

**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, 2020

Commission File Number 001-14962



CIRCOR INTERNATIONAL, INC.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation or organization)

001-14962
(Commission File Number)

04-3477276
(I.R.S. Employer
Identification No.)

30 CORPORATE DRIVE, SUITE 200
Burlington, MA
(Address of principal executive offices and Zip Code)

01803-4238
(Zip Code)

(781) 270-1200
(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.01 per share	CIR	New York Stock Exchange

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 Exchange Act. Yes ☐ No ☒

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input checked="" type="checkbox"/>	Emerging growth company	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>		

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. Yes ☐ No ☐

Indicate by check mark whether the registrant has filed a report and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

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 voting stock held by non-affiliates of the registrant as of June 28, 2020 was \$443,948,186. The registrant does not have any non-voting common equity.

As of March 10, 2021, there were 20,155,251 shares of the registrant's Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Part III incorporates by reference certain portions of the information from the registrant's definitive Proxy Statement for the 2021 Annual Meeting of Stockholders to be held on May 25, 2021. The definitive Proxy Statement will be filed with the Securities and Exchange Commission within 120 days of the close of the registrant's year ended December 31, 2020.

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Part I

Item 1. Business

This Annual Report on Form 10-K contains certain statements that are “forward-looking statements” as that term is defined under the Private Securities Litigation Reform Act of 1995 (the “Act”). The words “may,” “hope,” “should,” “expect,” “plan,” “anticipate,” “intend,” “believe,” “estimate,” “predict,” “potential,” “continue,” and other expressions which are predictions of or indicate future events and trends and which do not relate to historical matters, identify forward-looking statements. We believe that it is important to communicate our future expectations to our stockholders, and we, therefore, make forward-looking statements in reliance upon the safe harbor provisions of the Act. However, there may be events in the future that we are not able to accurately predict or control and our actual results may differ materially from the expectations we describe in our forward-looking statements. Forward-looking statements, including statements about our future performance, including the expected and potential direct and indirect impacts of the COVID-19 pandemic on our business, our ability to maintain our internal controls, the number of new product launches and future cash flows from operating activities, involve known and unknown risks, uncertainties and other factors, which may cause our actual results, performance or achievements to differ materially from anticipated future results, performance or achievements expressed or implied by such forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, the duration and scope of the COVID-19 pandemic; any adverse changes in governmental policies; variability of raw material and component pricing; changes in our suppliers’ performance; fluctuations in foreign currency exchange rates; changes in tariffs or other taxes related to doing business internationally; our ability to hire and retain key personnel; our ability to operate our manufacturing facilities at efficient levels, including our ability to prevent cost overruns and reduce costs; our ability to generate increased cash by reducing our working capital; our prevention of the accumulation of excess inventory; fluctuations in interest rates; our ability to successfully defend product liability actions; as well as the uncertainty associated with the current worldwide economic conditions and the continuing impact on economic and financial conditions in the United States and around the world, including as a result of the COVID-19 pandemic, natural disasters, terrorist attacks and similar matters. For a discussion of these risks, uncertainties and other factors, see Part I, Item 1A, “Risk Factors” in this Annual Report on Form 10-K. We undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

Overview

As used in this report, the terms “we,” “us,” “our,” the “Company” and “CIRCOR” mean CIRCOR International, Inc. and its subsidiaries (unless the context indicates another meaning). The term “common stock” means our common stock, par value \$0.01 per share.

CIRCOR designs, manufactures and markets differentiated technology products and sub-systems for the industrial and aerospace and defense markets. We have a diversified flow and motion control product portfolio with recognized, market-leading brands that fulfill our customers’ mission critical and severe service needs. The Company’s strategy is to grow organically through innovative product development (including growth in the digital space), aftermarket growth, penetrating new regions, margin expansion and through complementary acquisitions; achieve world class operational excellence; and build an inclusive, growth-oriented culture that attracts and retains a diverse group of talent. We have a global presence and operate 21 major manufacturing facilities located in North America, Western Europe, Morocco, China and India. The Company has the following reportable business segments: Industrial segment (“Industrial”) and Aerospace & Defense segment (“Aerospace & Defense”). We sell our products directly to end-user customers and original equipment manufacturers (“OEMs”), as well as through Engineering, Procurement and Construction (“EPC”) companies and our channel partner network.

In 2020, we completed the divestiture of our loss-making Distributed Valves (“DV”) business. This action stemmed from our strategic decision to exit the upstream oil and gas valves market. This business and the associated loss on disposal were reported within discontinued operations in our consolidated financial statements. The following discussion in this Item 1 relates only to our continuing operations unless otherwise noted. Refer to Note 1, Description of Business along with Note 3, Discontinued Operations and Assets Held for Sale, to the consolidated financial statements included in this Annual Report for additional information.

Strategies

Our objective is to enhance stockholder value by focusing on growth, margin expansion, strong free cash flow and disciplined capital deployment. Our strategy to achieve these objectives is to:

1) *Build the Best Team.* We are committed to creating a strong employee value proposition that attracts talented and diverse people to the CIRCOR team. We are also committed to investing in, engaging, challenging and developing our employees through a variety of development programs. Our goal is to build an inclusive, growth-oriented culture that, when combined with robust process, appropriate metrics and individual accountability, will deliver extraordinary results.

2) *Grow Organically and Through Acquisitions.* We leverage the power of our global design capabilities to develop innovative products that solve our customers' most challenging and mission critical problems. New product development is an important part of our growth strategy. We are driving innovation in our traditional flow control product lines, as well as augmenting the existing product offerings with digital solutions that address well-understood customer needs. We are focusing on regional expansion in areas where we see opportunity for our products but have limited presence today. Expansion of our aftermarket is also a key part of our organic growth strategy. We sell products that have strong aftermarket opportunity and endeavor to service our customers throughout the lifetime of the installed equipment.

In addition to organic growth, we expect to acquire businesses over time. We are primarily focused on companies with differentiated technologies in complementary and adjacent markets. In addition to strategic fit and differentiated technology, the main criterion for an acquisition is return on invested capital.

3) *Margin Expansion.* Given our strategy of providing differentiated solutions to mission critical applications, we are driving value pricing across the Company, with a particular focus on aftermarket. We are also focused on the movement of operations to lower costs jurisdictions as well as simplifying our structure and optimizing centers of excellence to not only drive costs down and improve margins but to help us improve our customer service, operations and controls.

4) *Achieve World Class Operational Excellence.* Our Global Operations and Supply Chain organization is fully committed to achieving operational excellence in support of our customers' expectations of high quality, on-time delivery and market competitiveness. We follow the CIRCOR Operating System ("COS"), which creates a disciplined culture of continuous improvement for driving operational excellence including a sales and inventory operations plan that provides for world-class quality and delivery while maintaining an optimal level of working capital. COS is comprised of ten business process attributes designed to engage and empower our employees to recognize and eliminate waste, work real-time problem solving as part of their everyday job experience, and enhance our performance both in operations and business office processes. Under the COS, our employees participate in a regimented training program and receive regular prescriptive assessments and action plans to drive process maturity. Quantitative performance metrics define site certification levels to help attain and sustain a level of quality, productivity, inventory management and market competitiveness that delights our customers, stockholders, and employees.

Business Segments

Industrial

Industrial is a global portfolio of highly engineered and differentiated flow control solutions. Our primary products are positive displacement pumps, specialty centrifugal pumps, metering pumps, automatic recirculating valves, control and actuators valves for mission critical applications.

Our technology is focused on moving the most difficult fluids with extremely high efficiency for critical applications in the general industrial, power, process, energy, and commercial marine end markets.

We plan to grow the Industrial segment by providing innovative new products, including digital products, in multiple product lines that address our customers' severe service and mission critical needs. We are driving growth regionally and developing products in-region, for-region. Growing our share of aftermarket business is a key element of our organic growth. We are using digitization, including a new CIRCOR app, to make it easier for our customers to order parts from us. The Industrial segment is also focused on pricing initiatives to drive value-pricing for our products. We believe margin expansion can be achieved through use of COS at our sites.

Industrial is headquartered in Radolfzell, Germany, with primary manufacturing centers in North America, England, Germany, India and China.

Markets and Applications

Industrial serves the general industrial, power and process, energy and commercial marine markets.

- The general industrial market includes a broad range of manufacturing operations for flow control. Our products are used to handle fluids with a wide range of viscosity, lubricity, temperature, pressure and flow requirements, automate and control plant utilities, increase energy efficiency in buildings and campuses, and safely regulate critical fluids such as steam and industrial gases used in manufacturing processes.
- The power and process market is comprised of electric utilities, industrial power producers and OEM power generating equipment providers. Our products and services are used across this segment in lubrication management for turbines and generators, as well as fuel delivery, heat transfer, and emissions reduction applications. We serve power generation facilities and processes fueled by natural gas, oil, hydro, solar, nuclear, and coal.
- The energy markets we serve are primarily midstream and downstream oil & gas, as well as renewables. In midstream, our products and services are used in the transfer of oils and refined products via pipelines, ship vessels, railcars, and trucks, as well as pipeline pigging and associated pipeline integrity operations. Our products and services are also used to manage and maintain storage terminals. In downstream, our products are used to support critical refining processes, both directly in the process and as part of integrated equipment supplied by OEMs. Our products are also used in the production and management of biofuels and supporting the operation of large-scale wind farms.
- The commercial marine market includes shipbuilders, OEM suppliers of onboard equipment, and shipping fleet operators. Our products and services are designed specifically to support all aspects of fluid systems, including propulsion, ballast handling, cooling water, bilge, fuel, power generation, and mechanical hydraulics.
- In all of the markets we serve, we provide aftermarket components and aftermarket services.

Brands

Industrial manufactures and markets products and services through the following brands:

Allweiler, Houttuin, IMO Pump, IMO AB, Leslie Controls, RG Lawrence, RTK, Schroedahl, Tushaco, and Zenith.

Products

Industrial offers a range of flow control products and services, including:

- 3 Screw Pumps
- 2 Screw Pumps
- Progressing Cavity Pumps
- Specialty Centrifugal Pumps
- Gear Metering Pumps
- Automatic Recirculation Valves
- Highly engineered valves, actuation and unheading devices for refinery coking and Fluidized Catalytic Cracking Units (FCCU) operations
- Severe Service and General Service Control Valves
- Pipeline pigs and high-pressure pipeline closures

Our products must comply with certification standards applicable to many of our end markets. These standards include but are not limited to ISO 9001:2008, ANSI/ASQC Q 9001, API 676, and Mil-I-45208.

Customers

Industrial's products and services are sold directly to end-users, original equipment manufacturers ("OEMs") that supply specialized systems in their respective end markets, and EPC companies and through a global network of indirect sales channels.

Revenue

Industrial accounted for \$505.5 million, \$691.7 million and \$776.5 million or 65%, 72% and 77% of our net revenues for the years ended December 31, 2020, 2019 and 2018. For the year ended December 31, 2020 compared to 2019, \$90.3 million of decline in net revenues was due to divestitures and for the year ended December 31, 2019 compared to 2018, \$81.0 million of decline in net revenues was due to divestitures.

Aerospace & Defense

Aerospace & Defense produces diversified and innovative flow control products. Our primary product focus areas are valves, pumps, actuation, motors, switches and high pressure pneumatic systems. Aerospace & Defense products are mainly used in aerospace, defense and general industrial markets.

We plan to grow Aerospace & Defense by increasing market share in existing and new markets through exceptional sales and customer service and with new products enabled by innovative, reliable and high quality solutions. A key part of our strategy is the development of a strong technology team that can use our core technology to accelerate new product development. We are exploring adjacency applications for our core technology and opportunities to increase our aftermarket sales. Our growth will also be driven by margin expansion, through increased manufacturing capabilities at our lower cost facility in Morocco, adoption of the COS by our sites and value pricing initiatives.

