded at the time incurred. Receipt of reimbursement from our insurers may be delayed for a variety of reasons. In particular, if our primary insurers claim that certain policy limits have been exhausted, we may be delayed in receiving reimbursement due to the transition from one set of insurers to another. Our excess insurers may also dispute the claims of exhaustion, or may rely on certain policy requirements to delay or deny claims. Furthermore, the various per occurrence and aggregate limits in different insurance policies may result in extended negotiations or the denial of reimbursement for particular claims. For more information on the cost sharing agreements related to this risk, refer to Note 12 *Commitments and Contingencies*.

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

Our products are used in potentially hazardous completion, production and drilling applications in the oil and natural gas industry where an accident or a failure of a product can potentially have catastrophic consequences. Risks inherent to these applications, such as equipment malfunctions; failures; explosions; blowouts or uncontrollable flows of oil, natural gas or well fluids; and natural disasters on land or in deepwater or shallow-water environments, 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 water and drinking water resources, equipment and the environment. These risks can be caused or contributed to by failure of, defects in or misuse of our products. In addition, we provide certain services that could cause, contribute to or be implicated in these events. If our products or services fail to meet specifications or are involved in accidents or failures, we could face warranty, contract or other litigation claims, which

could expose us to substantial liability for personal injury, wrongful death, property damage, loss of oil and natural gas production, and pollution or other environmental damages. In addition, failure of our products to operate properly or to meet specifications may increase costs by requiring additional engineering resources and services, replacement of parts and equipment or monetary reimbursement to a customer. Our insurance policies may not be adequate to cover all liabilities. Further, insurance may not be generally available in the future or, if available, insurance premiums may make such insurance commercially unjustifiable. Moreover, even if we are successful in defending a claim, it could be time-consuming and costly to defend.

In addition, the frequency and severity of such incidents could affect operating costs, insurability and relationships with customers, employees and regulators. In particular, our customers may elect not to purchase our products or services if they view our safety record as unacceptable, which could cause us to lose customers and revenues. In addition, these risks may be greater for us because we may acquire companies that have not allocated significant resources and management focus to quality or safety, requiring rehabilitative efforts during the integration process. We may incur liabilities for losses associated with these newly acquired companies before we are able to rehabilitate such companies' quality, safety and environmental programs.

Our acquisitions and dispositions may not result in anticipated benefits and may present risks not originally contemplated, which may have a material adverse effect on our business, consolidated results of operations and consolidated financial condition.

We continually seek opportunities to maximize efficiency and value through various transactions, including purchases or sales of assets, businesses, investments, or joint venture interests. These transactions are intended to (but may not) result in the realization of savings, the creation of efficiencies, the offering of new products or services, the generation of cash or income, or the reduction of risk. Acquisition transactions may use cash on hand or be financed by additional borrowings or by the issuance of our common stock. These transactions may also affect our business, consolidated results of operations and consolidated financial condition. These transactions also involve risks, and we cannot ensure that:

- any acquisitions we attempt will be completed on the terms announced, or at all;
- any acquisitions would result in an increase in income or provide an adequate return of capital or other anticipated benefits;
- any acquisitions would be successfully integrated into our operations and internal controls;
- the due diligence conducted prior to an acquisition would uncover situations that could result in financial or legal exposure, including under the FCPA, or that we will appropriately quantify the exposure from known risks;
- any disposition would not result in decreased earnings, revenue, or cash flow;
- use of cash for acquisitions would not adversely affect our cash available for capital expenditures and other uses; or
- any dispositions, investments, or acquisitions, including integration efforts, would not divert management resources.

Climate change legislation or regulations restricting emissions of greenhouse gases and related divestment and other efforts could increase our operating costs or reduce demand for our products.

Environmental advocacy groups and regulatory agencies in the U.S. and other countries have focused considerable attention on the emissions of carbon dioxide, methane and other greenhouse gases and their potential role in climate change. In response to scientific studies suggesting that emissions of GHGs, including carbon dioxide and methane, are contributing to the warming of the Earth's atmosphere and other climatic conditions, the U.S. Congress has considered adopting comprehensive legislation to reduce emissions of GHGs, and almost half of the states have already taken legal measures to reduce emissions of GHGs, primarily through measures to promote the use of renewable energy and/or regional GHG cap-and-trade programs. The Environmental Protection Agency (the "EPA") has already begun to regulate greenhouse gas emissions under the federal Clean Air Act. In December 2009, the EPA determined that emissions of carbon dioxide, methane and certain other GHGs endanger public health and the environment because emissions of such gases are, according to the EPA, contributing to warming of the Earth's atmosphere and other climatic changes. Accordingly, the EPA has begun adopting rules under the Clean Air Act that, among other things, cover reductions in GHG emissions from motor vehicles, permits for certain large stationary sources of GHGs, and monitoring and annual reporting of GHG emissions from specified GHG emission sources, including oil and natural gas exploration and production operations. Additionally, in May 2016, the EPA issued final new source performance standards governing methane emissions that impose more stringent controls on methane and volatile organic compounds emissions at new and modified oil and natural gas production, processing, storage and transmission facilities. The EPA has also adopted rules requiring the reporting of greenhouse gas emissions from specified large greenhouse gas emission sources in the U.S., including oil and natural gas systems.

Efforts have also been made and continue to be made in the international community toward the adoption of international treaties or protocols that would address global climate change issues. In 2015, the U.S. participated in the United Nations Conference on Climate Change, which led to the creation of the Paris Agreement, which requires member countries to review and "represent a progression" in their nationally determined contributions, which set GHG emission reduction goals every five years. In November 2019, the State Department formally informed the United Nations of the U.S.'s withdrawal from the Paris Agreement. Due to the Paris Agreement's protocol, the withdrawal will be effective in November 2020.

The adoption of additional legislation or regulatory programs to reduce emissions of greenhouse gases could require us to incur increased operating costs to comply with new emissions-reduction or reporting requirements. Any such legislation or regulatory programs could also increase the cost of consuming, and thereby reduce demand for, hydrocarbons that certain of our customers produce and reduce revenues by other of our customers who provide services to those exploration and production customers. Consequently, legislation and regulatory programs to reduce emissions of greenhouse gases could have an adverse effect on our business, financial condition and results of operations.

In addition to the regulatory efforts described above, there have also been efforts in recent years aimed at the investment community, including investment advisers, sovereign wealth funds, public pension funds, universities and other groups, promoting the divestment of fossil fuel equities as well as to pressure lenders and other financial services companies to limit or curtail activities with companies engaged in the extraction of fossil fuel reserves. If these efforts are successful, our ability to access capital markets may be limited and our stock price may be negatively impacted.

Members of the investment community have recently increased their focus on sustainability practices, including practices related to GHGs and climate change, in the oil and natural gas industry. As a result, we and our customers have come under increasing pressure to improve our sustainability practices. Some of our customers have begun to screen their service providers, including us, for compliance with sustainability metrics. Additionally, members of the investment community have begun to screen companies such as ours for sustainability performance before investing in our stock. If we are unable to establish adequate sustainability practices, we may lose customers, our stock price may be negatively impacted, our reputation may be negatively affected, and it may be more difficult for us to compete effectively. Our efforts to improve our sustainability practices in response to these pressures may increase our costs, and we may be forced to implement technologies that are not economically viable in order to improve our sustainability performance and to perform services for certain customers. Finally, some scientists have concluded that increasing concentrations of greenhouse gases in the Earth's atmosphere may produce climate changes that have significant physical effects, such as increased frequency and severity of storms, droughts, and floods and other climatic events.

Adverse weather conditions negatively impact demand for services and operations.

Adverse weather conditions, such as hurricanes, tornadoes, ice or snow may damage or destroy our facilities, interrupt or curtail our operations, or our customers' operations, cause supply disruptions and result in a loss of revenue, which

may or may not be insured. For example, certain of our facilities located in Oklahoma and Pennsylvania have experienced suspensions in operations due to tornado activity or extreme cold weather conditions.

A natural disaster, catastrophe or other event could result in severe property damage, which could curtail our operations.

Some of our operations involve risks of, among other things, property damage, which could curtail our operations. Disruptions in operations or damage to a manufacturing plant could reduce our ability to produce products and satisfy customer demand. In particular, we have offices and manufacturing facilities in Houston, Texas, and in various places throughout the U.S. Gulf Coast region. These offices and facilities are particularly susceptible to severe tropical storms and hurricanes, which may disrupt our operations. Damage to one or more of our manufacturing facilities by severe weather or any other disaster, accident, catastrophe or event, could significantly interrupt our operations. Similar interruptions could result from damage to production or other facilities that provide supplies or other raw materials to our plants or other stoppages arising from factors beyond our control. These interruptions might involve significant damage to property, among other things, and repairs might take a significant amount of time. For example, in the third quarter 2017, we were impacted by idled facilities and operations directly related to Hurricane Harvey's widespread damage in Texas and Louisiana. As a result, our financial results were negatively impacted by foregone revenue and under-absorption of manufacturing costs, and, indirectly, due to supplier and logistical delays.

Provisions in our organizational documents and under Delaware law could delay or prevent a change in control of our company, which could adversely affect the price of our common stock.

The existence of some provisions in our organizational documents and under Delaware law could delay or prevent a change in control of our company that a stockholder may consider favorable, which could adversely affect the price of our common stock. Certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws could make it more difficult for a third party to acquire control of our company, even if the change of control would be beneficial to our stockholders. These provisions include:

- a classified board of directors, so that only approximately one-third of our directors are elected each year;
- authority of our board to fill vacancies and determine its size;
- the ability of our board of directors to issue preferred stock without stockholder approval;
- limitations on the removal of directors; and
- limitations on the ability of our stockholders to call special meetings.

In addition, our amended and restated bylaws establish advance notice provisions for stockholder proposals and nominations for elections to the board of directors to be acted upon at meetings of stockholders. Furthermore, if SCF's ownership is reduced to less than 15%, certain restrictions under Delaware law on business combinations with greater than 15% stockholders will begin to apply to us.

L.E. Simmons & Associates, Incorporated ("LESA"), through SCF Partners ("SCF"), may significantly influence the outcome of stockholder voting and may exercise this voting power in a manner adverse to our other stockholders.

As of February 24, 2020, SCF held approximately 17.8 million shares of our common stock, equal to approximately 16% of the outstanding common stock at that date. LESA is the ultimate general partner of SCF and will exert significant influence over us, including over the outcome of most matters requiring a stockholder vote, such as the election of directors, adoption of amendments to our charter and bylaws and approval of transactions involving a change of control. LESA's interests may differ from our other stockholders, and SCF may vote its common stock in a manner that may adversely affect those stockholders.

SCF is a party to a registration rights agreement with us, which requires us to effect the registration of its shares in certain circumstances. SCF exercised such rights in the past. Sales of substantial amounts of our common stock by SCF, or the perception that such sales could occur, may adversely affect prevailing market prices of our common stock.

Certain of our directors may have conflicts of interest because they are also directors or officers of SCF. The resolution of these conflicts of interest may not be in the best interests of our Company or our other stockholders.

Certain of our directors, namely David C. Baldwin and Andrew L. Waite, are currently officers of LESA. In addition, our CEO, directly and through a trust for his children who are primary beneficiaries, holds an ownership interest in various SCF funds. These positions may create conflicts of interest because of the ownership interest these directors and Mr. Gaut maintain. Duties as directors or officers of LESA may conflict with such individuals' duties as one of our directors or officers regarding business dealings and other matters between SCF and us. The resolution of these conflicts may not always be in the best interest of our Company or our other stockholders. Please read "We have renounced any interest in specified business opportunities, and SCF and its director nominees on our board of directors generally have no obligation to offer us those opportunities."

We have renounced any interest in specified business opportunities, and SCF and its director nominees on our board of directors generally have no obligation to offer us those opportunities.

Our certificate of incorporation provides that, so long as we have a director or officer who is affiliated with SCF (an "SCF Nominee") and for a continuous period of one year thereafter, we renounce any interest or expectancy in any business opportunity in which any member of the SCF group participates or desires or seeks to participate in and that involves any aspect of the energy equipment or services business or industry, other than (i) any business opportunity that is brought to the attention of an SCF Nominee solely in such person's capacity as a director or officer of our Company and with respect to which no other member of the SCF group independently receives notice or otherwise identifies such opportunity and (ii) any business opportunity that is identified by the SCF group solely through the disclosure of information by or on behalf of our Company. We refer to SCF and its other affiliates and its portfolio companies as the SCF group. We are not prohibited from pursuing any business opportunity with respect to which we have renounced any interest.

SCF has investments in other oilfield service companies that may compete with us, and SCF and its affiliates, other than our Company, may invest in other such companies in the future. LESA, the ultimate general partner of SCF, has an internal policy that discourages it from investing in two or more portfolio companies with substantially overlapping industry segments and geographic areas. However, LESA's internal policy does not restrict the management or operation of its other individual portfolio companies from competing with us. Pursuant to LESA's policy, LESA may allocate any potential opportunities to the existing portfolio company where LESA determines, in its discretion, such opportunities are the most logical strategic and operational fit. As a result, LESA or its affiliates may become aware, from time to time, of certain business opportunities, such as acquisition opportunities, and may direct such opportunities to its other portfolio companies, in which case we may not become aware of or otherwise have the ability to pursue such opportunities. Furthermore, LESA does not have a specific policy with regard to allocation of financial professionals and they are under no obligation to provide us with financial professionals.

Item 1B. Unresolved Staff Comments

None.

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Item 2. Properties

The following table describes the significant facilities owned or leased by us as of December 31, 2019 for our Drilling & Downhole ("D&D"), Completions ("C") and Production ("P") segments:

Country	Location	Number of facilities	Description	Leased or Owned	Segments
Canada	Red Deer	2	Service/Distribution	Leased	C
	Calgary	2	Service/Distribution	Leased	Shared
	Edmonton	2	Service/Distribution	Leased	Shared
	Grande Prairie	1	Service/Distribution	Leased	C
China	Shanghai	1	Distribution	Leased	P
	Suzhou	1	Distribution	Leased	P
Germany	Hamburg	1	Manufacturing	Leased	D&D
Mexico	Monterrey	1	Manufacturing	Leased	D&D
Saudi Arabia	Dammam	1	Manufacturing/Distribution	Owned	Shared
Singapore	Singapore	1	Manufacturing/Service/Distribution	Leased	D&D
UAE	Dubai	1	Service/Distribution	Leased	D&D
	Jebel Ali	1	Service/Distribution	Leased	D&D
United Kingdom	Aberdeen	1	Service	Leased	D&D
	Kirkbymoorside	1	Manufacturing	Owned	D&D
	Findon	1	Manufacturing/Distribution	Leased	D&D
United States	Broussard, LA	3	Manufacturing/Service/Distribution	Owned	Shared
	Brownsville, PA	1	Service/Distribution	Leased	C
	Bryan, TX	1	Manufacturing	Owned	D&D
	Clearfield, PA	1	Manufacturing/Service/Distribution	Owned	P
	Davis, OK	2	Manufacturing/Service	Owned	C
	Dayton, TX	1	Manufacturing	Owned	C
	Elmore City, OK	1	Manufacturing	Owned	P
	Fort Worth, TX	1	Manufacturing/Service	Leased	C
	Guthrie, OK	1	Manufacturing	Leased	P
	Houston, TX	2	Corporate/Manufacturing	Leased	Shared
	Humble, TX	1	Manufacturing	Leased	C
	Liberty, TX	1	Service	Owned	D&D
	Madison, KS	5	Manufacturing	Leased	P
	Midland, TX	2	Service/Distribution	Leased	C
	Missouri City, TX	1	Manufacturing	Leased	D&D
	Odessa, TX	1	Service/Distribution	Leased	C
	Odessa, TX	1	Service/Distribution	Owned	D&D
	Pearland, TX	1	Manufacturing/Distribution	Owned	D&D

Plantersville, TX	1	Manufacturing/Distribution	Owned	D&D
Smock, PA	1	Service	Leased	C
Stafford, TX	2	Manufacturing/Distribution	Leased	Shared
Stafford, TX	1	Manufacturing	Owned	D&D
Tyler, TX	1	Distribution	Leased	D&D
Williston, ND	3	Service/Distribution	Leased	Shared

We believe our facilities are suitable for their present and intended purposes, and are adequate for our current and anticipated level of operations.

We incorporate by reference the information set forth in Item 1 and Item 7 of this Annual Report on Form 10-K and the information set forth in Note 6 *Property and Equipment* and Note 12 *Commitments and Contingencies*.

Item 3. Legal Proceedings

Information related to Item 3. Legal Proceedings is included in Note 12 *Commitments and Contingencies*, which is incorporated herein by reference. In addition to these matters, we are involved in various other legal proceedings incidental to the conduct of our business. We do not believe that any of these legal proceedings will have a material adverse effect on our financial condition, results of operation or cash flows.

Item 4. Mine Safety Disclosures

Not applicable.

Information About Our Executive Officers

The following table indicates the names, ages and positions of the executive officers of Forum as of February 24, 2020:

Name	Age	Position
C. Christopher Gaut	63	President, Chief Executive Officer and Chairman of the Board
Pablo G. Mercado	43	Senior Vice President and Chief Financial Officer
John C. Ivascu	42	Senior Vice President, General Counsel and Secretary
Michael D. Danford	57	Senior Vice President - Human Resources
D. Lyle Williams	50	Senior Vice President - Operations

C. Christopher Gaut. Mr. Gaut was appointed to serve as President and Chief Executive Officer in November 2018 and has served as Chairman of the board of directors since December 2017. Prior to that, from May 2017 to December 2017, he served as Executive Chairman of the Board, and as Chief Executive Officer from May 2016 to May 2017. From August 2010 to May 2016 he served as President, Chief Executive Officer and Chairman of the Board, and as one of our directors since December 2006. He served as a consultant to LESA, the ultimate general partner of SCF, our largest stockholder, from November 2009 to August 2010 and from April 2018 to November 2018. Mr. Gaut served at Halliburton Company, a leading diversified oilfield services company, as President of the Drilling and Evaluation Division and prior to that as Chief Financial Officer, from March 2003 through April 2009. From April 2009 through November 2009, Mr. Gaut was a private investor. Prior to joining Halliburton Company in 2003, Mr. Gaut was a Co-Chief Operating Officer of Ensco International, a provider of offshore contract drilling services. He also served as Ensco’s Chief Financial Officer from 1988 until 2003. Mr. Gaut is currently a member of the board of directors of EOG Resources, an independent crude oil and natural gas company, and previously served as a director of Valaris plc and Key Energy Services Inc., a well services provider. Mr. Gaut holds an A.B. in Engineering Sciences from Dartmouth College and an M.B.A. from The Wharton School at University of Pennsylvania.

Pablo G. Mercado. Mr. Mercado has served as Chief Financial Officer since March 2018. Prior to that, he served as Senior Vice President - Finance from June 2017 to March 2018; Vice President, Operations Finance from August 2015 to June 2017; Vice President, Corporate Strategy and Treasurer from January 2014 to August 2015; Vice President, Corporate Development & Strategy from February 2013 to January 2014; and Vice President, Corporate Development from November 2011 to February 2013. From May 2005 to October 2011, Mr. Mercado was an investment

banker in the Oil and Gas Group of Credit Suisse Securities (USA) LLC where he worked with oilfield services companies and other companies in the oil and natural gas industry, most recently as a Director. From 1998 to 2001 and 2003 to May 2005, Mr. Mercado was an investment banker at other firms, primarily working with companies in the oil and natural gas industry. He is currently a member of the board of directors of Comfort Systems USA, Inc., a national heating, ventilation and cooling company. Mr. Mercado holds a B.B.A. from the Cox School of Business and a B.A. in Economics from the Dedman College, both at Southern Methodist University, and an M.B.A. from The University of Chicago Booth School of Business.

John C. Ivascu. Mr. Ivascu has served as Senior Vice President, General Counsel and Secretary since February 2019. Prior to that, he served as Vice President, Deputy General Counsel and Secretary from February 2018 to February 2019; Vice President, Associate General Counsel and Assistant Secretary from August 2015 to February 2018; and Assistant General Counsel from June 2011 to August 2015. From 2006 to June 2011, Mr. Ivascu practiced corporate law at Vinson & Elkins L.L.P., representing public and private companies and investment banking firms in capital markets offerings, mergers and acquisitions, corporate governance and bankruptcy matters. From 2004 to 2006, Mr. Ivascu served as an attorney for the U.S. Securities & Exchange Commission, Division of Enforcement. Mr. Ivascu holds a B.B.A. from the Stephen M. Ross School of Business at the University of Michigan, and a J.D. from Brooklyn Law School.

Michael D. Danford. Mr. Danford has served as Senior Vice President - Human Resources since February 2015. Prior to that, Mr. Danford served as Vice President - Human Resources from November 2007 to February 2015. Prior to joining Forum and, from August 2007 through November 2007, he worked at Trico Marine Services Inc., a privately held provider of subsea and marine support vessels and services to the oil and natural gas industry, as Vice President - Human Resources. From 1997 through July 2007, Mr. Danford served as Director of Human Resources and Vice President - Human Resources for Hydril Company, a publicly traded manufacturer of connections used for oil and natural gas drilling and production. From 1991 to 1997, Mr. Danford served in various human resources roles for Baker Hughes Incorporated, a publicly traded oilfield services company. Prior to joining Baker Hughes, from 1990 to 1991, Mr. Danford served as a recruiter and as an employee relations representative in the human resources department for Compaq Computer, a publicly traded developer and manufacturer of computer systems. Mr. Danford holds a B.S. degree in Computer Science from the University of Louisiana at Monroe (formerly Northeast Louisiana University).

D. Lyle Williams, Jr. Mr. Williams has served as Senior Vice President - Operations since May 2018. Since January 2007, Mr. Williams has held various financial and operations roles, including Vice President - Corporate Development and Treasurer; Vice President - Operations Finance; Vice President - Finance and Accounting, Drilling and Subsea Segment; Senior Vice President - Downhole Technologies; Vice President - Subsea Products; and Vice President - Capital Equipment. Prior to joining Forum, Mr. Williams held various operations positions with Cooper Cameron Corporation, including Director of Operations - Engineering Products. He holds a B.A. in Economics and English from Rice University and an M.B.A. from Harvard University Graduate School of Business Administration.

PART II

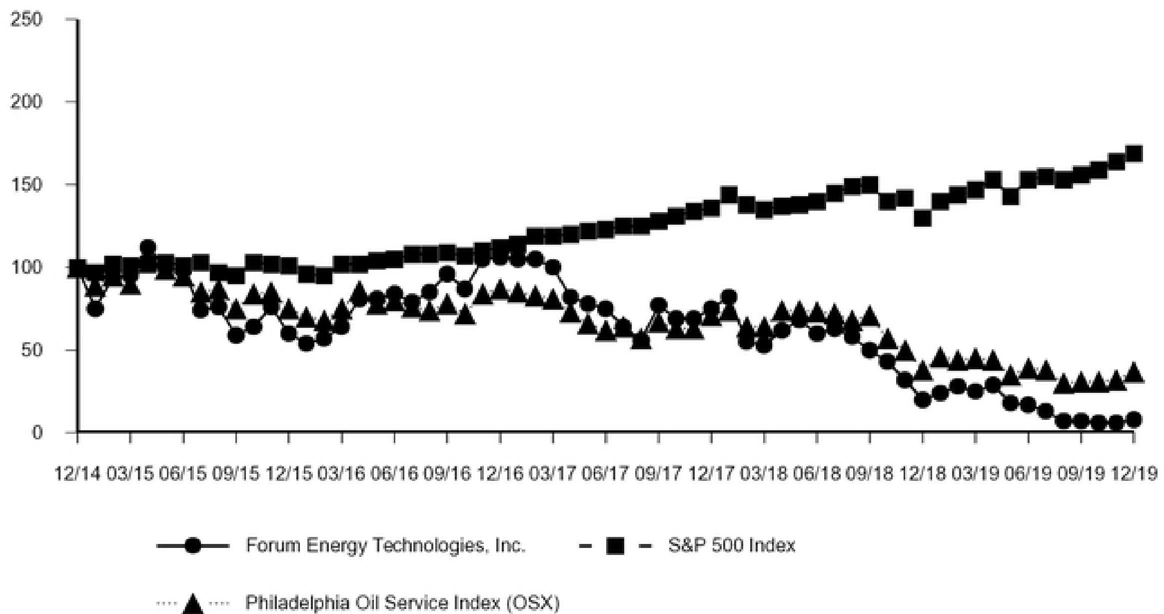
Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common stock trades on the NYSE under the trading symbol "FET." As of February 24, 2020, there were approximately 57 shareholders of record of our common stock. In calculating the number of shareholders, we consider clearing agencies and security position listings as one shareholder for each agency or listing.

No dividends were declared or issued during 2019 or 2018, and we do not currently have any plans to pay cash dividends in the future. Our future dividend policy is within the discretion of our board of directors and will depend upon various factors, including our results of operations, financial condition, capital requirements, investment opportunities, and other loan agreements.

Performance Graph

The following graph compares total shareholder return on our common stock with the Standard & Poor's 500 Stock Index and the Philadelphia Oil Service Sector Index ("OSX"), an index of oil and natural gas related companies that represents an industry composite of our peers. This graph covers the period from December 31, 2014 through December 31, 2019. This comparison assumes the investment of $100 on December 31, 2014 and the reinvestment of all dividends. The shareholder return set forth is not necessarily indicative of future performance.



The performance graph above is furnished and not filed for purposes of Section 18 of the Exchange Act and will not be incorporated by reference into any registration statement filed under the Securities Act of 1933 (the "Securities Act") unless specifically identified therein as being incorporated therein by reference. The performance graph is not soliciting material subject to Regulation 14A.

Purchase of Equity Securities

Following is a summary of our repurchases of our common stock during the three months ended December 31, 2019.

Period	Total number of shares purchased (a)	Average price paid per share	Total number of shares purchased as part of publicly announced plan or programs (b)	Maximum value of shares that may yet be purchased under the plan or program (in thousands) (b)
October 1, 2019 - October 31, 2019	1,945	$ 3.42	—	$ 49,752
November 1, 2019 - November 30, 2019	—	$ —	—	$ 49,752
December 1, 2019 - December 31, 2019	—	$ —	—	$ 49,752
Total	1,945	$ 3.42	—	

a) All of the 1,945 shares purchased during the three months ended December 31, 2019 were acquired from employees in connection with the settlement of income tax and related benefit withholding obligations arising from the vesting of restricted stock grants. These shares were not part of a publicly announced program to purchase common stock.

(b) In October 2014, our board of directors approved a program for the repurchase of outstanding shares of our common stock with an aggregate purchase amount of up to $150.0 million. From the inception of this program through December 31, 2019, we have repurchased approximately 4.5 million shares of our common stock for aggregate consideration of approximately $100.2 million. Remaining authorization under this program is $49.8 million.

Acquisition of Innovative Valve Components

On January 9, 2017, we acquired all of the issued and outstanding partnership interests of Innovative Valve Components. As partial consideration for the acquisition we issued 196,249 shares of our common stock. Pursuant to the terms of the purchase agreement, we issued 8,400 shares of our common stock on January 9, 2018 and 82,962 shares of our common stock on January 9, 2019 in connection with the first and second anniversaries of the closing, respectively. The issuance of our common stock was exempt from registration under the Securities Act pursuant to Rule 4(a)(2) thereof and the safe harbor provided by Rule 506 of Regulation D promulgated thereunder.

Contingent shares issuance

On July 3, 2017, the Company acquired Multilift Welltec, LLC and Multilift Wellbore Technology Limited. In connection with the transactions, the Company entered into a contingent stock agreement with an employee. Pursuant to the contingent stock agreement, we issued 30,582 shares of our common stock on February 1, 2019. The issuance of our common stock was exempt from registration under the Securities Act pursuant to Rule 4(a)(2) thereof and the safe harbor provided by Rule 506 of Regulation D promulgated thereunder.

Item 6. Selected Financial Data

The following selected historical consolidated financial data should be read in conjunction with Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and related notes appearing in Item 8 “Financial Statements and Supplementary Data” of this Annual Report on Form 10-K to fully understand the factors that may affect the comparability of the information presented below.

The selected historical financial data as of December 31, 2019 and 2018, and for the years ended December 31, 2019, 2018 and 2017 are derived from our audited consolidated financial statements and related notes thereto that are included herein. The selected historical data as of December 31, 2017, 2016 and 2015 and for the years ended December 31, 2016 and 2015 have been derived from our audited consolidated financial statements, which are not included in this Annual Report on Form 10-K. Our historical results are not necessarily indicative of our results to be expected in any future period.