We have Aerospace & Defense facilities in North America, the United Kingdom, France, Morocco, and India. Our Aerospace & Defense headquarters is in Corona, California.

Markets and Applications

Aerospace & Defense serves the aerospace and defense markets.

- The aerospace market that we serve includes commercial aerospace primarily focused on systems and components on airliners and business jets, such as hydraulic, pneumatic, fuel and ground support equipment including maintenance, repair and overhaul (MRO). In addition, we serve the defense aerospace market, including applications where controls or motion switches are mission critical. We support fixed wing aircraft, rotorcraft, missile systems, ground vehicles, submarines, weapon systems and weapon launch systems, ordinance, fire control, fuel systems, pneumatic controls, and hydraulic and dockside support equipment including MRO.
- The non-aerospace defense market that we serve is primarily focused on naval vessels, with our pumps and valves used across most naval platforms in a wide variety of onboard applications. We are a trusted supplier to many countries' navies, leveraging our engineering and manufacturing capabilities to work directly with our customers in developing targeted solutions for mission critical applications including very low acoustic signature pumps for submarines.
- In all of the markets we serve, we provide aftermarket components.

Brands

Aerospace & Defense manufactures and markets control valves, pumps, regulators, fluid controls, actuation systems, pneumatic valves and controls, electro-mechanical controls, motors and other flow control products and systems. Aerospace & Defense provides actuation and fluid control systems and services through the following brands: CIRCOR Aerospace, Aerodyne Controls, CIRCOR Bodet, CIRCOR Industria, CIRCOR Motors, Hale Hamilton, Leslie Controls, Portland Valve, and Warren Pumps.

Products

Aerospace & Defense offers a range of solutions, including:

- Specialty Centrifugal, 2-Screw, and Propeller Pumps
- Specialized control valves
- MIL-Spec butterfly valves and actuators
- Electromechanical, pneumatic and hydraulic, fluid and motion control systems
- Brushless DC Motors
- Switches
- Actuation components and sub-systems

In the manufacture of our products, we must comply with certain certification standards, such as AS9100C, ISO 9001:2008, National Aerospace & Defense Contractors Accreditation Program, Federal Aviation Administration Certification and European Aviation Safety Agency as well as other customer qualification standards. Currently all of our manufacturing facilities comply with applicable standards.

Customers

Aerospace & Defense products and services are sold directly and indirectly to a range of customers, including those in the military and defense, commercial aerospace, business and general aviation and general industrial markets. Our customers include aircraft manufacturers (OEMs) and Tier 1 suppliers to these customers.

Revenue

Aerospace & Defense accounted for \$267.8 million, \$272.6 million and \$237.0 million, or 35%, 28% and 23% of our net revenues for the years ended December 31, 2020, 2019 and 2018, respectively.

CIRCOR Consolidated

Competition

The domestic and international markets for our products are highly competitive. Some of our competitors have substantially greater financial, marketing, personnel and other resources than us. We consider product brand, quality, performance, on-time delivery, customer service, price, distribution capabilities and breadth of product offerings to be the primary competitive factors in these markets. We believe that new product development and product engineering also are important to our success and that our position in the industry is attributable, in significant part, to our ability to develop innovative products and to adapt existing products to specific customer applications. Our ability to leverage our large installed base of equipment to drive repairs and spares growth is a competitive advantage.

The primary competitors of our Industrial segment include: Leistriz AG, Curtiss-Wright Corporation, Netzsch GmbH, ITT Corporation, IMI plc, TD Williamson Inc., Seepex GmbH, and Naniwa Ltd.

The primary competitors of our Aerospace & Defense segment include: Transdigm, Crane Co., Curtiss-Wright Corporation, Moog, Inc., Parker Hannifin Corp., and Woodward Inc.

New Product Development

Our engineering differentiation comes from our ability to offer products, solutions and services that address high pressure, high temperature, and caustic flow. Our solutions offer high standards of reliability, safety and durability in applications requiring precision movement and zero leakage.

We continue to develop new and innovative products to enhance our market positions and drive growth. Our product development capabilities include designing and manufacturing custom solutions to meet high tolerance or close precision requirements. Our Aerospace & Defense segment continues to expand its integrated systems design and testing capability to support bundled sub-systems for aeronautics applications, as well as acoustically superior pumps for marine applications. These testing and manufacturing capabilities enable us to develop customer-specified applications. In many cases, the unique characteristics of our customer-specified technologies have been subsequently used in broader product offerings. The Industrial segment provides unique flow control products for viscous and critical fluids with specific design and engineering capabilities.

We maintain a Global Engineering Center of Excellence in India with a capable technology and engineering team that complements the engineering resources in a business unit.

Customers

For the years ended December 31, 2020 and 2019, no customers accounted for more than 10% of the Company's consolidated revenues. Our businesses sell into both long-term capital projects as well as short-cycle demand. As a result, we tend to experience fluctuations in orders, revenues and operating results at various points across economic and business cycles.

Selling and Distribution

Across our businesses we utilize a variety of channels to market our products and solutions. Those channels include direct sales, distributors and commissioned representatives. Our channel partner network typically offers technically trained sales forces with strong relationships in key markets. We believe that our established, global direct and indirect sales channels constitute a competitive strength. We believe that we have good relationships with our channel partners.

Intellectual Property

The Company relies upon a combination of trade secrets and patent and trademark registrations to protect its intellectual property. Our patents are scheduled to expire between 2021 and 2030, and our trademarks can be renewed as long as we continue to use them. We do not believe the vitality and competitiveness of any of our business segments as a whole depends on any one or more patents or trademarks. We own certain licenses such as software licenses, but we do not believe that our business as a whole depends on any one or more licenses.

Raw Materials

The raw materials used most often in our production processes are castings, forgings and bar stock of various materials, including stainless steel, carbon steel, bronze, copper, brass, titanium and aluminum. These materials are subject to price fluctuations that may adversely affect our results of operations. We purchase these materials from numerous suppliers and at times experience constraints on the supply of certain raw material as well as the inability of certain suppliers to respond to our needs. Historically, increases in the prices of raw materials have been partially offset by higher sales prices, active materials management, project engineering programs and the diversity of materials used in our production processes.

Regulatory and Environmental Matters

Our business and operations are subject to numerous federal, state and local laws and regulations, both within and outside the United States, in areas such as: competition, government contracts, international trade, labor and employment, tax, environmental protection, workplace health and safety, and others. These and other laws and regulations impact the manner in which we conduct our business, and changes in legislation or government policies can affect our operations, both favorably and unfavorably. Below is a summary of the some of the significant regulations that impact our business (see also *Part I, Item 1A, Risk Factors*).

Government Procurement. The services we provide to the U.S. federal government are subject to Federal Acquisition Regulation, the Truth in Negotiations Act, export controls rules and Department of Defense (DOD) security regulations, as well as many other laws and regulations. These laws and regulations affect how we transact business with our customers and, in some instances, impose additional costs on our business operations. A violation of specific laws and regulations could lead to fines, contract termination or suspension of future contracts. Our government clients can also terminate, renegotiate, or modify any of their contracts with us at their convenience.

Trade Controls. The export of our products is subject to applicable trade controls laws, including those in the U.S., the European Union, the United Kingdom and China, and include, but are not limited to, the International Traffic in Arms Regulations, the Export Administration Regulations, and trade sanctions against embargoed countries. A violation of specific laws and regulations could lead to civil or criminal enforcement action and varying degrees of liability.

Anti-Bribery. We are subject to the U.S. Foreign Corrupt Practices Act and similar anti-bribery laws, which generally prohibit companies and their intermediaries from making improper payments to foreign government officials for the purpose of obtaining or retaining business. The U.K. Bribery Act of 2010 prohibits both domestic and international bribery, as well as bribery across both private and public sectors. In addition, an organization that “fails to prevent bribery” committed by anyone associated with the organization can be charged under the U.K. Bribery Act unless the organization can establish the defense of having implemented “adequate procedures” to prevent bribery.

Human Capital

CIRCOR’s success depends on our ability to attract, develop, engage and retain key talent. Management oversees and drives a number of vital employee programs in support of these goals.

Employee Profile

As of December 31, 2020, CIRCOR had 3,138, employees, of which approximately 80% are full-time. 48% of this workforce was in Europe, 41% in the United States, 9% in India and the rest spread across the rest of Asia, the Middle East and Latin America.

39% of our workforce is composed of skilled direct labor working in our factories across the globe. 28% is indirect labor in support of this direct labor. 33% are SG&A staff (including engineering, sales, finance, human resources and legal personnel). 6% of the Company's U.S. employees are unionized. Outside the United States, we have employees in Europe that are represented by an employee representative organization, such as a union, works council or employee association.

Approximately 19% of the Company's global workforce is female, and 14% of the Company's employees in leadership roles are female. Approximately 31% of the Company's U.S. workforce and 25% of our U.S. employees in leadership roles are racially or ethnically diverse.

Talent Attraction

We employ a rigorous recruitment process to attract and hire the talent needed for our continued success and growth. This includes candidates from diverse backgrounds and with differing experiences. Candidates are carefully vetted and assessed in multiple stages and interviews. Our recruitment processes are designed to comply with local labor laws and regulations.

We actively partner with universities across the globe to recruit promising graduate talent into various functions in the Company. We partner with Kellogg School (Northwestern University) to hire graduating MBAs each year into the Company's general management rotation program.

Talent Development

We are committed to developing its talent. Some of our employees participate in an annual Talent Review Process and Performance Management Process, which helps assess the performance as well as the potential of employees. We focus on investment in three main methods of developing talent: (1) on-the-job training, (2) mentorship and (3) training.

We offer an annual Senior Leadership Program for top leaders and a Management Development Program for mid-level managers. In addition, we actively train our employees on diversity and inclusion, interpersonal skills, process improvement skills, compliance topics as well as technical skills at the site level. We work with high potential employees to create Individual Development Plans for them and provide opportunities for assessments and coaching as needed. In 2020, 50% of leadership positions were filled internally as CIRCOR lays heavy emphasis on promoting from within.

Talent Retention

We are committed to creating a strong employee value proposition, and our retention strategy centers on building an inclusive, growth-oriented culture that is attractive to our employees. We have regular communications from our senior leaders to employees throughout the organization and provide channels for feedback.

We periodically conduct employee engagement surveys and other similar surveys to measure employee engagement and satisfaction. In addition, our sites host town halls throughout the year to engage employees at a local level. In 2020 while many of our employees worked from home, sites have hosted online events to continue to facilitate employee engagement.

In addition, we offer competitive compensation and benefits packages that are designed to retain, motivate and reward our employees. CIRCOR has a Pay for Performance philosophy, and we align our compensation practices with reference to external benchmarks, internal comparisons and the relationship between management and non-management remuneration. Some of our employees participate in our short-term and/or long-term incentive program connecting payouts to achievement of key financial and other metrics and the employee's contribution to those results.

We also provide competitive benefits programs in line with local market practice. We regularly review our benefits packages globally, especially in light of changing employees' expectations as a result of the COVID-19 pandemic. During 2020 we supported more work from home opportunities, and we are rolling out a Flex Work Policy to accommodate employees after pandemic measures are lifted.

We carefully monitor the voluntary attrition of our employees. In 2020, the annualized voluntary attrition rate was 7%. This is lower than our historical rate, in part due to the COVID-19 pandemic, which we believe led to fewer employees leaving their jobs during 2020.

Employee Health & Safety

We are committed to protecting the health and safety of our employees, and safety is one of our Absolutes. Our Absolutes, which are Safety, Controls and Ethics, are the three imperatives underlying everything we do at CIRCOR. Our culture of safety includes an ongoing training program, stand downs when injury events occur and encouraging our employees to speak up if they see a safety hazard.

We also utilize metrics to track employee safety. In addition to common lagging indicators, such as injuries, we look to leading indicators, such as safety observations and near-hits, integrated with established problem-solving methodologies to resolve any issue that endangers worker safety. Our total recordable incident rate for 2020 was 0.76.

The ongoing COVID-19 pandemic has created unique challenges for our employees, and we are striving to ensure the health, safety and general well-being of our teams. Actions we have taken in response to the pandemic challenges include the following:

- Adjusting attendance policies to encourage those who are sick to stay home;
- Increasing cleaning protocols across all locations;
- Initiating regular communication regarding impacts of the COVID-19 pandemic;
- Implementing temperature screening of employees at the majority of our facilities;
- Establishing physical distancing procedures for employees who need to be onsite;
- Providing additional personal protective equipment and cleaning supplies;
- Implementing protocols to address actual and suspected COVID-19 cases and potential exposure;
- Prohibiting all domestic and international non-essential travel for all employees;
- Requiring masks to be worn in all locations where allowed by local law; and
- Providing wellness seminars to employees addressing mental health needs exacerbated by the pandemic.

Diversity & Inclusion ("D&I")

CIRCOR is committed to cultivating a workplace that makes diversity, equity, inclusion and transparency priorities in everything we do. In furtherance of that commitment, we have established active D&I initiatives in the areas of talent acquisition, talent development, total rewards, employee engagement and communications, which impact employees at all levels of the organization. In addition, we appointed our first D&I Leader, who is driving our D&I initiatives and goals. Our goal is to increase gender and racial/ethnic representation throughout the organization, including senior management, and our initiatives are focused on that goal.

D&I achievements in 2020 included the following:

- Developed strategy, priorities, goals and scorecard;
- Added D&I review in periodic Talent Reviews with sites, including section for Emerging Female Talent;
- Launched our first Employee Resource Group in late 2020, Women @ CIRCOR;
- Approval of Flex Work Policy in the United States and Germany (other jurisdictions will follow in 2021);
- Published D&I metrics; and
- Multiple employee communications on D&I topics and initiatives.

Available Information

We file reports on Form 10-Q with the Securities and Exchange Commission ("SEC") on a quarterly basis, additional reports on Form 8-K from time to time, and an annual report on Form 10-K on an annual basis. These and other reports filed by us, or furnished by us, to the SEC in accordance with section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, are available free of charge from the SEC on its website at <http://www.sec.gov>. Additionally, our Form 10-Q, Form 8-K, Form 10-K and amendments to those reports are available without charge, as soon as reasonably practicable after they have been filed with, or furnished to, the SEC, on our Investor Relations website at <http://investors.CIRCOR.com>. The information on our website is not part of, or incorporated by reference in, this Annual Report.

Item 1A. Risk Factors

Set forth below are certain risk factors that we believe are material to our stockholders. The risks described in these risk factors could harm our business, financial condition, cash flows, results of operations and reputation. You should also consider these risk factors when you read “forward-looking statements” elsewhere in this report. You can identify forward-looking statements by terms such as “may,” “hope,” “should,” “expect,” “plan,” “anticipate,” “intend,” “believe,” “estimate,” “predict,” “potential” or “continue,” the negative of those terms or other comparable terminology. Forward-looking statements are only predictions and can be adversely affected by any of the following risks:

Risks Related to our Markets and Industry.

We face significant competition and, if we are not able to respond, our revenues may decrease.

We operate in a highly competitive environment in each of the markets we serve, and we face competition in each of our segments from numerous competitors. We consider product innovation, product quality, performance, customer service, on-time delivery, price, distribution capabilities and breadth of product offerings to be the primary competitive factors in our markets. Our competitors may be able to offer more attractive pricing, duplicate our strategies, or develop enhancements to products that could offer performance features that are superior to our products. 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, either of which could have a material adverse effect on our business, financial condition, cash flows or results of operations. In addition, some of our competitors are based in foreign countries and have cost structures and prices based on foreign currencies. The majority of our transactions are denominated in either U.S. dollar or Euro currency. Accordingly, currency fluctuations could cause our U.S. dollar and/or Euro priced products to be less competitive than our competitors' products that are priced in other currencies.

We, along with our customers and vendors, face the uncertainty in the public and private credit markets and in general economic conditions in the United States and around the world.

In recent years there has been at times disruption and general slowdown of the public and private capital and credit markets in the United States and around the world. Such conditions can adversely affect our revenue, results of operations and overall financial growth. Our business can be affected by a number of factors that are beyond our control such as general geopolitical, economic and business conditions and conditions in the financial services market, which each could materially impact our business, financial condition, cash flows and results of operations. Additionally, many lenders and institutional investors, at times, have reduced funding to borrowers, including other financial institutions. A constriction on future lending by banks or investors could result in higher interest rates on future debt obligations, restrict our ability to obtain sufficient financing to meet our long-term operational and capital needs or limit our ability in the future to consummate strategic acquisitions. Any uncertainty in the credit markets could also negatively impact the ability of our customers and vendors to finance their operations which, in turn, could result in a decline in our sales and in our ability to obtain necessary raw materials and components, thus potentially having an adverse effect on our business, financial condition, cash flows or results of operations.

Implementation of our acquisition strategy may not be successful, which could affect our ability to increase our revenues, reduce our profitability or lead to significant impairment charges.

One of our strategies has been and is to increase our revenues and expand our markets through acquisitions that will provide us with complementary products. We expect to face competition for acquisition candidates that may limit the number of acquisition opportunities available to us and may result in higher acquisition prices. We cannot be certain that we will be able to identify, acquire or profitably manage additional acquired companies or successfully integrate such additional acquired companies without substantial costs, delays or other problems. Acquisitions may also involve a number of special risks, including: adverse effects on our reported operating results; use of cash; diversion of management's attention; loss of key personnel at acquired companies; or unanticipated management or operational problems or legal liabilities.

Moreover, there can be no assurance that companies we have previously acquired or that we may acquire in the future ultimately will achieve the revenues, profitability or cash flows, or generate the synergies upon which we justify our investment in them; as a result, any such under-performing acquisitions could result in impairment charges which would adversely affect our results of operations. The acquired assets of businesses include goodwill and indefinite-lived intangible assets that are required to be tested for impairment at least annually or more frequently if impairment indicators are present. Events or changes that could indicate that the carrying value of our goodwill or indefinite-lived intangible assets may not be recoverable include reduced future cash flow estimates, slower growth rates in industry segments in which we participate and a decline in our stock price and market capitalization. In addition, any prolonged material disruption of our employees, distributors,

suppliers or customers, whether due to COVID-19 or otherwise, would negatively impact our global sales and operating results and could lead to impairments and other valuation allowances.

Risks Related to our Operations

If we cannot continue operating our manufacturing facilities at current or higher levels, our results of operations could be adversely affected.

We operate a number of manufacturing facilities for the production of our products. 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 products to our customers on a timely basis, which could have a material adverse effect on our business, financial condition, cash flows or results of operations. We are working to continuously enhance and improve Lean manufacturing techniques as part of the CIRCOR Operating System. We believe that this process produces meaningful reductions in manufacturing costs. However, continuous improvement of these techniques may cause short-term inefficiencies in production. If we are not successful in continuously improving our processes, our results of operations may suffer.

Further, a catastrophic event could result in the loss of the use of all or a portion of one of our manufacturing facilities. Although we carry property and business interruption insurance, our coverage may not be adequate to compensate us for all losses that may occur. Any of these events individually or in the aggregate could have a material adverse effect on our business, financial condition and operating results.

If we cannot pass on higher raw material or manufacturing costs to our customers, we may become less profitable.

One of the ways we attempt to manage the risk of higher raw material and manufacturing costs is to increase selling prices to our customers. The markets we serve are extremely competitive and customers may not accept price increases or may look to alternative suppliers, which may negatively impact our profitability and revenues.

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

Some of our customer contracts require us to compensate those customers if we do not meet specified delivery obligations. We rely on numerous suppliers to provide us with our required materials and in many instances these materials must meet certain specifications. In addition, we continue to increase our dependence on lower cost foreign sources of raw materials, components, and, in some cases, completed products. While we actively manage our supply chain, having a geographically diverse supply base inherently poses significant logistical challenges, and we could experience diminished supplier performance resulting in longer than expected lead times and/or product quality issues. In addition, the potential physical effects of climate change, such as increased frequency and severity of storms, floods and other climatic events, could disrupt our supply chain, and cause our suppliers to incur significant costs in preparing for or responding to these effects. These or other meteorological changes could lead to increased costs. The occurrence of such factors could have a negative impact on our ability to deliver products to customers within our committed time frames and could adversely impact our results of operations, financial conditions and cash flows.

If we experience delays in introducing new products or if our existing or new products do not achieve or maintain market acceptance, our revenues may decrease.

Our industries are characterized by: intense competition; changes in end-user requirements; technically complex products; and evolving product offerings and introductions.

We believe our future success depends, in part, on our ability to anticipate or adapt to these factors and to offer, on a timely basis, mission-critical products that meet customer demands. Failure to develop new and innovative products or to custom design existing products could result in the loss of existing customers to competitors or the inability to attract new business, either of which may adversely affect our revenues. The development of new or enhanced products is a complex and uncertain process requiring the anticipation of technological and market trends. We may experience design, manufacturing, marketing or other difficulties, such as an inability to attract a sufficient number of qualified engineers, which could delay or prevent our development, introduction or marketing of new products or enhancements and result in unexpected expenses.

If we fail to manufacture and deliver high quality products in accordance with industry standards, we will lose customers.

Product quality and performance are a priority for our customers since many of our product applications involve caustic or volatile chemicals and, in many cases, involve processes that require precise control of fluids. Our products are used in the aerospace, military, commercial aircraft, analytical equipment, oil & gas refining, power generation, chemical processing and maritime industries. These industries require products that meet stringent performance and safety standards, such as the standards of the International Organization for Standardization, Underwriters' Laboratory, American National Standards Institute, American Society of Mechanical Engineers and the European Pressure Equipment Directive. If we fail to maintain and enforce quality control and testing procedures, our products will not meet these stringent performance and safety standards that are required by many of our customers. Non-compliance with the standards could result in a loss of current customers and damage our ability to attract new customers, which could have a material adverse effect on our business, financial condition, cash flows or results of operations.

We rely on information technology in our operations, and any material failure, inadequacy, interruption or security failure of that technology could harm our business, financial condition, cash flows and results of operations.

We rely on information technology networks and systems, including systems of third parties and the Internet, to process, transmit and store electronic information, and manage or support a variety of business processes, including operational and financial transactions and records, personal identifying information, payroll data and workforce scheduling information. We purchase some of our information technology from vendors, on whom our systems depend. We rely on commercially available systems, software, tools and monitoring to provide security for the processing, transmission and storage of Company and customer information. Although we have taken steps to protect the security of our information systems and the data maintained in those systems, no such measures can eliminate the possibility of the systems' improper functioning or the improper access or disclosure of confidential or personally identifiable information such as in the event of cyber-attacks. Security breaches, whether through physical or electronic break-ins, computer viruses, ransomware, impersonation of authorized users, attacks by hackers or other means, can create system disruptions or shutdowns or the unauthorized disclosure of confidential information. Additionally, outside parties frequently attempt to fraudulently induce employees, suppliers or customers to disclose sensitive information or take other actions, including making fraudulent payments or downloading malware, by using "spoofing" and "phishing" emails or other types of attacks. Our employees have been and likely will continue to be targeted by such fraudulent activities. Outside parties may also subject us to distributed denial of services attacks or introduce viruses or other malware through "trojan horse" programs to our users' computers in order to gain access to our systems and the data stored therein. Because the techniques used to obtain unauthorized access, disable or degrade service, or sabotage systems change frequently and continuously become more sophisticated, often are not recognized until launched against a target and may be difficult to detect for a long time, we may be unable to anticipate these techniques or to implement adequate preventive or detective measures.