	Year ended December 31,				
(in thousands, except per share information)	2019	2018	2017	2016	2015
Income Statement Data:					
Revenues	$ 956,533	$ 1,064,219	$ 818,620	$ 587,635	$ 1,073,652
Total operating expenses	1,492,361	1,461,357	961,215	718,411	1,202,199
Earnings (loss) from equity investment	(318)	140	1,000	1,824	14,824
Operating loss	(536,146)	(396,998)	(141,595)	(128,952)	(113,723)
Total other expense (income)	32,725	(7,244)	(86,316)	9,047	20,600
Loss before income taxes	(568,871)	(389,754)	(55,279)	(137,999)	(134,323)
Income tax expense (benefit)	(1,814)	(15,674)	4,121	(56,051)	(14,939)
Net loss	(567,057)	(374,080)	(59,400)	(81,948)	(119,384)
Less: Income (loss) attributable to noncontrolling interest	—	—	—	30	(31)
Net loss attributable to common stockholders	(567,057)	(374,080)	(59,400)	(81,978)	(119,353)
Weighted average shares outstanding					
Basic	110,100	108,771	98,689	91,226	89,908
Diluted	110,100	108,771	98,689	91,226	89,908
Loss per share					
Basic	$ (5.15)	$ (3.44)	$ (0.60)	$ (0.90)	$ (1.33)
Diluted	$ (5.15)	$ (3.44)	$ (0.60)	$ (0.90)	$ (1.33)

	As of December 31,				
(in thousands)	2019	2018	2017	2016	2015
Balance Sheet Data:					
Cash and cash equivalents	$ 57,911	$ 47,241	$ 115,216	$ 234,422	$ 109,249
Net property, plant and equipment	154,836	177,358	197,281	152,212	186,667
Total assets	1,159,997	1,829,652	2,195,228	1,835,192	1,886,042
Long-term debt	398,862	517,544	506,750	396,747	396,016
Total stockholders’ equity	486,039	1,030,126	1,409,016	1,235,202	1,257,020

	Year ended December 31,				
(in thousands)	2019	2018	2017	2016	2015
Other financial data:					
Net cash provided by (used in) operating activities	$ 104,144	$ 2,407	$ (40,033)	$ 64,742	$ 155,913
Capital expenditures for property and equipment	(15,102)	(24,043)	(26,709)	(16,828)	(32,291)
Proceeds from the sale of equity investment, business, property and equipment	43,237	9,258	1,971	9,763	1,821
Acquisition of businesses, net of cash acquired	—	(60,622)	(162,189)	(4,072)	(60,836)
Net cash provided by (used in) investing activities	28,135	(75,407)	(187,968)	(11,137)	(91,306)
Net cash provided by (used in) financing activities	(122,191)	6,522	100,563	86,195	(26,937)

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with “Selected historical consolidated financial data” included under Item 6 of this Annual Report on Form 10-K and our financial statements and related notes included under Item 8 of this Annual Report on Form 10-K. This discussion contains forward-looking statements based on our current expectations, estimates and projections about our operations and the industry in which we operate. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of a variety of risks and uncertainties, including those described in “Risk Factors” and “Cautionary note regarding forward-looking statements” and elsewhere in this Annual Report on Form 10-K. We assume no obligation to update any of these forward-looking statements.

Overview

We are a global oilfield products company, serving the drilling, downhole, subsea, completions and production sectors of the oil and natural gas industry. We design, manufacture and distribute products and engage in aftermarket services, parts supply and related services that complement our product offering. The Company's products include highly engineered capital equipment as well as products that are consumed in the drilling, well construction, production and transportation of oil and natural gas. Our consumable products are used in drilling, well construction and completions activities, within the supporting infrastructure, and at processing centers and refineries. Our engineered capital products are directed at: drilling rig equipment for new rigs, upgrades and refurbishment projects; subsea construction and development projects; pressure pumping equipment; the placement of production equipment on new producing wells; and downstream capital projects. In 2019, over 80% of our revenue was derived from consumable products and activity-based equipment, while the balance was primarily derived from capital products with a small amount from rental and other services.

We seek to design, manufacture and supply high quality reliable products that create value for our diverse customer base, which includes, among others, oil and natural gas operators, land and offshore drilling contractors, oilfield service companies, subsea construction and service companies, and pipeline and refinery operators.

In the first quarter of 2019, we changed our reporting segments to align them with business activity drivers and the manner in which management reviews and evaluates operating performance. Forum now operates in the following three reporting segments: Drilling & Downhole, Completions and Production, and we believe that this reporting segment structure better aligns with the key phases of the well cycle and provides improved operating efficiencies. Prior to this change, we operated in three business segments: Drilling & Subsea, Completions, and Production & Infrastructure. We moved the Downhole product line from Completions to Drilling & Subsea to form the new Drilling & Downhole segment. Completions retained the Stimulation & Intervention and Coiled Tubing product lines. Finally, we renamed Production & Infrastructure the Production segment. Our historical results of operations have been recast to retrospectively reflect these changes in accordance with generally accepted accounting principles.

A summary of the products and services offered by each segment is as follows:

- *Drilling & Downhole*. This segment designs and manufactures products and provides related services to the drilling, well construction, artificial lift and subsea energy construction and services markets as well as other sectors such as alternative energy, defense and communications. The products and related services consist primarily of: (i) capital equipment and a broad line of expendable drilling products consumed in the drilling process; (ii) well construction casing and cementing equipment, protection products for artificial lift equipment and cables, and composite plugs used for zonal isolation in hydraulic fracturing; and (iii) subsea remotely operated vehicles and trenchers, specialty components and tooling, products used in subsea pipeline infrastructure, and complementary subsea technical services.

- *Completions.* This segment designs, manufactures and supplies products and provides related services to the coiled tubing, stimulation and intervention markets. The products and related services consist primarily of: (i) capital and consumable products sold to the pressure pumping, hydraulic fracturing and flowback services markets, including hydraulic fracturing pumps, pump consumables, cooling systems and flow iron as well as wireline cable, and pressure control equipment used in the well completion and intervention service markets; and (ii) coiled tubing strings and coiled line pipe and related services.

- *Production*. This segment designs, manufactures and supplies products and provides related equipment and services for production and infrastructure markets. The products and related services consist primarily of: (i) engineered process systems, production equipment, as well as specialty separation equipment; and (ii) a wide

range of industrial valves focused on serving upstream, midstream, and downstream oil and natural gas customers as well as power and other general industries.

Market Conditions

The level of demand for our products is directly related to the activity levels and the capital and operating budgets of our customers, which in turn are heavily influenced by energy prices and expectations as to future price trends. In addition, the availability of existing capital equipment adequate to serve exploration and production requirements, or lack thereof, drives demand for our capital equipment products.

The probability of changes in energy prices and their extent and duration are difficult to predict. Oil prices fluctuated throughout 2019 and were on average lower compared to 2018.

The volume of rigs drilling for oil and natural gas in North America and the level of hydraulic fracturing and other well completion activities are drivers for our revenue from this region. In the second half of 2019, activity levels significantly slowed in the North America market, which caused a material reduction in demand for many of our products and thus, our revenue. In addition to oil prices, other factors contributed to this slowdown in activity. Publicly traded exploration and production and oilfield services companies are under pressure from investors to reduce capital spending, generate positive free cash flow and return capital to investors. This has led service companies to reduce capital expenditures on new equipment and defer maintenance on existing fleets by utilizing equipment from idle fleets.

Increases in activity in international regions, as well as global offshore and subsea activity, have seen a modest recovery in 2019. As a result, we have seen an increase in international demand for our drilling and subsea capital equipment offerings, especially in the Middle East market. However, revenue levels remain far below the level achieved during the last newbuild cycle due to the oversupply of relatively new or recently upgraded equipment.

Revenue for our Valve Solutions product line is also influenced by energy prices, but to a lesser extent compared to our other product lines, resulting in more stable operating and financial results over the long-term. Demand for valves from the oil and natural gas industry worldwide is driven by planned investments in global refinery and petrochemical projects, as well as the construction of additional pipeline capacity. Our valve distribution customers have also been under pressure to generate positive free cash flow. This has led them to decrease the amount of valves in their inventories, causing a decrease in orders from our valve distribution customers until their inventories reach targeted levels. This was particularly evident in the second half of 2019 when our Valve Solutions product line experienced a material slowdown in bookings and overall customer demand.

The U.S. government has imposed tariffs on imports of selected products, including those sourced from China. In response, China and other countries have imposed retaliatory tariffs on a wide range of U.S. products, including those containing steel and aluminum. These tariffs have caused our cost of raw materials to increase, primarily in our Coiled Tubing and Valve Solutions product lines. In response, we are taking actions to mitigate the impact, including through the pricing of our products, diversification of our supply chain and applying for tariff exemptions for certain products.

The table below shows average crude oil and natural gas prices for West Texas Intermediate crude oil (WTI), United Kingdom Brent crude oil (Brent), and Henry Hub natural gas:

	2019	2018	2017
Average global oil, $/bbl			
West Texas Intermediate	$ 56.98	$ 65.07	$ 50.80
United Kingdom Brent	$ 64.30	$ 71.11	$ 54.12
Average North American Natural Gas, $/Mcf			
Henry Hub	$ 2.56	$ 3.16	$ 2.99

Average WTI and Brent oil prices were 12% and 10% lower, respectively, for the year ended December 31, 2019 compared to 2018. The spot WTI and Brent oil price closed at $61.14 and $67.77 per barrel, respectively, as of December 31, 2019 versus $45.15 and $50.57, respectively, as of December 31, 2018. Average natural gas prices were 19% lower in 2019 than 2018. Concerns about the coronavirus and its potential impact on the Chinese and global economy are creating uncertainty about the overall demand for hydrocarbons resulting in lower prices for oil and natural gas in early 2020.

The table below shows the average number of active drilling rigs operating by geographic area and drilling for different purposes based on the weekly rig count information published by Baker Hughes Company.

	2019	2018	2017
Active Rigs by Location			
United States	943	1,032	877
Canada	134	191	206
International	1,098	989	948
Global Active Rigs	**2,175**	**2,212**	**2,031**
Land vs. Offshore Rigs			
Land	1,903	1,987	1,812
Offshore	272	225	219
Global Active Rigs	**2,175**	**2,212**	**2,031**
U.S. Commodity Target, Land			
Oil/Gas	773	841	704
Gas	169	190	172
Unclassified	1	1	1
Total U.S. Land Rigs	**943**	**1,032**	**877**
U.S. Well Path, Land			
Horizontal	826	900	737
Vertical	54	63	70
Directional	63	69	70
Total U.S. Active Land Rigs	**943**	**1,032**	**877**

A substantial portion of our revenue is impacted by the level of rig activity and the number of wells completed. The average U.S. and Canadian rig counts in 2019 decreased 9% and 30%, respectively, as compared to 2018, while the international rig count increased 11% compared to 2018. The average U.S. and Canadian rig counts decreased significantly in the second half of 2019. As of December 31, 2019, the number of working rigs in the U.S. decreased to 805 active rigs, from 1,083 active rigs as of December 31, 2018.

The table below shows the amount of total inbound orders by segment for the years ended December 31, 2019, 2018 and 2017:

(in millions of dollars)	2019	2018	2017
Orders:			
Drilling & Downhole	$ 314.2	$ 371.7	$ 299.3
Completions	273.8	373.8	212.3
Production	275.4	370.8	358.3
Total Orders	$ 863.4	$ 1,116.3	$ 869.9

Acquisitions and Dispositions

On December 4, 2019, we sold certain assets of our Cooper Alloy brand of valve products for total consideration of $4.0 million and recognized a gain on disposition totaling $2.3 million.

On October 5, 2018, we acquired 100% of the stock of Houston Global Heat Transfer LLC ("GHT") for total aggregate consideration of $57.3 million, net of cash acquired. The aggregate consideration includes the estimated fair value of certain contingent cash payments due to the former owners of GHT if certain conditions are met in 2019 and 2020. Based in Houston, Texas, GHT designs, engineers, and manufactures premium industrial heat exchanger and cooling systems used primarily on hydraulic fracturing equipment. This acquisition is included in the Completions segment.

On July 2, 2018, we acquired certain assets of ESP Completion Technologies LLC, a subsidiary of C&J Energy Services, for cash consideration of $8.0 million. ESPCT consists of a portfolio of early stage technologies that maximize the run life of artificial lift systems, primarily electric submersible pumps. This acquisition is included in the Drilling and Downhole segment.

On January 3, 2018, we contributed our subsea rentals business to Ashtead to create an independent provider of subsea survey and equipment rental services. In exchange, we received a 40% interest in the combined business, a cash payment of £2.7 million British Pounds and a note receivable from Ashtead of £3.0 million British Pounds. Following this transaction, our 40% interest in Ashtead was accounted for as an equity method investment and reported as Investment in unconsolidated subsidiary in our consolidated balance sheets. On September 3, 2019, we sold our aggregate 40% interest in Ashtead to the majority owners of Ashtead. Total consideration for Forum's 40% interest and the settlement of the £3.0 million British Pounds note receivable from Ashtead was $47.7 million. Forum received $39.3 million in cash proceeds and a new £6.9 million British Pounds note receivable with a three year maturity.

There are factors related to the businesses we have acquired and disposed that may result in lower or higher net profit margins on a go-forward basis, primarily the federal income tax status of the legal entity and the level of depreciation and amortization charges arising out of the accounting for the purchase.

For additional information regarding our acquisitions and dispositions, refer to Note 4 *Acquisitions & Dispositions*.

Factors affecting the comparability of our future results of operations to our historical results of operations

Our future results of operations may not be comparable to our historical results of operations for the periods presented, primarily for the following reasons:

- Since our initial public offering in 2012, we have grown our business both organically and through strategic acquisitions. We expanded and diversified our product portfolio and business lines with the acquisition of two businesses in 2018. The historical financial data for periods prior to the acquisitions does not include the results of any of the acquired companies for the periods presented. In addition, we completed two strategic dispositions in 2019. The historical financial data for periods prior to these dispositions include the results attributable to the disposed assets for the periods presented. As such, historical financial results may not provide an accurate indication of our future results.
- As we integrate acquired companies and further implement internal controls, processes and infrastructure to operate in compliance with the regulatory requirements applicable to companies with publicly traded shares, it is likely that we will incur incremental selling, general and administrative expenses relative to historical periods.

Our future results will depend on our ability to efficiently manage our combined operations and execute our business strategy.

Results of operations

Year ended December 31, 2019 compared with year ended December 31, 2018

(in thousands of dollars, except per share information)	Year ended December 31, 2019	Year ended December 31, 2018	Change $	Change %
Revenue:				
Drilling & Downhole	$ 334,829	$ 334,019	$ 810	0.2 %
Completions	305,089	373,107	(68,018)	(18.2)%
Production	320,996	361,407	(40,411)	(11.2)%
Eliminations	(4,381)	(4,314)	(67)	*
Total revenue	$ 956,533	$ 1,064,219	(107,686)	(10.1)%
Cost of sales:				
Drilling & Downhole	$ 240,175	$ 256,208	$ (16,033)	(6.3)%
Completions	226,713	272,280	(45,567)	(16.7)%
Production	249,174	283,673	(34,499)	(12.2)%
Eliminations	(4,381)	(4,314)	(67)	*
Total cost of sales	$ 711,681	$ 807,847	$ (96,166)	(11.9)%
Gross profit:				
Drilling & Downhole	$ 94,654	$ 77,811	$ 16,843	21.6 %
Completions	78,376	100,827	(22,451)	(22.3)%
Production	71,822	77,734	(5,912)	(7.6)%
Total gross profit	$ 244,852	$ 256,372	$ (11,520)	(4.5)%
Selling, general and administrative expenses:				
Drilling & Downhole	$ 86,993	$ 111,286	$ (24,293)	(21.8)%
Completions	71,795	68,903	2,892	4.2 %
Production	64,020	71,712	(7,692)	(10.7)%
Corporate	28,928	35,079	(6,151)	(17.5)%
Total selling, general and administrative expenses	$ 251,736	$ 286,980	$ (35,244)	(12.3)%
Segment operating income (loss):				
Drilling & Downhole	$ 7,343	$ (33,335)	$ 40,678	122.0 %
Operating margin %	*2.2 %*	*(10.0)%*		
Completions	6,581	31,924	(25,343)	(79.4)%
Operating margin %	*2.2 %*	*8.6 %*		
Production	7,802	6,022	1,780	29.6 %
Operating margin %	*2.4 %*	*1.7 %*		
Corporate	(28,928)	(35,079)	6,151	17.5 %
Total segment operating loss	$ (7,202)	$ (30,468)	$ 23,266	76.4 %
Operating margin %	*(0.8)%*	*(2.9)%*		
Transaction expenses	1,159	3,446	(2,287)	*
Impairments of goodwill, intangible assets, property and equipment	532,336	363,522	168,814	*
Contingent consideration benefit	(4,629)	—	(4,629)	*
Loss (gain) on disposal of assets and other	78	(438)	516	*
Operating loss	(536,146)	(396,998)	(139,148)	(35.1)%
Interest expense	31,618	32,532	(914)	(2.8)%
Foreign exchange losses (gains) and other, net	5,022	(6,270)	11,292	*
Gain on contribution of subsea rentals business	—	(33,506)	33,506	*
Gain on disposition of business	(2,348)	—	(2,348)	*
Gain realized on previously held equity investment	(1,567)	—	(1,567)	*
Total other (income) expense, net	32,725	(7,244)	39,969	*
Loss before income taxes	(568,871)	(389,754)	(179,117)	(46.0)%
Income tax benefit	(1,814)	(15,674)	13,860	*
Net loss	(567,057)	(374,080)	(192,977)	(51.6)%
Weighted average shares outstanding				
Basic	110,100	108,771		
Diluted	110,100	108,771		
Loss per share				
Basic	$ (5.15)	$ (3.44)		
Diluted	$ (5.15)	$ (3.44)		

** not meaningful*

Revenue

Our revenue for the year ended December 31, 2019 was $956.5 million, a decrease of $107.7 million, or 10.1%, compared to the year ended December 31, 2018. In general, the decrease in revenue is due to lower drilling and completions activity in the North America market resulting from lower oil and natural gas prices compared to the previous year resulting in lower spending by exploration and production companies. For the year ended December 31, 2019, our Drilling & Downhole segment, Completions segment, and Production segment comprised 35.0%, 31.4% and 33.6% of our total revenue, respectively, compared to 31.4%, 34.6% and 34.0%, respectively, for the year ended December 31, 2018. The changes in revenue by operating segment consisted of the following:

Drilling & Downhole segment — Revenue was $334.8 million for the year ended December 31, 2019, an increase of $0.8 million, or 0.2%, compared to the year ended December 31, 2018. This increase was driven by a $10.3 million increase in revenue for our Subsea product line, primarily due to higher sales of non-oil and natural gas capital equipment and an $11.1 million increase in revenue for our Downhole product line due to continued sales volume growth for our artificial lift products, including the revenue contribution from ESPCT which was acquired in the third quarter of 2018. These increases were mostly offset by a $20.6 million decrease in revenue for our Drilling product line on lower sales volumes of consumable products due to lower U.S. rig activity.

Completions segment — Revenue was $305.1 million for the year ended December 31, 2019, a decrease of $68.0 million, or 18.2%, compared to the year ended December 31, 2018. This decrease includes a $66.7 million decrease in revenue for our Stimulation and Intervention product line attributable to lower capital spending by our pressure pumping service customers, partially offset by a full year of revenue contribution from GHT, which was acquired in the fourth quarter of 2018. The remaining decline was driven by a $1.3 million decrease in sales volumes for our Coiled Tubing product line primarily attributable to lower U.S. completions activity, partially offset by higher sales into international markets.

Production segment — Revenue was $321.0 million for the year ended December 31, 2019, a decrease of $40.4 million, or 11.2%, compared to the year ended December 31, 2018. This decrease was primarily driven by a $21.9 million decline in sales volumes of our valve products, particularly sales into the North America midstream oil and natural gas market. Revenue for our Production Equipment product line decreased by $18.5 million as a result of lower sales volumes of our surface production equipment due to a decline in well completions activity and lower project activity with our downstream customers for our process oil treatment equipment.

Segment operating loss and segment operating margin percentage

Segment operating loss for the year ended December 31, 2019 improved $23.3 million to a loss of $7.2 million from a loss of $30.5 million for the year ended December 31, 2018. The operating margin percentage improved to (0.8)% for the year ended December 31, 2019 from (2.9)% for the year ended December 31, 2018. The segment operating margin percentage is calculated by dividing segment operating income (loss) by revenue for the period. The change in operating margin percentage for each segment is explained as follows:

Drilling & Downhole segment — The operating margin percentage for this segment was 2.2% for the year ended December 31, 2019 compared to (10.0)% for the year ended December 31, 2018. The improvement in operating margins is attributable to increased operating leverage on higher revenues for our Downhole and Subsea product lines. In addition, operating margins improved from a reduction in selling, general and administrative expenses including lower employee related costs as a result of cost reduction actions, an $8.3 million reduction in amortization expense following intangible asset impairments recognized in the fourth quarter of 2018 and a $9.1 million reduction in inventory write downs in 2019 compared to 2018.

Completions segment — The operating margin percentage declined to 2.2% for the year ended December 31, 2019 compared to 8.6% for the year ended December 31, 2018. This decline is due to decreased operating leverage on lower sales volumes of our well stimulation products and incremental selling, general and administrative expenses following the fourth quarter 2018 acquisition of GHT. These declines were partially offset by a $9.5 million reduction in inventory write downs recognized in 2019 compared to 2018.

Production segment — The operating margin percentage was 2.4% for the year ended December 31, 2019 compared to 1.7% for the year ended December 31, 2018. Segment operating margins improved due to a $7.6 million reduction in inventory write downs in 2019 compared to 2018 and lower selling, general and administrative expenses, primarily lower employee related costs as a result of cost reduction actions. These cost reductions were mostly offset by decreased operating leverage on lower sales volumes of our valves products and incremental cost from steel tariffs.

Corporate — Selling, general and administrative expenses for Corporate decreased $6.2 million, or 17.5%, for the year ended December 31, 2019 compared to the year ended December 31, 2018. This decrease was primarily attributable to a $3.8 million reduction in severance costs in 2019 compared to 2018 as well as lower employee payroll costs, professional fees and facilities costs as a result of cost reduction actions. Corporate costs include, among other

items, payroll related costs for management, administration, finance, legal, and human resources personnel; professional fees for legal, accounting and related services; and marketing costs.

Other items not included in segment operating loss

Several items are not included in segment operating loss, but are included in the total operating loss. These items include transaction expenses, impairments of goodwill, intangible assets, property and equipment, contingent consideration benefit and losses (gains) on the disposal of assets and other. Transaction expenses relate to legal and other advisory costs incurred in acquiring or disposing of businesses and are not considered to be part of segment operating loss. These costs were $1.2 million and $3.4 million for the years ended December 31, 2019 and 2018, respectively.

For the years ended December 31, 2019 and 2018, we recognized material impairments of goodwill, intangible assets, property and equipment primarily as a result of substantial declines in the quoted market prices of our common stock and significant declines in drilling and completions activity. In 2019, we recognized goodwill impairments totaling $471.0 million, intangible asset impairments totaling $53.5 million and property and equipment impairments totaling $7.9 million. In 2018, we recognized goodwill impairments totaling $298.8 million and intangible impairments totaling $64.7 million. See Note 7 *Goodwill and Intangible Assets* and Note 6 *Property and Equipment* for further information related to these charges.

The contingent consideration benefit relates to a gain of $4.6 million recognized in the first quarter of 2019 due to reducing the estimated fair value of the contingent cash liability associated with the acquisition of GHT. See Note 4 *Acquisitions & Dispositions* for additional information.

Other income and expense

Other income and expense includes interest expense, foreign exchange losses (gains) and other, net, gains on the disposition of businesses and a gain realized on our previously held equity investment.

We incurred $31.6 million of interest expense during the year ended December 31, 2019, a decrease of $0.9 million compared to the year ended December 31, 2018 due to a lower average outstanding balance on our Credit Facility.

The foreign exchange losses (gains) are primarily the result of movements in the British pound, the Euro, and Canadian Dollars relative to the U.S. dollar. These movements in exchange rates create foreign exchange gains or losses when applied to monetary assets or liabilities denominated in currencies other than the location's functional currency, primarily U.S. dollar denominated cash, trade account receivables and net intercompany receivable balances for our entities using a functional currency other than the U.S. dollar. The foreign exchange loss was $5.0 million for the year ended December 31, 2019 compared to a gain of $6.3 million for the year ended December 31, 2018.

In the first quarter of 2018, we recognized a gain of $33.5 million as a result of the deconsolidation of our Forum Subsea Rentals business which was contributed to Ashtead in exchange for an aggregate 40% interest in the combined business. In the third quarter of 2019, we sold our aggregate 40% interest in Ashtead and recognized a gain of $1.6 million as a result of this transaction. In the fourth quarter of 2019, we sold certain assets of our Cooper Alloy brand of valve products and recognized a gain on disposition totaling $2.3 million. See Note 4 *Acquisitions & Dispositions* for further information related to these transactions.

Taxes

The effective tax rate, calculated by dividing total tax benefit by loss before income taxes, was (0.3)% and (4.0)% for the years ended December 31, 2019 and 2018 respectively. The tax rate for 2019 is different than 2018 primarily due to higher goodwill impairments, increases in our valuation allowance related to our deferred tax assets and a non-recurring benefit of the tax effects of tax reform recorded in 2018. We recorded a tax benefit of $1.8 million for the year ended December 31, 2019, compared to a tax benefit of $15.7 million for the year ended December 31, 2018. Items impacting the effective tax rate for the year ended December 31, 2019 include an increase in our valuation allowance of $98.9 million to write down our deferred tax assets in the U.S., U.K., Germany, Singapore and Saudi Arabia primarily due to operating losses incurred where the recording of a tax benefit is not available and $27.2 million of tax expense related to the impairment of non-tax deductible goodwill. Items impacting the effective tax rate for the year ended December 31, 2018 include $46.1 million of tax expense associated with the impairment of non-tax deductible goodwill for our Drilling and Downhole reporting units, $50.0 million of tax expense for a partial valuation allowance in the U.S. and full valuation allowances in the U.K., Germany and Singapore, and $15.6 million of tax benefit from adjusting the provisional impact of U.S. tax reform. See Note 10 *Income Taxes* for additional information on the impact of U.S. Tax Reform.

Year ended December 31, 2018 compared to year ended December 31, 2017

	Year ended December 31,		Change	
	2018	2017	$	%
(in thousands of dollars, except per share information)				
Revenue:				
Drilling & Downhole	$ 334,019	$ 310,523	$ 23,496	7.6 %
Completions	373,107	184,182	188,925	102.6 %
Production	361,407	327,287	34,120	10.4 %
Eliminations	(4,314)	(3,372)	(942)	*
Total revenue	$ 1,064,219	$ 818,620	245,599	30.0 %
Cost of sales:				
Drilling & Downhole	$ 256,208	$ 241,263	$ 14,945	6.2 %
Completions	272,280	140,118	132,162	94.3 %
Production	283,673	251,823	31,850	12.6 %
Eliminations	(4,314)	(3,372)	(942)	*
Total cost of sales	$ 807,847	$ 629,832	$ 178,015	28.3 %
Gross profit:				
Drilling & Downhole	$ 77,811	$ 69,260	$ 8,551	12.3 %
Completions	100,827	44,064	56,763	128.8 %
Production	77,734	75,464	2,270	3.0 %
Total gross profit	$ 256,372	$ 188,788	$ 67,584	35.8 %
Selling, general and administrative expenses:				
Drilling & Downhole	$ 111,286	$ 116,366	$ (5,080)	(4.4)%
Completions	68,903	36,267	32,636	90.0 %
Production	71,712	67,653	4,059	6.0 %
Corporate	35,079	33,427	1,652	4.9 %
Total selling, general and administrative expenses	$ 286,980	$ 253,713	$ 33,267	13.1 %
Segment operating income (loss):				
Drilling & Downhole	$ (33,335)	$ (47,106)	$ 13,771	29.2 %
Operating income margin %	*(10.0)%*	*(15.2)%*		
Completions	31,924	8,797	23,127	262.9 %
Operating income margin %	*8.6 %*	*4.8 %*		
Production	6,022	7,811	(1,789)	(22.9)%
Operating income margin %	*1.7 %*	*2.4 %*		
Corporate	(35,079)	(33,427)	(1,652)	(4.9)%
Total segment operating loss	$ (30,468)	$ (63,925)	$ 33,457	52.3 %
Operating income margin %	*(2.9)%*	*(7.8)%*		
Impairments of goodwill and intangible assets	363,522	69,062	294,460	*
Transaction expenses	3,446	6,511	(3,065)	*
Loss (gain) on disposal of assets and other	(438)	2,097	(2,535)	*
Operating loss	(396,998)	(141,595)	(255,403)	(180.4)%
Interest expense	32,532	26,808	5,724	21.4 %
Foreign exchange losses (gains) and other, net	(6,270)	7,268	(13,538)	*
Gain on contribution of subsea rentals business	(33,506)	—	(33,506)	*
Gain realized on previously held equity investment	—	(120,392)	120,392	*
Total other income	(7,244)	(86,316)	79,072	*
Loss before income taxes	(389,754)	(55,279)	(334,475)	(605.1)%
Income tax expense (benefit)	(15,674)	4,121	(19,795)	*
Net loss	$ (374,080)	$ (59,400)	$ (314,680)	(529.8)%
Weighted average shares outstanding				
Basic	108,771	98,689		
Diluted	108,771	98,689		
Loss per share				
Basic	$ (3.44)	$ (0.60)		
Diluted	$ (3.44)	$ (0.60)		

** not meaningful*

Revenue

Our revenue for the year ended December 31, 2018 was $1,064.2 million, an increase of $245.6 million, or 30.0%, compared to the year ended December 31, 2017. In general, the increase in revenue is due to higher market activity resulting from higher oil prices. For the year ended December 31, 2018, our Drilling & Downhole segment, Completions segment, and Production segment comprise 31.4%, 34.6% and 34.0% of our total revenue, respectively, compared to 37.9%, 22.1% and 40.0%, respectively, for the year ended December 31, 2017. The changes in revenue by operating segment consisted of the following:

Drilling & Downhole segment — Revenue was $334.0 million for the year ended December 31, 2018, an increase of $23.5 million, or 7.6%, compared to the year ended December 31, 2017. Revenue from sales of our Downhole products increased $29.0 million, primarily due to incremental revenue from Multilift and ESPCT which were acquired in the second quarter of 2017 and third quarter of 2018, respectively. Refer to Note 4 *Acquisitions & Dispositions* for additional information. Revenue from sales of our drilling products increased $9.4 million , primarily due to higher sales of capital equipment to international markets in 2018. These increases were partially offset by a $14.9 million decline in revenue for our subsea product line primarily due to the contribution of our subsea rentals business to Ashtead in exchange for a 40% interest in the combined business.

Completions segment — Revenue was $373.1 million for the year ended December 31, 2018, an increase of $188.9 million, or 102.6%, compared to the year ended December 31, 2017. This change includes a $108.8 million increase in revenue from Global Tubing which was acquired and fully consolidated in our financial statements beginning in the fourth quarter of 2017. The remaining increase was driven by an $80.1 million increase in sales of our well stimulation and intervention products due to higher sales volumes of pressure pumping products attributable to higher completions spending by exploration and production companies in the U.S. market and revenue contributed by the acquisition of GHT in the fourth quarter of 2018.