If Company, personal or otherwise protected information is improperly accessed, tampered with or distributed, we may face significant financial exposure, including incurring significant costs to remediate possible injury to the affected parties. We may also be subject to sanctions and civil or criminal penalties if we are found to be in violation of the privacy or security rules under federal, state, or international laws protecting confidential information. Any failure to maintain proper functionality and security of our information systems could result in the loss of trade secrets or other proprietary or competitively sensitive information, compromise personally identifiable information regarding customers or employees, interrupt our operations, damage our reputation, subject us to liability claims or regulatory penalties. The costs associated with maintaining robust information security mechanisms and controls are also increasing and are likely to increase further in the future. We continuously seek to maintain a robust program of information security and controls, but the impact of a material information technology event could have a material adverse effect on our competitive position, reputation, results of operations, financial condition and cash flows.

Terrorist activity and/or political instability around the world could cause economic conditions to deteriorate and adversely impact our businesses.

In the past, terrorist attacks have negatively impacted general economic, market and political conditions. Terrorist acts, acts of war or political instability (wherever located around the world) could cause damage or disruption to our business, our facilities or our employees which could significantly impact our business, financial condition or results of operations. The potential for future terrorist attacks, the national and international responses to terrorist attacks, political instability, and other acts of war or hostility, have created many economic and political uncertainties, which could adversely affect our business and results of operations in ways that cannot presently be predicted. In addition, with manufacturing facilities located worldwide, including facilities located in North America, Western Europe, Morocco, and India, we may be impacted by terrorist actions not only

against the United States but in other parts of the world as well. In some cases, we are not insured for losses and interruptions caused by terrorist acts and acts of war.

The impact of the COVID-19 pandemic has adversely impacted, and continues to pose risks to, our business, results of operations and financial condition.

The situation relating to the COVID-19 pandemic and its potential effects on our business and financial results remains dynamic. The broader implications for our business and results of operations remain uncertain and will depend on many factors outside our control, including, without limitation, the timing, extent, trajectory and duration of the pandemic, the development, availability and effectiveness of treatments and vaccines, the imposition of protective public safety measures, and the impact of the pandemic on the global economy and enterprise and consumer behaviors. If these and other effects of the COVID-19 pandemic, including its effect on broader economies, financial markets and overall demand environment for our products, continues or worsens, it could have a material adverse effect on our business, financial condition, results of operations, or cash flows.

The COVID-19 pandemic may also increase the likelihood and severity of other risks discussed in this “Risk Factors” section, including but not limited to risks related to competition, development of the market for and demand for our products, delays in the development and production of our products, reliance on third parties, our international scale, our exposure to currency exchange rate fluctuations and the credit risks of our customers and resellers, and volatility in the capital markets.

Risks Related to our International Operations

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

We derive a significant portion of our revenue from sales outside the United States. In addition, one of our key growth strategies is to sell our products in international markets not significantly served by us in portions of Europe, Latin America and Asia. We market our products and services outside of the United States through direct sales, distributors, and technically trained commissioned representatives. We may not succeed in our efforts to further penetrate these markets. Moreover, conducting business outside the United States is subject to risks, including currency exchange rate fluctuations; changes in regional, political or economic conditions, trade protection measures such as tariffs or import or export restrictions; and complex, varying and changing government regulations and legal standards and requirements, particularly with respect to price protection, competition practices, export control regulations and restrictions, customs and tax requirements, immigration, anti-boycott regulations, data privacy, intellectual property, anti-corruption and environmental compliance, including U.S. customs and export regulations and restrictions and the Foreign Corrupt Practices Act, and the occurrence of any of these factors could materially and adversely affect our operations.

Our international activities expose us to fluctuations in currency exchange rates that could adversely affect our results of operations and cash flows.

Our international manufacturing and sales activities expose us to changes in foreign currency exchange rates. Our major foreign currency exposures involve the markets in Western Europe and Asia. Fluctuations in foreign currency exchange rates could result in our (i) paying higher prices for certain imported goods and services, (ii) realizing lower prices for any sales denominated in currencies other than U.S. dollars, (iii) realizing lower net income, on a U.S. dollar basis, from our international operations due to the effects of translation from weakened functional currencies, and (iv) realizing higher costs to settle transactions denominated in other currencies. Any of these risks could adversely affect our results of operations and cash flows.

We use derivatives to help manage the currency risk related to certain business transactions denominated in foreign currencies. To the extent these transactions are completed, the contracts minimize our risk from exchange rate fluctuations because they offset gains and losses on the related derivatives. However, there can be no assurances that we will be able to effectively utilize these forward exchange contracts in the future to offset significant risk related to fluctuations in currency exchange rates. In addition, there can be no assurances that counterparties to such contracts will perform their contractual obligations to us in order for us to realize the anticipated benefits of the contracts.

A change in international governmental policies or restrictions could result in decreased availability and increased costs for certain components and finished products that we purchase from sources in foreign countries, which could adversely affect our profitability.

Like most manufacturers of flow control products, we attempt, where appropriate, to reduce costs by seeking lower cost sources of certain components and finished products. Many such sources are located in developing countries such as India and China, where a change in governmental approach toward U.S. trade could restrict the availability to us of such sources. In addition, periods of war or other international tension and global health pandemics could interfere with international freight operations and hinder our ability to purchase such components and products. A decrease in the availability of these items could hinder our ability to timely meet our customers' orders. We attempt, when possible, to maintain alternate sources for these components and products and the capability to produce such items in our own manufacturing facilities. However, the cost of obtaining such items from alternate sources or producing them ourselves is often considerably greater, and a shift toward such higher cost production could therefore adversely affect our profitability.

Risks Related to our Business Strategy

Our ability to execute our strategy is dependent upon our ability to attract, train and retain qualified personnel.

Our continued success depends, in part, on our ability to identify, attract, motivate, train and retain qualified personnel in key functions and geographic areas, including the members of our senior management team. In particular, we are dependent on our ability to recruit and retain qualified engineers with the requisite education, background and industry experience to assist in the development, enhancement, introduction and manufacture of our products.

Failure to attract, train and retain qualified personnel, whether as a result of an insufficient number of qualified candidates or the allocation of inadequate resources to training, integration and retention, could impair our ability to execute our business strategy and could have an adverse effect on our business prospects. Our success also depends to a large extent upon our ability to attract and retain key executives. The loss of the services of one or more of these key employees could have an adverse effect, at least in the short to medium term, on significant aspects of our business, including the ability to manage our business effectively and the successful execution of our strategies. If certain of these employees decide to leave us, we could incur disruptions to the completion of certain initiatives and we could incur significant costs in hiring, training, developing and retaining their replacements.

Risks Related to Legal, Regulatory and Compliance Matters

We face risks from product liability lawsuits that may adversely affect our business.

We, like other manufacturers, face an inherent risk of exposure to product liability claims in the event that the use of our products results in personal injury, property damage or business interruption to our customers. We may be subjected to various product liability claims, including, among others, asbestos-related claims, claims that our products include inadequate or improper instructions for use or installation, or inadequate warnings concerning the effects of the failure of our products. Although we maintain quality controls and procedures, including the testing of raw materials and safety testing of selected finished products, we cannot be certain that our products will be free from defect. In addition, in certain cases, we rely on third-party manufacturers for our products or components of our products. Although we have liability insurance coverage, we cannot be certain that this insurance coverage will continue to be available to us at a reasonable cost or, if available, will be adequate to cover any such liabilities. For example, liability insurance typically does not afford coverage for a design or manufacturing defect unless such defect results in injury to person or property. We generally attempt to contractually limit liability to our customers to risks that are insurable but are not always successful in doing so. Similarly, we generally seek to obtain contractual indemnification from our third-party suppliers, and for us to be added as an additional insured party under such parties' insurance policies. Any such indemnification or insurance is limited by its terms and, as a practical matter, is limited to the credit worthiness of the indemnifying or insuring party. In the event that we do not have adequate insurance or contractual indemnification, product liabilities could have a material adverse effect on our business, financial condition, cash flows or results of operations.

The costs of complying with existing or future governmental regulations on importing and exporting practices and of curing any violations of these regulations, could increase our expenses, reduce our revenues or reduce our profitability.

We are subject to a variety of laws and international trade practices, including regulations issued by certain United States governmental agencies and authorities in the European Union. We cannot predict the nature, scope or effect of future regulatory requirements to which our international trading practices might be subject or the manner in which existing laws might be administered or interpreted. Future regulations could limit the countries into which certain of our products may be sold or could restrict our access to, and increase the cost of obtaining products from, foreign sources. In addition, actual or alleged violations of such regulations could result in enforcement actions and/or financial penalties that could result in substantial costs.

If we incur higher costs as a result of trade policies, treaties, government regulations or tariffs, we may become less profitable.

There is currently significant uncertainty about the future relationship between the United States and China, including with respect to trade policies, treaties, government regulations and tariffs. The past U.S. presidential administration had called for substantial changes to U.S. foreign trade policy and had implemented greater restrictions on international trade and significant changes in tariffs on goods imported into the U.S. Under the current administration, we expect that tariff increases will primarily impact our Industrial segment. We are unable to predict whether or when additional tariffs will be imposed or the impact of any such future tariff changes.

The costs of complying with existing or future environmental regulations and curing any violations of these regulations could increase our expenses or reduce our profitability.

We are subject to a variety of environmental laws relating to the storage, discharge, handling, emission, generation, use and disposal of chemicals, solid and hazardous waste and other toxic and hazardous materials used to manufacture, or resulting from the process of manufacturing, our products. We cannot predict the nature, scope or effect of future regulatory requirements to which our operations might be subject or the manner in which existing or future laws will be administered or interpreted. Future regulations could be applied to materials, products or activities that have not been subject to regulation previously. The costs of complying with new or more stringent regulations, or with more vigorous enforcement of these or existing regulations, could be significant.

Environmental laws require us to maintain and comply with a number of permits, authorizations and approvals and to maintain and update training programs and safety data regarding materials used in our processes. Violations of these requirements could result in financial penalties and other enforcement actions. We also could be required to halt one or more portions of our operations until a violation is cured. Although we attempt to operate in compliance with these environmental laws, we may not succeed in this effort at all times. The costs of curing violations or resolving enforcement actions that might be initiated by government authorities could be substantial.

Failure to maintain effective internal controls in accordance with Section 404 of the Sarbanes-Oxley Act could have a material adverse effect on our business and stock price.

In 2020 we remediated material weaknesses in our internal control over financial reporting identified as of December 31, 2019. If our remediation or other controls do not continue to operate effectively, we may not be able to rely on the integrity of our financial results, which could result in inaccurate or late reporting of our financial results, as well as delays or the inability to meet our reporting obligations or to comply with SEC rules and regulations. If we are unable to maintain effective internal control over financial reporting or disclosure controls and procedures, our ability to record, process and report financial information accurately, and to prepare consolidated financial statements within required time periods could be adversely affected, which could subject us to litigation or investigations requiring management resources and payment of legal and other expenses, negatively affect investor confidence in our consolidated financial statements and adversely impact our stock price.

Regulations related to “conflict minerals” may cause us to incur additional expenses and could limit the supply and increase the cost of certain metals used in manufacturing our products.

Under the conflict minerals rule, public companies must disclose whether specified minerals, known as conflict minerals, are necessary to the functionality or production of products manufactured or contracted to be manufactured. The rule requires a disclosure report to be filed by May 31st of each year. The conflict minerals rule could affect sourcing at competitive prices and availability in sufficient quantities of certain minerals used in the manufacture of our products, including tantalum, tin, gold and tungsten. The number of suppliers who provide conflict-free minerals is limited. In addition, there may be material costs associated with complying with the disclosure requirements, such as costs related to determining the source of certain minerals used in our products, as well as costs of possible changes to products, processes, or sources of supply as a consequence of such verification activities. As our supply chain is complex, we may not be able to sufficiently verify the origins of the relevant minerals used in our products through the due diligence procedures that we implement, which may harm our reputation. In addition, we may encounter challenges to satisfy those customers who require that all of the components of our products be certified as conflict-free, which could place us at a competitive disadvantage if we are unable to do so.

Risks Related to our Common Stock

The trading price of our common stock continues to be volatile, and investors in our common stock may experience substantial losses.

The trading price of our common stock may be, and, in the past, has been volatile. Our common stock could decline or fluctuate in response to a variety of factors, including, but not limited to: our failure to meet our performance estimates or performance estimates of securities analysts; changes in financial estimates of our revenues and operating results or buy/sell recommendations by securities analysts; the timing of announcements by us or our competitors concerning significant product line developments, contracts or acquisitions or publicity regarding actual or potential results or performance; fluctuation in our quarterly operating results caused by fluctuations in revenue and expenses; substantial sales of our common stock by our existing stockholders; general stock market conditions; and fluctuations in oil and gas prices or other economic or external factors. While we attempt in our public disclosures to provide forward-looking information in order to enable investors to anticipate our future performance, such information by its nature represents our good-faith forecasting efforts. As a result, our actual results have differed materially, and going forward could differ materially, from our forecasts, which could cause further volatility in the value of our common stock.

In recent years the stock market as a whole has experienced dramatic price and volume fluctuations. In the past, securities class action litigation has often been instituted against companies following periods of volatility in the market price of their securities. This type of litigation could result in substantial costs and a diversion of management attention and resources.

Risks Related to our Indebtedness

If we are unable to generate sufficient cash flow, we may not be able to service our debt obligations, including making payments on our outstanding term loan.

Our ability to make payments of principal and interest on our indebtedness when due, including the significant indebtedness that we incurred in connection with our acquisition of Colfax Corporation's Fluid Handling business ("FH"), depends upon our future performance, which will be subject to general economic conditions (including recovery from the COVID-19 pandemic), industry cycles and financial, business and other factors affecting our consolidated operations, many of which are beyond our control. If we are unable to generate sufficient cash flow from operations in the future to service our outstanding debt, we may be required to, among other things:

- seek additional financing in the debt or equity markets;
- refinance or restructure all or a portion of our indebtedness;
- divert funds that would otherwise be invested in our operations;
- sell selected assets; or
- reduce or delay planned capital expenditures or operating expenditures.

Such measures might not be sufficient to enable us to service our debt, which could negatively impact our financial results. In addition, we may not be able to obtain any such financing, refinancing or complete a sale of assets on economically favorable terms. In the case of financing or refinancing, favorable interest rates will be dependent on the health of the debt capital markets and our credit rating.

Our existing indebtedness could also have the effect, among other things, of reducing our flexibility to respond to changing business and economic conditions, reducing funds available for working capital, capital expenditures, acquisitions and other general corporate purposes or creating competitive disadvantages relative to other companies with lower debt levels.

Our credit agreement requires that we maintain certain ratios and limits our ability to make acquisitions, incur debt, pay dividends, make investments, sell assets or merge.

Our credit agreement, dated December 11, 2017, as amended, governs our indebtedness. This agreement includes provisions which place limitations on certain activities, including our ability to: issue; incur additional indebtedness; create any liens or encumbrances on our assets or make any guarantees; make certain investments; pay cash dividends above certain limits; or dispose of or sell assets or enter into a merger or a similar transaction. These restrictions may limit our ability to operate our business and may prohibit or limit our ability to execute our business strategy, compete, enhance our operations, take advantage of potential business opportunities as they arise or meet our capital needs. Furthermore, future debt instruments or other contracts could contain more restrictive financial or other covenants. The breach of any of these covenants by us or the failure by us to meet any of these conditions or requirements could result in a default under any or all of our indebtedness. If we are unable to service our indebtedness, our business, financial condition, cash flows and results of operations would be materially adversely affected.

Discontinuation, replacement or reform of LIBOR could affect interest rates under our credit agreement and financing costs

Our credit arrangements include borrowings at variable rates, primarily based on London Interbank Offered Rate ("LIBOR"). In 2017 the UK Financial Conduct Authority announced that it will no longer be necessary to persuade or compel banks to submit to LIBOR after 2021. It is possible that, after 2021, the LIBOR may be discontinued as a reference rate. In the United States the Alternative Reference Rate Committee convened by the US Federal Reserve identified the Secured Overnight Financing Rate (SOFR) as its preferred alternative reference rate to the US Dollar LIBOR. The shift away from one of the most widely used interest rate benchmarks to an alternative reference rate is a significant change for the global financial markets. At this time the future consequences of developments with respect to replacement of LIBOR remain unclear. However, these changes could have a material adverse effect on our credit facilities, and could adversely effect our business, results of operations, financial condition and cash flows.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

We maintain 21 major manufacturing facilities worldwide, including operations located in North America, Western Europe, Morocco, China and India. We also maintain sales offices or warehouses from which we ship finished goods to customers, distributors and commissioned representative organizations. Our executive office is located in Burlington, Massachusetts and is leased.

Our Aerospace & Defense segment has major manufacturing facilities located in North America, United Kingdom, France and Morocco. Properties in New York and California are leased. Our Industrial segment has major facilities located in North America, Germany, India and China. Properties in Germany, India and China are leased.

Segment	Leased	Owned	Total
Industrial	5	10	15
Aerospace & Defense	1	5	6
Total	6	15	21

In general, we believe that our properties, including machinery, tools and equipment, are in good condition, are well maintained, and are adequate and suitable for their intended uses. Our manufacturing facilities generally operate five days per week on one or two shifts. We believe our manufacturing capacity could be increased by working additional shifts and weekends and by successful implementation of our CIRCOR Operating System. We also have low-cost sources for manufacturing in India and Morocco which have capacity to fulfill our manufacturing needs. We believe that our current facilities will meet our near-term production requirements without the need for additional facilities.

Item 3. Legal Proceedings

For information regarding our legal proceedings refer to the first two paragraphs of Note 16, Contingencies, Commitments and Guarantees, to the consolidated financial statements included in this Annual Report, which disclosure is incorporated herein by reference.

Item 4. Mine Safety Disclosures

Not applicable.

Part II

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

Our common stock is traded on the New York Stock Exchange ("NYSE") under the symbol "CIR."

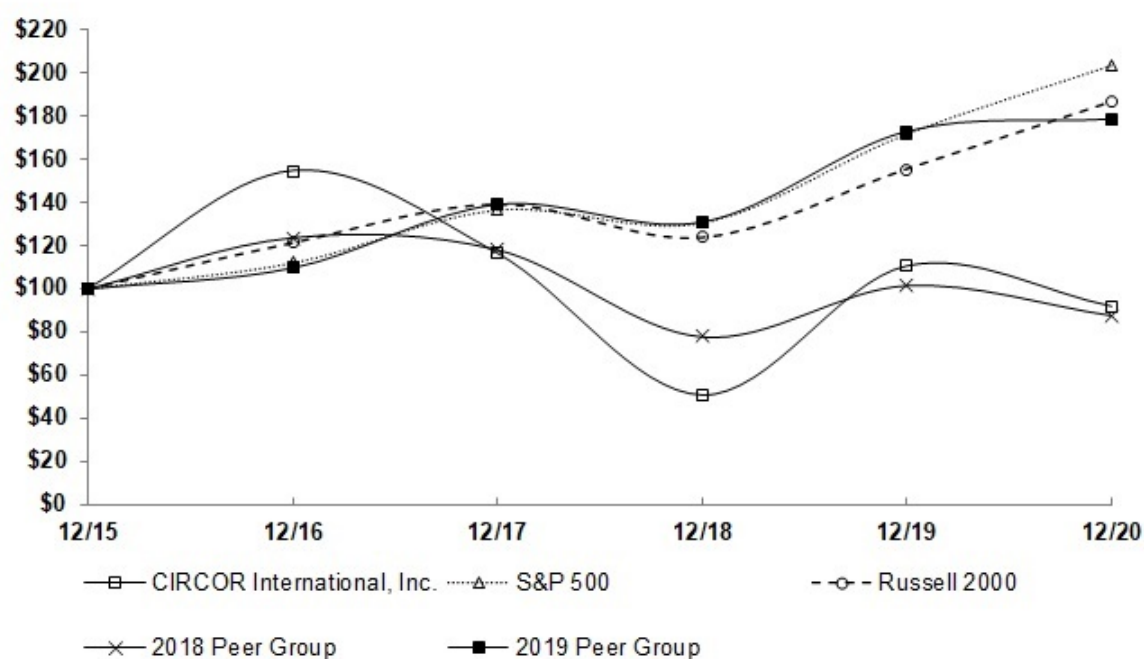
Our Board of Directors is responsible for determining our dividend policy. The timing and level of any dividends will necessarily depend on our Board of Directors' assessments of earnings, financial condition, capital requirements and other factors, including restrictions, if any, imposed by our lenders. On February 28, 2018, we announced the suspension of our nominal dividend, as part of our capital deployment strategy.

As of March 10, 2021, there were 20,155,251 shares of our common stock outstanding and we had 50 holders of record of our common stock. We believe the number of beneficial owners of our common stock was substantially greater on that date.

The graph below compares the cumulative 5-Year total return provided stockholders on CIRCOR International, Inc.'s common stock relative to the cumulative total returns of the S&P 500 index, the Russell 2000 index, our previous peer group ("2018 Peer Group") and our updated peer group ("2019 Peer Group"). The companies included in the 2018 Peer Group and the 2019 Peer Group are listed in footnotes 1 and 2 below, respectively. We revised our peer group to incorporate peers relevant to the businesses we acquired in the Fluid Handling acquisition along with divestitures of non-core businesses. An investment of \$100 (with reinvestment of all dividends) is assumed to have been made in our common stock, in each index and in each of the peer groups on December 31, 2015 and its relative performance is tracked through December 31, 2020.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among CIRCOR International, Inc., the S&P 500 Index, the Russell 2000 Index, 2018 Peer Group and 2019 Peer Group



* \$100 invested on 12/31/2015 in stock or index, including reinvestment of dividends.

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	12/15	12/16	12/17	12/18	12/19	12/20
CIRCOR International, Inc.	\$ 100.00	\$ 154.37	\$ 116.15	\$ 50.82	\$ 110.33	\$ 91.72
S&P 500	100.00	111.96	136.40	130.42	171.49	203.04
Russell 2000	100.00	121.31	139.08	123.76	155.35	186.36
2018 Peer Group	100.00	123.46	117.88	77.90	101.45	87.70
2019 Peer Group	100.00	109.69	138.98	130.84	172.68	178.42

- **2018 Peer Group:** There are three companies included in the Company's 2018 Peer Group which are: Dover Corp, IDEX Corp and Schlumberger NV.
- **2019 Peer Group:** The eight companies included in the Company's 2019 Peer Group are: Alfa Laval Ab, Flowserve Corp, Gardner Denver Holdings Inc, Imi Plc, Metso Oyj, Spx Flow Inc, Sulzer Ag and Weir Group Plc.

Item 6. Selected Financial Data

Not Applicable.

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

See Part 1, Item 1, "Business", for additional detail on forward looking statements.