Production segment — Revenue was $361.4 million for the year ended December 31, 2018, an increase of $34.1 million, or 10.4%, compared to the year ended December 31, 2017. The increase in oil and natural gas operators budgets and resulting infrastructure spending have led to increased sales of our valve products and surface production equipment. Approximately $17.3 million of the increase is due to higher sales volumes of valve products, particularly sales into the North America oil and natural gas market. The remaining $16.8 million increase is attributable to higher sales volumes of our activity-based surface production equipment to exploration and production operators.

Segment operating income (loss) and segment operating margin percentage

Segment operating loss for the year ended December 31, 2018 improved $33.5 million, to a loss of $30.5 million from a loss of $63.9 million for the year ended December 31, 2017. The operating margin percentage improved to (2.9)% for the year ended December 31, 2018 from (7.8)% for the year ended December 31, 2017. The segment operating margin percentage is calculated by dividing segment operating income (loss) by revenue for the period. The change in operating margin percentage for each segment is explained as follows:

Drilling & Downhole segment — The operating margin percentage was (10.0)% for the year ended December 31, 2018 compared to (15.2)% for the year ended December 31, 2017. The improvement in operating margin percentage is due to a more favorable sales mix and a decrease in employee related costs resulting from cost reduction actions. This improvement was partially offset by an increase in restructuring charges and inventory write downs totaling approximately $18.5 million and $12.9 million for the years ended December 31, 2018 and 2017, respectively.

Completions segment — The operating margin percentage improved to 8.6% for the year ended December 31, 2018 from 4.8% for the year ended December 31, 2017. The improvement in operating margin percentage is due to increased operating leverage on higher volumes, especially on higher sales of our well stimulation and intervention products as discussed above. In addition, operating margin was positively impacted by the late 2017 acquisition of the remaining ownership interest of Global Tubing, which was previously reported as an equity method investment for the first nine months of 2017 and was fully consolidated in our financial statements beginning in the fourth quarter of 2017. The improvement in operating margins was partially offset by $12.5 million of charges to write-down inventory for the year ended December 31, 2018.

Production segment — The operating margin percentage was 1.7% for the year ended December 31, 2018 compared to 2.4% for the year ended December 31, 2017. The slight decline in operating margin percentage was driven by $9.9 million of charges to write-down inventory for the year ended December 31, 2018 compared to $4.3 million for the year ended December 31, 2017.

Corporate — Selling, general and administrative expenses for Corporate increased $1.7 million, or 4.9%, for the year ended December 31, 2018 compared to the year ended December 31, 2017, primarily due to an increase in employee severance and payroll costs, partially offset by a decrease in share based compensation expense. Corporate costs

include, among other items, payroll related costs for general management and management of finance and administration, legal, human resources; professional fees for legal, accounting and related services; and marketing costs.

Other items not included in segment operating loss

Several items are not included in segment operating loss, but are included in total operating loss. These items include goodwill and intangible asset impairments, transaction expenses, and loss (gain) on the disposal of assets. Transaction expenses relate to legal and other advisory costs incurred in acquiring and disposing of businesses and are not considered to be part of segment operating loss. These costs were $3.4 million and $6.5 million for the years ended December 31, 2018 and 2017, respectively, with these costs primarily related to the acquisitions of GHT and ESPCT in 2018 and Global Tubing and Multilift in 2017.

For the years ended December 31, 2018 and 2017, we recognized material impairments of goodwill and intangible assets primarily as a result of substantial declines in the quoted market prices of our common stock and significant declines in drilling and completions activity. In 2018, we recognized goodwill impairments totaling $298.8 million and intangible impairments totaling $64.7 million. In 2017, we recognized goodwill impairments totaling $68.0 million and intangible impairments totaling $1.1 million. See Note 7 *Goodwill and Intangible Assets* for further information related to these charges.

Other income and expense

Other income and expense includes interest expense, foreign exchange losses (gains), a gain recognized on the contribution of our subsea rentals business and a gain realized on the previously held equity investment in Global Tubing. We incurred $32.5 million of interest expense during the year ended December 31, 2018, an increase of $5.7 million compared to the year ended December 31, 2017 primarily due to an increase in average outstanding borrowings under our Credit Facility.

The foreign exchange gain was $6.3 million for the year ended December 31, 2018 compared to a loss of $7.3 million for the year ended December 31, 2017. The foreign exchange losses (gains) are primarily the result of movements in the British pound and the Euro relative to the U.S. dollar. These movements in exchange rates create foreign exchange gains or losses when applied to monetary assets or liabilities denominated in currencies other than the location's functional currency, primarily U.S. dollar denominated cash, trade account receivables and net intercompany receivable balances for our entities using a functional currency other than the U.S. dollar.

In 2018, we recognized a gain of $33.5 million as a result of the deconsolidation of our Forum Subsea Rentals business. In 2017, we recognized a gain of $120.4 million on the previously held equity investment in Global Tubing upon acquiring the remaining interest in the fourth quarter of 2017. Refer to Note 4 *Acquisitions & Dispositions* for additional information

Taxes

The effective tax rate, calculated by dividing total tax expense (benefit) by income before income taxes, was (4.0)% and 7.5% for the years ended December 31, 2018 and 2017, respectively. The tax rate for 2018 is significantly different than 2017 primarily due to higher goodwill impairments, increases in our valuation allowance related to our deferred tax assets, the reduction in the U.S. corporate income tax rate as a result of U.S. tax reform and the tax effects of tax reform recorded in 2018 as compared to those recorded in 2017. Items impacting the effective tax rate for the year ended December 31, 2018 include $46.1 million of tax expense associated with the impairment of non-tax deductible goodwill for our Drilling and Downhole reporting units, $50.0 million of tax expense for a partial valuation allowance in the U.S. and a full valuation allowance in the U.K., Germany and Singapore writing down our deferred tax assets to what is more likely than not realizable, and $15.6 million of tax benefit from adjusting the provisional impact of U.S. tax reform.

Liquidity and capital resources

Sources and uses of liquidity

Our internal sources of liquidity are cash on hand and cash flows from operations, while our primary external sources include trade credit and our Credit Facility and Senior Notes described below. Our primary uses of capital have been for inventories, sales on credit to our customers and ongoing maintenance and growth capital expenditures. We continually monitor potential capital sources, including equity and debt financing, to meet our investment and target liquidity requirements. Our future success and growth will be highly dependent on our ability to continue generating positive operating cash flow and access outside sources of capital. Based on existing market conditions and our expected liquidity needs, among other factors, we may use a portion of our cash flows from operations, proceeds from divestitures, securities offerings or borrowings to reduce debt prior to scheduled maturities, and may seek opportunities to refinance all or a portion of our senior secured notes.

At December 31, 2019, we had cash and cash equivalents of $57.9 million, availability under our Credit Facility of $229.1 million and total debt of $399.6 million. Capital expenditures for 2019 totaled $15.1 million and consist of, among other items, investments in certain manufacturing facilities, replacing end of life machinery and equipment, and continuing the implementation of our enterprise resource planning solution globally. We believe that cash on hand, cash generated from operations and availability under our Credit Facility will be sufficient to fund operations, working capital needs, and capital expenditure requirements for the foreseeable future.

In 2018 we expanded and diversified our product portfolio with the acquisition of two businesses for total consideration of $65.3 million. In 2019, we sold our aggregate 40% interest in Ashtead and we sold certain assets of our Cooper Alloy brand of valve products for total consideration of $51.7 million. We did not complete any acquisitions in 2019. For additional information, see Note 4 *Acquisitions & Dispositions*. We may pursue acquisitions in the future, which may be funded with cash and/or equity. Our ability to make significant additional acquisitions for cash may require us to pursue additional equity or debt financing, which we may not be able to obtain on terms acceptable to us or at all.

Our cash flows for the years ended December 31, 2019, 2018 and 2017 are presented below (in thousands):

	Year ended December 31,		
	2019	2018	2017
Net cash provided by (used in) operating activities	$ 104,144	$ 2,407	$ (40,033)
Net cash provided by (used in) investing activities	28,135	(75,407)	(187,968)
Net cash provided by (used in) financing activities	(122,191)	6,522	100,563
Effect of exchange rate changes on cash	582	(1,497)	8,232
Net increase (decrease) in cash, cash equivalents and restricted cash	$ 10,670	$ (67,975)	$ (119,206)

Net cash provided by (used in) operating activities

2019 vs. 2018. Net cash provided by operating activities was $104.1 million for the year ended December 31, 2019 compared to $2.4 million for the year ended December 31, 2018. This improvement is primarily attributable to changes in working capital which provided cash of $63.5 million for the year ended December 31, 2019 compared to a $75.3 million use of cash in 2018.

2018 vs. 2017. Net cash provided by operating activities was $2.4 million for the year ended December 31, 2018 compared to $40.0 million of net cash used in operating activities for the year ended December 31, 2017. Due to improved operating results, net income adjusted for non-cash items provided $77.7 million of cash for the year ended December 31, 2018 as compared to $1.7 million of cash used for the same period in 2017. However, higher investments in working capital used $75.3 million of cash for the year ended December 31, 2018 compared to $38.4 million for the same period in 2017. The increase in working capital in 2018 was primarily due to increases in inventory.

Our operating cash flows are sensitive to a number of variables, the most significant of which is the level of drilling and production activity for oil and natural gas reserves. These activity levels are in turn impacted by the volatility of oil and natural gas prices, regional and worldwide economic activity, weather, infrastructure capacity to reach markets and other various factors. These factors are beyond our control and are difficult to predict.

Net cash provided by (used in) investing activities

2019 vs. 2018. Net cash provided by investing activities was $28.1 million for the year ended December 31, 2019 compared to $75.4 million of net cash used in investing activities for the year ended December 31, 2018. Net cash provided by investing activities for the year ended December 31, 2019 includes $43.2 million in cash proceeds from the sale of equity investment, business, property and equipment partially offset by $15.1 million of capital expenditures for property and equipment. In comparison, net cash used in investing activities for the year ended December 31, 2018 included $60.6 million for the acquisition of two businesses and $24.0 million of capital expenditures for property and equipment, partially offset by $9.3 million of proceeds from the sale of businesses, property and equipment.

2018 vs. 2017. Net cash used in investing activities was $75.4 million and $188.0 million for the years ended December 31, 2018 and 2017, respectively. The decrease was primarily due to $60.6 million of cash consideration (net of cash acquired) paid for two acquisitions in 2018 compared $162.2 million paid for three acquisitions in 2017. Capital expenditures were $24.0 million and $26.7 million for the years ended December 31, 2018 and 2017, respectively.

Net cash provided by (used in) financing activities

2019 vs. 2018. Net cash used in financing activities was $122.2 million for the year ended December 31, 2019 compared to $6.5 million of net cash provided by financing activities for the year ended December 31, 2018. This change is primarily related to net repayments of debt totaling $119.9 million in 2019.

2018 vs. 2017. Net cash provided by financing activities was $6.5 million and $100.6 million for the years ended December 31, 2018 and 2017, respectively. The decrease primarily resulted from net borrowings on our Credit Facility of $10.2 million in 2018 compared to $107.4 million in 2017.

Senior Notes Due 2021

Our Senior Notes have $400.0 million principal amount outstanding which bear interest at a rate of 6.25% per annum, payable on April 1 and October 1 of each year, and mature on October 1, 2021. The Senior Notes are senior unsecured obligations guaranteed on a senior unsecured basis by our subsidiaries that guarantee the Credit Facility and rank junior to, among other indebtedness, the Credit Facility to the extent of the value of the collateral securing the Credit Facility.

The terms of the Senior Notes are governed by the indenture, dated October 2, 2013 (the “Indenture”), by and among us, the guarantors named therein and Wells Fargo Bank, National Association, as trustee. The Senior Notes contain customary covenants including some limitations and restrictions on our ability to pay dividends on, purchase or redeem our common stock; redeem or prepay our subordinated debt; make certain investments; incur or guarantee additional indebtedness or issue certain types of equity securities; create certain liens, sell assets, including equity interests in our restricted subsidiaries; restrict dividends or other payments of our restricted subsidiaries; consolidate, merge or transfer all or substantially all of our assets; engage in transactions with affiliates; and create unrestricted subsidiaries. The Indenture also contains customary events of default, including nonpayment, breach of covenants in the Indenture, payment defaults or acceleration of other indebtedness, failure to pay certain judgments and certain events of bankruptcy and insolvency. We are required to offer to repurchase the Senior Notes in connection with specified change in control events or with excess proceeds of asset sales not applied for permitted purposes.

We may redeem the Senior Notes at a redemption price of 100.0% of their principal amount plus accrued interest. For additional information, refer to Note 8 *Debt*.

Credit Facility

Our Credit Facility provides revolving credit commitments of $300.0 million, including up to $30.0 million available to certain Canadian subsidiaries of the Company for loans in United States or Canadian dollars, $45.0 million available for letters of credit issued for the account of the Company and certain of its domestic subsidiaries and $3.0 million available for letters of credit issued for the account of Canadian subsidiaries of the Company. Lender commitments under the Credit Facility, subject to certain limitations, may be increased by an additional $100.0 million. The Credit Facility matures in July 2021, but if our outstanding Senior Notes due October 2021 are refinanced or replaced with indebtedness maturing in or after February 2023, the final maturity of the Credit Facility will automatically extend to October 2022.

Availability under the Credit Facility is subject to a borrowing base calculated by reference to eligible accounts receivable in the United States, Canada and certain other jurisdictions (subject to a cap) and eligible inventory in the United States and Canada. Our borrowing capacity under the Credit Facility could be reduced or eliminated, depending on future fluctuations in our receivables and inventory. As of December 31, 2019, our total borrowing base was $253.0 million,

of which zero was drawn and $23.9 million was used for security of outstanding letters of credit, resulting in remaining availability of $229.1 million.

If excess availability under the Credit Facility falls below the greater of 10.0% of the borrowing base and $20.0 million, we will be required to maintain a fixed charge coverage ratio of at least 1.00:1.00 as of the end of each fiscal quarter until excess availability under the Credit Facility exceeds such thresholds for at least 60 consecutive days. For additional information, refer to Note 8 *Debt*.

Off-balance sheet arrangements

As of December 31, 2019, we had no off-balance sheet instruments or financial arrangements, other than letters of credit entered into in the ordinary course of business. Operating leases were excluded from our balance sheet as of December 31, 2018, but are included in the balance sheet as of December 31, 2019 following the January 1, 2019 adoption of ASC 842. For additional information, refer to Note 2 *Summary of Significant Accounting Policies* and Note 9 *Leases*.

Contractual obligations

The following table summarizes our significant contractual obligations and other long- term liabilities as of December 31, 2019 (in thousands):

	2020	2021	2022	2023	2024	Thereafter	Total
Senior Notes due 2021 [1]	$ 25,000	$ 418,750	$ —	$ —	$ —	$ —	$ 443,750
Credit Facility [2]	—	—	—	—	—	—	—
Leases	17,679	14,870	11,329	7,593	6,363	25,507	83,341
Letters of Credit	20,913	1,480	2,125	—	—	—	24,518
Pension	315	316	342	325	362	7,837	9,497
Total	$ 63,907	$ 435,416	$ 13,796	$ 7,918	$ 6,725	$ 33,344	$ 561,106

(1) Includes interest on $400 million of senior notes at 6.25% that are due in October 2021.

(2) No outstanding balance under the Credit Facility as of December 31, 2019.

As discussed in Note 10 *Income Taxes*, as of December 31, 2019 the Company has approximately $14.6 million of liabilities associated with uncertain tax positions in the various jurisdictions in which the Company conducts business. Due to the uncertain and complex application of the tax regulations, combined with the difficulty in predicting when tax audits throughout the world may be concluded, the Company cannot make precise estimates of the timing of cash outflows relating to these liabilities. Accordingly, liabilities associated with uncertain tax positions have been excluded from the contractual obligations table above.

Inflation

Global inflation has been relatively low in recent years and did not have a material impact on our results of operations during 2019, 2018 or 2017. Although the impact of inflation has been insignificant in recent years, it is still a factor in the global economy and we do experience inflationary pressure on the cost of raw materials and components used in our products.

Critical accounting policies and estimates

The discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with GAAP. In preparing our consolidated financial statements, we make judgments, estimates and assumptions affecting the amounts reported. We base our estimates on factors including historical experience and various assumptions that we believe are reasonable under the circumstances. These factors form the basis for making estimates about the carrying values of assets and liabilities that are not readily apparent from other sources. Certain accounting policies involve judgments and uncertainties to such an extent that there is a reasonable likelihood that materially different amounts could have been reported under different conditions, or if different assumptions had been used. We evaluate our estimates and assumptions on a regular basis. Actual results may differ from these estimates and assumptions used in preparation of our consolidated financial statements.

In order to provide a better understanding of how we make judgments, and develop estimates and assumptions about future events, we have described our most critical accounting policies below. We believe that these accounting policies reflect our more significant estimates and assumptions used in preparation of our consolidated financial statements.

Revenue recognition

Revenue is recognized in accordance with Accounting Standards Codification Topic 606 (“ASC 606”), when control of the promised goods or services is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those goods or services.

Contract Identification. We account for a contract when it is approved, both parties are committed, the rights of the parties are identified, payment terms are defined, the contract has commercial substance and collection of consideration is probable.

Performance Obligations. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer under ASC 606. The majority of our contracts with customers contain a single performance obligation to provide agreed-upon products or services. For contracts with multiple performance obligations, we allocate revenue to each performance obligation based on its relative standalone selling price. In accordance with ASC 606, we do not assess whether promised goods or services are performance obligations if they are immaterial in the context of the contract with the customer. We have elected to apply the practical expedient to account for shipping and handling costs associated with outbound freight after control of a product has transferred to a customer as a fulfillment cost which is included in Cost of Sales. Furthermore, since our customer payment terms are short-term in nature, we have also elected to apply the practical expedient which allows an entity to not adjust for the effects of a significant financing component if it expects that the customer’s payment period will be less than one year in duration.

Contract Value. Revenue is measured based on the amount of consideration specified in the contracts with our customers and excludes any amounts collected on behalf of third parties. We have elected the practical expedient to exclude amounts collected from customers for all sales (and other similar) taxes.

The estimation of total revenue from a customer contract is subject to elements of variable consideration. Certain customers may receive rebates or discounts which are accounted for as variable consideration. We estimate variable consideration as the most likely amount to which we expect to be entitled, and we include estimated amounts in the transaction price to the extent it is probable that a significant reversal of cumulative revenue will not occur when the uncertainty associated with the variable consideration is resolved. Our estimate of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of our anticipated performance and all information (historic, current, forecast) that is reasonably available to us.

Timing of Recognition. We recognize revenue when we satisfy a performance obligation by transferring control of a product or service to a customer. Our performance obligations are satisfied at a point in time or over time as work progresses.

Revenue from goods transferred to customers at a point in time accounted for 96% of revenues for the year ended December 31, 2019. The majority of this revenue is product sales, which are generally recognized when items are shipped from our facilities and title passes to the customer. The amount of revenue recognized for products is adjusted for expected returns, which are estimated based on historical data.

Revenue from goods transferred to customers over time accounted for 4% of revenues for the year ended December 31, 2019, which is related to certain contracts in our Subsea and Production Equipment product lines. Recognition over time for these contracts is supported by our assessment of the products supplied as having no alternative use to us and by clauses in the contracts that provide us with an enforceable right to payment for performance completed to date. We use the cost-to-cost method to measure progress for these contracts because it best depicts the transfer of

assets to the customer which occurs as costs are incurred on the contract. The amount of revenue recognized is calculated based on the ratio of costs incurred to-date compared to total estimated costs which requires management to calculate reasonably dependable estimates of total contract costs. Whenever revisions of estimated contract costs and contract values indicate that the contract costs will exceed estimated revenues, thus creating a loss, a provision for the total estimated loss is recorded in that period. We recognize revenue and cost of sales each period based upon the advancement of the work-in-progress unless the stage of completion is insufficient to enable a reasonably certain forecast of profit to be established. In such cases, no profit is recognized during the period.

Accounting estimates during the course of projects may change, primarily related to our remotely operated vehicles ("ROVs") which may take longer to manufacture. The effect of such a change, which can be upward as well as downward, is accounted for in the period of change, and the cumulative income recognized to date is adjusted to reflect the latest estimates. These revisions to estimates are accounted for on a prospective basis.

Contracts are sometimes modified to account for changes in product specifications or requirements. Most of our contract modifications are for goods and services that are not distinct from the existing contract. As such, these modifications are accounted for as if they were part of the existing contract, and therefore, the effect of the modification on the transaction price and our measure of progress for the performance obligation to which it relates is recognized as an adjustment to revenue on a cumulative catch-up basis. No adjustment to any one contract was material to our consolidated financial statements for the years ended December 31, 2019, 2018 and 2017.

We sell our products through a number of channels including a direct sales force, marketing representatives, and distributors. We have elected to expense sales commissions when incurred as the amortization period would be less than one year. These costs are recorded within cost of sales.

Portfolio Approach. We have elected to apply ASC 606 to a portfolio of contracts with similar characteristics as we reasonably expect that the effects on the financial statements of applying this guidance to the portfolio would not differ materially from applying this guidance to the individual contracts within that portfolio.

Disaggregated Revenue. Refer to Note 17 *Business Segments* for disaggregated revenue by product line and geography.

Contract Balances. Contract balances are determined on a contract by contract basis. Contract assets represent revenue recognized for goods and services provided to our customers when payment is conditioned on something other than the passage of time. Similarly, when we receive consideration, or such consideration is unconditionally due, from a customer prior to transferring goods or services to the customer under the terms of a sales contract, we record a contract liability. Such contract liabilities typically result from billings in excess of costs incurred and advance payments received on product sales.

Stock based compensation

We account for awards of stock based compensation at fair value on the date granted to employees and recognize the compensation expense in our consolidated financial statements over the requisite service period. The fair value of stock based compensation was measured using the fair value of the common stock for restricted stock and restricted stock units, the Black-Scholes model for options, and a Monte Carlo Simulation model for performance share units and stock appreciation rights. These models require assumptions and estimates for inputs, especially the estimate of the volatility in the value of the underlying share price, that affect the resultant values and hence the amount of compensation expense recognized.

Inventories

Inventory, consisting of finished goods and materials and supplies held for resale, is carried at the lower of cost or net realizable value. We evaluate our inventories, based on an analysis of stocking levels, historical sales levels and future sales forecasts, to determine obsolete, slow-moving and excess inventory. While we have policies for calculating and recording reserves against inventory carrying values, we exercise judgment in establishing and applying these policies.

Business combinations, goodwill and intangible assets

Business combinations

Goodwill acquired in connection with business combinations represents the excess of consideration over the fair value of net assets acquired. Certain assumptions and estimates are employed in evaluating the fair value of assets acquired and liabilities assumed. These estimates may be affected by factors such as changing market conditions, technological advances in the oil and natural gas industry or changes in regulations governing that industry. The most significant assumptions requiring judgment involve identifying and estimating the fair value of intangible assets and the associated useful lives for establishing amortization periods. To finalize purchase accounting for significant acquisitions, we utilize the services of independent valuation specialists to assist in the determination of the fair value of acquired intangible assets.

Goodwill and intangible assets with indefinite lives

For goodwill and intangible assets with indefinite lives, an assessment for impairment is performed annually or when there is an indication an impairment may have occurred. We use an assessment date of October 1 for our annual impairment test for goodwill and other indefinite-lived intangible assets. Goodwill is reviewed for impairment by comparing the carrying value of each of our reporting units' net assets, including allocated goodwill, to the estimated fair value of the reporting unit. We determine the fair value of our reporting units using a combination of discounted cash flow and guideline public company methodologies. We selected these valuation methodologies because we believe they provide the best estimate of fair value for each of our reporting units. The discounted cash flow methodology requires the use of estimates and assumptions such as revenue growth rates, future operating margins, the weighted average cost of capital, a terminal growth value, and future market conditions, among others. The guideline public company methodology is a valuation technique in which the value of an entity is determined based on a comparison to similar publicly traded companies with an evaluation of pricing multiples determined as equity value relative to appropriate measures of operating results. Criteria for comparability in the selection of publicly traded companies includes, but are not limited to, operational characteristics, growth patterns, relative size, earnings trends, markets served, and risk characteristics. We believe that the estimates and assumptions used in our impairment assessments are reasonable. If the reporting unit's carrying value is greater than its calculated fair value, we recognize a goodwill impairment charge for the amount by which the carrying value of goodwill exceeds its fair value.

For the years ended December 31, 2019, 2018 and 2017, we recognized goodwill impairment charges totaling $471.0 million, $298.8 million and $68.0 million, respectively, which are included in "Impairments of goodwill, intangible assets, property and equipment" in the consolidated statements of comprehensive loss. See Note 7 *Goodwill and Intangible Assets* for further information related to these charges. Following the goodwill impairment charges recognized in the third quarter of 2019, there is no remaining goodwill balance for any of our reporting units.

Intangible assets with definite lives

Intangible assets with definite lives are tested for impairment whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. In performing the review for impairment, future cash flows expected to result from the use of the asset are estimated. If the undiscounted future cash flows are less than the carrying amount of the assets, there is an indication that the asset may be impaired. The amount of the impairment is measured as the difference between the carrying value and the estimated fair value of the asset. The fair value is determined either through the use of an external valuation, or by means of an analysis of discounted future cash flows. The impairment loss recognized represents the excess of an assets' carrying value as compared to its estimated fair value.

For the years ended December 31, 2019, 2018 and 2017, we recognized intangible asset impairment charges totaling $53.5 million, $64.7 million and $1.1 million, respectively, which are included in "Impairments of goodwill, intangible assets, property and equipment" in the consolidated statements of comprehensive loss. See Note 7 *Goodwill and Intangible Assets* for further information related to these charges.

Property and equipment

Property and equipment is stated at cost less accumulated depreciation. Depreciation is computed using the straight-line method based on the estimated useful lives of assets, generally 3 to 30 years. We have established standard useful lives for certain classes of assets.

We review long-lived assets for potential impairment whenever events or changes in circumstances indicate that the carrying amount of a long-lived asset may not be recoverable. In performing the review for impairment, future cash flows expected to result from the use of the asset and its eventual disposal are estimated. If the undiscounted future cash flows are less than the carrying amount of the assets, there is an indication that the asset may be impaired. The

amount of the impairment is measured as the difference between the carrying value and the estimated fair value of the asset. The fair value is determined either through the use of an external valuation, or by means of an analysis of discounted future cash flows based on expected utilization. The impairment loss recognized represents the excess of an assets' carrying value as compared to its estimated fair value.

For the year ended December 31, 2019, we recognized property and equipment impairment charges totaling $7.9 million, which are included in "Impairments of goodwill, intangible assets, property and equipment" in the consolidated statements of comprehensive loss. See Note 6 *Property and Equipment* for further information related to these charges.

No significant impairments of property and equipment were recorded for the years ended December 31, 2018 and 2017.

Income taxes

We follow the liability method of accounting for income taxes. Under this method, deferred income tax assets and liabilities are determined based upon temporary differences between the carrying amounts and tax bases of our assets and liabilities at the balance sheet date, and are measured using enacted tax rates and laws that will be in effect when the differences are expected to reverse. We recognize deferred tax assets to the extent that we believe these assets are more likely than not to be realized. In making such a determination, we consider all available positive and negative evidence, including future reversals of existing temporary differences, projected future taxable income, including the effect of U.S. tax reform, tax-planning and recent operating results. Any changes in our judgment as to the realizability of our deferred tax assets are recorded as an adjustment to the deferred tax asset valuation allowance in the period the change occurs.

The accounting guidance for income taxes requires that we recognize the financial statement benefit of a tax position only after determining that the relevant tax authority would more likely than not sustain the position following an audit. If a tax position meets the "more likely than not" recognition criteria, the accounting guidance requires the tax position be measured at the largest amount of benefit greater than 50% likely of being realized upon ultimate settlement. If management determines that likelihood of sustaining the realization of the tax benefit is less than or equal to 50%, then the tax benefit is not recognized in the consolidated financial statements.

We have operations in countries other than the U.S. Consequently, we are subject to the jurisdiction of a number of taxing authorities. The final determination of tax liabilities involves the interpretation of local tax laws, tax treaties, and related authorities in each jurisdiction. Changes in the operating environment, including changes in tax law or interpretation of tax law and currency repatriation controls, could impact the determination of our tax liabilities for a given tax year.

During 2018, we completed our analysis of the impact of U.S. tax reform enacted in December 2017 based on further guidance provided on the new tax law by the U.S. Treasury Department and Internal Revenue Service. We finalized our accounting for the effects of U.S. tax reform during 2018 based on the additional guidance issued and recognized an income tax benefit of $15.6 million for the year ended December 31, 2018.

For the years ended December 31, 2019 and 2018, we recognized tax expense for valuation allowances totaling $98.9 million and $50.0 million, respectively. See Note 10 *Income Taxes* for further information related to these charges.

Recognition of provisions for contingencies

In the ordinary course of business, we are subject to various claims, suits and complaints. We, in consultation with internal and external legal advisors, will provide for a contingent loss in the consolidated financial statements if, at the date of the consolidated financial statements, it is probable that a liability has been incurred and the amount can be reasonably estimated. If it is determined that the reasonable estimate of the loss is a range and that there is no best estimate within that range, a provision will be made for the lower amount of the range. Legal costs are expensed as incurred.

An assessment is made of the areas where potential claims may arise under contract warranty clauses. Where a specific risk is identified, and the potential for a claim is assessed as probable and can be reasonably estimated, an appropriate warranty provision is recorded. Warranty provisions are eliminated at the end of the warranty period except where warranty claims are still outstanding. The liability for product warranty is included in accrued liabilities in the consolidated balance sheets.

Recent accounting pronouncements

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board (“FASB”), which we adopt as of the specified effective date. Refer to Note 2 *Summary of Significant Accounting Policies* for information related to recent accounting pronouncements.