Company Overview

CIRCOR International is one of the world's leading providers of mission critical flow control products and services for the Industrial and Aerospace & Defense markets. The Company has a product portfolio of market-leading brands serving its customers' most demanding applications. CIRCOR markets its solutions directly and through various sales partners to more than 14,000 customers in approximately 100 countries. The Company has a global presence with approximately 3,100 employees and is headquartered in Burlington, Massachusetts. See Part 1, Item 1, Business, for additional information regarding the description of our business.

COVID-19

The COVID-19 pandemic adversely impacted our end markets, operations, and financial condition in 2020. Throughout this continued time of unprecedented uncertainty, the Company's top priority remains the health and safety of our employees, customers, and suppliers. Because of the end markets we serve, the majority of our facilities are deemed 'essential operations' in the countries in which we operate. Throughout 2020 and continuing in 2021, we implemented significant measures in an effort to ensure our employees around the world have the necessary protection and our business continues to operate with as little disruption as possible. These measures include but are not limited to:

- Additional cleaning and disinfecting procedures at all facilities;
- Daily temperature checks and masks for employees;
- Adherence to strict social distancing guidelines;
- Employees are strongly encouraged to work from home where possible; and
- Cancellation of all non-essential travel

Throughout 2020 and into 2021, the Company also took prudent action to ensure it maintained its financial flexibility including the cessation of all non-critical business expenses, permanent employee reductions, employee furloughs, and pay cuts for senior management and board of directors. We believe that these actions along with the Company's continued focus on new product innovation, cost productivity, and the CIRCOR Operating System ("COS") serve to best position the Company for potential end market recovery across our Industrial and Aerospace & Defense business segments. The situation relating to the COVID-19 pandemic and its potential effects on our business and financial results remains dynamic, and the broader implications for our business and results of operations remain uncertain and will depend on many factors outside our control. Please see Part 1, Item 1A - "Risk Factors" for more detail.

Segment Commentary

The Company's Aerospace & Defense segment has been and continues to be significantly impacted by the COVID-19 pandemic, primarily in our Commercial Aerospace business. We expect that the commercial aerospace end markets will improve in 2021 compared to 2020, but that a recovery to pre-pandemic levels of demand will depend on air framer production rates and could take several years. Our Defense business has been less impacted by the pandemic, and we expect continued growth in this end market driven by our positions on key U.S. defense programs, including the Joint Strike Fighter and Columbia class submarines, and new product introductions. We continue to focus on increasing growth in our global aftermarket.

The Company's Industrial reporting segment has been and continues to be significantly impacted by the COVID-19 pandemic. In 2021, we expect modest growth in the General Industrial sector led by chemical and machinery applications with a weaker recovery in construction and mining. While our commercial marine sector continues to be constrained, we do expect to experience growth as the regulatory environment could cause demand for our products. We expect that our mid-stream and downstream oil and gas customers will continue to prioritize spending on critical safety and maintenance, but we expect that larger capital expenditures will continue to be delayed. We expect to experience higher demand for our products that serve the power generation markets with particular strength in Asia and in our global aftermarket.

We continue to implement actions to mitigate the impact on our earnings from lower demand and an increasingly competitive environment. In addition, we are investing in products and technologies designed to help solve our customers' most difficult problems. We expect to further simplify CIRCOR by standardizing technology, rationalizing facilities, consolidating suppliers and achieving world class operational excellence, including working capital management. We believe our cash flow from

operations and financing capacity is adequate to support these activities. Finally, continuing to attract and retain talented personnel, including the enhancement of our global sales, operations, product management and engineering organizations, remains an important part of our strategy during 2021.

Basis of Presentation

All significant intercompany balances and transactions have been eliminated in consolidation. We operate and report financial information using a 52-week fiscal year ending December 31. The data periods contained within our Quarterly Reports on Form 10-Q reflect the results of operations for the 13-week, 26-week and 39-week periods which generally end on the Sunday nearest the calendar quarter-end date. Certain reclassifications have been made to prior period amounts to conform to the current period financial statement presentation, including the results of discontinued operations and reportable segment information.

Critical Accounting Policies and Use of Estimates

The Company's discussion and analysis of its financial condition and results of operations is based upon its consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). The preparation of these consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses and related disclosure of contingent liabilities. On an on-going basis, management evaluates its significant estimates, including those related to contracts accounted for under the percentage of completion method, bad debts, inventories, intangible assets and goodwill, purchase accounting, delivery penalties, income taxes, and contingencies including litigation. Management believes the most complex and sensitive judgments, because of their significance to the consolidated financial statements, result primarily from the need to make estimates about the effects of matters that are inherently uncertain. Management bases its estimates on historical experience, current market and economic conditions and other assumptions that management believes are reasonable. The results of these estimates form the basis for judgments about the carrying value of assets and liabilities where the values are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

There have been no significant changes from the methodology applied by management for critical accounting estimates previously disclosed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019.

For goodwill, we perform an impairment assessment at the reporting unit level on an annual basis as of our October month end or more frequently if circumstances warrant. On March 29, 2020, the Company reorganized its reporting units and had its stock price drop below book value, which the Company determined were triggering events requiring an assessment of its goodwill and indefinite-lived trade names. Based on our impairment assessment as of March 29, 2020, we concluded that our goodwill in the Industrial reporting unit was impaired and, accordingly, recorded a goodwill impairment charge of \$116.2 million in the quarterly period ended March 29, 2020.

In October 2020 when we performed our annual goodwill impairment assessment, the fair value of each of our reporting units exceeded the respective carrying amount, and no goodwill impairments were recorded. The fair values utilized for our 2020 goodwill assessment exceeded the carrying amounts by more than 20% and 10% for our Aerospace & Defense and Industrial reporting units, respectively. The growth rate assumptions utilized were consistent with growth rates within the markets that we serve and considered the near to mid-term negative impact of the COVID-19 pandemic on our end markets, operations, and cash flows. If our results significantly vary from our estimates, related projections, or business assumptions in the future due to change in industry or market conditions, we may be required to record impairment charges.

For information regarding our significant accounting policies, refer to Note 2, Summary of Significant Accounting Policies, to the consolidated financial statements included in this Annual Report, which disclosure is incorporated by reference herein.

Revenue Recognition

The Company recognizes revenue to depict the transfer of control to the Company's customers in an amount reflecting the consideration the Company expects to be entitled to in exchange for performance obligations. Revenue on point in time contracts are recognized when customer obtains control of the product, which is generally at the time of shipping. Revenues and costs on certain long-term contracts are recognized on the percentage-of-completion method measured on the basis of costs incurred to estimated total costs of each contract. This method is used because management considers it to be the best available measure of progress towards completion on these contracts. Revenues and costs on contracts are subject to changes in estimates throughout the duration of the contracts, and any required adjustments are made in the period in which a change in estimate becomes known.

For revenue that is recognized from products and services transferred to customers over-time, the Company uses an input measure (e.g., costs incurred to date relative to total estimated costs at completion, known as the “cost-to-cost” method) to measure progress. The Company uses the cost-to-cost measure of progress because it best depicts the transfer of control to the customer which occurs as it incurs costs on its contracts. Under the cost-to-cost measure of progress, revenue is recognized proportionally as costs are incurred. Contract costs include labor, materials and subcontractors’ costs, other direct costs and an allocation of overhead, as appropriate. Accounting for over-time contracts requires reliable estimates in order to estimate total contract revenue and costs. For these contracts, management reviews the progress and execution of the Company’s performance obligations at least quarterly. Management estimates the profit on a contract as the difference between the total estimated revenue and estimate at completion (“EAC”) costs and recognizes the resultant profit over the life of the contract, using the cost-to-cost EAC input method to measure progress toward complete satisfaction of a performance obligation. A change in one or more of these estimates could affect the profitability of the related contracts. Management recognizes adjustments in estimated profit on contracts under the cumulative catch-up method. Under this method, the impact of the adjustment on profit recorded to date is recognized in the period the adjustment is identified. Revenue and profit in future periods of contract performance is recognized using the adjusted estimate. The impact of adjustments in contract estimates on our operating earnings can be reflected in either operating expenses or revenue.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carry-forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

In accordance with the provisions of ASC Topic 740, Income Taxes, the Company initially recognizes the financial statement effect of a tax position when, based solely on its technical merits, it is more likely than not (a likelihood of greater than fifty percent) that the position will be sustained upon examination by the relevant taxing authority. Those tax positions failing to qualify for initial recognition are recognized in the first interim period in which they meet the more likely than not standard, are resolved through negotiation or litigation with the taxing authority, or upon expiration of the statute of limitations. De-recognition of a tax position that was previously recognized occurs when an entity subsequently determines that a tax position no longer meets the more likely than not threshold of being sustained.

ASC 740, Income Taxes, requires a valuation allowance to reduce deferred tax assets if, based on the weight of available evidence, it is more likely than not that some portion, or all, of the deferred tax assets will not be realized. The weight given to the potential effect of negative and positive evidence should be commensurate with the extent to which it can be objectively verified. The more negative evidence that exists, (a) the more positive evidence is necessary and (b) the more difficult it is to support a conclusion that a valuation allowance is not needed for some portion, or all, of the deferred tax asset. Should there be a cumulative loss in recent years it is considered a significant piece of negative evidence that is difficult to overcome in assessing the need for a valuation allowance.

Management assesses the available positive and negative evidence to estimate whether sufficient future taxable income will be generated to permit use of the existing deferred tax assets. On July 9, 2020, the US Department of the Treasury (Treasury) and Internal Revenue Service (IRS) released Final Regulations (Final Regulations) that provide guidance on the section 250 deduction for foreign-derived intangible income (FDII) and global intangible low-taxed income (GILTI). In addition, on July 20, 2020, Treasury released Proposed Regulations concerning GILTI. Based on the impact of these regulations, we believe less reliance should be placed on the US taxation of foreign earnings, which would adversely impact our ability to realize our US deferred tax assets. With the release of these Final Regulations during the third quarter, coupled with the negative evidence of cumulative losses in the US, the negative evidence outweighed the positive evidence as of the third quarter of 2020. As such, the Company has not relied on projections of future taxable income in our assessment of the realization of deferred tax assets at September 27, 2020, and recognized a valuation allowance of \$42.2 million in income tax expense in the third quarter of 2020.. In addition, the Company recorded a valuation allowance related to German deferred tax assets of \$14.8 million in income tax expense in the fourth quarter of 2020. The Company relied solely on the expected reversal of taxable temporary differences to support the realizability of the German deferred tax assets and no reliance was placed on projections of future taxable income.

Results of Operations

The Chief Operating Decision Maker ("CODM") is the function that allocates the resources of the enterprise and assesses the performance of the Company's reportable operating segments. CIRCOR has determined that the CODM is solely comprised of its Chief Executive Officer ("CEO"), as the CEO has the ultimate responsibility for CIRCOR strategic decision-making and resource allocation.

Our CODM evaluates segment operating performance using segment operating income. We define segment operating income as GAAP operating income excluding intangible amortization and amortization of fair value step-ups of inventory and fixed assets from acquisitions completed subsequent to December 31, 2011, the impact of restructuring-related inventory write-offs, impairment charges and special charges or gains. The Company also refers to this measure as adjusted operating income. The Company uses this measure because it helps management understand and evaluate the segments' core operating results and facilitates a comparison of performance for determining incentive compensation achievement.

For information regarding our segment determination refer to Note 18, Business Segment and Geographical Information, of the consolidated financial statements included in this Annual Report.

The following tables present information on net revenues and operating income of our business segments, along with a reconciliation of total segment operating income to the Company's consolidated operating income.