Cautionary note regarding forward-looking statements

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. These forward-looking statements are subject to a number of risks and uncertainties, many of which are beyond the Company's control. All statements, other than statements of historical fact, included in this Annual Report on Form 10-K regarding our strategy, future operations, financial position, estimated revenues and losses, projected costs, prospects, plans and objectives of management are forward-looking statements. When used in this Annual Report on Form 10-K, the words "will," "could," "believe," "anticipate," "intend," "estimate," "expect," "may," "continue," "predict," "potential," "project" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain such identifying words.

Forward-looking statements may include, but are not limited to, statements about the following subjects:

- business strategy;
- cash flows and liquidity;
- the volatility and impact of changes in oil and natural gas prices;
- the availability of raw materials and specialized equipment;
- our ability to accurately predict customer demand;
- customer order cancellations or deferrals;
- competition in the oil and natural gas industry;
- governmental regulation and taxation of the oil and natural gas industry, including the application of tariffs by governmental authorities;
- environmental liabilities;
- political, social and economic issues affecting the countries in which we do business;
- changes in relative activities of U.S. and international operations;
- our ability to deliver our backlog in a timely fashion;
- our ability to implement new technologies and services;
- availability and terms of capital;
- general economic conditions;
- our ability to successfully manage our growth, including risks and uncertainties associated with integrating and retaining key employees of the businesses we acquire;
- benefits of our acquisitions;
- availability of key management personnel;
- availability of skilled and qualified labor;
- operating hazards inherent in our industry;
- the continued influence of our largest shareholder;
- the ability to establish and maintain effective internal control over financial reporting;
- financial strategy, budget, projections and operating results;
- uncertainty regarding our future operating results; and
- plans, objectives, expectations and intentions contained in this report that are not historical.

All forward-looking statements speak only as of the date of this Annual Report on Form 10-K. We disclaim any obligation to update or revise these statements unless required by law, and you should not place undue reliance on these forward-looking statements. Although we believe that our plans, intentions and expectations reflected in or suggested by the forward-looking statements we make in this Annual Report on Form 10-K are reasonable, we can give no assurance that these plans, intentions or expectations will be achieved. We disclose important factors that could cause our actual results to differ materially from our expectations in "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere in this Annual Report on Form 10-K. These cautionary statements qualify all forward-looking statements attributable to us or persons acting on our behalf.

Item 7A. Quantitative and qualitative disclosures about market risk

We are currently exposed to market risk from changes in foreign currency and interest rates. From time to time, we may enter into derivative financial instrument transactions to manage or reduce our market risk, but we do not enter into derivative transactions for speculative purposes. A discussion of our market risk exposure in financial instruments follows.

Non-U.S. currency exchange rates

In certain regions, we conduct our business in currencies other than the U.S. dollar and for the majority of our non-U.S. operations, the functional currency is the applicable local currency. We operate primarily in the U.S., Canada, United Kingdom, and Europe. As a result, our primary exposure to fluctuations in currency exchange rates relates to fluctuations between the U.S. dollar and the Canadian dollar, the British pound sterling, the Euro, and, to a lesser degree, the Mexican Peso and the Singapore dollar. In countries where we operate in the local currency, the effects of currency fluctuations are largely mitigated because local expenses of such operations are also generally denominated in the local currency. There may be instances, however, in which costs and revenue will not be matched with respect to currency denomination. As a result, we may experience economic losses and a negative impact on earnings or net assets solely due to foreign currency exchange rate fluctuations.

Realized and unrealized gains and losses resulting from re-measurements of monetary assets and liabilities denominated in a currency other than the local entity's functional currency are included in the consolidated statements of comprehensive loss as incurred. Our consolidated statements of comprehensive loss include foreign exchange losses of $5.2 million and gains of $5.4 million for the years ended December 31, 2019 and 2018, respectively.

Financial statements of our foreign operations where the functional currency is not the U.S. dollar are translated into U.S. dollars using the current rate method whereby assets and liabilities are translated at the balance sheet rate and income and expenses are translated at the average exchange rates in effect during the period. The resultant translation adjustments are reported as a component of accumulated other comprehensive loss within stockholders' equity in our consolidated balance sheets. For the year ended December 31, 2019, net foreign currency translation gains of $8.0 million are included in other comprehensive income to reflect the net impact of the general strengthening of other applicable currencies against the U.S. dollar. These translation gains were caused primarily by the relative strengthening of the British pound sterling, as it appreciated 4%, offset by weakening of the Euro, as it depreciated 2%, relative to the U.S. dollar from December 31, 2018 to December 31, 2019.

Interest rates

At December 31, 2019, our principal amount of debt outstanding included $400.0 million of Senior Notes which bear interest at a fixed rate of 6.25%.

Borrowings under our Credit Facility are subject to a variable interest rate as determined by the credit agreement and are exposed to interest rate risk associated with changes in market interest rates. At December 31, 2019, we had no borrowings outstanding under our Credit Facility.

Item 8. Consolidated Financial Statements and Supplementary Data

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Forum Energy Technologies, Incorporated

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheet of Forum Energy Technologies, Incorporated and subsidiaries (the "Company") as of December 31, 2019, the related consolidated statement of comprehensive income (loss), changes in stockholders' equity, and cash flows, for the period ended December 31, 2019, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019, and the results of its operations and its cash flows for the year ended December 31, 2019, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 25, 2020 expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

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

/s/ Deloitte & Touche LLP

Houston, Texas
February 25, 2020

We have served as the Company’s auditor since 2019.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Forum Energy Technologies, Inc.

Opinion on the Financial Statements

We have audited the consolidated balance sheet of Forum Energy Technologies, Inc. and its subsidiaries (the "Company") as of December 31, 2018, and the related consolidated statements of comprehensive loss, of changes in stockholders' equity and of cash flows for each of the two years in the period ended December 31, 2018, including the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2018 in conformity with accounting principles generally accepted in the United States of America.

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 28, 2019, except for the change in composition of reportable segments discussed in Notes 4, 7, and 17 to the consolidated financial statements, as to which the date is May 3, 2019.

We served as the Company's auditor from 2005 to 2019.

Forum Energy Technologies, Inc. and subsidiaries
Consolidated statements of comprehensive loss

(in thousands, except per share information)	Year ended December 31, 2019	2018	2017
Revenues	$ 956,533	$ 1,064,219	$ 818,620
Cost of sales	711,681	807,847	629,832
Gross profit	244,852	256,372	188,788
Operating expenses			
Selling, general and administrative expenses	251,736	286,980	253,713
Impairments of goodwill, intangible assets, property and equipment	532,336	363,522	69,062
Transaction expenses	1,159	3,446	6,511
Contingent consideration benefit	(4,629)	—	—
Loss (gain) on disposal of assets and other	78	(438)	2,097
Total operating expenses	780,680	653,510	331,383
Earnings (loss) from equity investments	(318)	140	1,000
Operating loss	(536,146)	(396,998)	(141,595)
Other expense (income)			
Interest expense	31,618	32,532	26,808
Foreign exchange losses (gains) and other, net	5,022	(6,270)	7,268
Gain on contribution of subsea rentals business	—	(33,506)	—
Gain realized on previously held equity investment	(1,567)	—	(120,392)
Gain on disposition of business	(2,348)	—	—
Total other expense (income), net	32,725	(7,244)	(86,316)
Loss before income taxes	(568,871)	(389,754)	(55,279)
Income tax expense (benefit)	(1,814)	(15,674)	4,121
Net loss	(567,057)	(374,080)	(59,400)
Weighted average shares outstanding			
Basic	110,100	108,771	98,689
Diluted	110,100	108,771	98,689
Loss per share			
Basic	$ (5.15)	$ (3.44)	$ (0.60)
Diluted	$ (5.15)	$ (3.44)	$ (0.60)
Other comprehensive income (loss), net of tax:			
Net loss	(567,057)	(374,080)	(59,400)
Change in foreign currency translation, net of tax of $0	7,958	(24,752)	36,163
Gain (loss) on pension liability	(1,666)	1,489	107
Comprehensive loss	(560,765)	(397,343)	(23,130)
Less: comprehensive loss attributable to noncontrolling interests	—	—	—
Comprehensive loss attributable to common stockholders	$ (560,765)	$ (397,343)	$ (23,130)

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

Forum Energy Technologies, Inc. and subsidiaries
Consolidated balance sheets

(in thousands, except share information)	December 31, 2019	December 31, 2018
Assets		
Current assets		
Cash and cash equivalents	$ 57,911	$ 47,241
Accounts receivable—trade, net of allowances of $9,048 and $7,432	154,182	206,055
Inventories, net	414,640	479,023
Prepaid expenses and other current assets	33,820	23,677
Costs and estimated profits in excess of billings	4,104	9,159
Accrued revenue	1,260	862
Total current assets	665,917	766,017
Property and equipment, net of accumulated depreciation	154,836	177,358
Operating lease assets	48,682	—
Deferred financing costs, net	1,243	2,071
Intangibles, net	272,300	359,048
Goodwill	—	469,647
Investment in unconsolidated subsidiary	—	44,982
Deferred income taxes, net	654	1,234
Other long-term assets	16,365	9,295
Total assets	$ 1,159,997	$ 1,829,652
Liabilities and equity		
Current liabilities		
Current portion of long-term debt	$ 717	$ 1,167
Accounts payable—trade	98,720	143,186
Accrued liabilities	86,625	81,032
Deferred revenue	4,877	8,335
Billings in excess of costs and profits recognized	5,911	3,210
Total current liabilities	196,850	236,930
Long-term debt, net of current portion	398,862	517,544
Deferred income taxes, net	2,465	15,299
Operating lease liabilities	49,938	—
Other long-term liabilities	25,843	29,753
Total liabilities	673,958	799,526
Commitments and contingencies		
Equity		
Common stock, $0.01 par value, 296,000,000 shares authorized, 118,840,611 and 117,411,158 shares issued	1,189	1,174
Additional paid-in capital	1,231,650	1,214,928
Treasury stock at cost, 8,211,919 and 8,200,477 shares	(134,493)	(134,434)
Retained earnings (accumulated deficit)	(503,369)	63,688
Accumulated other comprehensive loss	(108,938)	(115,230)
Total equity	486,039	1,030,126
Total liabilities and equity	$ 1,159,997	$ 1,829,652

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

Forum Energy Technologies, Inc. and subsidiaries
Consolidated statements of cash flows

(in thousands, except share information)	Year ended December 31, 2019	2018	2017
Cash flows from operating activities			
Net loss	$ (567,057)	$ (374,080)	$ (59,400)
Adjustments to reconcile net loss to net cash provided by (used in) investing activities:			
Impairments of goodwill, intangible assets, property and equipment	532,336	363,522	69,062
Depreciation expense	30,629	33,148	34,401
Amortization of intangible assets	32,612	41,360	30,728
Stock-based compensation expense	15,846	19,927	20,310
Inventory write downs	10,324	36,606	14,620
Provision for doubtful accounts	3,152	3,342	2,903
Deferred income taxes	(12,985)	(13,552)	149
Contingent consideration benefit	(4,629)	—	—
Gain on disposition of business	(2,348)	—	—
Gain realized on previously held equity investment	(1,567)	—	(120,392)
(Earnings) loss from equity investments, net of distributions	318	(140)	2,073
Gain on contribution of subsea rentals business	—	(33,506)	—
Other	4,040	1,086	3,886
Changes in operating assets and liabilities			
Accounts receivable—trade	49,732	(4,833)	(64,844)
Inventories	54,265	(60,903)	(66,646)
Prepaid expenses and other current assets	621	(7,980)	12,462
Income tax receivable	—	—	30,929
Cost and estimated profits in excess of billings	4,632	1,273	(171)
Accounts payable, deferred revenue and other accrued liabilities	(48,056)	(4,192)	52,142
Billings in excess of costs and estimated profits earned	2,279	1,329	(2,245)
Net cash provided by (used in) operating activities	$ 104,144	$ 2,407	$ (40,033)
Cash flows from investing activities			
Capital expenditures for property and equipment	(15,102)	(24,043)	(26,709)
Acquisition of businesses, net of cash acquired	—	(60,622)	(162,189)
Proceeds from the sale of equity investment, business, property and equipment	43,237	9,258	1,971
Investment in unconsolidated subsidiary	—	—	(1,041)
Net cash provided by (used in) investing activities	$ 28,135	$ (75,407)	$ (187,968)
Cash flows from financing activities			
Borrowings of debt	137,000	221,980	107,431
Repayments of debt	(256,900)	(211,783)	—
Repurchases of stock	(1,094)	(2,777)	(4,742)
Proceeds from stock issuance	—	249	1,491
Payment of capital lease obligations	(1,197)	(1,147)	(1,187)
Deferred financing costs	—	—	(2,430)
Net cash provided by (used in) financing activities	$ (122,191)	$ 6,522	$ 100,563
Effect of exchange rate changes on cash	582	(1,497)	8,232
Net increase (decrease) in cash, cash equivalents and restricted cash	10,670	(67,975)	(119,206)
Cash, cash equivalents and restricted cash at beginning of period	47,241	115,216	234,422
Cash, cash equivalents and restricted cash at end of period	$ 57,911	$ 47,241	$ 115,216
Supplemental cash flow disclosures			
Cash paid for interest	31,940	30,269	25,986
Cash paid (refunded) for income taxes	3,917	5,560	(29,094)
Noncash investing and financing activities			
Acquisition via issuance of stock	—	—	177,972
Assets contributed for equity method investment	—	18,070	—
Note receivable related to equity method investment transaction	4,725	4,067	—
Accrued purchases of property and equipment	91	1,708	1,398
Accrued consideration for acquisition	—	4,650	—

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

Forum Energy Technologies, Inc. and subsidiaries
Consolidated statements of changes in stockholders' equity

(in thousands)	Common stock	Additional paid-in capital	Treasury stock	Retained earnings (accumulated deficit)	Accumulated other comprehensive income / (loss)	Total common stockholders' equity	Non controlling Interest	Total equity
Balance at December 31, 2016	$ 1,037	$ 998,169	$ (133,941)	$ 498,174	$ (128,237)	$ 1,235,202	$ 559	$ 1,235,761
Restricted stock issuance, net of forfeitures	3	(3,152)	—	—	—	(3,149)	—	(3,149)
Stock-based compensation expense	—	20,310	—	—	—	20,310	—	20,310
Exercised stock options	2	1,489	—	—	—	1,491	—	1,491
Issuance of performance shares	3	(1,244)	—	—	—	(1,241)	—	(1,241)
Shares issued in employee stock purchase plan	1	1,912	—	—	—	1,913	—	1,913
Shares issued for acquisition	117	177,855				177,972	—	177,972
Sale of non-controlling interest	—	—	—	—	—	—	(559)	(559)
Treasury stock	—	—	(352)	—	—	(352)	—	(352)
Change in pension liability	—	—	—	—	107	107	—	107
Currency translation adjustment	—	—	—	—	36,163	36,163	—	36,163
Net Loss	—	—	—	(59,400)	—	(59,400)	—	(59,400)
Balance at December 31, 2017	$ 1,163	$ 1,195,339	$ (134,293)	$ 438,774	$ (91,967)	$ 1,409,016	$ —	$ 1,409,016
Restricted stock issuance, net of forfeitures	7	(2,370)	—	—	—	(2,363)	—	(2,363)
Stock-based compensation expense	—	19,927	—	—	—	19,927	—	19,927
Exercised stock options	—	249	—	—	—	249	—	249
Issuance of performance shares	2	(275)	—	—	—	(273)	—	(273)
Shares issued in employee stock purchase plan	2	1,933	—	—	—	1,935	—	1,935
Contingent shares issued for acquisition of Cooper	—	125				125		125
Treasury stock	—	—	(141)	—	—	(141)	—	(141)
Adjustment for adoption of ASU 2016-16 (Intra-entity asset transfers)	—	—	—	(1,006)	—	(1,006)	—	(1,006)
Change in pension liability	—	—	—	—	1,489	1,489	—	1,489
Currency translation adjustment	—	—	—	—	(24,752)	(24,752)	—	(24,752)
Net Loss	—	—	—	(374,080)	—	(374,080)	—	(374,080)
Balance at December 31, 2018	$ 1,174	$ 1,214,928	$ (134,434)	$ 63,688	$ (115,230)	$ 1,030,126	$ —	$ 1,030,126
Restricted stock issuance, net of forfeitures	9	(1,044)	—	—	—	(1,035)	—	(1,035)
Stock-based compensation expense	—	15,846	—	—	—	15,846	—	15,846
Shares issued in employee stock purchase plan	5	1,546	—	—	—	1,551	—	1,551
Contingent shares issued for acquisition of Cooper	1	374	—	—	—	375	—	375
Treasury stock	—	—	(59)	—	—	(59)	—	(59)
Change in pension liability	—	—	—	—	(1,666)	(1,666)	—	(1,666)
Currency translation adjustment	—	—	—	—	7,958	7,958	—	7,958
Net Loss	—	—	—	(567,057)	—	(567,057)	—	(567,057)
Balance at December 31, 2019	$ 1,189	$ 1,231,650	$ (134,493)	$ (503,369)	$ (108,938)	$ 486,039	$ —	$ 486,039

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

1. Nature of Operations

Forum Energy Technologies, Inc. (the “Company”), a Delaware corporation, is a global oilfield products company, serving the drilling, downhole, subsea, completions and production sectors of the oil and natural gas industry. The Company designs, manufactures and distributes products, and engages in aftermarket services, parts supply and related services that complement the Company’s product offering.

2. Summary of Significant Accounting Policies

Basis of presentation

The accompanying consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”).

Principles of consolidation

The consolidated financial statements include the accounts of the Company and its wholly and majority owned subsidiaries after elimination of intercompany balances and transactions. Noncontrolling interest represented ownership by others of the equity in a consolidated majority owned South African subsidiary which we sold in the first quarter of 2017.

Our investments in operating entities where we have the ability to exert significant influence, but do not control operating and financial policies, are accounted for using the equity method of accounting with our share of the net income reported in “Earnings (loss) from equity investments” in the consolidated statements of comprehensive loss and the investments reported in “Investment in unconsolidated subsidiary” in the consolidated balance sheets. The Company’s share of equity earnings are reported within operating loss as the operations of investees are integral to the operations of the Company.

Prior to acquiring the remaining membership interest of Global Tubing, LLC (“Global Tubing”) on October 2, 2017, the Company’s investment was accounted for using the equity method of accounting.

On January 3, 2018, the Company contributed Forum Subsea Rentals (“FSR”) into Ashtead Technology, a competing business, in exchange for a 40% interest in the combined business. After the merger, our interest in the combined business was accounted for using the equity method of accounting. On September 3, 2019, we sold our aggregate 40% interest in Ashtead to the majority owners of Ashtead. As of December 31, 2019, we have no investments in unconsolidated subsidiaries. Refer to Note 4 *Acquisitions & Dispositions* for further discussion.

Use of estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period.

In the preparation of these consolidated financial statements, estimates and assumptions have been made by management including, among others, costs to complete contracts, an assessment of percentage of completion of projects, the selection of useful lives of tangible and intangible assets, fair value of reporting units used for goodwill impairment testing, fair value associated with business combinations, expected future cash flows from long lived assets to support impairment tests, provisions necessary for trade receivables, amounts of deferred taxes and income tax contingencies. Actual results could differ from these estimates.

The financial reporting of contracts depends on estimates, which are assessed continually during the term of those contracts. The amounts of revenues and income recognized are subject to revisions as the contract progresses to completion and changes in estimates are reflected in the period in which the facts that give rise to the revisions become known. Additional information that enhances and refines the estimating process that is obtained after the balance sheet date, but before issuance of the consolidated financial statements is reflected in the consolidated financial statements.

Cash and cash equivalents

Cash and cash equivalents consist of cash on deposit and high quality, short term money market instruments with an original maturity of three months or less. Cash equivalents are based on quoted market prices, a Level 1 fair value measure.

Accounts receivable-trade

Trade accounts receivables are carried at their estimated collectible amounts. Trade credit is generally extended on a short-term basis; thus receivables do not bear interest, although a finance charge may be applied to amounts past due. We maintain an allowance for doubtful accounts for estimated losses that may result from the inability of our customers to make required payments. Such allowances are based upon several factors including, but not limited to, credit approval practices, industry and customer historical experience as well as the current and projected financial condition of the specific customer. Accounts receivable outstanding longer than contractual terms are considered past due. We write off accounts receivable to the allowance for doubtful accounts when they become uncollectible. Any payments subsequently received on receivables previously written off are credited to bad debt expense.

The change in amounts of the allowance for doubtful accounts during the three year period ended December 31, 2019 is as follows (in thousands):

Period ended	Balance at beginning of period	Charged to expense	Deductions or other	Balance at end of period
December 31, 2017	$ 3,331	$ 2,903	$ (439)	$ 5,795
December 31, 2018	5,795	3,342	(1,705)	7,432
December 31, 2019	7,432	3,152	(1,536)	9,048

Inventories

Inventory consisting of finished goods and materials and supplies held for resale is carried at the lower of cost or net realizable value. For certain operations, cost, which includes the cost of raw materials and labor for finished goods, is determined using standard cost which approximates a first-in first-out basis. For other operations, this cost is determined on an average cost, first-in first-out or specific identification basis. Net realizable value means estimated selling price in the ordinary course of business, less reasonably predictable cost of completion, disposal, and transportation. We continuously evaluate inventories based on an analysis of inventory levels, historical sales experience and future sales forecasts, to determine obsolete, slow-moving and excess inventory. Adjustments to reduce such inventory to its net realizable value have been recorded.

Property and equipment

Property and equipment are stated at cost less accumulated depreciation. Capital leases of property and equipment are stated at the present value of future minimum lease payments. Expenditures for property and equipment and for items which substantially increase the useful lives of existing assets are capitalized at cost and depreciated over their estimated useful life utilizing the straight-line method. Routine expenditures for repairs and maintenance are expensed as incurred. Depreciation is computed using the straight-line method based on the estimated useful lives of assets, generally 3 to 30 years. Property and equipment held under capital leases are amortized straight-line over the shorter of the lease term or estimated useful life of the asset. Gains or losses resulting from the disposition of assets are recognized in income with the related asset cost and accumulated depreciation removed from the balance sheet. Assets acquired in connection with business combinations are recorded at fair value.

Rental equipment consists of equipment rented to customers under short-term rental agreements. Rental equipment is recorded at cost and depreciated using the straight-line method over the estimated useful life of three to ten years.

We review long-lived assets for potential impairment whenever events or changes in circumstances indicate that the carrying amount of a long-lived asset may not be recoverable. In performing the review for impairment, future cash flows expected to result from the use of the asset and its eventual disposal are estimated. If the undiscounted future cash flows are less than the carrying amount of the assets, there is an indication that the asset may be impaired. The amount of the impairment is measured as the difference between the carrying value and the estimated fair value of the asset. The fair value is determined either through the use of an external valuation, or by means of an analysis of discounted future cash flows based on expected utilization.

For the years ended December 31, 2019, we recognized property and equipment impairment charges totaling $7.9 million, which are included in “Impairments of goodwill, intangible assets, property and equipment” in the consolidated statements of comprehensive loss. See Note 6 *Property and Equipment* for further information related to these charges.

No significant impairment charges were recorded for the years ended December 31, 2018 and 2017.

We record the fair value of asset retirement obligations as a liability in the period in which the associated legal obligation is incurred. The fair value of the obligation is recorded as a liability and capitalized as part of the related asset. Over time, the liability is accreted to its future value and the capitalized cost is depreciated over the estimated useful life of the related asset. The current portion of the liability is included in other accrued liabilities and the non-current portion is included in other long-term liabilities in the consolidated balance sheets.

Goodwill and intangible assets

For goodwill and intangible assets with indefinite lives, an assessment for impairment is performed annually or when there is an indication an impairment may have occurred. We use an assessment date of October 1 for our annual impairment test for goodwill and other indefinite-lived intangible assets. Goodwill is reviewed for impairment by comparing the carrying value of each of our seven reporting units' net assets, including allocated goodwill, to the estimated fair value of the reporting unit. We determine the fair value of our reporting units using a discounted cash flow approach. We selected this valuation approach because we believe it, combined with our best judgment regarding underlying assumptions and estimates, provides the best estimate of fair value for each of our reporting units. Determining the fair value of a reporting unit requires the use of estimates and assumptions. Such estimates and assumptions include revenue growth rates, future operating margins, the weighted average cost of capital, a terminal growth value, and future market conditions, among others. We believe that the estimates and assumptions used in our impairment assessments are reasonable. If the reporting unit's carrying value is greater than its calculated fair value, we recognize a goodwill impairment charge for the amount by which the carrying value of goodwill exceeds its fair value.

For the years ended December 31, 2019, 2018 and 2017, we recognized goodwill impairment charges totaling $471.0 million, $298.8 million and $68.0 million, respectively, which are included in “Impairments of goodwill, intangible assets, property and equipment” in the consolidated statements of comprehensive loss. See Note 7 *Goodwill and Intangible Assets* for further information related to these charges. Following the goodwill impairment charges recognized in the third quarter of 2019, there is no remaining goodwill balance for any of our reporting units.

Intangible assets with definite lives are comprised of customer and distributor relationships, patents and technology, trade names, trademarks and non-compete agreements which are amortized on a straight-line basis over the life of the intangible asset, generally two to twenty-two years. These assets are tested for impairment whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. In performing the review for impairment, future cash flows expected to result from the use of the asset are estimated. If the undiscounted future cash flows are less than the carrying amount of the assets, there is an indication that the asset may be impaired. The amount of the impairment is measured as the difference between the carrying value and the estimated fair value of the asset. The fair value is determined either through the use of an external valuation, or by means of an analysis of discounted future cash flows. The impairment loss recognized represents the excess of an assets' carrying value as compared to its estimated fair value.

For the years ended December 31, 2019, 2018 and 2017, we recognized intangible asset impairment charges totaling $53.5 million, $64.7 million and $1.1 million, respectively, which are included in “Impairments of goodwill, intangible assets, property and equipment” in the consolidated statements of comprehensive loss. See Note 7 *Goodwill and Intangible Assets* for further information related to these charges.

Recognition of provisions for contingencies

In the ordinary course of business, we are subject to various claims, suits and complaints. We, in consultation with internal and external legal advisors, will provide for a contingent loss in the consolidated financial statements if, at the date of the consolidated financial statements, it is probable that a liability has been incurred and the amount can be reasonably estimated. If it is determined that the reasonable estimate of the loss is a range and that there is no best estimate within that range, a provision will be made for the lower amount of the range. Legal costs are expensed as incurred.

An assessment is made of the areas where potential claims may arise under contract warranty clauses. Where a specific risk is identified, and the potential for a claim is assessed as probable and can be reasonably estimated, an appropriate warranty provision is recorded. Warranty provisions are eliminated at the end of the warranty period except where warranty claims are still outstanding. The liability for product warranty is included in other accrued liabilities in the consolidated balance sheets.

Revenue recognition and deferred revenue

Revenue is recognized in accordance with Accounting Standards Codification Topic 606 (“ASC 606”), when control of the promised goods or services is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those goods or services.

Contract Identification. We account for a contract when it is approved, both parties are committed, the rights of the parties are identified, payment terms are defined, the contract has commercial substance and collection of consideration is probable.

Performance Obligations. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer under ASC 606. The majority of our contracts with customers contain a single performance obligation to provide agreed-upon products or services. For contracts with multiple performance obligations, we allocate revenue to each performance obligation based on its relative standalone selling price. In accordance with ASC 606, we do not assess whether promised goods or services are performance obligations if they are immaterial in the context of the contract with the customer. We have elected to apply the practical expedient to account for shipping and handling costs associated with outbound freight after control of a product has transferred to a customer as a fulfillment cost which is included in Cost of Sales. Furthermore, since our customer payment terms are short-term in nature, we have also elected to apply the practical expedient which allows an entity to not adjust for the effects of a significant financing component if it expects that the customer’s payment period will be less than one year in duration.

Contract Value. Revenue is measured based on the amount of consideration specified in the contracts with our customers and excludes any amounts collected on behalf of third parties. We have elected the practical expedient to exclude amounts collected from customers for all sales (and other similar) taxes.

The estimation of total revenue from a customer contract is subject to elements of variable consideration. Certain customers may receive rebates or discounts which are accounted for as variable consideration. We estimate variable consideration as the most likely amount to which we expect to be entitled, and we include estimated amounts in the transaction price to the extent it is probable that a significant reversal of cumulative revenue will not occur when the uncertainty associated with the variable consideration is resolved. Our estimate of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of our anticipated performance and all information (historic, current, forecast) that is reasonably available to us.

Timing of Recognition. We recognize revenue when we satisfy a performance obligation by transferring control of a product or service to a customer. Our performance obligations are satisfied at a point in time or over time as work progresses.

Revenue from goods transferred to customers at a point in time accounted for 96% of revenues for the year ended December 31, 2019. The majority of this revenue is product sales, which are generally recognized when items are shipped from our facilities and title passes to the customer. The amount of revenue recognized for products is adjusted for expected returns, which are estimated based on historical data.

Revenue from goods transferred to customers over time accounted for 4% of revenues for the year ended December 31, 2019, which is related to certain contracts in our Subsea and Production Equipment product lines. Recognition over time for these contracts is supported by our assessment of the products supplied as having no alternative use to us and by clauses in the contracts that provide us with an enforceable right to payment for performance completed to date. We use the cost-to-cost method to measure progress for these contracts because it best depicts the transfer of assets to the customer which occurs as costs are incurred on the contract. The amount of revenue recognized is calculated based on the ratio of costs incurred to-date compared to total estimated costs which requires management to calculate reasonably dependable estimates of total contract costs. Whenever revisions of estimated contract costs and contract values indicate that the contract costs will exceed estimated revenues, thus creating a loss, a provision for the total estimated loss is recorded in that period. We recognize revenue and cost of sales each period based upon the advancement of the work-in-progress unless the stage of completion is insufficient to enable a reasonably certain forecast of profit to be established. In such cases, no profit is recognized during the period.

Accounting estimates during the course of projects may change, primarily related to our remotely operated vehicles (“ROVs”) which may take longer to manufacture. The effect of such a change, which can be upward as well as downward, is accounted for in the period of change, and the cumulative income recognized to date is adjusted to reflect the latest estimates. These revisions to estimates are accounted for on a prospective basis.

Contracts are sometimes modified to account for changes in product specifications or requirements. Most of our contract modifications are for goods and services that are not distinct from the existing contract. As such, these modifications

are accounted for as if they were part of the existing contract, and therefore, the effect of the modification on the transaction price and our measure of progress for the performance obligation to which it relates is recognized as an adjustment to revenue on a cumulative catch-up basis. No adjustment to any one contract was material to our consolidated financial statements for the years ended December 31, 2019, 2018 and 2017.

We sell our products through a number of channels including a direct sales force, marketing representatives, and distributors. We have elected to expense sales commissions when incurred as the amortization period would be less than one year. These costs are recorded within cost of sales.

Portfolio Approach. We have elected to apply ASC 606 to a portfolio of contracts with similar characteristics as we reasonably expect that the effects on the financial statements of applying this guidance to the portfolio would not differ materially from applying this guidance to the individual contracts within that portfolio.

Disaggregated Revenue. Refer to Note 17 *Business Segments* for disaggregated revenue by product line and geography.

Contract Balances. Contract balances are determined on a contract by contract basis. Contract assets represent revenue recognized for goods and services provided to our customers when payment is conditioned on something other than the passage of time. Similarly, when we receive consideration, or such consideration is unconditionally due, from a customer prior to transferring goods or services to the customer under the terms of a sales contract, we record a contract liability. Such contract liabilities typically result from billings in excess of costs incurred and advance payments received on product sales.

Concentration of credit risk

Financial instruments which potentially subject the Company to credit risk include trade accounts receivable. Trade accounts receivable consist of uncollateralized receivables from domestic and international customers. For the years ended December 31, 2019, 2018 and 2017, no one customer accounted for 10% or more of the total revenue or 10% or more of the total accounts receivable balance at the end of the respective period.

Stock based compensation

We measure all stock based compensation awards at fair value on the date they are granted to employees and directors, and recognize compensation cost over the requisite service period for awards with only a service condition, and over a graded vesting period for awards with service and performance or market conditions.

The fair value of stock based compensation awards with market conditions is measured using a Monte Carlo Simulation model and, in accordance with Accounting Standards Codification (“ASC”) 718, is not adjusted based on actual achievement of the performance goals. The Black-Scholes option pricing model is used to measure the fair value of options. The following sections address the assumptions used related to the Black-Scholes option pricing model:

Expected life

The expected term of stock options represents the period the stock options are expected to remain outstanding.

Expected volatility

Expected volatility measures the amount that a stock price has fluctuated or is expected to fluctuate during a period and is estimated based on a weighted average of the Company’s historical stock price.

Dividend yield

We have never declared or paid any cash dividends and do not plan to pay cash dividends for the foreseeable future. Therefore, a zero expected dividend yield was used in the valuation model.

Risk-free interest rate

The risk-free interest rate is based on U.S. Treasury zero-coupon issues with remaining terms similar to the expected life of the options.

Forfeitures

Forfeitures are accounted for as they occur.

Income taxes

We follow the liability method of accounting for income taxes. Under this method, deferred income tax assets and liabilities are determined based upon temporary differences between the carrying amounts and tax bases of our assets and liabilities at the balance sheet date, and are measured using enacted tax rates and laws that will be in effect when the differences are expected to reverse. The effect on deferred tax assets and liabilities of a change in the tax rates is recognized in income in the period in which the change occurs. We record a valuation allowance in each reporting period when management believes that it is more likely than not that any deferred tax asset created will not be realized. See Note 10 *Income Taxes* for more information on valuation allowances recognized.

During 2018, we completed our analysis of the impact of U.S. tax reform enacted in December 2017 based on further guidance provided on the new tax law by the U.S. Treasury Department and Internal Revenue Service. Refer to Note 10 *Income Taxes* for further discussion.

Accounting guidance for income taxes requires that we recognize the financial statement benefit of a tax position only after determining that the relevant tax authority would more likely than not sustain the position following an audit. If a tax position meets the “more likely than not” recognition criteria, accounting guidance requires the tax position be measured at the largest amount of benefit greater than 50% likely of being realized upon ultimate settlement.

Non-U.S. local currency translation

We have global operations and the majority of our non-U.S. operations have designated the local currency as the functional currency. Realized and unrealized gains and losses resulting from re-measurements of monetary assets and liabilities denominated in a currency other than the local entity’s functional currency are included in the consolidated statements of comprehensive loss as incurred.

Financial statements of our foreign operations where the functional currency is not the U.S. dollar are translated into U.S. dollars using the current rate method whereby assets and liabilities are translated at the balance sheet rate and income and expenses are translated at the average exchange rates in effect during the period. The resultant translation adjustments are reported as a component of accumulated other comprehensive loss within stockholders’ equity in our consolidated balance sheets.

Fair value

The carrying amounts for financial instruments classified as current assets and current liabilities approximate fair value, due to the short maturity of such instruments. The book values of other financial instruments, such as our debt related to the Credit Facility, approximates fair value because interest rates charged are similar to other financial instruments with similar terms and maturities and the rates vary in accordance with a market index.

For the financial assets and liabilities disclosed at fair value, fair value is determined as the exit price, or the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The established fair value hierarchy divides fair value measurement into three broad levels:

- Level 1 - inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date;
- Level 2 - inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly; and
- Level 3 - inputs are unobservable for the asset or liability, which reflect the best judgment of management.

The financial assets and liabilities that are disclosed at fair value for disclosure purposes are categorized in one of the above three levels based on the lowest level input that is significant to the fair value measurement in its entirety. Level 1 provides the most reliable measure of fair value, whereas Level 3 generally requires significant management judgment.

Recent accounting pronouncements

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board (“FASB”), which we adopt as of the specified effective date. Unless otherwise discussed, management believes that the impact of recently issued standards, which are not yet effective, will not have a material impact on our consolidated financial statements upon adoption.

Accounting Standards Adopted in 2019

Stranded Tax Effects from the Tax Cuts and Jobs Act. In February 2018, the FASB issued ASU No. 2018-02 Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income. U.S. GAAP requires deferred tax liabilities and assets to be adjusted for the effect of a change in tax laws or rates, with the effect included in income from continuing operations in the reporting period that includes the enactment date, even in situations in which the related income tax effects of items in accumulated other comprehensive income were originally recognized in other comprehensive income (referred to as “stranded tax effects”). The amendments in this ASU allow a specific exception for reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act. The underlying guidance that requires that the effect of a change in tax laws or rates be included in income from continuing operations is not affected. In addition, the amendments in this update also require certain disclosures about stranded tax effects. We applied the update beginning January 1, 2019. The adoption of this new guidance had no material impact on our consolidated financial statements.

Leases. In February 2016, the FASB issued ASU No. 2016-02, Leases (“ASU 842”). Under this new guidance, lessees are required to recognize assets and liabilities on the balance sheet for the rights and obligations created by all leases (finance and operating). The classification as either a finance or operating lease determines whether lease expense is recognized on an effective interest method basis or on a straight-line basis over the term of the lease, respectively.

We adopted this new standard as of January 1, 2019 using the modified retrospective transition method which requires leases existing at, or entered into after, January 1, 2019 to be recognized and measured. As such, the comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods. We took advantage of various practical expedients provided by the new standard, including:

- use of the transition package of practical expedients which, among other things, allows us to carry forward the historical lease classification for existing leases;
- making an accounting policy election for leases with an initial term of 12 months or less to be excluded from the balance sheet; and
- electing to not separate non-lease components from lease components for all classes of underlying lease assets.

The adoption of this standard resulted in the recording of net operating lease assets of approximately $54 million and operating lease liabilities of approximately$65 million as of January 1, 2019. The new standard did not materially affect our consolidated statements of comprehensive loss for the year ended December 31, 2019. For additional information, please refer to Note 9 *Leases*.

Accounting Standards Issued But Not Yet Adopted

***Accounting for Implementation Costs Related to a Cloud Computing Arrangement*.** In August 2018, the FASB issued ASU No. 2018-15 Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement that is a Service Contract. This new guidance aligns the requirements for capitalizing implementation costs incurred by an entity related to a cloud computing arrangement with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. Accordingly, this guidance requires an entity to capitalize certain implementation costs incurred and then amortize them over the term of the cloud hosting arrangement. Furthermore, this guidance also requires an entity to present the expense, cash flows, and capitalized implementation costs in the same financial statement line items as the associated hosting service. This new guidance will take effect for public companies with fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019, and early adoption is 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 currently evaluating the impact of adopting this guidance. However, we currently expect that the adoption of this guidance will not have a material impact on our consolidated financial statements.

***Fair Value Measurement Disclosure*.** In August 2018, the FASB issued ASU No. 2018-13 Fair Value Measurement (Topic 820) - Disclosure Framework - Changes to the Disclosure Requirement for Fair Value Measurement. This new guidance eliminated, modified and added certain disclosure requirements related to fair value measurements. The amended disclosure requirements are effective for all entities for fiscal years, and for interim periods within those fiscal years, beginning after December 15, 2019. We are evaluating the impact of adopting this guidance. However, we currently expect that the adoption of this guidance will not have a material impact on our consolidated financial statements.

Financial Instruments—Credit Losses. In June 2016, the FASB issued ASU No. 2016-13 Financial Instruments—Credit Losses (Topic 326), which introduced an expected credit loss methodology for the impairment of financial assets

measured at amortized cost basis. It requires an entity to estimate credit losses expected over the life of an exposure based on historical information, current information, and reasonable and supportable forecasts, including estimates of prepayments. The amendments affect loans, debt securities, trade receivables, net investments in leases, off-balance-sheet credit exposures, reinsurance receivables, and any other financial assets not excluded from the scope that have the contractual right to receive cash. This guidance will take effect for public companies with fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019.

The Company is currently evaluating the impact of adopting ASU No. 2016-13 and is in the process of:

- reviewing historical data that will be used in the calculation of expected credit loss;
- documenting relevant assumptions to calculate expected losses; and
- updating policies, procedures and internal controls.

Although we are continuing to asses all potential impacts of the standard, based on our analysis completed to date, we expect the adoption of this guidance will result in a change of less than $4.0 million for the calculation of our allowance for doubtful accounts for trade accounts receivable.

Income Tax. In December 2019, the FASB issued ASU No. 2019-12 Income Taxes (Topic 740) - Disclosure Framework - Simplifying the Accounting for Income Taxes, which simplified the accounting for income taxes by removing certain exceptions to the general principles of Topic 740 and clarifying and amending existing guidance. This guidance will take effect for public companies with fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. We are currently evaluating the impact of this new guidance. However, we currently expect that the adoption of this guidance will not have a material impact on our consolidated financial statements.

3. Revenues

Disaggregated Revenue

Refer to Note 17 *Business Segments* for disaggregated revenue by product line and geography.

Contract Balances

The following table reflects the changes in our contract assets and contract liabilities balances for the year ended December 31, 2019:

	December 31, 2019	December 31, 2018	Decrease	
			$	%
Accrued revenue	$ 1,260	$ 862		
Costs and estimated profits in excess of billings	4,104	9,159		
Contract assets	$ 5,364	$ 10,021	$ (4,657)	(46)%
Deferred revenue	$ 4,877	$ 8,335		
Billings in excess of costs and profits recognized	5,911	3,210		
Contract liabilities	$ 10,788	$ 11,545	$ (757)	(7)%

During the year ended December 31, 2019, our contract assets decreased by $4.7 million primarily due to the timing of billings on a large project in our Subsea Technologies product line and our contract liabilities decreased by $0.8 million primarily due to a reduction in customer pre-payments in our Drilling Technologies and Stimulation and Intervention product lines.

During the year ended December 31, 2019, we recognized revenue of $6.5 million that was included in the contract liability balance at the beginning of the period.

In the second quarter of 2018, our Subsea Technologies product line received an order to supply a submarine rescue vehicle and related equipment that we expect to deliver in 2020. We use the cost-to-cost method to measure progress on this contract to recognize revenue over time. Other than this contract, all of our other contracts are less than one year in duration. As such, we have elected to apply the practical expedient which allows an entity to exclude disclosures

about its remaining performance obligations if the performance obligation is part of a contract that has an original expected duration of one year or less.

4. Acquisitions & Dispositions

Acquisitions

2018 Acquisition of Houston Global Heat Transfer LLC

On October 5, 2018, we acquired 100% of the stock of Houston Global Heat Transfer LLC (“GHT”) for total aggregate consideration of $57.3 million, net of cash acquired. The aggregate consideration included the estimated fair value (as of the acquisition date) of certain contingent cash payments due to the former owners of GHT if certain conditions are met in 2019 and 2020. Based in Houston, Texas, GHT designs, engineers, and manufactures premium industrial heat exchanger and cooling systems used primarily on hydraulic fracturing equipment. GHT’s flagship product, the Jumbotron, is an innovative cube-style radiator that substantially reduces customer maintenance expense. This acquisition is included in the Completions segment. In the first quarter of 2019, we updated the estimated fair value of the contingent cash payments and recognized a $4.6 million reduction in the contingent cash liability. This gain is included in contingent consideration benefit in the consolidated statements of comprehensive loss.

The following table summarizes the fair values of the assets acquired and liabilities assumed at the date of the acquisition (in thousands):

Current assets, net of cash acquired	$	18,468
Property and equipment		2,408
Non-current assets		238
Intangible assets (primarily customer relationships)		30,400
Tax-deductible goodwill		20,746
Current liabilities		(12,633)
Long-term liabilities	$	(2,355)
Net assets acquired, net of cash acquired	$	57,272

Revenue and net income for this acquisition were not significant for the year ended December 31, 2019 and 2018. Pro forma results of operations for this acquisition have not been presented because the effects were not material to the consolidated financial statements.

2018 Acquisition of ESP Completion Technologies LLC

On July 2, 2018, we acquired certain assets of ESP Completion Technologies LLC ("ESPCT"), a subsidiary of C&J Energy Services, for cash consideration of $8.0 million. ESPCT consists of a portfolio of early stage technologies that maximize the run life of artificial lift systems, primarily electric submersible pumps. This acquisition is included in the Drilling and Downhole segment. The fair values of the assets acquired and liabilities assumed as well as the pro forma results of operations for this acquisition have not been presented because they are not material to the consolidated financial statements.

2017 Acquisition of Global Tubing

On October 2, 2017, we acquired all of the remaining ownership interests of Global Tubing, LLC ("Global Tubing") from our joint venture partner and management for total consideration of approximately $290.3 million. We originally invested in Global Tubing with a joint venture partner in 2013. Prior to acquiring the remaining ownership interest in Global Tubing, we reported this investment using the equity method of accounting. The financial results for Global Tubing are reported in the Completions segment. Located in Dayton, Texas, Global Tubing provides coiled tubing, coiled line pipe and related services to customers worldwide.

The acquisition of Global Tubing contributed revenues of $35.5 million and net income of $3.8 million to our consolidated statement of comprehensive loss from the time of acquisition to December 31, 2017. The following unaudited pro forma summary presents consolidated information as if the Global Tubing acquisition had occurred on January 1, 2016:

	Pro Forma Year Ended December 31, 2017
Net sales	$ 901,856
Net loss attributable to common stockholders	(125,204)

The pro forma consolidated results of operations amounts have been calculated after applying our accounting policies, and include the following adjustments:

- An increase in depreciation and amortization expense resulting from the fair value adjustments of property, plant and equipment and intangible assets recognized as part of the Global Tubing Acquisition;
- Removal of earnings from equity investment;
- Removal of the historical interest expense from Global Tubing's historical debt and inclusion of interest expense from the amount borrowed on our Credit Facility to finance the acquisition;
- As a result of acquiring the remaining equity interest of Global Tubing, the Company's previously held equity interest was remeasured to fair value, resulting in a gain of approximately $120.4 million. This gain has been recognized in the consolidated statement of comprehensive loss for the year ended December 31, 2017 and is excluded from the pro forma results above; and
- Estimated tax benefits of approximately $45 million to tax-effect the aforementioned pro forma adjustments using an estimated U.S. federal income tax rate of 35%.

The pro forma amounts do not include any potential synergies, cost savings or other expected benefits of the acquisition, and are presented for illustrative purposes only and are not necessarily indicative of results that would have been achieved if the acquisition had occurred as of January 1, 2016 or of future operating performance.

The following table summarizes the consideration transferred to acquire the remaining ownership interests of Global Tubing (in thousands other than stock price and shares issued):

		Purchase Consideration
Forum Energy Technologies' closing stock price on October 2, 2017	$	15.10
Multiplied by number of shares issued for acquisition		11,488,208
Common shares	$	173,472
Cash		31,764
Repayment of Global Tubing debt at acquisition		85,084
Total Consideration paid for the acquisition	$	290,320

2017 Acquisition of Multilift

On July 3, 2017, we acquired Multilift Welltec, LLC and Multilift Wellbore Technology Limited (collectively, “Multilift”) for approximately $39.2 million in cash consideration. These acquisitions are included in the Completions segment. Based in Houston, Texas, Multilift manufactures the patented SandGuard™ and the Cyclone™ completion tools. Pro forma results of operations for this acquisition have not been presented because the effects were not material to the consolidated financial statements.

2017 Acquisition of Cooper Valves

On January 9, 2017, we acquired substantially all of the assets of Cooper Valves, LLC as well as 100% of the general partnership interests of Innovative Valve Components (collectively, “Cooper”) for total aggregate consideration of $14.0 million, after settlement of working capital adjustments. The aggregate consideration includes the issuance of stock valued at $4.5 million and certain contingent stock issuances. These acquisitions are included in the Production segment. The acquired Cooper brands include the Accuseal® metal seated ball valves engineered to meet Class VI shut off standards for use in severe service applications, as well as a full line of Cooper Alloy® cast and forged gate, globe, and check valves. Innovative Valve Components, in partnership with Cooper Valves, commercialized critical service valves and components for the power generation, mining and oil and natural gas industries. Pro forma results of operations for this acquisition have not been presented because the effects were not material to the consolidated financial statements.

Dispositions

2019 Disposition of Cooper Alloy®

On December 4, 2019, we sold certain assets of our Cooper Alloy® brand of valve products for total consideration of $4.0 million and recognized a gain on disposition totaling $2.3 million. Pro forma results of operations for this disposition have not been presented because the effects were not material to the consolidated financial statements.

2019 Disposition of Equity Interest in Ashtead Technology

On September 3, 2019, we sold our aggregate 40% interest in Ashtead to the majority owners of Ashtead. Total consideration for Forum’s 40% interest and the settlement of a £3.0 million British Pounds note receivable from Ashtead was $47.7 million. Forum received $39.3 million in cash proceeds and a new £6.9 million British Pounds note receivable with a three year maturity. In the third quarter of 2019, we recognized a gain of $1.6 million as a result of this transaction, which is classified as *Gain realized on previously held equity investment* in the consolidated statements of comprehensive loss. Pro forma results of operations for this transaction have not been presented because the effects were not material to the consolidated financial statements.

2018 Disposition of Forum Subsea Rentals

On January 3, 2018, we contributed our subsea rentals business to Ashtead to create an independent provider of subsea survey and equipment rental services. In exchange, we received a 40% interest in the combined business, a cash payment of £2.7 million British Pounds and a note receivable from Ashtead of £3.0 million British Pounds. Our 40% interest in Ashtead was accounted for as an equity method investment and reported as *Investment in unconsolidated subsidiary* in our consolidated balance sheets prior to the disposition of our equity interest discussed above. In the first quarter of 2018, we recognized a gain of $33.5 million as a result of the deconsolidation of our Forum Subsea Rentals business, which is classified as *Gain on contribution of subsea rentals business* in the consolidated statements of comprehensive loss. This gain was equal to the sum of the consideration received, which included the fair value of our 40% interest in Ashtead, £2.7 million British Pounds in cash, and the £3.0 million British Pounds note receivable from Ashtead, less the $18.1 million carrying value of the Forum subsea rentals assets at the time of closing.

The fair value of such 40% interest in Ashtead was determined based on the present value of estimated future cash flows of the combined entity as of January 3, 2018. The difference between the fair value of our 40% interest in Ashtead of $43.8 million and the book value of the underlying net assets resulted in a basis difference, which was allocated to fixed assets, intangible assets and goodwill based on their respective fair values as of January 3, 2018. The basis difference allocated to fixed assets and intangible assets was amortized through equity earnings (loss) over the estimated life of the respective assets prior to the disposition of our equity interest discussed above. Pro forma results of operations for this transaction have not been presented because the effects were not material to the consolidated financial statements.

5. Inventories

The Company's significant components of inventory at December 31, 2019 and 2018 were as follows (in thousands):

	December 31, 2019	December 31, 2018
Raw materials and parts	$ 172,083	$ 212,526
Work in process	29,972	39,494
Finished goods	278,660	302,590
Gross inventories	480,715	554,610
Inventory reserve	(66,075)	(75,587)
Inventories	$ 414,640	$ 479,023

The change in the amounts of the inventory reserve during the three year period ended December 31, 2019 is as follows (in thousands):

Period ended	Balance at beginning of period	Charged to expense	Deductions or other	Balance at end of period
December 31, 2017	$ 68,352	$ 14,620	$ (8,654)	$ 74,318
December 31, 2018	74,318	36,606	(35,337)	$ 75,587
December 31, 2019	75,587	10,324	(19,836)	$ 66,075

6. Property and Equipment

Property and equipment consists of the following (in thousands):

	Estimated useful lives	December 31, 2019	December 31, 2018
Land		$ 9,870	$ 9,755
Buildings and leasehold improvements	5-30	103,383	103,761
Computer equipment	3-5	55,941	54,721
Machinery & equipment	5-10	166,123	162,110
Furniture & fixtures	3-10	6,731	6,631
Vehicles	3-5	5,382	6,160
Right of use assets - finance leases	2-6	2,528	—
Construction in progress		3,663	9,155
		353,621	352,293
Less: accumulated depreciation		(199,210)	(180,717)
Property and equipment, net		154,411	171,576
Rental equipment	3-10	3,779	9,535
Less: accumulated depreciation		(3,354)	(3,753)
Rental equipment, net		425	5,782
Total property and equipment, net		$ 154,836	$ 177,358

Depreciation expense was $30.6 million, $33.1 million and $34.4 million for the years ended December 31, 2019, 2018 and 2017, respectively.

For the year ended December 31, 2019, we recognized property and equipment impairment charges of $5.2 million in our Subsea product line and $2.7 million in our Stimulation and Intervention product line, which are included in *Impairments of goodwill, intangible assets, property and equipment* in the consolidated statements of comprehensive loss. The amount of the impairment is measured as the difference between the carrying value and the estimated fair value of the asset. The fair value is determined either through the use of an external valuation, or by means of an analysis of discounted future cash flows based on expected utilization (classified within level 3 of the fair value hierarchy).

7. Goodwill and Intangible Assets

Goodwill

The changes in the carrying amount of goodwill were as follows (in thousands):

	Drilling & Downhole	Completions	Production	Total
Goodwill balance at December 31, 2017	**$ 494,983**	**$ 240,816**	**$ 19,446**	**$ 755,245**
Acquisitions, net of dispositions	1,753	20,559	—	22,312
Impairment	(298,789)	—	—	(298,789)
Impact of non-U.S. local currency translation	(6,796)	(2,095)	(230)	(9,121)
Goodwill balance at December 31, 2018	**191,151**	**259,280**	**19,216**	**469,647**
Acquisitions, net of dispositions	427	187	—	614
Impairment	(191,485)	(260,238)	(19,287)	(471,010)
Impact of non-U.S. local currency translation	(93)	771	71	$ 749
Goodwill balance at December 31, 2019	**$ —**	**$ —**	**$ —**	**$ —**

We perform our annual impairment tests of goodwill as of October 1 or when there is an indication an impairment may have occurred. Relevant events and circumstances which could be an indicator of impairment include: macroeconomic

conditions; industry and market conditions; commodity prices; operating cost factors; overall financial performance; the impact of dispositions and acquisitions; valuation of the Company's common stock and other entity-specific events.

During the third quarter 2019, there was a significant decline in the quoted market prices of our common stock and a continued decline in U.S. onshore drilling and completions activity, which led us to evaluate all of our reporting units for a triggering event as of September 30, 2019. Upon evaluation, we considered these developments to be a triggering event that required us to update our goodwill impairment evaluation for all reporting units as of September 30, 2019 based on our current forecast and expectations for market conditions. As a result, we determined that the carrying value of each of our Downhole, Stimulation and Intervention, Coiled Tubing, Production Equipment and Valve Solutions reporting units exceeded their respective estimated fair value and we recorded non-cash goodwill impairment charges of $191.5 million, $126.3 million, $133.9 million, $4.6 million, and $14.7 million, respectively. These charges are included in *Impairments of goodwill, intangible assets, property and equipment* in the consolidated statements of comprehensive loss. Following these impairment charges, there is no remaining goodwill balance for any of our reporting units.

During the fourth quarter 2018, we completed the annual evaluation of goodwill related to all of our reporting units as of October 1, 2018, our annual testing date. Based on this evaluation, we determined that the carrying value of our Drilling reporting unit exceeded its estimated fair value. As a result, we recorded a non-cash impairment charge of $245.4 million to write-off the goodwill in our Drilling reporting unit. Additionally, during the fourth quarter 2018, there was a significant decline in oil prices, lowered industry expectations for U.S. drilling and completions activities and a substantial decline in the quoted market prices of our common stock, which led us to evaluate all of our reporting units for a triggering event as of December 31, 2018. Upon evaluation, we considered these developments to be a triggering event for our Downhole reporting unit that required us to update our goodwill impairment evaluation as of December 31, 2018 based on our current forecast and expectations for market conditions. As a result, we determined that the carrying value of our Downhole reporting unit exceeded its estimated fair value and we recorded a non-cash impairment charge of $53.4 million to write-off a portion of the goodwill in our Downhole reporting unit. These charges are included in *Impairments of goodwill, intangible assets, property and equipment* in the consolidated statements of comprehensive loss.

In the second quarter of 2017, there was a decline in oil prices and a developing consensus view that production from lower cost oil basins would be sufficient to meet anticipated demand for a longer period, delaying the need for production from higher cost basins. With this indication of further delays in the recovery of the offshore market, we performed an impairment test and determined that the carrying value of the goodwill in our Subsea reporting unit was impaired. As a result, we recorded an impairment charge of $68.0 million in the second quarter of 2017.

Accumulated impairment losses on goodwill were $1,006.6 million, $535.6 million and $236.8 million as of December 31, 2019, 2018, and 2017, respectively.

The fair values used in each impairment analysis were determined using the net present value of the expected future cash flows for each reporting unit (classified within level 3 of the fair value hierarchy). We determine the fair value of each reporting unit using a combination of discounted cash flow and guideline public company methodologies, which requires significant assumptions and estimates about the future operations of each reporting unit. The assumptions about future cash flows and growth rates are based on our current estimates, strategic plans and management's estimates for future activity levels. Forecasted cash flows in future periods were estimated using a terminal value calculation, which considered long-term earnings growth rates.

Intangible assets

At December 31, 2019 and 2018, intangible assets consisted of the following, respectively (in thousands):

	December 31, 2019			
	Gross carrying amount	Accumulated amortization	Net intangibles	Amortization period (in years)
Customer relationships	$ 281,052	$ (110,410)	$ 170,642	10 - 15
Patents and technology	92,498	(20,819)	71,679	5 - 19
Non-compete agreements	190	(100)	90	2 - 6
Trade names	43,284	(21,015)	22,269	7 - 19
Distributor relationships	22,160	(18,866)	3,294	15 - 22
Trademark	5,089	(763)	4,326	15
Intangible Assets Total	$ 444,273	$ (171,973)	$ 272,300	

	December 31, 2018			
	Gross carrying amount	Accumulated amortization	Net intangibles	Amortization period (in years)
Customer relationships	$ 337,546	$ (110,228)	$ 227,318	4 - 15
Patents and technology	104,394	(17,148)	87,246	5 - 17
Non-compete agreements	6,245	(5,600)	645	3 - 6
Trade names	47,493	(18,107)	29,386	10 - 15
Distributor relationships	22,160	(17,602)	4,558	8 - 15
Trademark	10,319	(424)	9,895	15 - Indefinite
Intangible Assets Total	$ 528,157	$ (169,109)	$ 359,048	

Intangible assets with definite lives are tested for impairment whenever events or changes in circumstances indicate that their carrying amount may not be recoverable.

In the third quarter of 2019, due to the impairment indicators discussed above, we determined that certain intangibles in our Stimulation and Intervention and our Valve Solutions reporting units were impaired. As a result, we recognized an aggregate $53.5 million of impairment charges on these intangible assets (primarily customer relationships, technology and trademarks) in the third quarter of 2019.

In the fourth quarter of 2018, due to the impairment indicators discussed above, we determined that certain intangible assets in our Downhole Technologies reporting unit were impaired. As a result, we recognized $50.2 million of impairment charges on these intangible assets (primarily customer relationships and trade names) in the fourth quarter of 2018. In the second quarter of 2018, we made the decision to exit specific products within the Subsea Technologies and Downhole Technologies product lines. As a result, we recognized $14.5 million of impairment losses on certain intangible assets (primarily customer relationships).

In 2017, impairment charges totaling $1.1 million were recorded on certain intangible assets within the Subsea Technologies and Downhole Technologies reporting units related to management's decision to abandon specific product lines.

All of the intangible asset impairment charges discussed above are included in *Impairments of goodwill, intangible assets, property and equipment* in the consolidated statements of comprehensive loss. The amount of the impairment charges were measured as the difference between the carrying value and the estimated fair value of the assets. The fair value was determined either through the use of an external valuation, or by means of an analysis of discounted future cash flows (classified within level 3 of the fair value hierarchy).