2020 Compared With 2019

Consolidated Operations

(in thousands)	2020	2019	Total Change	Divestiture	Operations	Foreign Exchange
Net Revenues						
Industrial	\$ 505,449	691,688	\$ (186,239)	(90,287)	(98,435)	2,483
Aerospace & Defense	267,822	272,625	(4,803)	—	(5,553)	750
Consolidated Net Revenues	<u>\$ 773,271</u>	<u>\$ 964,313</u>	<u>\$ (191,042)</u>	<u>\$ (90,287)</u>	<u>\$ (103,988)</u>	<u>\$ 3,233</u>

Net revenues in 2020 were \$773.3 million, a decrease of \$191 million from 2019 primarily driven by lower revenue as a result of divestitures of \$90.3 million and lower operational results of \$104.0 million, partially offset by favorable foreign exchange of \$3.2 million.

Segment Results

(in thousands)

	2020	2019	Change
Net Revenues			
Industrial	\$ 505,449	\$ 691,688	\$ (186,239)
Aerospace & Defense	267,822	272,625	(4,803)
Consolidated Net Revenues	<u>\$ 773,271</u>	<u>\$ 964,313</u>	<u>\$ (191,042)</u>
Operating Income			
Industrial - Segment Operating Income	39,823	\$ 90,789	\$ (50,966)
Aerospace & Defense - Segment Operating Income	59,093	52,480	6,613
Corporate expenses	(31,285)	(33,469)	2,184
Subtotal	67,631	109,800	(42,169)
Special restructuring (recoveries) charges, net	4,945	5,186	(241)
Special other (recoveries) charges, net	(39,248)	17,686	(56,934)
Special and restructuring (recoveries) charges, net (1)	(34,303)	22,872	(57,175)
Restructuring related inventory (recoveries) charges, net (1)	(250)	(820)	570
Amortization of inventory step-up	—	—	—
Impairment charges	116,182	—	116,182
Acquisition amortization	42,463	45,715	(3,252)
Acquisition depreciation	3,985	4,352	(367)
Restructuring, impairment and other cost, net	162,380	49,247	113,133
Consolidated Operating (Loss) Income	<u>\$ (60,446)</u>	<u>\$ 37,681</u>	<u>\$ (98,127)</u>
Consolidated Operating Margin	(7.8)%	3.9 %	

(1) See Note 5, Special and Restructuring (Recoveries) Charges, net in the consolidated financial statements included in this Annual Report, for additional details.

Industrial Segment

(in thousands, except percentages)

	2020	2019	Change
Net Revenues as reported	\$ 505,449	\$ 691,688	\$ (186,239)
Net Revenues excluding divestiture (1)	500,549	596,501	(95,952)
Segment Operating Income as reported	39,823	90,789	(50,966)
Segment Operating Income excluding divestiture (2)	39,823	73,500	(33,677)
Segment Operating Margin excluding divestiture (2)	8.0 %	12.3 %	
Orders	\$ 481,609	\$ 663,553	\$ (181,944)

(1) Adjusted for the January 2020 divestiture of our Instrumentation & Sampling business and the August 2019 divestiture of certain assets and liabilities related to our Spence and Nicholson product lines. The Instrumentation and Sampling business generated revenues of \$4.9 million and \$78.6 million for the years ended December 31, 2020 and December 31, 2019, respectively. The Spence and Nicholson product lines generated revenues of \$0.0 million and \$13.5 million for the year ended December 31, 2020 and December 31, 2019, respectively.

(2) Adjusted for the January 2020 divestiture of our Instrumentation & Sampling business, which contributed \$0.0 million and \$13.8 million to segment operating income for the years ended December 31, 2020 and December 31, 2019, respectively, and the August 2019 divestiture of certain assets and liabilities related to our Spence and Nicholson product lines, which contributed \$0.0 million and \$3.5 million to segment operating income for the years ended December 31, 2020 and December 31, 2019, respectively.

Industrial segment revenues decreased \$186.2 million, or 27%, in 2020 compared to 2019. Segment net revenues excluding divestitures decreased \$96.0 million due to the timing of projects in the Europe and North American Pumps businesses ("Pumps businesses") driving a decrease of 7% and reduction in the Valves businesses of 10%.

Industrial segment operating income decreased \$51.0 million, or 56%, in 2020 compared to 2019. Segment operating income excluding divestitures decreased \$33.7 million, or 46%, to \$39.8 million for 2020 compared to \$73.5 million for 2019, driven by decreases in the Pumps businesses of 31% and the Valves businesses of 49% partially offset by operational efficiencies in headquarters.

Industrial segment orders decreased \$181.9 million, or 27%, in 2020 compared to 2019. The decrease was primarily driven by the impact from divestitures of \$90.3 million and reductions in the Valves businesses of 17% and the Pumps businesses of 11%.

QUARTERLY INDUSTRIAL SEGMENT INFORMATION

(in thousands, except percentages)

(unaudited)

	2019					2020				
	1ST QTR	2ND QTR	3RD QTR	4TH QTR	TOTAL	1ST QTR	2ND QTR	3RD QTR	4TH QTR	TOTAL
Orders	\$171,834	\$164,642	\$158,986	\$168,091	\$663,553	\$136,443	\$116,023	\$107,453	\$121,690	\$481,609
Net Revenues	177,615	181,074	169,431	163,568	691,688	126,720	123,825	124,391	130,513	505,449
Operating Income	22,581	26,173	21,278	20,757	90,789	5,169	12,406	9,807	12,441	39,823
Operating Margin	12.7%	14.5%	12.6%	12.7%	13.1%	4.1%	10.0%	7.9%	9.5%	7.9%
Backlog (1)	\$254,942	\$238,081	\$218,365	\$226,208	\$226,208	\$222,190	\$217,774	\$203,993	\$197,198	\$197,198

(1) At end of period.

Aerospace & Defense Segment

(in thousands, except percentages)

	2020	2019	Change
Net Revenues	\$ 267,822	\$ 272,625	\$ (4,803)
Segment Operating Income	59,093	52,480	6,613
Segment Operating Margin	22.1 %	19.2 %	
Orders	\$ 254,548	\$ 313,939	\$ (59,391)

Aerospace & Defense segment net revenues decreased by \$4.8 million, or 2% in 2020 as compared to 2019. The decrease was driven by our Aerospace businesses 28%, partially offset by increases in the Defense businesses 21%.

Segment operating income increased \$6.6 million, or 13%, to \$59.1 million for 2020 compared to \$52.5 million for 2019. The increase in operating income was driven by improved value pricing and cost actions taken to mitigate the impact of the COVID-19 pandemic.

Aerospace & Defense segment orders decreased \$59.4 million, or 18.9%, to \$254.5 million in 2020 compared to \$313.9 million in 2019, driven by decreases in our Defense businesses of 5% and our Aerospace businesses of 36%.

QUARTERLY A&D SEGMENT INFORMATION

(in thousands, except percentages)

(unaudited)

	2019					2020				
	1ST QTR	2ND QTR	3RD QTR	4TH QTR	TOTAL	1ST QTR	2ND QTR	3RD QTR	4TH QTR	TOTAL
Orders	\$88,107	\$93,405	\$63,968	\$68,459	\$313,939	\$72,031	\$76,616	\$59,105	\$46,796	\$254,548
Net Revenues	61,240	64,694	67,621	79,070	272,625	65,493	62,241	62,249	77,839	267,822
Operating Income	9,374	10,443	13,564	19,099	52,480	12,494	13,142	14,782	18,675	59,093
Operating Margin	15.3%	16.1%	20.1%	24.2%	19.2%	19.1%	21.1%	23.7%	24.0%	22.1%
Backlog (1)	\$206,457	\$234,964	\$206,917	\$194,459	\$194,459	\$199,013	\$214,192	\$211,367	\$182,111	\$182,111

(1) At end of period.

Corporate Expenses

Corporate expenses decreased \$2.2 million to \$31.3 million for 2020. This decrease was primarily driven by ongoing cost savings initiatives and lower travel expenses due to global travel restrictions related to COVID-19.

Special and Restructuring (Recoveries) Charges, net

During 2020, the Company recorded a total of \$34.3 million in recovery of special and restructuring charges. In our consolidated statements of (loss) income, these recoveries are recorded in special and restructuring (recoveries) charges, net. The recovery is a result of the net gain on sale of our Instrumentation & Sampling business, offset by professional fees related to an unsolicited tender offer to acquire the Company and other restructuring costs associated with our simplification efforts, primarily in our Industrial Segment. These recoveries, restructuring charges and other special charges are described in further detail in Note 5, Special and Restructuring (Recoveries) Charges, net, in the consolidated financial statements included in this Annual Report.

Restructuring, impairment and other costs, net

During 2020, the Company recorded a total of \$162.4 million of Restructuring, impairment and other costs, net, including Q1 2020 industrial reporting unit goodwill impairment in the amount of \$116.2 million. These charges represent plant, property, and equipment depreciation related to the step-up in fair value as part of our acquisition of Colfax Corporation's Fluid Handling ("FH") business, intangible amortization in connection with acquisitions subsequent to December 31, 2011, and step-up in fair value of inventory acquired as part of our FH acquisition. These charges are recorded in either selling, general and administrative expenses or cost of revenues based upon the nature of the underlying asset.

Interest Expense, Net

Interest expense decreased \$14.4 million to \$34.2 million for 2020. The change in interest expense was primarily due to lower debt balances.

Other Income, Net

Other income, net, was \$0.5 million for 2020 compared to \$0.8 million in 2019. The difference of \$0.3 million primarily relates to net pension income for the retirement plans we acquired as part of the FH acquisition. Effective January 1, 2018 all pension gains and losses are recorded in the Other (Income) Expense, net caption on our consolidated statement of (loss) income. Pension Income was partially offset by unfavorable foreign currency translation.

Comprehensive (Loss) Income

Comprehensive loss increased \$46.7 million, from a comprehensive loss position of \$144.5 million for the year-ended December 31, 2019 to a comprehensive loss position of \$191.2 million for the year-ended December 31, 2020. This change was primarily driven by an increase in net loss of \$125.6 million in our continuing operations caused by impairment of goodwill of \$116.2 million and increased income taxes of \$41.5 million, partially offset by net gain on the sale of the

Instrumentation & Sampling business of \$53.2 million and reduced losses in our discontinued operations of \$74.0 million as the Distributed Valve business was divested during the year.

As of December 31, 2020, we had a cumulative currency translation adjustment of \$18.2 million in Accumulated Other Comprehensive Loss for our Brazil entity. If we were to cease to have a controlling financial interest in the Brazil entity or otherwise satisfy criteria for reclassification of the amount from Accumulated Other Comprehensive Loss to earnings, we would recognize a non-cash charge of \$18.2 million based on December 31, 2020 balances, which would be included as a special charge within the consolidated statements of (loss) income.

(Benefit from) Provision for Income Taxes

The table below outlines the change in effective tax rate for 2020 and 2019 (in thousands, except percentages).