Amortization expense was $32.6 million, $41.4 million and $30.7 million for the years ended December 31, 2019, 2018 and 2017, respectively. The estimated future amortization expense for the next five years is as follows (in thousands):

Year ending December 31,	Amount
2020	$ 27,974
2021	26,951
2022	25,976
2023	24,413
2024	22,872

8. Debt

Notes payable and lines of credit as of December 31, 2019 and 2018 consisted of the following (in thousands):

	December 31, 2019	December 31, 2018
6.25% Senior notes due October 2021	$ 400,000	$ 400,000
Unamortized debt premium	770	1,176
Debt issuance cost	(3,232)	(3,121)
Senior secured revolving credit facility	—	119,000
Other debt	2,041	1,656
Total debt	399,579	518,711
Less: current maturities	(717)	(1,167)
Long-term debt	$ 398,862	$ 517,544

Senior Notes Due 2021

In October 2013, we issued $300.0 million of senior unsecured notes due 2021 at par, and in November 2013, we issued an additional $100.0 million aggregate principal amount of the notes at a price of 103.25% of par (the “Senior Notes”). The Senior Notes bear interest at a rate of 6.25% per annum, payable on April 1 and October 1 of each year, and mature on October 1, 2021. The Senior Notes are senior unsecured obligations, and are guaranteed on a senior unsecured basis by our subsidiaries that guarantee the Credit Facility and rank junior to, among other indebtedness, the Credit Facility to the extent of the value of the collateral securing the Credit Facility.

The terms of the Senior Notes are governed by the indenture, dated October 2, 2013 (the “Indenture”), by and among us, the guarantors named therein and Wells Fargo Bank, National Association, as trustee. The Senior Notes contain customary covenants including some limitations and restrictions on our ability to pay dividends on, purchase or redeem our common stock; redeem or prepay our subordinated debt; make certain investments; incur or guarantee additional indebtedness or issue certain types of equity securities; create certain liens, sell assets, including equity interests in our restricted subsidiaries; restrict dividends or other payments of our restricted subsidiaries; consolidate, merge or transfer all or substantially all of our assets; engage in transactions with affiliates; and create unrestricted subsidiaries. Many of these restrictions will terminate if the Senior Notes become rated investment grade. The Indenture also contains customary events of default, including nonpayment, breach of covenants in the Indenture, payment defaults or acceleration of other indebtedness, failure to pay certain judgments and certain events of bankruptcy and insolvency. We are required to offer to repurchase the Senior Notes in connection with specified change in control events or with excess proceeds of asset sales not applied for permitted purposes.

We may redeem the Senior Notes at a redemption price of 100.0% of their principal amount plus accrued interest.

Credit Facility

Our Credit Facility provides revolving credit commitments of $300.0 million (with a sublimit of up to $45.0 million available for letters of credit issued for the account of the Company and certain of its domestic subsidiaries (the “U.S. Line”), of which up to $30.0 million is available to certain of our Canadian subsidiaries for loans in U.S. or Canadian dollars (with a sublimit of up to $3.0 million available for letters of credit issued for the account of our Canadian subsidiaries (the “Canadian Line”). Lender commitments under the Credit Facility, subject to certain limitations, may be increased by an additional $100.0 million. The Credit Facility matures in July 2021, but if our outstanding Notes due October 2021 are refinanced or replaced with indebtedness maturing in or after February 2023, the final maturity of the Credit Facility will automatically extend to October 2022.

Availability under the Credit Facility is subject to a borrowing base calculated by reference to eligible accounts receivable in the United States, Canada and certain other jurisdictions (subject to a cap) and eligible inventory in the United States and Canada. Our borrowing capacity under the Credit Facility could be reduced or eliminated, depending on future fluctuations in our receivables and inventory. As of December 31, 2019, our total borrowing base was $253.0 million, of which zero was drawn and $23.9 million was used for security of outstanding letters of credit, resulting in remaining availability of $229.1 million.

If excess availability under the Credit Facility falls below the greater of 10.0% of the borrowing base and $20.0 million, we will be required to maintain a fixed charge coverage ratio of at least 1.00:1.00 as of the end of each fiscal quarter until excess availability under the Credit Facility exceeds such thresholds for at least 60 consecutive days.

Borrowings under the U.S. Line bear interest at a rate equal to, at our option, either (a) the LIBOR rate or (b) a base rate determined by reference to the highest of (i) the rate of interest per annum determined from time to time by Wells Fargo as its prime rate in effect at its principal office in San Francisco, (ii) the federal funds rate plus 0.50% per annum and (iii) the one-month adjusted LIBOR plus 1.00% per annum, in each case plus an applicable margin. Borrowings under the Canadian Line bear interest at a rate equal to, at Forum Canada's option, either (a) the CDOR rate or (b) a base rate determined by reference to the highest of (i) the prime rate for Canadian dollar commercial loans made in Canada as reported from time to time by Thomson Reuters and (ii) the CDOR rate plus 1.00%, in each case plus an applicable margin. The applicable margin for LIBOR and CDOR loans will initially range from 1.75% to 2.25%, depending upon average excess availability under the Credit Facility. After the first quarter ending on or after March 31, 2018 in which our total net leverage ratio is less than or equal to 4.00:1.00, the applicable margin for LIBOR and CDOR loans will range from 1.50% to 2.00%, depending upon average excess availability under the Credit Facility. The weighted average interest rate under the Credit Facility was approximately 4.16% during the year ended December 31, 2019.

The Credit Facility also provides for a commitment fee in the amount of (a) 0.375% per annum on the unused portion of commitments if average usage of the Credit Facility is greater than 50% and (b) 0.500% per annum on the unused portion of commitments if average usage of the Credit Facility is less than or equal to 50%. After the first quarter in which our total leverage ratio is less than or equal to 4.00:1.00, the commitment fees will range from 0.25% to 0.375%, depending upon average usage of the Credit Facility.

Other debt

Other debt consists primarily of various finance leases of equipment.

Deferred loan costs

The Company has incurred loan costs that have been capitalized and are amortized to interest expense over the term of the Senior Notes and the Credit Facility. As a result, approximately $1.9 million, $1.9 million and $1.7 million were amortized to interest expense for the years ended December 31, 2019, 2018 and 2017, respectively.

Future principal payments under long-term debt for each of the years ending December 31 are as follows (in thousands):

2020	$	806
2021		400,806
2022		441
2023		43
2024		19
Thereafter		5
Total future payment	$	402,120
Add: Unamortized debt premium		770
Less: Debt issuance cost		(3,232)
Less: present value discount on finance leases	$	(79)
Total debt	$	399,579

9. Leases

We determine if an arrangement is a lease at inception. Leases with an initial term of 12 months or less are not recorded in our consolidated balance sheets. Leases with an initial term greater than 12 months are recognized in our consolidated balance sheets based on lease classification as either operating or financing. Operating leases are included in operating lease assets, accrued liabilities and operating lease liabilities. Finance leases are included in property and equipment, current portion of long-term debt, and long-term debt. Some of our lease agreements include lease and non-lease components for which we have elected to not separate for all classes of underlying assets. Our lease agreements do not contain any material residual value guarantees or material restrictive covenants. We sublease certain real estate to third parties when we have no future use for the property.

Our lease portfolio primarily consists of operating leases for certain manufacturing facilities, warehouses, service facilities, office spaces, equipment and vehicles. Operating lease Right of Use (“ROU”) assets and operating lease liabilities are recognized based on the present value of the future minimum lease payments at the commencement date. As most of our leases do not provide an implicit rate, we use our incremental borrowing rate based on the information available at the commencement date in determining the present value of future payments. Our leases have remaining terms of 1 year to 14 years and may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option. The operating lease ROU assets also include any upfront lease payments made and exclude lease incentives and initial direct costs incurred. Lease expense for operating leases is recognized on a straight-line basis over the lease term.

The following table summarizes the supplemental balance sheet information related to leases as of December 31, 2019 (in thousands):

	Classification	As of December 31, 2019
Assets		
Operating lease assets	Operating lease assets	48,682
Finance lease assets	Property and equipment, net of accumulated depreciation	2,085
Total lease assets		50,767
Liabilities		
Current		
Operating	Accrued liabilities	12,538
Finance	Current portion of long-term debt	717
Noncurrent		
Operating	Operating lease liabilities	49,938
Finance	Long-term debt, net of current portion	1,324
Total lease liabilities		64,517

The following table summarizes the components of lease expenses for the twelve months ended December 31, 2019 (in thousands):

Lease Cost	Classification	Twelve Months Ended December 31, 2019
Operating lease cost	Cost of sales and Selling, general and administrative expenses	$ 13,675
Finance lease cost		
Amortization of leased assets	Selling, general and administrative expenses	445
Interest on lease liabilities	Interest expense	81
Sublease income	Cost of sales and Selling, general and administrative expenses	(1,635)
Net lease cost		$ 12,566

Total rent expense under operating leases was $13.7 million, $18.3 million and $19.3 million for the years ended December 31, 2019, 2018 and 2017, respectively.

The maturities of lease liabilities as of December 31, 2019 are as follows (in thousands):

	Operating Leases	Finance Leases	Total
2020	$ 16,873	$ 806	$ 17,679
2021	14,064	806	14,870
2022	10,888	441	11,329
2023	7,550	43	7,593
2024	6,344	19	6,363
Thereafter	25,502	5	25,507
Total lease payments	81,221	2,120	83,341
Less: present value discount	(18,745)	(79)	(18,824)
Present value of lease liabilities	$ 62,476	$ 2,041	$ 64,517

Future minimum lease payments under operating leases as of December 31, 2018 are as follows (in thousands):

	Total
2019	$ 17,536
2020	14,826
2021	12,800
2022	11,202
2023	5,701
Thereafter	15,069
Total	$ 77,134

The following table summarizes the weighted-average remaining lease term and weighted average discount rates related to leases as of December 31, 2019:

Lease Term and Discount Rate	December 31, 2019
Weighted-average remaining lease term (years)	
Operating leases	6.8 years
Financing leases	2.8 years
Weighted-average discount rate	
Operating leases	6.58%
Financing leases	6.58%

The following table summarizes the supplemental cash flow information related to leases as of December 31, 2019:

	Twelve Months Ended December 31, 2019
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows from operating leases	$ 12,679
Operating cash flows from finance leases	81
Financing cash flows from finance leases	$ 1,197
Noncash activities from right-of-use assets obtained in exchange for lease obligations:	
Operating leases	$ 9,745
Finance leases	1,822
Noncash activities from adoption of ASC 842 as of January 1, 2019	
Prepaid expenses and other current assets	$ (884)
Operating lease assets	54,069
Operating lease liabilities	64,506
Accrued liabilities	(11,321)

10. Income Taxes

The components of loss before income taxes for the years ended December 31, 2019, 2018 and 2017 are as follows (in thousands):

	2019	2018	2017
U.S.	$ (532,363)	$ (285,141)	$ (3,015)
Non-U.S.	(36,508)	(104,613)	(52,264)
Loss before income taxes	$ (568,871)	$ (389,754)	$ (55,279)

The components of income tax expense (benefit) for the years ended December 31, 2019, 2018 and 2017 are as follows (in thousands):

	2019	2018	2017
Current			
U.S. federal and state	$ (1,423)	$ (6,932)	$ (1,426)
Non-U.S.	12,594	4,810	5,398
Total current	11,171	(2,122)	3,972
Deferred			
U.S. federal and state	3,580	(21,467)	6,415
Non-U.S.	(16,565)	7,915	(6,266)
Total deferred	(12,985)	(13,552)	149
Income tax expense (benefit)	$ (1,814)	$ (15,674)	$ 4,121

The reconciliation between the actual provision for income taxes from continuing operations and that computed by applying the U.S. statutory rate to income before income taxes and noncontrolling interests are outlined below (in thousands):

	2019		2018		2017	
Income tax expense at the statutory rate	$ (119,463)	(21.0)%	$ (81,849)	(21.0)%	$ (19,348)	(35.0)%
State taxes, net of federal tax benefit	(5,846)	(1.0)%	(2,564)	(0.7)%	(294)	(0.5)%
Non-U.S. operations	(4,023)	(0.7)%	(10,166)	(2.6)%	6,337	11.5 %
Domestic incentives	(633)	(0.1)%	(286)	(0.1)%	(254)	(0.5)%
Prior year federal, non-U.S. and state tax	257	— %	(2,880)	(0.7)%	(1,283)	(2.3)%
Nondeductible expenses	348	0.1 %	502	0.1 %	644	1.2 %
Goodwill impairment	27,244	4.8 %	46,051	11.8 %	14,731	26.6 %
Global Tubing acquisition	—	— %	—	— %	(9,160)	(16.6)%
U.S. tax reform	—	— %	(15,604)	(4.0)%	10,138	18.3 %
Valuation allowance	98,900	17.4 %	50,005	12.8 %	4,523	8.2 %
Other	1,402	0.2 %	1,117	0.4 %	(1,913)	(3.4)%
Income tax expense (benefit)	$ (1,814)	(0.3)%	$ (15,674)	(4.0)%	$ 4,121	7.5 %

Our effective tax rate was (0.3)%, (4.0)%, and 7.5% for the years ended December 31, 2019, 2018 and 2017, respectively. For the year ended December 31, 2019, we recognized the following significant items impacting our effective tax rate:

- $27.2 million of tax expense associated with the impairment of non-tax deductible goodwill, and
- $98.9 million of tax expense consisting of a full valuation allowance against our deferred tax assets in the U.S, U.K., Germany, Singapore and Saudi Arabia, as further described below under the primary components of deferred taxes.

On December 22, 2017, the U.S. enacted the Tax Cuts and Jobs Act of 2017, a comprehensive U.S. tax reform package that, effective January 1, 2018, among other things, lowered the corporate income tax rate from 35% to 21% and moved the country towards a territorial tax system with a one-time mandatory tax on previously deferred earnings of non-U.S. subsidiaries. The effects of U.S. tax reform on us include two major categories: (i) recognition of liabilities for taxes on mandatory deemed repatriation and (ii) re-measurement of deferred taxes. In 2017, we recorded provisional amounts as an estimate of federal and state tax related to the effects of U.S. tax reform including the recognition of liabilities for taxes on mandatory deemed repatriation of non-U.S. earnings of $27.7 million and a $17.6 million tax benefit for the re-measurement of deferred taxes based on the new 21% U.S. corporate tax rate, resulting in a net $10.1 million provisional net tax charge for the year.

During 2018, we completed our analysis of the impact of U.S. tax reform based on further guidance provided on the new tax law by the U.S. Treasury Department and Internal Revenue Service. We finalized our accounting for the effects of U.S. tax reform during 2018 based on the additional guidance issued and recognized an income tax benefit of $15.6 million resulting in an overall net tax benefit related to U.S. tax reform of $5.5 million.

The primary components of deferred taxes include (in thousands):

	2019	2018
Deferred tax assets		
Reserves and accruals	$ 4,590	$ 7,259
Operating lease liabilities	14,912	—
Inventory	16,429	18,694
Stock awards	5,185	5,637
Net operating loss and other tax carryforwards	83,325	66,098
Goodwill and intangible assets	45,528	—
Other	1,150	549
Gross deferred tax assets	171,119	98,237
Valuation allowance	(152,795)	(54,441)
Total deferred tax assets	18,324	43,796
Deferred tax liabilities		
Property and equipment	(7,733)	(9,565)
Operating lease assets	(12,006)	—
Goodwill and intangible assets	—	(42,502)
Investment in unconsolidated subsidiary	—	(5,402)
Prepaid expenses and other	(396)	(392)
Total deferred tax liabilities	(20,135)	(57,861)
Net deferred tax liabilities	$ (1,811)	$ (14,065)

Goodwill from certain acquisitions is tax deductible due to the acquisition structure as an asset purchase or due to tax elections made by the Company and the respective sellers at the time of acquisition.

We have deferred tax assets related to net operating loss and other tax carryforwards in the U.S., and in certain states and foreign jurisdictions. We recognize deferred tax assets to the extent that we believe these assets are more likely than not to be realized.

At December 31, 2019, we had $238.3 million of U.S. net operating loss carryforwards and $7.5 million of state net operating losses. Of these losses, $151.1 million will expire no later than 2037 if they are not utilized prior to that date. The remaining $94.7 million will not expire. We also had $155.4 million of non-U.S. net operating loss carryforwards with indefinite expiration dates. The ultimate realization of income tax benefits for these net operating loss carryforwards depends on our ability to generate sufficient taxable income in the respective taxing jurisdictions. Where we have unrecognized tax benefits in jurisdictions with existing net operating losses, we utilize the unrecognized tax benefits as a source of income to offset such losses. We do not anticipate being able to fully utilize all of the losses prior to their expiration in the following jurisdictions: the U.S, the U.K, Germany, Singapore and Saudi Arabia.

During 2019, we recognized $98.9 million of tax expense related to the increase in our valuation allowance provided against our deferred tax assets to write down our deferred tax assets in these jurisdictions to what is more likely than not realizable. We increased our valuation allowance related to our U.S. and foreign deferred tax assets by $98.0 million and $0.9 million, respectively. In making such a determination for each of these jurisdictions, we considered all available positive and negative evidence, including our recent history of pretax losses over the prior three year period, the goodwill and intangible asset impairments for various reporting units, the future reversals of existing taxable temporary differences, the projected future taxable income or loss, including the effect of U.S. tax reform, and tax-planning.

Deferred tax liabilities arising from the difference between the financial reporting and income tax bases inherent in our foreign subsidiaries, referred to as outside basis differences, have not been provided for U.S. income tax purposes because we do not intend to sell, liquidate or otherwise trigger the recognition of U.S. taxable income with regard to our investment in these foreign subsidiaries. Determining the amount of U.S. deferred tax liabilities associated with outside basis differences is not practicable at this time.

We file income tax returns in the U.S. as well as in various states and non-U.S. jurisdictions. With few exceptions, we are no longer subject to income tax examination by tax authorities in these jurisdictions prior to 2013.

We account for uncertain tax positions in accordance with guidance in FASB ASC 740, which prescribes the minimum recognition threshold a tax position taken or expected to be taken in a tax return is required to meet before being recognized in the financial statements. A reconciliation of the beginning and ending amount of uncertain tax positions is as follows (in thousands):

Balance at January 1, 2019	$	13,254
Additional based on tax positions related to prior years		2,069
Additional based on tax positions related to current year		2,057
Reduction based on tax positions related to prior years		(666)
Settlement with tax authorities		(100)
Lapse of statute of limitations		(2,048)
Balance at December 31, 2019		14,566

The total amount of unrecognized tax benefits at December 31, 2019 was $14.6 million, of which it is reasonably possible that $1.8 million could be settled during the next twelve-month period as a result of the conclusion of various tax audits or due to the expiration of the applicable statute of limitations. We estimate that $12.5 million of the unrecognized tax benefits at December 31, 2019, excluding consideration of valuation allowance, would impact our future effective income tax rate, if recognized.

We recognize interest and penalties related to uncertain tax positions within the provision for income taxes in the consolidated statements of comprehensive loss. As of December 31, 2019 and 2018, we had accrued approximately $0.3 million and $0.3 million in interest and penalties, respectively. During the years ended December 31, 2019 and 2018, we recognized no material change in the interest and penalties related to uncertain tax positions.

11. Fair Value Measurements

At December 31, 2019 the Company had no balance outstanding under the Credit Facility, and at December 31, 2018, the Company had $119.0 million of debt outstanding under the Credit Facility. The Credit Facility incurs interest at a variable interest rate and therefore, the carrying amount approximates fair value. The fair value of the debt is classified as a Level 2 measurement because interest rates charged are similar to other financial instruments with similar terms and maturities.

The fair value of the Company's Senior Notes is estimated using Level 2 inputs in the fair value hierarchy and is based on quoted prices for those or similar instruments. At December 31, 2019, the fair value and the carrying value of the Company's unsecured Senior Notes approximated $354.0 million and $397.5 million, respectively. At December 31, 2018, the fair value and the carrying value of the Company's unsecured Senior Notes approximated $362.0 million and $398.1 million, respectively.

There were no other significant outstanding financial instruments as of December 31, 2019 and 2018 that required measuring the amounts at fair value on a recurring basis. The Company did not change its valuation techniques associated with recurring fair value measurements from prior periods and there were no transfers between levels of the fair value hierarchy during the year ended December 31, 2019.

12. Commitments and Contingencies

Litigation

In the ordinary course of business, the Company is, and in the future, could be involved in various pending or threatened legal actions, some of which may or may not be covered by insurance. Management has reviewed such pending judicial and legal proceedings, the reasonably anticipated costs and expenses in connection with such proceedings, and the availability and limits of insurance coverage, and has established reserves that are believed to be appropriate in light of those outcomes that are believed to be probable and can be estimated. The reserves accrued at December 31, 2019 and 2018 are immaterial. In the opinion of management, the Company's ultimate liability, if any, with respect to these actions is not expected to have a material adverse effect on the Company's financial position, results of operations or cash flows.

Asbestos litigation

One of our subsidiaries has been named as one of many defendants in a number of product liability claims for alleged exposure to asbestos. These lawsuits are typically filed on behalf of plaintiffs who allege exposure to asbestos, against numerous defendants, often forty or more, who are alleged to have manufactured or distributed products containing asbestos. The injuries alleged by plaintiffs in these cases range from mesothelioma and other cancers to asbestosis. The earliest claims against our subsidiary were filed in New Jersey in 1998, and our subsidiary currently has active cases in Missouri, New Jersey, New York, Illinois, Delaware, and Pennsylvania. These complaints do not typically include requests for a specific amount of damages. Our subsidiary acquired the trademark for the product line in question in 1985. To date, the claims against our subsidiary alleging illnesses due to asbestos have generally been based on products manufactured by the previous owner prior to 1985 that are alleged to have contained asbestos. Many claimants alleging illnesses due to asbestos sue on the basis of exposure prior to 1985, as by that date the hazards of asbestos exposure were well known and asbestos had begun to fall into disuse. Our subsidiary has been successful in obtaining dismissals in most lawsuits without any cash contribution including because the "successor liability" law in most states does not hold a purchaser in good faith liable for the actions of the seller prior to the acquisition date unless the purchaser contractually assumed the liabilities, which our subsidiary did not. There are exceptions to the successor liability doctrine in many states, so there are no assurances that our subsidiary will not be found liable for the actions of its predecessor. The law in other states on so called "successor liability" may be different or ambiguous in this regard, and could also expose our subsidiary to liability. Our subsidiary could also be found liable should a trier of fact reject our subsidiary's position that it is not responsible for the alleged asbestos injuries. To date, asbestos claims have not had a material adverse effect on our business, financial condition, results of operations, or cash flow, as our annual out-of-pocket costs over the last five years has been less than $200,000. There were fewer than 25 new cases filed against our subsidiary in each of last two years, and a significant number of existing cases were dismissed, settled or otherwise disposed of over the last year. We currently have fewer than 150 lawsuits pending against this subsidiary. Our subsidiary has over $17 million in face amount of insurance per occurrence and over $23 million of aggregate primary insurance coverage. In addition, our subsidiary has over $950 million in face amount of excess coverage applicable to the claims. There can be no guarantee that all of this can be collected due to policy terms and conditions and insurer insolvencies in the past or in the future. In January 2011, we entered into an agreement with seven of our primary insurers under which they have agreed to pay 80% of the costs of handling and settling each asbestos claim against the affected subsidiary. The insurers' portion of the settlements is funded by our aggregate primary limits, which are eroded only by settlements and not legal fees. Approximately $2.0 million in settlements has been paid by insurers and our subsidiary to date, with approximately $40,000 paid over the course of the last two years. Our subsidiary and the subscribing insurers have the right to withdraw from this agreement, but to date, no party has exercised this right or expressed an intent to do so.

Portland Harbor Superfund litigation

In May 2009, one of the Company's subsidiaries (which is presently a dormant company with nominal assets except for rights under insurance policies) was named along with many defendants in a suit filed by the Port of Portland, Oregon seeking reimbursement of costs related to a five-year study of contaminated sediments at the port. In March 2010, the subsidiary also received a notice letter from the Environmental Protection Agency indicating that it had been identified as a potentially responsible party with respect to environmental contamination in the "study area" for the Portland Harbor Superfund Site. Under a 1997 indemnity agreement, the subsidiary is indemnified by a third party with respect to losses relating to environmental contamination. As required under the indemnity agreement, the subsidiary provided notice of these claims, and the indemnitor has assumed responsibility and is providing a defense of the claims. Although the Company believes that it is unlikely that the subsidiary contributed to the contamination at the Portland Harbor Superfund Site, the potential liability of the subsidiary and the ability of the indemnitor to fulfill its indemnity obligations cannot be quantified at this time.

Operating leases

The Company has operating leases for warehouses, office space, manufacturing facilities and equipment. The leases generally require the Company to pay certain expenses including taxes, insurance, maintenance, and utilities. See Note 9 *Leases* for further information.

Letters of credit and guarantees

The Company executes letters of credit in the normal course of business to secure the delivery of product from specific vendors and also to guarantee the Company fulfilling certain performance obligations relating to certain large contracts. At December 31, 2019, the Company had $24.5 million in letters of credit outstanding.

13. Earnings Per Share

The reconciliation of basic and diluted earnings per share for each period presented was as follows (dollars and shares in thousands, except per share amounts):

	Year ended December 31,		
	2019	2018	2017
Net loss attributable to common stockholders	$ (567,057)	$ (374,080)	$ (59,400)
Basic - weighted average shares outstanding	110,100	108,771	98,689
Dilutive effect of stock options and restricted stock	—	—	—
Diluted - weighted average shares outstanding	110,100	108,771	98,689
Loss per share			
Basic	$ (5.15)	$ (3.44)	$ (0.60)
Diluted	$ (5.15)	$ (3.44)	$ (0.60)

For all periods presented, we excluded all potentially dilutive restricted shares and stock options in calculating diluted earnings per share as the effect was anti-dilutive due to the net losses incurred for these periods.

14. Stockholders' Equity and Employee Benefit Plans

Shares issued for Acquisition

On January 9, 2017, the Company issued 196,249 shares of common stock to acquire 100% of the general partnership interests of Innovative Valve Components. On October 2, 2017, the Company issued 11.5 million shares of common stock to acquire the remaining membership interests in Global Tubing. Refer to Note 4 *Acquisitions & Dispositions* for further details on these acquisitions.

Employee benefit plans

We sponsor a 401(k) savings plan for U.S. employees and related savings plans for certain non-U.S. employees. These plans benefit eligible employees by allowing them the opportunity to make contributions up to certain limits. We contribute by matching a percentage of each employee's contributions. Subsequent to the closing of all acquisitions, employees of those acquired entities will generally be eligible to participate in the Company's 401(k) savings plan. We also have the discretion to provide a profit sharing contribution to each participant depending on the Company's performance for the applicable year. The expense under the Company's plan was $5.8 million, $6.2 million, and $5.4 million for the years ended December 31, 2019, 2018 and 2017, respectively.

We have an Employee Stock Purchase Plan, which allows eligible employees to purchase shares of the Company's common stock at six-month intervals through periodic payroll deductions at a price per share equal to 85.0% of the lower of the fair market value at the beginning and ending of the six-month intervals. Following the fourth quarter of 2019, this plan was suspended.

Stock repurchases

In October 2014, the board of directors approved a program for the repurchase of outstanding shares of the Company's common stock with an aggregate purchase price of up to $150.0 million. We have repurchased approximately 4.5 million shares (primarily in 2014) under this program for aggregate consideration of approximately $100.2 million.

15. Stock Based Compensation

FET stock based compensation plan

In August 2010, we created the 2010 Stock Incentive Plan (the "2010 Plan") to allow for employees, directors and consultants of the Company and its subsidiaries to maintain stock ownership in the Company through the award of stock options, restricted stock, restricted stock units or any combination thereof. Under the terms of the 2010 Plan, a total of 18.5 million shares were authorized for awards.

In May 2016, we created a new 2016 Stock and Incentive Plan (the "2016 Plan"). Under the terms of the 2016 Plan, the aggregate number of shares that may be issued may not exceed the number of shares reserved but not issued under the 2010 Plan as of May 17, 2016, the effective date of the 2016 plan, a total of 5.7 million shares. No further awards will be made under the 2010 Plan after such date, and outstanding awards granted under the 2010 Plan shall continue to be outstanding. In May 2019, we amended and restated the 2016 Plan to add an additional 2.9 million shares and revised certain terms of the 2016 Plan (the "2016 Amended Plan"). Approximately 4.8 million shares remained available under the 2016 Amended Plan for future grants as of December 31, 2019.

The total amount of stock based compensation expense recorded was approximately $15.8 million, $19.9 million and $20.3 million for the years ended December 31, 2019, 2018 and 2017, respectively. As of December 31, 2019, the Company expects to record stock based compensation expense of approximately $19.2 million over a weighted average remaining term of approximately two years. Future grants will result in additional compensation expense.

Stock options

The exercise price of each option is based on the fair market value of the Company's stock at the date of grant. Options generally have a ten-year life and vest annually in equal increments over four years. Our policy for issuing stock upon a stock option exercise is to issue new shares. Compensation expense is recognized on a straight line basis over the vesting period. The following tables provide additional information related to stock options:

2019 Activity	Number of shares (in thousands)	Weighted average exercise price	Remaining weighted average contractual life in years	Intrinsic value (in millions)
Beginning balance	5,740	$ 12.39	3.7	$ —
Granted	—	$ —		
Exercised	—	$ —		
Forfeited/expired	(364)	$ 13.05		
Total outstanding	5,376	$ 12.35	2.5	$ —
Options exercisable	5,033	$ 12.29	2.2	$ —

The intrinsic value is the amount by which the fair value of the underlying share exceeds the exercise price of the stock option. No stock options were exercised in 2019. The intrinsic value of stock options exercised in 2018 and 2017 was $0.2 million and $1.6 million, respectively.

As of December 31, 2019 and 2018, the share price of the Company was less than the exercise price for all outstanding stock options. Therefore, the intrinsic value for stock options outstanding and exercisable were both zero.

No stock options were granted in 2019. The assumptions used in the Black-Scholes pricing model to estimate the fair value of stock options granted in 2018 and 2017 are as follows:

	2019	2018	2017
Weighted average fair value	n/a	$5.62	$8.95
Assumptions			
Expected life (in years)	n/a	6.25	6.25
Volatility	n/a	44%	43%
Dividend yield	n/a	—%	—%
Risk free interest rate	n/a	2.74%	2.11%

Restricted stock

Restricted stock generally vests over a three or four year period from the date of grant. The following table provides additional information related to our restricted stock:

2019 Activity	Restricted stock (shares in thousands)
Nonvested at beginning of year	195
Granted	150
Vested	(135)
Forfeited	(2)
Nonvested at the end of year	208

The weighted average grant date fair value of the restricted stock was $6.59, $12.00 and $19.00 per share during the years ended December 31, 2019, 2018 and 2017, respectively. The total fair value of shares vested was $1.5 million during 2019, $1.7 million during 2018 and $2.3 million during 2017.

Restricted stock units

Restricted stock units generally vest over a three or four year period from the date of grant. The following table provides additional information related to our restricted stock units:

2019 Activity	Restricted stock units (shares in thousands)
Nonvested at beginning of year	2,455
Granted	1,227
Vested	(905)
Forfeited	(588)
Nonvested at the end of year	2,189

The weighted average grant date fair value of the restricted stock units was $6.54, $10.54 and $17.97 per share during the years ended December 31, 2019, 2018 and 2017, respectively. The total fair value of units vested was $11.8 million, $14.2 million, and $10.0 million during 2019, 2018 and 2017, respectively.

Performance share awards

During 2019, we granted 390,896 performance share awards with service-vesting and market-vesting conditions. These awards may settle between zero and two shares of the Company's common stock for each performance share unit awarded. The number of shares issued for the 2019 performance share awards will be determined based on the

total shareholder return of the Company's common stock as compared to a group of peer companies measured over a three-year performance period.

Stock appreciation rights

In the fourth quarter of 2019, we granted stock appreciation rights with service-vesting and market-vesting conditions. The following table provides additional information related to our stock appreciation rights:

2019 Activity	Stock Appreciation Rights (in thousands)
Nonvested at beginning of year	—
Granted	6,352
Forfeited	—
Nonvested at the end of year	6,352

The grant date fair value of the stock appreciation rights was $0.19. The stock appreciation rights will vest on the third anniversary from the grant date if the average closing price of a share of our Common Stock over the twenty trading days prior to the third anniversary date (the "Ending Market Value") is equal to or greater than $5.00. If vested, the stock appreciation rights will ultimately be settled for the difference between the Ending Market Value and the exercise price of $1.45. The stock appreciation rights, if vested, may be settled in stock or cash. If vested, we intend to settle the stock appreciation rights in stock.

16. Related Party Transactions

The Company has sold and purchased inventory, services and fixed assets to and from various affiliates of certain directors. The dollar amounts related to these related party activities are not significant to our consolidated financial statements.

17. Business Segments

In the first quarter of 2019, we changed our reporting segments to align with business activity drivers and the manner in which management reviews and evaluates operating performance. Forum now operates in the following three reporting segments: Drilling & Downhole, Completions and Production, and we believe that this reporting segment structure better aligns with the key phases of the well cycle and provides improved operating efficiencies. Prior to this change, we operated in three business segments: Drilling & Subsea, Completions, and Production & Infrastructure. We have moved the Downhole product line from Completions to Drilling & Subsea to form the new Drilling & Downhole segment. Completions retains the Stimulation & Intervention and Coiled Tubing product lines. Finally, we renamed Production & Infrastructure the Production segment. Our historical results of operations have been recast to retrospectively reflect these changes in accordance with generally accepted accounting principles.

The Drilling & Downhole segment designs and manufactures products and provides related services to the drilling, well construction, artificial lift and subsea energy construction and services markets as well as other markets such as alternative energy, defense and communications. The Completions segment designs, manufactures and supplies products and provides related services to the coiled tubing, stimulation and intervention markets. The Production segment designs, manufactures and supplies products, and provides related equipment and services for production and infrastructure markets.

The Company's reportable segments are strategic units that offer distinct products and services. They are managed separately since each business segment requires different marketing strategies. Operating segments have not been aggregated as part of a reportable segment. The Company evaluates the performance of its reportable segments based on operating income. This segmentation is representative of the manner in which our Chief Operating Decision Maker and our board of directors view the business. We consider the Chief Operating Decision Maker to be the Chief Executive Officer.

The amounts indicated below as "Corporate" relate to costs and assets not allocated to the reportable segments. Summary financial data by segment follows (in thousands):

	Year ended December 31,		
	2019	2018	2017
Revenue:			
Drilling & Downhole	$ 334,829	$ 334,019	$ 310,523
Completions	305,089	373,107	184,182
Production	320,996	361,407	327,287
Eliminations	(4,381)	(4,314)	(3,372)
Total revenue	$ 956,533	$ 1,064,219	$ 818,620
Segment operating income (loss):			
Drilling & Downhole	$ 7,343	$ (33,335)	$ (47,106)
Completions	6,581	31,924	8,797
Production	7,802	6,022	7,811
Corporate	(28,928)	(35,079)	(33,427)
Total segment operating loss	(7,202)	(30,468)	(63,925)
Impairments of goodwill, intangible assets, property and equipment	532,336	363,522	69,062

Transaction expenses	1,159	3,446	6,511
Contingent consideration benefit	(4,629)	—	—
Loss (gain) on disposal of assets and other	78	(438)	2,097
Operating loss	$ (536,146)	$ (396,998)	$ (141,595)
Depreciation and amortization			
Drilling & Downhole	$ 21,433	$ 31,985	$ 38,463
Completions	32,780	33,943	17,631
Production	8,478	8,407	8,608
Corporate	550	173	427
Total depreciation and amortization	$ 63,241	$ 74,508	$ 65,129

A summary of capital expenditures by reportable segment is as follows (in thousands):

	Year ended December 31,		
Capital expenditures	**2019**	**2018**	**2017**
Drilling & Downhole	$ 3,169	$ 8,067	$ 7,093
Completions	3,886	4,997	4,789
Production	4,041	4,877	6,855
Corporate	4,006	6,102	7,972
Total capital expenditures	$ 15,102	$ 24,043	$ 26,709

Forum Energy Technologies, Inc. and subsidiaries
Notes to consolidated financial statements (continued)

A summary of consolidated assets by reportable segment is as follows (in thousands):

Assets	Year ended December 31, 2019	2018	2017
Drilling & Downhole	$ 407,779	$ 663,414	$ 1,057,378
Completions	496,714	872,731	790,255
Production	186,786	243,354	251,685
Corporate	68,718	50,153	95,910
Total assets	$ 1,159,997	$ 1,829,652	$ 2,195,228

Corporate assets primarily include cash, certain prepaid expenses and deferred loan costs.

A summary of long-lived assets by country is as follows (in thousands):

Long-lived assets:	Year ended December 31, 2019	2018	2017
United States	$ 397,219	$ 868,295	$ 1,087,381
Europe	54,519	100,451	213,008
Canada	32,703	87,221	88,280
Asia-Pacific	1,707	984	7,984
Middle East	5,653	6,049	7,362
Latin America	2,279	635	832
Total long-lived assets	$ 494,080	$ 1,063,635	$ 1,404,847

The following table presents our revenues disaggregated by geography based on shipping destination (in thousands):

	Year ended December 31,					
	2019		2018		2017	
Revenue:	$	%	$	%	$	%
United States	$ 670,205	70.1%	$ 811,724	76.3%	$ 621,445	76.0%
Canada	62,651	6.5%	68,635	6.4%	60,898	7.4%
Europe & Africa	71,527	7.5%	57,632	5.4%	61,134	7.5%
Middle East	62,169	6.5%	54,541	5.1%	25,634	3.1%
Asia-Pacific	59,517	6.2%	46,503	4.4%	28,694	3.5%
Latin America	30,464	3.2%	25,184	2.4%	20,815	2.5%
Total Revenue	$ 956,533	100.0%	$ 1,064,219	100.0%	$ 818,620	100.0%

The following table presents our revenues disaggregated by product line (in thousands):

	Year ended December 31,					
	2019		2018		2017	
Revenue:	$	%	$	%	$	%
Drilling Technologies	$ 157,648	16.6 %	$ 178,260	16.6 %	$ 168,816	20.6 %
Downhole Technologies	116,104	12.1 %	104,974	9.9 %	76,010	9.3 %
Subsea Technologies	61,077	6.4 %	50,785	4.8 %	65,697	8.0 %
Stimulation and Intervention	162,025	16.9 %	228,721	21.5 %	148,666	18.2 %
Coiled Tubing	143,064	15.0 %	144,386	13.6 %	35,516	4.3 %
Production Equipment	122,654	12.8 %	141,169	13.3 %	124,323	15.2 %
Valve Solutions	198,342	20.7 %	220,238	20.7 %	202,964	24.8 %
Eliminations	(4,381)	(0.5)%	(4,314)	(0.4)%	(3,372)	(0.4)%
Total revenue	$ 956,533	100.0 %	$ 1,064,219	100.0 %	$ 818,620	100.0 %

18. Condensed Consolidating Financial Statements

The Senior Notes are guaranteed by our domestic subsidiaries which are 100% owned, directly or indirectly, by the Company. The guarantees are full and unconditional, joint and several and on an unsecured basis.

Condensed consolidating statements of comprehensive loss

	Year ended December 31, 2019				
	FET (Parent)	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
	(in thousands)				
Revenue	$ —	$ 811,566	$ 211,665	$ (66,698)	$ 956,533
Cost of sales	—	614,429	162,715	(65,463)	711,681
Gross Profit	—	197,137	48,950	(1,235)	244,852
Operating Expenses					
Selling, general and administrative expenses	69	208,862	42,805	—	251,736
Goodwill and intangible assets impairment	—	487,212	45,124	—	532,336
Transaction Expenses	—	1,067	92	—	1,159
Contingent consideration benefit	—	(4,629)	—	—	(4,629)
Loss (gain) on disposal of assets and other	—	201	(123)	—	78
Total operating expenses	69	692,713	87,898	—	780,680
Earnings (loss) from equity investment	—	(668)	350	—	(318)
Equity loss from affiliate, net of tax	(535,435)	(53,778)	—	589,213	—
Operating loss	(535,504)	(550,022)	(38,598)	587,978	(536,146)
Other expense (income)					
Interest expense (income)	31,553	(84)	149	—	31,618
Foreign exchange and other losses (gains), net	—	(138)	5,160	—	5,022
(Gain) loss realized on previously held equity investment	—	(14,045)	12,478	—	(1,567)
Gain on disposition of Business	—	(2,348)	—	—	(2,348)
Total other (income) expense, net	31,553	(16,615)	17,787	—	32,725
Loss before income taxes	(567,057)	(533,407)	(56,385)	587,978	(568,871)
Income tax expense (benefit)	—	2,028	(3,842)	—	(1,814)
Net loss	(567,057)	(535,435)	(52,543)	587,978	(567,057)
Other comprehensive income (loss), net of tax:					
Net loss	(567,057)	(535,435)	(52,543)	587,978	(567,057)
Change in foreign currency translation, net of tax of $0	7,958	7,958	7,958	(15,916)	7,958
Loss on pension liability	(1,666)	(1,666)	(1,666)	3,332	(1,666)
Comprehensive loss	$ (560,765)	$ (529,143)	$ (46,251)	$ 575,394	$ (560,765)

Forum Energy Technologies, Inc. and subsidiaries
Notes to consolidated financial statements (continued)

Condensed consolidating statements of comprehensive loss

	Year ended December 31, 2018				
	FET (Parent)	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
			(in thousands)		
Revenue	$ —	$ 936,319	$ 187,647	$ (59,747)	$ 1,064,219
Cost of sales	—	717,519	151,787	(61,459)	807,847
Gross Profit	—	218,800	35,860	1,712	256,372
Operating Expenses					
Selling, general and administrative expenses	—	231,492	55,488	—	286,980
Goodwill and intangible assets impairment	—	233,635	129,887	—	363,522
Transaction Expenses	—	2,926	520	—	3,446
Loss (gain) on disposal of assets and other	—	(1,274)	836	—	(438)
Total operating expenses	—	466,779	186,731	—	653,510
Earnings (loss) from equity investment	—	529	(389)	—	140
Equity loss from affiliate, net of tax	(348,557)	(118,601)	—	467,158	—
Operating loss	(348,557)	(366,051)	(151,260)	468,870	(396,998)
Other expense (income)					
Interest expense	32,307	158	67	—	32,532
Foreign exchange and other gains, net	—	(296)	(5,974)	—	(6,270)
(Gain) loss on contribution of subsea rentals business	—	5,856	(39,362)	—	(33,506)
Total other (income) expense, net	32,307	5,718	(45,269)	—	(7,244)
Loss before income taxes	(380,864)	(371,769)	(105,991)	468,870	(389,754)
Income tax expense (benefit)	(6,784)	(23,212)	14,322	—	(15,674)
Net loss	(374,080)	(348,557)	(120,313)	468,870	(374,080)
Other comprehensive income (loss), net of tax:					
Net loss	(374,080)	(348,557)	(120,313)	468,870	(374,080)
Change in foreign currency translation, net of tax of $0	(24,752)	(24,752)	(24,752)	49,504	(24,752)
Gain on pension liability	1,489	1,489	1,489	(2,978)	1,489
Comprehensive loss	$ (397,343)	$ (371,820)	$ (143,576)	$ 515,396	$ (397,343)

Forum Energy Technologies, Inc. and subsidiaries
Notes to consolidated financial statements (continued)

Condensed consolidating statements of comprehensive loss

	Year ended December 31, 2017				
	FET (Parent)	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
			(in thousands)		
Revenue	$ —	$ 703,409	$ 182,417	$ (67,206)	$ 818,620
Cost of sales	—	550,931	145,743	(66,842)	629,832
Gross Profit	—	152,478	36,674	(364)	188,788
Operating Expenses					
Selling, general and administrative expenses	—	205,672	48,041	—	253,713
Goodwill and intangible assets impairment	—	33,301	35,761	—	69,062
Transaction Expenses	—	6,521	(10)	—	6,511
Loss on disposal of assets and other	—	1,981	116	—	2,097
Total operating expenses	—	247,475	83,908	—	331,383
Earnings from equity investment	—	1,000	—	—	1,000
Equity loss from affiliate, net of tax	(41,253)	(53,682)	—	94,935	—
Operating loss	(41,253)	(147,679)	(47,234)	94,571	(141,595)
Other expense (income)					
Interest expense (income)	27,919	(569)	(542)	—	26,808
Foreign exchange and other losses (gains), net	—	(118)	7,386	—	7,268
Gain realized on previously held equity investment	—	(120,392)	—	—	(120,392)
Total other (income) expense, net	27,919	(121,079)	6,844	—	(86,316)
Loss before income taxes	(69,172)	(26,600)	(54,078)	94,571	(55,279)
Income tax expense (benefit)	(9,772)	14,653	(760)	—	4,121
Net loss	(59,400)	(41,253)	(53,318)	94,571	(59,400)
Other comprehensive income (loss), net of tax:					
Net loss	(59,400)	(41,253)	(53,318)	94,571	(59,400)
Change in foreign currency translation, net of tax of $0	36,163	36,163	36,163	(72,326)	36,163
Gain on pension liability	107	107	107	(214)	107
Comprehensive loss	(23,130)	(4,983)	(17,048)	22,031	(23,130)

Forum Energy Technologies, Inc. and subsidiaries
Notes to consolidated financial statements (continued)

Condensed consolidating balance sheets

	December 31, 2019				
	FET (Parent)	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
	(in thousands)				
Assets					
Current assets					
Cash and cash equivalents	$ —	$ 32,387	$ 25,524	$ —	$ 57,911
Accounts receivable—trade, net	—	116,862	37,320	—	154,182
Inventories, net	—	344,920	78,047	(8,327)	414,640
Prepaid expenses and other current assets	—	31,485	2,335	—	33,820
Costs and estimated profits in excess of billings	—	4,029	75	—	4,104
Accrued revenue	—	428	832	—	1,260
Total current assets	—	530,111	144,133	(8,327)	665,917
Property and equipment, net of accumulated depreciation	—	133,974	20,862	—	154,836
Deferred financing costs, net	1,243	—	—	—	1,243
Operating lease assets	—	29,518	19,164	—	48,682
Intangible assets	—	245,507	26,793	—	272,300
Goodwill	—	—	—	—	—
Investment in unconsolidated subsidiary	—	—	—	—	—
Deferred income taxes, net	—	—	654	—	654
Other long-term assets	—	6,682	9,683	—	16,365
Investment in affiliates	348,623	218,228	—	(566,851)	—
Long-term advances to affiliates	541,351	—	116,053	(657,404)	—
Total assets	$ 891,217	$ 1,164,020	$ 337,342	$ (1,232,582)	$ 1,159,997
Liabilities and equity					
Current liabilities					
Current portion of long-term debt	$ —	$ 566	$ 151	$ —	$ 717
Accounts payable—trade	—	75,999	22,721	—	98,720
Accrued liabilities	7,640	35,746	43,239	—	86,625
Deferred revenue	—	1,616	3,261	—	4,877
Billings in excess of costs and profits recognized	—	787	5,124	—	5,911
Total current liabilities	7,640	114,714	74,496	—	196,850
Long-term debt, net of current portion	397,538	1,128	196	—	398,862
Deferred income taxes, net	—	—	2,465	—	2,465
Operating Lease liabilities	—	29,896	20,042	—	49,938
Other long-term liabilities	—	12,255	13,588	—	25,843
Long-term payables to affiliates	—	657,404	—	(657,404)	—
Total liabilities	405,178	815,397	110,787	(657,404)	673,958
					—
Total equity	486,039	348,623	226,555	(575,178)	486,039
Total liabilities and equity	$ 891,217	$ 1,164,020	$ 337,342	$ (1,232,582)	$ 1,159,997

Forum Energy Technologies, Inc. and subsidiaries
Notes to consolidated financial statements (continued)

Condensed consolidating balance sheets

	December 31, 2018				
	FET (Parent)	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
	(in thousands)				
Assets					
Current assets					
Cash and cash equivalents	$ —	$ 24,977	$ 22,264	$ —	$ 47,241
Accounts receivable—trade, net	—	177,986	28,069	—	206,055
Inventories, net	—	416,237	69,878	(7,092)	479,023
Prepaid expenses and other current assets	—	23,585	92	—	23,677
Costs and estimated profits in excess of billings	—	6,202	2,957	—	9,159
Accrued revenue	—	—	862	—	862
Total current assets	—	648,987	124,122	(7,092)	766,017
Property and equipment, net of accumulated depreciation	—	156,434	20,924	—	177,358
Deferred financing costs, net	2,071	—	—	—	2,071
Intangible assets	—	320,056	38,992	—	359,048
Goodwill	—	433,415	36,232	—	469,647
Investment in unconsolidated subsidiary	—	1,222	43,760	—	44,982
Deferred income taxes, net	—	1,170	64	—	1,234
Other long-term assets	—	4,194	5,101	—	9,295
Investment in affiliates	877,764	265,714	—	(1,143,478)	—
Long-term advances to affiliates	674,220	—	98,532	(772,752)	—
Total assets	$ 1,554,055	$ 1,831,192	$ 367,727	$ (1,923,322)	$ 1,829,652
Liabilities and equity					
Current liabilities					
Current portion of long-term debt	$ —	$ 1,150	$ 17	$ —	$ 1,167
Accounts payable—trade	—	121,019	22,167	—	143,186
Accrued liabilities	6,873	40,913	33,246	—	81,032
Deferred revenue	—	4,742	3,593	—	8,335
Billings in excess of costs and profits recognized	—	84	3,126	—	3,210
Total current liabilities	6,873	167,908	62,149	—	236,930
Long-term debt, net of current portion	517,056	480	8	—	517,544
Deferred income taxes, net	—	—	15,299	—	15,299
Other long-term liabilities	—	12,288	17,465	—	29,753
Long-term payables to affiliates	—	772,752	—	(772,752)	—
Total liabilities	523,929	953,428	94,921	(772,752)	799,526
Total equity	1,030,126	877,764	272,806	(1,150,570)	1,030,126
Total liabilities and equity	$ 1,554,055	$ 1,831,192	$ 367,727	$ (1,923,322)	$ 1,829,652

Forum Energy Technologies, Inc. and subsidiaries
Notes to consolidated financial statements (continued)

Condensed consolidating statements of cash flows

	Year ended December 31, 2019				
	FET (Parent)	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
			(in thousands)		
Cash flows from operating activities	$ (28,883)	$ 143,219	$ (10,192)	$ —	$ 104,144
Cash flows from investing activities					
Capital expenditures for property and equipment	—	(13,619)	(1,483)	—	(15,102)
Acquisition of businesses, net of cash acquired	—	—	—	—	—
Investment in unconsolidated subsidiary	—	—	—	—	—
Proceeds from sale of business, property and equipment	—	18,522	24,715	—	43,237
Long-term loans and advances to affiliates	148,977	—	(10,362)	(138,615)	—
Net cash provided by investing activities	148,977	4,903	12,870	(138,615)	28,135
Cash flows from financing activities					
Borrowings of debt	137,000	—	—	—	137,000
Repayments of debt	(256,000)	(900)	—	—	(256,900)
Repurchases of stock	(1,094)	—	—	—	(1,094)
Proceeds from stock issuance	—	—	—	—	—
Payment of capital lease obligations	—	(1,197)	—	—	(1,197)
Long-term loans and advances to affiliates	—	(138,615)	—	138,615	—
Dividend paid to affiliates	—	—	—	—	—
Net cash used in financing activities	(120,094)	(140,712)	—	138,615	(122,191)
Effect of exchange rate changes on cash	—	—	582	—	582
Net increase in cash, cash equivalents and restricted cash	—	7,410	3,260	—	10,670
Cash, cash equivalents and restricted cash at beginning of period	—	24,977	22,264	—	47,241
Cash, cash equivalents and restricted cash at end of period	$ —	$ 32,387	$ 25,524	$ —	$ 57,911

Forum Energy Technologies, Inc. and subsidiaries
Notes to consolidated financial statements (continued)

Condensed consolidating statements of cash flows

	Year ended December 31, 2018				
	FET (Parent)	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
	(in thousands)				
Cash flows from operating activities	$ 10,461	$ (76)	$ 15,972	$ (23,950)	$ 2,407
Cash flows from investing activities					
Capital expenditures for property and equipment	—	(20,288)	(3,755)	—	(24,043)
Acquisition of businesses, net of cash acquired	—	(60,622)	—	—	(60,622)
Proceeds from sale of business, property and equipment	—	5,192	4,066	—	9,258
Long-term loans and advances to affiliates	(18,130)	9,690	—	8,440	—
Net cash provided by (used in) investing activities	(18,130)	(66,028)	311	8,440	(75,407)
Cash flows from financing activities					
Borrowings of debt	221,980	—	—	—	221,980
Repayments of debt	(211,783)	—	—	—	(211,783)
Repurchases of stock	(2,777)	—	—	—	(2,777)
Proceeds from stock issuance	249	—	—	—	249
Payment of capital lease obligations	—	(1,030)	(117)	—	(1,147)
Long-term loans and advances to affiliates	—	18,130	(9,690)	(8,440)	—
Dividend paid to affiliates	—	—	(23,950)	23,950	—
Net cash provided by (used in) financing activities	7,669	17,100	(33,757)	15,510	6,522
Effect of exchange rate changes on cash	—	—	(1,497)	—	(1,497)
Net decrease in cash, cash equivalents and restricted cash	—	(49,004)	(18,971)	—	(67,975)
Cash, cash equivalents and restricted cash at beginning of period	—	73,981	41,235	—	115,216
Cash, cash equivalents and restricted cash at end of period	$ —	$ 24,977	$ 22,264	$ —	$ 47,241

Forum Energy Technologies, Inc. and subsidiaries
Notes to consolidated financial statements (continued)

Condensed consolidating statements of cash flows

	Year ended December 31, 2017				
	FET (Parent)	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
			(in thousands)		
Cash flows from operating activities	$ (15,718)	$ 483	$ 3,702	$ (28,500)	$ (40,033)
Cash flows from investing activities					
Capital expenditures for property and equipment	—	(20,499)	(6,210)	—	(26,709)
Acquisition of businesses, net of cash acquired	—	(157,297)	(4,892)	—	(162,189)
Investment in unconsolidated subsidiary	—	(1,041)	—	—	(1,041)
Proceeds from sale of property and equipment	—	2,038	(67)	—	1,971
Long-term loans and advances to affiliates	(86,097)	22,072	—	64,025	—
Net cash used in investing activities	(86,097)	(154,727)	(11,169)	64,025	(187,968)
Cash flows from financing activities					
Borrowings of debt	107,431	—	—	—	107,431
Repurchases of stock	(4,742)	—	—	—	(4,742)
Proceeds from stock issuance	1,491	—	—	—	1,491
Payment of capital lease obligations	—	(1,147)	(40)	—	(1,187)
Deferred financing costs	(2,430)	—	—	—	(2,430)
Long-term loans and advances to affiliates	—	86,097	(22,072)	(64,025)	—
Dividend paid to affiliates	—	—	(28,500)	28,500	—
Net cash provided by (used in) financing activities	101,750	84,950	(50,612)	(35,525)	100,563
Effect of exchange rate changes on cash	—	—	8,232	—	8,232
Net decrease in cash, cash equivalents and restricted cash	(65)	(69,294)	(49,847)	—	(119,206)
Cash, cash equivalents and restricted cash at beginning of period	65	143,275	91,082	—	234,422
Cash, cash equivalents and restricted cash at end of period	$ —	$ 73,981	$ 41,235	$ —	$ 115,216

19. Quarterly Results of Operations (Unaudited)

The following tables summarize the Company's results by quarter for the years ended December 31, 2019 and 2018. The quarterly results may not be comparable primarily due to acquisitions and dispositions in 2019, 2018 and 2017. Refer to Note 4 *Acquisitions & Dispositions* for further information.

	2019			
(in thousands, except per share information)	**Q1**	**Q2**	**Q3**	**Q4**
Revenues	$ 271,842	$ 245,648	$ 239,266	$ 199,777
Cost of sales	201,744	182,460	176,632	150,845
Gross profit	70,098	63,188	62,634	48,932
Total operating expenses (1)	64,952	63,022	595,954	56,752
Earnings (loss) from equity investment	(849)	570	(39)	—
Operating income (loss)	4,297	736	(533,359)	(7,820)
Total other expense, net (2)	10,458	6,077	2,999	13,191
Loss before income taxes	(6,161)	(5,341)	(536,358)	(21,011)
Income tax expense (benefit)	1,727	8,393	(3,371)	(8,563)
Net loss	(7,888)	(13,734)	(532,987)	(12,448)
Weighted average shares outstanding				
Basic	109,643	109,987	110,295	110,464
Diluted	109,643	109,987	110,295	110,464
Loss per share				
Basic	$ (0.07)	$ (0.12)	$ (4.83)	$ (0.11)
Diluted	$ (0.07)	$ (0.12)	$ (4.83)	$ (0.11)

(1) Q1 includes a $4.6 million contingent consideration benefit related to GHT. See Note 4 Acquisitions & Dispositions for further information related to this benefit. Q3 includes $471.0 million of goodwill impairments, $53.5 million of intangible asset impairments and $7.9 million of property and equipment impairments. See Note 7 Goodwill and Intangible Assets and Note 6 Property and Equipment for further information related to these charges.

(2) Q3 includes a $1.6 million gain realized on the sale of our previously held equity investment in Ashtead. Q4 includes a 2.3 million gain on the sale of certain assets of our Cooper Alloy® brand of valve products. See Note 4 Acquisitions & Dispositions for further information related to these gains.

Forum Energy Technologies, Inc. and subsidiaries
Notes to consolidated financial statements (continued)

	2018			
(in thousands, except per share information)	**Q1**	**Q2**	**Q3**	**Q4**
Revenues	$ 250,231	$ 274,003	$ 267,037	$ 272,948
Cost of sales	182,944	201,334	192,496	231,073
Gross profit	67,287	72,669	74,541	41,875
Total operating expenses (1)	73,030	84,721	72,764	422,995
Earnings (loss) from equity investment	(963)	350	659	94
Operating income (loss)	(6,706)	(11,702)	2,436	(381,026)
Total other expense (income), net (2)	(21,868)	2,001	6,598	6,025
Income (loss) before income taxes	15,162	(13,703)	(4,162)	(387,051)
Income tax expense (benefit)	(12,904)	1,646	(1,108)	(3,308)
Net income (loss)	28,066	(15,349)	(3,054)	(383,743)
Weighted average shares outstanding				
Basic	108,423	108,714	108,856	109,082
Diluted	110,857	108,714	108,856	109,082
Earnings (loss) per share				
Basic	$ 0.26	$ (0.14)	$ (0.03)	$ (3.52)
Diluted	$ 0.25	$ (0.14)	$ (0.03)	$ (3.52)

(1) Total operating expenses includes $14.5 million of intangible asset impairments for the Subsea and Downhole product lines in Q2, $298.8 million of goodwill impairment charges in Q4 and $50.2 million of intangible asset impairments in Q4. See Note 7 Goodwill and Intangible Assets for further information related to these charges.

(2) Total other expenses includes a $33.5 million gain on contribution of our subsea rentals business in Q1. See Note 4 Acquisitions & Dispositions for further information related to this gain.

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

We maintain disclosure controls and procedures (as defined under Rules 13a-15(e) and 15d-15(e) of the Exchange Act). The Company's disclosure controls and procedures have been designed to provide reasonable assurance that information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms. Our disclosure controls and procedures include controls and procedures designed to provide reasonable assurance that information required to be disclosed in reports filed or submitted under the Exchange Act is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Our management, under the supervision and with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures pursuant to Exchange Act Rule 13a-15(b) as of December 31, 2019. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of December 31, 2019.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control over financial reporting is a process to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Our management performed an assessment of the overall effectiveness of our internal control over financial reporting as of December 31, 2019, utilizing the criteria described in the "Internal Control - Integrated Framework" (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, management has concluded that the Company's internal control over financial reporting is effective as of December 31, 2019.

Our independent registered public accounting firm, Deloitte & Touche LLP, audited the effectiveness of our internal control over financial reporting as of December 31, 2019, as stated in their report which appears herein.

Changes in Internal Control over Financial Reporting

There have been no changes in internal control over financial reporting during the quarter ended December 31, 2019 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Forum Energy Technologies, Incorporated

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Forum Energy Technologies, Incorporated and subsidiaries (the "Company") as of December 31, 2019, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control - Integrated Framework (2013) issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2019, of the Company and our report dated February 25, 2020 expressed an unqualified opinion on those financial statements.

Basis for Opinion

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

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

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

/s/ Deloitte & Touche LLP

Houston, TX

February 25, 2020

Item 9B. Other information

None.

Item 10. Directors, executive officers and corporate governance

Information required by this item is incorporated herein by reference to our Proxy Statement for the 2020 Annual Meeting of Stockholders.

Code of Ethics

We have adopted a Financial Code of Ethics, which applies to our Chief Executive Officer, Chief Financial Officer (or other principal financial officer), Corporate Controller (or other principal accounting officer) and other senior financial officers. We have posted a copy of the code under "Corporate Governance" in the "Investors" section of our website at *www.f-e-t.com*. Copies of the code may be obtained free of charge on our website. Any waivers of the code must be approved by our board of directors or a designated committee of our board of directors. Any change to, or waiver from, the Code of Ethics will be promptly disclosed as required by applicable U.S. federal securities laws and the corporate governance rules of the NYSE.

Item 11. Executive compensation

Information required by this item is incorporated herein by reference to our Proxy Statement for the 2020 Annual Meeting of Stockholders.

Item 12. Security ownership of certain beneficial owners and management and related stockholder matters

Information required by this item is incorporated herein by reference to our Proxy Statement for the 2020 Annual Meeting of Stockholders.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Information required by this item is incorporated herein by reference to our Proxy Statement for the 2020 Annual Meeting of Stockholders.

Item 14. Principal accountant fees and services

Information required by this item is incorporated herein by reference to our Proxy Statement for the 2020 Annual Meeting of Stockholders.

Item 15. Exhibits

(a) The following documents are filed as part of this Annual Report on Form 10-K:

1. Financial Statements filed as part of this report

Index to Consolidated Financial Statements	Page
Report of Independent Registered Public Accounting Firm	56
Consolidated Statements of Comprehensive Loss	58
Consolidated Balance Sheets	59
Consolidated Statements of Cash Flows	60
Consolidated Statements of Changes in Stockholders' Equity	61
Notes to Consolidated Financial Statements	62

2. Financial Statement Schedules

All financial statement schedules have been omitted since the required information is not applicable or is not present in amounts sufficient to require submission of the schedule, or because the information required is included on the Consolidated Financial Statements and Notes thereto.

3. Exhibits

Index to Exhibits

Exhibit Number	DESCRIPTION
2.1*	Combination Agreement dated July 16, 2010 by and among Forum Oilfield Technologies, Inc., Allied Production Services, Inc., Allied Merger Sub, LLC, Global Flow Technologies, Inc., Global Flow Merger Sub, LLC, Subsea Services International, Inc., Subsea Merger Sub, LLC, Triton Group Holdings LLC, Triton Merger Sub, LLC and SCF-VII, L.P. (incorporated herein by reference to Exhibit 2.1 to the Company's Registration Statement on Form S-1 (the "Registration Statement"), filed on August 31, 2011) File No. 333-180676.
3.1*	Third Amended and Restated Certificate of Incorporation of Forum Energy Technologies, Inc. dated March 28, 2011 (incorporated herein by reference to Exhibit 3.2 to Amendment No. 5 to the Registration Statement, filed on March 29, 2012) (File No. 333-180676).
3.2*	Second Amended and Restated Bylaws of Forum Energy Technologies, Inc. dated April 17, 2012 (incorporated herein by reference to Exhibit 3.1 on the Company's Current Report on Form 8-K, filed on April 17, 2012) (File No. 1-35504).
4.1*	Indenture, dated October 2, 2013, among Forum Energy Technologies, Inc., the guarantors named therein and Wells Fargo Bank, National Association, as Trustee (incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K, filed on October 4, 2013).
4.2*	Registration Rights Agreement by and among Forum Energy Technologies and the other parties thereto (incorporated herein by reference to Exhibit B to Exhibit 4.2 to the Registration Statement, filed on August 31, 2011) (File No. 333-180676).
4.3*	Form of Common Stock Certificate (incorporated herein by reference to Exhibit 4.1 to Amendment No. 3 to the Registration Statement, filed on December 29, 2011) (File No. 333-180676).
4.4*	Form of Note (incorporated herein by reference to Exhibit A to Exhibit 4.1 to the Company's Current Report on Form 8-K, filed on October 4, 2013).
4.5**	Description of Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934.
10.1*	Stock Purchase Agreement between Forum Energy Technologies, Inc. and Tinicum, L.P., dated as of March 28, 2012 (incorporated herein by reference to Exhibit 10.30 to Amendment No. 5 to the Registration Statement, filed on March 29, 2012)) (File No. 333-180676).

10.2*#	Form of Nonstatutory Stock Option Agreement (Employees and Consultants) (incorporated herein by reference to Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q, filed on November 6, 2012).
10.3*#	Form of Nonstatutory Stock Option Agreement (Employees and Consultants)(incorporated herein by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q, filed on May 3, 2013).
10.4*#	Form of Nonstatutory Stock Option Agreement (Employees and Consultants) (incorporated herein by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q, filed on April 29, 2014).
10.5*#	Form of Nonstatutory Stock Option Agreement (Employees and Consultants) (incorporated herein by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q, filed on May 1, 2015).
10.6*#	Form of Nonstatutory Stock Option Agreement - Three Year Cliff Vesting (Employees and Consultants) (incorporated herein by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q, filed on October 30, 2015).
10.7*#	Employment Agreement dated as of August 2, 2010 between Forum Energy Technologies, Inc. and C. Christopher Gaut (incorporated herein by reference to Exhibit 10.2 to the Registration Statement, filed on August 31, 2011)) (File No. 333-180676).
10.8*#	Employment Agreement dated as of October 25, 2010 between Forum Energy Technologies, Inc. and James L. McCulloch (incorporated herein by reference to Exhibit 10.7 to the Registration Statement, filed on August 31, 2011)) (File No. 333-180676).
10.9*#	Amendment to Employment Agreement dated as of April 12, 2012 between Forum Energy Technologies, Inc. and C. Christopher Gaut (incorporated herein by reference to Exhibit 10.2 on the Company's Current Report on Form 8-K, filed on April 17, 2012) (File No. 1-35504).
10.10*#	Amendment to Employment Agreement dated as of April 12, 2012 between Forum Energy Technologies, Inc. and James L. McCulloch (incorporated herein by reference to Exhibit 10.5 on the Company's Current Report on Form 8-K, filed on April 17, 2012).
10.11*#	Employment Agreement, dated February 16, 2018, by and between Forum Energy Technologies, Inc. and C. Christopher Gaut (incorporated herein by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K, filed on February 21, 2018).
10.12*#	Indemnification Agreement dated as of August 2, 2010 between Forum Energy Technologies and C. Christopher Gaut (incorporated herein by reference to Exhibit 10.9 to the Registration Statement, filed on August 31, 2011) (File No. 333-180676).
10.13*#	Form of Indemnification Agreement between Forum Energy Technologies, Inc. and the executive officers identified on Annex A thereto (incorporated herein by reference to Exhibit 10.10 to the Registration Statement, filed on August 31, 2011) (File No. 333-180676).
10.14*#	Form of Indemnification Agreement between Forum Energy Technologies and each of the non-SCF directors identified on Annex A thereto (incorporated herein by reference to Exhibit 10.11 to the Registration Statement, filed on August 31, 2011) (File No. 333-180676).
10.15*#	Form of Indemnification Agreement between Forum Energy Technologies and each of the SCF directors identified on Annex A thereto (incorporated herein by reference to Exhibit 10.12 to the Registration Statement, filed on August 31, 2011) (File No. 333-180676).
10.16*#	Forum Energy Technologies, Inc. Severance Plan (incorporated herein by reference to Exhibit 10.15 to the Registration Statement, filed on August 31, 2011) (File No. 333-180676).
10.17*#	Forum Energy Technologies, Inc. Deferred Compensation and Restoration Plan (incorporated herein by reference to Exhibit 10.6 to the Company's Current Report on Form 10-Q, filed on May 3, 2013).
10.18*#	Letter Agreement dated March 28, 2012 between Forum Energy Technologies, Inc. and Tinicum, L.P. (incorporated herein by reference to Exhibit 10.31 to Amendment No. 5 to the Registration Statement, filed on March 29, 2012) (File No. 333-180676).
10.19*#	Forum Energy Technologies, Inc. 2010 Stock Incentive Plan (as amended and restated effective August 15, 2012) (incorporated herein by reference to Exhibit 10.2 to the Company's Current Report on Form 10- Q, filed November 6, 2012) (File No. 1-35504).
10.20*#	Subscription Agreement dated July 16, 2010 by and among Forum Oilfield Technologies, Inc., SCF-VII, L.P., Sunray Capital, LP, C. Christopher Gaut and W. Patrick Connelly, as amended (incorporated herein by reference to Exhibit 10.21 to the Registration Statement, filed on August 31, 2011) (File No. 333-180676).

10.21*#	Severance Agreement dated as of February 16, 2018 between Forum Energy Technologies, Inc. and Pablo G. Mercado (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on February 21, 2018).
10.22*#	Severance Agreement dated as of February 16, 2018 between Forum Energy Technologies, Inc. and Michael D. Danford (incorporated herein by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K, filed on February 21, 2018).
10.23*#	Severance Agreement dated as of December 19, 2018 between Forum Energy Technologies, Inc. and C. Christopher Gaut (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K/A, filed on December 21, 2018).
10.24*#	Severance Agreement dated as of September 1, 2018 between Forum Energy Technologies, Inc. and D. Lyle Williams (Incorporate herein by reference to Exhibit 10.26 to the Company's Annual Report on Form 10-K, filed on February 28, 2019).
10.25*#	Form of Restricted Stock Unit Agreement (Employees and Consultants - Group 1) (incorporated herein by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q, filed on May 3, 2016).
10.26#	Form of Restricted Stock Unit Agreement (Employees and Consultants - Group 2) (incorporated herein by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q, filed on May 3, 2016).
10.27*#	Form of Restricted Stock Agreement (Employees and Consultants) (incorporated herein by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q, filed on May 3, 2016).
10.28*#	Form of Nonstatutory Stock Option Agreement (Employees and Consultants) (incorporated herein by reference to Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q, filed on May 3, 2016).
10.29*#	Form of Performance Share Award Agreement (Employees and Consultants) (incorporated herein by reference to Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q, filed on May 3, 2016).
10.30*#	Forum Energy Technologies, Inc. 2016 Stock and Incentive Plan (incorporated herein by reference to Appendix A to the Company's Proxy Statement on Schedule 14A filed on April 1, 2016).
10.31*#	Form of Restricted Stock Unit Agreement (Employees and Consultants) (incorporated herein by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q, filed on November 2, 2016).
10.32*#	Form of Restricted Stock Unit Agreement (Employees and Consultants - Group 1) (incorporated herein by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q, filed on May 2, 2017).
10.33*#	Form of Restricted Stock Unit Agreement (Employees and Consultants - Group 2) (incorporated herein by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q, filed on May 2, 2017).
10.34*#	Form of Nonstatutory Stock Option Agreement (Employees and Consultants) (incorporated herein by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q, filed on May 2, 2017).
10.35*#	Form of Performance Share Award Agreement (Employees and Consultants) (incorporated herein by reference to Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q, filed on May 2, 2017).
10.36*#	Amended and Restated Employee Stock Purchase Plan, dated as of July 1, 2017 (incorporated herein by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q, filed on August 1, 2017).
10.37*#	Form of Restricted Stock Agreement (Directors) (incorporated herein by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q, filed on May 2, 2018).
10.38*#	Form of Restricted Stock Unit Agreement (Directors) (incorporated herein by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q, filed on May 2, 2018).
10.39*#	Form of Restricted Stock Unit Agreement (Employees and Consultants - Group 1) (incorporated herein by reference to Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q, filed on May 2, 2018).
10.40*#	Form of Restricted Stock Unit Agreement (Employees and Consultants - Group 2) (incorporated herein by reference to Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q, filed on May 2, 2018).
10.41*#	Form of Nonstatutory Stock Option Agreement (Employees and Consultants) (incorporated herein by reference to Exhibit 10.8 to the Company's Quarterly Report on Form 10-Q, filed on May 2, 2018).

10.42*#	Form of Performance Share Award Agreement (Employees and Consultants) (incorporated herein by reference to Exhibit 10.9 to the Company's Quarterly Report on Form 10-Q, filed on May 2, 2018).
10.43*#	Form of Restricted Stock Agreement (Directors) (incorporated herein by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q, filed on May 1, 2019).
10.44*#	Form of Restricted Stock Unit Agreement (Directors) (incorporated herein by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q, filed on May 1, 2019).
10.45*#	Form of Restricted Stock Unit Agreement (Employees and Consultants - Group 1) (incorporated herein by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q, filed on May 1, 2019).
10.46*	Form of Restricted Stock Unit Agreement (Employees and Consultants - Group 2) (incorporated herein by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q, filed on May 1, 2019).
10.47*#	Form of Performance Share Award Agreement (Employees and Consultants) (incorporated herein by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q, filed on May 1, 2019).
10.48*#	Form of Cash Award Agreement (Employees and Consultants) (incorporated herein by reference to Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q, filed on May 1, 2019).
10.49*#	Forum Energy Technologies, Inc. Amended and Restated 2016 Stock and Incentive Plan (incorporated herein by reference to Appendix B to the Company's Proxy Statement on Schedule 14A filed on April 2, 2019).
10.50*#	Severance Agreement dated as of February 15, 2019 between Forum Energy Technologies, Inc. and John C. Ivascu (incorporated herein by reference to Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q, filed on May 1, 2019).
10.51*#	Purchase and Sale Agreement, dated August 25, 2017, by and among Q-GT (V) Investment Partners, LLC, Forum Energy Technologies, Inc. and Global Tubing, LLC (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on August 28, 2017).
10.52*#	Amendment No. 2 to the Registration Rights Agreement, dated as of August 25, 2017, by and among Forum Energy Technologies and the other parties thereto (incorporated herein by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K, filed on August 28, 2017).
10.53*	Registration Rights Agreement, dated as of October 2, 2017, by and between Forum Energy Technologies, Inc. and Q-GT (V) Investment Partners, LLC (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on October 3, 2017).
10.54*	Third Amended and Restated Credit Agreement, dated as of October 30, 2017, by and among Forum Energy Technologies, Inc., Forum Canada ULC, Wells Fargo Bank, National Association, as administrative agent, and the lenders party thereto (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on November 2, 2017).
10.55*#	Amendment No. 1 to the Third Amended and Restated Credit Agreement, dated as of February 3, 2020, among Forum Energy Technologies, Inc., the lenders party thereto, Wells Fargo Bank, National Association, as Administrative Agent, and the other borrowers and guarantors party thereto (incorporate herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on February 5, 2020).
10.56*#	Retirement Agreement dated as of July 31, 2018 between Forum Energy Technologies, Inc. and James W. Harris (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on August 2, 2018).
10.57*#	Form of Restricted Stock Unit Agreement (Gaut) (incorporated herein by reference to Exhibit 10.50 to the Company's annual Report on Form 10-K, filed on February 28, 2019).
10.58*#	Form of Performance Share Award Agreement (Gaut) (incorporated herein by reference to Exhibit 10.51 to the Company's Annual Report on Form 10-K, filed Februray 28, 2019).
16.1*	Letter from PricewaterhouseCoopers regarding Change in Certifying Accountant (incorporated herein by reference to Exhibit 16.1 to the Company's Current Report on Form 8-K, filed on March 26, 2019).
21.1**	Subsidiaries of Forum Energy Technologies, Inc.
23.1**	Consent of Deloitte & Touche LLP.
23.2**	Consent of PricewaterhouseCoopers LLP

31.1**	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2**	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2**	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS**	XBRL Instance Document.
101.SCH**	XBRL Taxonomy Extension Schema Document.
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document.
101.LAB**	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase Document.
101.DEF**	XBRL Taxonomy Extension Definition Linkbase Document.
104**	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

* Previously filed.

** Filed herewith.

Identifies management contracts and compensatory plans or arrangements.

Item 16. Form 10-K Summary

None.

SIGNATURES

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

FORUM ENERGY TECHNOLOGIES, INC.

February 25, 2020	By:	/s/ Pablo G. Mercado
		Pablo G. Mercado
		Senior Vice President and Chief Financial Officer
		(As Duly Authorized Officer and Principal Financial Officer)
February 25, 2020	By:	/s/ John McElroy
		John McElroy
		Corporate Controller
		(As Duly Authorized Officer and Principal Accounting 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.

Signature	Title	Date
/s/ C. Christopher Gaut C. Christopher Gaut	President, Chief Executive Officer and Chairman of the Board (Principal Executive Officer)	February 25, 2020
/s/ Pablo G. Mercado Pablo G. Mercado	Senior Vice President and Chief Financial Officer (Principal Financial Officer)	February 25, 2020
/s/ John McElroy John McElroy	Corporate Controller (Principal Accounting Officer)	February 25, 2020
/s/ Evelyn M. Angelle Evelyn M. Angelle	Director	February 25, 2020
/s/ David C. Baldwin David C. Baldwin	Director	February 25, 2020
/s/ John A. Carrig John A. Carrig	Director	February 25, 2020
/s/ Michael McShane Michael McShane	Director	February 25, 2020
/s/ Terence O’Toole Terence O’Toole	Director	February 25, 2020
/s/ Louis A. Raspino Louis A. Raspino	Director	February 25, 2020
/s/ John Schmitz John Schmitz	Director	February 25, 2020
/s/ Andrew L. Waite Andrew L. Waite	Director	February 25, 2020

Description of Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934

The following description of the common stock, preferred stock, certificate of incorporation and by-laws of Forum Energy Technologies, Inc. ("Forum") is a summary only and is subject to the complete text of Forum's certificate of incorporation and by-laws. You should read Forum's certificate of incorporation and by-laws as currently in effect for more details regarding the provisions described below. This section also summarizes relevant provisions of the Delaware General Corporation Law ("DGCL"). The terms of the DGCL are more detailed than the general information provided below. Therefore, you should carefully consider the actual provisions of these laws.

Forum has one class of securities registered under Section 12 of the Securities Exchange Act, as amended: common stock, par value $0.01 per share ("common stock"). Forum's authorized capital stock consists of 299,700,000 shares of common stock, par value $0.01 per share, and 3,700,000 shares of preferred stock, par value $0.01 per share.

References to "we," "our" and "us" refer to Forum, unless the context otherwise requires. References to "stockholders" refer to holders of our common stock, unless the context otherwise requires.

Common Stock

Except as provided by law or in a preferred stock designation, holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders. Because holders of our common stock have the exclusive right to vote for the election of directors and do not have cumulative voting rights, the holders of a majority of the shares of our common stock can elect all of the members of the board of directors standing for election, subject to the rights, powers and preferences of any outstanding series of preferred stock that we may issue in the future, the holders of our common stock are entitled to receive:

- dividends as may be declared by our board of directors from time to time out of funds legally available for the payment of dividends; and

- if Forum is liquidated, dissolved or wound up, all of our assets available for distribution to holders of our common stock after satisfaction of all of our liabilities and the prior rights of any outstanding class of preferred stock, pro rata, based on the number of shares held.

Forum's common stock carries no preemptive or other subscription rights to purchase shares of Forum common stock and is not convertible, redeemable or assessable or entitled to the benefits of any sinking fund.

Preferred Stock

Subject to the provisions of our certificate of incorporation and legal limitations, our board of directors will have the authority, without further vote or action by our stockholders to issue shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions of our preferred stock, including provisions related to dividends, conversion, voting, redemption, liquidation and the number of shares constituting the series or the designation of that series, which may be superior to those of our common stock.

The issuance of shares of preferred stock by our board of directors as described above, while providing desired flexibility in connection with possible acquisitions and other corporate purposes, may adversely affect the rights of the holders of our common stock. For example, preferred stock may rank prior to our common stock as to dividend rights, liquidation preference or both, may have full or limited voting rights and may be convertible into shares of our common stock. The issuance of shares of preferred stock may

discourage third-party bids for our common stock or may otherwise adversely affect the market price of our common stock. In addition, preferred stock may enable our board of directors to make it more difficult or to discourage attempts to obtain control of us through a hostile tender offer, proxy contest, merger or otherwise, or to make changes in our management. Shares of preferred stock may be offered either separately or represented by depositary shares.

Anti-takeover effects of provisions of our certificate of incorporation, our bylaws and Delaware law

Some provisions of Delaware law, our certificate of incorporation and our bylaws could make certain change of control transactions more difficult, including acquisitions of us by means of a tender offer, a proxy contest or otherwise, as well as removal of our incumbent directors. These provisions may also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish or could deter transactions that stockholders may otherwise consider to be in their best interest or in his or her best interests, including transactions that might result in a premium over the market price for our common stock.

Business Combinations under Delaware Law

In our certificate of incorporation, we have elected not to be subject to the provisions of Section 203 of the DGCL regulating corporate takeovers until the date on which the SCF group (as defined below) is no longer the holder of at least 15% of our outstanding common stock. On and after such date, we will be subject to the provisions of Section 203 of the DGCL. In general, those provisions prohibit a Delaware corporation, including those whose securities are listed for trading on the NYSE, from engaging in any business combination with any interested stockholder for a period of three years following the date that the stockholder became an interested stockholder, unless:

- before the person became an interested stockholder, our board of directors approved either the business combination or the transaction in which the interested stockholder became an interested stockholder;

- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of our voting stock outstanding at the time the transaction commenced (other than statutorily excluded shares); or

- on or after the date the interested stockholder attained that status, the business combination is approved by the board of directors and authorized at a meeting of stockholders by at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

Certificate of Incorporation and Bylaws

Among other things, our certificate of incorporation and bylaws:

- establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders.

These procedures provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days nor more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. Our bylaws specify the requirements as to form and content of all stockholders’ notices. These requirements may preclude stockholders from bringing matters before the stockholders at an annual or special meeting to the extent they do not comply with the requirements in these advance notice procedures;

- provide our board of directors the ability to authorize the issuance of undesignated preferred stock. This makes it possible for our board of directors to issue, without stockholder approval, preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of us;

- provide that the authorized number of directors may be changed only by resolution of the board of directors;

- provide that all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;

- provide that any action required or permitted to be taken by the stockholders must be effected at a duly called annual or special meeting of stockholders and may not be effected by any consent in writing in lieu of a meeting of such stockholders, subject to the rights of the holders of any series of preferred stock;

- provide that our certificate of incorporation and bylaws may be amended by the affirmative vote of the holders of at least two-thirds of our then outstanding common stock;

- provide that special meetings of our stockholders may only be called by the board of directors, the chief executive officer, the president, the secretary, the chairman of the board or by stockholders holding a majority of the outstanding shares entitled to vote generally in the election of directors;

- provide for our board of directors to be divided into three classes of directors, with each class as nearly equal in number as possible, serving staggered three year terms, other than directors who may be elected by holders of preferred stock, if any. This system of electing and removing directors may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of us, because it generally makes it more difficult for stockholders to replace a majority of the directors;

- provide that a member of our board of directors may only be removed for cause and only by the affirmative vote of the holders of at least two-thirds of our then outstanding common stock; and

- provide that we renounce any interest in the business opportunities of the SCF group or any of their officers, directors, agents, stockholders, members, partners, affiliates and subsidiaries (other than our directors that are presented business opportunities in their capacity as our directors) and that they have no obligation to offer us those opportunities.

Renouncement of Business Opportunities

SCF-V, L.P., SCF-VI, L.P. and SCF-VII, L.P. (collectively, “SCF”) have investments in other oilfield service companies that may compete with us, and SCF and its affiliates, other than us, may invest in such other companies in the future. SCF, its other affiliates and its portfolio companies are referred to as the “SCF group.” Our certificate of incorporation provides that, until we have had no directors that are directors or officers affiliated with SCF (each, an “SCF Nominee”) for a continuous period of one year, we renounce any interest in any business opportunity in which any member of the SCF group participates or desires or seeks to participate in and that involves any aspect of the energy equipment or services business or industry, other than:

- any business opportunity that is brought to the attention of an SCF Nominee solely in such person’s capacity as our director or officer and with respect to which no other member of the SCF group independently receives notice or otherwise identifies such opportunity; or

- any business opportunity that is identified by the SCF group solely through the disclosure of information by or on behalf of us.

In addition, L.E. Simmons & Associates, Incorporated (“LESA”), the ultimate general partner of SCF, has an internal policy that discourages it from investing in two or more portfolio companies with substantially overlapping industry segments and geographic areas. However, LESA’s internal policy does not restrict the management or operation of its other individual portfolio companies from competing with us. Pursuant to LESA’s policy, LESA may allocate any potential opportunities to the existing portfolio company where LESA determines, in its discretion, such opportunities are the most logical strategic and operational fit. Thus, members of the SCF group, which includes any SCF Nominees, may pursue opportunities in the oilfield services industry for their own account or present such opportunities to us or one of SCF’s other portfolio companies. Our certificate of incorporation provides that the SCF group, which includes any SCF Nominees, has no obligation to offer such opportunities to us, even if the failure to provide such opportunity would have a competitive impact on us. We are not prohibited from pursuing any business opportunity with respect to which we have renounced any interest.

Our certificate of incorporation further provides that any amendment to or adoption of any provision inconsistent with the certificate of incorporation’s provisions governing the renouncement of business opportunities must be approved by the holders of at least 80% of the voting power of Forum’s outstanding stock entitled to vote thereon.

Amendment of the Bylaws

Our board of directors may amend or repeal the bylaws and adopt new bylaws by the affirmative vote of a majority of the whole board of directors. The stockholders may amend or repeal the bylaws and adopt new bylaws by the affirmative vote of the holders of at least two-thirds of our then outstanding common stock at any annual meeting or special meeting for which notice of the proposed amendment, repeal or adoption was contained in the notice for such special meeting.

Limitation of Liability and Indemnification of Officers and Directors

Our directors will not be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except, if required by Delaware law, for liability:

- for any breach of the duty of loyalty to us or our stockholders;
- for acts or omissions not in good faith or involving intentional misconduct or a knowing violation of law;
- for unlawful payment of a dividend or unlawful stock purchases or redemptions; or
- for any transaction from which the director derived an improper personal benefit.

As a result, neither we nor our stockholders have the right, through stockholders’ derivative suits on our behalf, to recover monetary damages against a director for breach of fiduciary duty as a director, including breaches resulting from grossly negligent behavior, except in the situations described above. We have entered into indemnification agreements with each of our other current directors and officers.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC.

Exhibit 4.5

Market Information

Our common stock is listed on the New York Stock Exchange under the symbol “FET.”

Exhibit 21.1

List of Subsidiaries of Forum Energy Technologies, Inc.

Name	**Jurisdiction**
FET (Barbados) SRL	Barbados
Forum Global Finance Limited	Ireland
FET Global L.P.	United Kingdom
FET Global Holdings Limited	United Kingdom
FET Holdings LLC	Delaware
FET Worldwide L.P.	United Kingdom
Forum Global Tubing L.P.	Delaware
Forum Global Tubing LLC	Delaware
Forum International Holdings, Inc.	Delaware
Forum US, Inc.	Delaware
Forum Worldwide Holdings Limited	United Kingdom
Global Tubing LLC	Delaware

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statements on Form S-8 (Nos.333-180769, 333-188915, 333-213158, 333-218789, 333-231525) and Forms S-3 (Nos. 333-220814, 333-233678) of our reports dated February 25, 2020 relating to the financial statements of Forum Energy Technologies, Incorporated and subsidiaries (“the Company”) and the effectiveness of the Company’s internal control over financial reporting, appearing in this Annual Report on Form 10-K for the year ended December 31, 2019.

/s/ Deloitte & Touche LLP

Houston, Texas
February 25, 2020

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-180769, 333-188915, 333-213158, 333-218789, 333-231525) and Form S-3 (No. 333-220814, 333-233678) of Forum Energy Technologies, Inc. of our report dated February 28, 2019, except for the change in composition of reportable segments discussed in Notes 4, 7, and 17 to the consolidated financial statements, as to which the date is May 3, 2019, relating to the financial statements, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP
Houston, Texas

February 25, 2020

Exhibit 31.1

Forum Energy Technologies, Inc.
Certification

I, C. Christopher Gaut, certify that:

1. I have reviewed this Annual Report on Form 10-K of Forum Energy Technologies, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of 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 25, 2020

By: /s/ C. Christopher Gaut
C. Christopher Gaut
President, Chief Executive Officer and Chairman of the Board

Exhibit 31.2

Forum Energy Technologies, Inc.
Certification

I, Pablo G. Mercado, certify that:

1. I have reviewed this Annual Report on Form 10-K of Forum Energy Technologies, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of 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 25, 2020

By: _/s/ Pablo G. Mercado__________________
Pablo G. Mercado
Senior Vice President and Chief Financial Officer

Exhibit 32.1

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

In connection with the Annual Report on Form 10-K of Forum Energy Technologies, Inc. (the “Company”) for the year ended December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), C. Christopher Gaut, as Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of his knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "***Exchange Act***"); and

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

Dated: February 25, 2020

By: /s/ C. Christopher Gaut
C. Christopher Gaut
President, Chief Executive Officer and Chairman of the Board

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

This certification shall not be deemed filed by the Company for purposes of § 18 of the Exchange Act.

Exhibit 32.2

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

In connection with the Annual Report on Form 10-K of Forum Energy Technologies, Inc. (the “Company”) for the year ended December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), Pablo G. Mercado, as Chief Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of his knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "***Exchange Act***"); and

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

Dated: February 25, 2020

By: /s/ Pablo G. Mercado
Pablo G. Mercado
Senior Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

This certification shall not be deemed filed by the Company for purposes of § 18 of the Exchange Act.