	2020	2019	Change
Income (Loss) Before Tax	\$(94,136)	\$(10,092)	\$(84,044)
Expected federal income tax rate	21.0%	21.0%	—%
State income taxes, net of federal tax benefit	(3.8)	15.5	(19.3)
Impairment	(7.1)	—	(7.1)
US permanent differences	—	(1.6)	1.6
Foreign tax rate differential	4.6	4.5	0.1
Tax reserve	(0.8)	(0.3)	(0.5)
Rate Change	(0.1)	5.9	(6.0)
GILTI	(4.0)	(3.9)	(0.1)
Foreign tax credit writeoff	—	—	—
Foreign-derived intangible income ("FDII")	—	10.7	(10.7)
Prior period adjustment	0.4	44.1	(43.7)
Dispositions	(1.0)	(227.0)	226.0
Valuation Allowance	(68.8)	(0.5)	(68.3)
Other, net	0.4	(16.1)	16.5
Equity compensation	(0.5)	(10.8)	10.3
Research and development	—	13.1	(13.1)
Effective tax rate	(59.7)%	(145.4)%	85.7%

Management assesses the available positive and negative evidence to estimate whether sufficient future taxable income will be generated to permit use of the existing deferred tax assets. On July 9, 2020, the US Department of the Treasury ("Treasury") and Internal Revenue Service released "Final Regulations" that provide guidance on the section 250 deduction for foreign-derived intangible income ("FDII") and global intangible low-taxed income ("GILTI"). In addition, on July 20, 2020, Treasury released proposed regulations ("Proposed Regulations") concerning GILTI. Based on the expected impact of these regulations, we believe less reliance should be placed on the US taxation of foreign earnings, which would adversely impact our ability to realize our US deferred tax assets. With the release of the Final Regulations during the third quarter of 2020, coupled with the negative evidence of cumulative losses in the US, the negative evidence outweighed the positive evidence as of the third quarter of 2020. As such, the Company has not relied on projections of future taxable income in our assessment of the realization of deferred tax assets at September 27, 2020, and recognized a valuation allowance of \$42.2 million in income tax expense in the third quarter of 2020. In addition, the Company recorded a valuation allowance related to German deferred tax assets of \$14.8 million in income tax expense in the fourth quarter of 2020. The Company relied solely on the expected reversal of taxable temporary differences to support the realizability of the German deferred tax assets and no reliance was placed on projections of future taxable income.

As of December 31, 2020 and 2019, the Company maintained a total valuation allowance of \$125.3 million and \$44.3 million, respectively, which relates to foreign, federal, and state deferred tax assets as of December 31, 2020 and 2019. The amount of the deferred tax asset considered realizable, however, could be adjusted if estimates of future taxable income during the carryforward period are reduced or increased or if objective negative evidence in the form of cumulative losses is no longer present and additional weight is given to subjective evidence such as our projections for growth.

Results of Operations

2019 Compared With 2018

Consolidated Operations

(in thousands)	2019	2018	Total Change	Divestiture	Operations	Foreign Exchange
Net Revenues						
Industrial	\$ 691,688	\$ 776,453	\$ (84,765)	\$ (81,044)	\$ 15,280	\$ (19,001)
Aerospace & Defense	272,625	237,017	35,608	—	39,133	(3,525)
Consolidated Net Revenues	<u>\$ 964,313</u>	<u>\$ 1,013,470</u>	<u>\$ (49,157)</u>	<u>\$ (81,044)</u>	<u>\$ 54,413</u>	<u>\$ (22,526)</u>

Net revenues in 2019 were \$964.3 million, a decrease of \$49.2 million from 2018 primarily driven by lower revenue as a result of divestitures of \$81.0 million and unfavorable foreign exchange of \$22.5 million, partially offset by operational growth in all segments of \$54.4 million.

The following table present information on net revenues and operating income of our business segments, along with a reconciliation of total segment operating income to the Company's consolidated operating income.

(in thousands)	2019	2018	Change
Net Revenues			
Industrial	\$ 691,688	\$ 776,453	\$ (84,765)
Aerospace & Defense	272,625	237,017	35,608
Consolidated Net Revenues	<u>\$ 964,313</u>	<u>\$ 1,013,470</u>	<u>\$ (49,157)</u>
Operating Income			
Industrial - Segment Operating Income	\$ 90,789	\$ 104,831	\$ (14,042)
A&D - Segment Operating Income	52,480	36,047	16,433
Corporate expenses	(33,469)	(39,011)	5,542
Subtotal	109,800	101,867	7,933
Restructuring charges, net	5,186	5,848	(662)
Special charges, net	17,686	13,061	4,625
Special and restructuring charges, net (1)	22,872	18,909	3,963
Restructuring related inventory (recoveries) charges, net (1)	(820)	346	(1,166)
Amortization of inventory step-up	—	6,600	(6,600)
Impairment charges	—	—	—
Acquisition amortization	45,715	47,310	(1,595)
Acquisition depreciation	4,352	7,049	(2,697)
Restructuring and other cost, net	49,247	61,305	(12,058)
Consolidated Operating Income	<u>\$ 37,681</u>	<u>\$ 21,653</u>	<u>\$ 16,028</u>
Consolidated Operating Margin	3.9 %	2.1 %	

(1) See Note 5, Special and Restructuring (Recoveries) Charges, net of the consolidated financial statements, for additional details.

Industrial Segment

(in thousands, except percentages)

	2019	2018	Change
Net Revenues as reported	\$ 691,688	\$ 776,453	\$ (84,765)
Net Revenues excluding divestiture (1)	596,501	596,463	38
Segment Operating Income as reported	90,789	104,831	(14,042)
Segment Operating Income excluding divestiture (2)	73,500	77,447	(3,947)
Segment Operating Margin excluding divestiture (2)	12.3 %	11.3 %	
Orders	\$ 663,553	\$ 821,740	\$ (158,187)

(1) Adjusted for the August 2019 divestiture of certain assets and liabilities related to our Spence and Nicholson product lines, the October 2018 divestiture of our Rosscor B.V. and SES International B.V. subsidiaries (the "Delden Business"), and the January 2019 divestiture of our Reliability Services business. The Spence and Nicholson product lines generated revenues of \$13.5 million and \$20.7 million for the years ended December 31, 2019 and December 31, 2018, respectively. The Delden business generated revenues of \$0.0 million and \$11.3 million for the years ended December 31, 2019, and December 31, 2018, respectively. The Reliability Services business generated \$3.1 million and \$65.6 million for the years December 31, 2019 and December 31, 2018, respectively.

(2) Adjusted for the August 2019 divestiture of certain assets and liabilities related to our Spence and Nicholson product lines, which contributed \$3.5 million and \$6.4 million to segment operating income for the year ended December 31, 2019 and December 31, 2018, respectively, and for the divestiture of the Delden business, which contributed \$0.0 million and (\$0.7) million to segment operating income for the years ended December 31, 2019, and December 31, 2018, respectively. Also adjusted for the Reliability Services business which contributed \$0.0 million and \$6.6 million to segment operating income for the years ended December 31 2019 and December 31, 2018 respectively.

Industrial segment net revenues, excluding divestitures, remained relatively flat with a less than \$0.1 million increase, in 2019 compared to 2018.

Segment operating income, excluding divestitures, decreased \$4.0 million, or 5%, to \$73.5 million for 2019 compared to \$77.5 million for 2018, primarily driven by a decrease in the Pumps businesses of 14%, partially offset by an increase in the Valves businesses of 6% along with operational efficiencies in headquarters.

Industrial segment orders decreased \$158.2 million, or 19%, to \$663.5 million for 2019 as compared to \$821.7 million in 2018, driven by declines within our Pumps businesses of 9%, Refinery Valves of 9% and other Valves businesses of 3%.

QUARTERLY INDUSTRIAL SEGMENT INFORMATION

(in thousands, except percentages)
(unaudited)

	2018					2019				
	1ST QTR	2ND QTR	3RD QTR	4TH QTR	TOTAL	1ST QTR	2ND QTR	3RD QTR	4TH QTR	TOTAL
Orders	\$221,943	\$203,571	\$202,022	\$194,205	\$821,741	\$171,834	\$164,642	\$158,986	\$168,091	\$663,553
Net Revenues	\$181,410	\$202,158	\$189,452	\$203,433	\$776,453	\$177,615	\$181,074	\$169,431	\$163,568	\$691,688
Operating Income	\$21,188	\$26,279	\$26,573	\$30,791	\$104,831	\$22,581	\$26,173	\$21,278	\$20,757	\$90,789
Operating Margin	11.7%	13.0%	14.0%	15.1%	13.5%	12.7%	14.5%	12.6%	12.7%	13.1%
Backlog (1)	\$282,904	\$273,515	\$299,644	\$274,299	\$274,299	\$254,942	\$238,081	\$218,365	\$226,208	\$226,208

(1) At end of period.

Aerospace & Defense Segment

(in thousands, except percentages)

	2019	2018	Change
Net Revenues	\$ 272,625	\$ 237,017	\$ 35,608
Segment Operating Income	52,480	36,047	16,433
Segment Operating Margin	19.2 %	15.2 %	
Orders	\$ 313,939	\$ 277,469	\$ 36,470

Aerospace & Defense segment net revenues increased by \$35.6 million, or 15%, in 2019 as compared to 2018. The increase was driven by growth in our Defense businesses of 10% and our Aerospace businesses of 5%.

Segment operating income increased \$16.4 million, or 46%, to \$52.5 million for 2019 compared to \$36.0 million for 2018. The change was driven by increases in our Defense businesses of 25% and our Aerospace businesses of 21%.

Aerospace & Defense segment orders increased \$36.5 million, or 13%, to \$313.9 million for 2019 compared to \$277.5 million in 2018, driven by increases in our Defense businesses of 10% and our Aerospace businesses of 3%.

QUARTERLY A&D SEGMENT INFORMATION

(in thousands, except percentages)

(unaudited)

	2018					2019				
	1ST QTR	2ND QTR	3RD QTR	4TH QTR	TOTAL	1ST QTR	2ND QTR	3RD QTR	4TH QTR	TOTAL
Orders	\$59,793	\$59,441	\$81,533	\$76,702	\$277,469	\$88,107	\$93,405	\$63,968	\$68,459	\$313,939
Net Revenues	\$58,477	\$57,500	\$57,757	\$63,283	\$237,017	\$61,240	\$64,694	\$67,621	\$79,070	\$272,625
Operating Income	\$8,931	\$6,992	\$8,709	\$11,415	\$36,047	\$9,374	\$10,443	\$13,564	\$19,099	\$52,480
Operating Margin	15.3%	12.2%	15.1%	18.0%	15.2%	15.3%	16.1%	20.1%	24.2%	19.2%
Backlog (1)	\$165,841	\$152,081	\$150,571	\$156,256	\$156,256	\$206,457	\$234,964	\$206,917	\$194,459	\$194,459

(1) At end of period.

Corporate Expenses

Corporate expenses decreased \$5.5 million to \$33.5 million for 2019. This decrease was primarily driven by ongoing cost savings initiatives resulting in lower professional fees, variable compensation and integration costs

Special and Restructuring charges, net

During 2019, the Company recorded a total of \$22.9 million of Special and restructuring charges. In our consolidated statements of (loss) income, these charges are recorded in Special and restructuring charges, net. These costs are primarily related to our simplification and restructuring efforts, as well as professional fees relating to an unsolicited tender offer to acquire the Company. These restructuring charges and other special charges are described in further detail in Note 5, Special and Restructuring (recoveries) charges, net, of the consolidated financial statements included in this Annual Report.

Restructuring and other cost, net

During 2019, the Company recorded a total of \$49.2 million of Restructuring and other costs. These charges represent plant, property, and equipment depreciation related to the step-up in fair value as part of our acquisition of Colfax Corporation's Fluid Handling ("FH") business, intangible amortization in connection with acquisitions subsequent to December 31, 2011, and step-up in fair value of inventory acquired as part of our FH acquisition. These charges are recorded in either selling, general and administrative expenses or cost of revenues based upon the nature of the underlying asset.

Interest Expense, Net

Interest expense decreased \$4.4 million to \$48.6 million for 2019. The change in interest expense was primarily due to lower debt balances, and our net investment hedge, partially offset by an increase in interest rates.

Other (Income) Expense, Net

Other income, net, was \$0.8 million for 2019 compared to \$7.4 million in 2018. The difference of \$6.6 million primarily relates to net pension income for the retirement plans we acquired as part of the FH acquisition. Effective January 1, 2018 all pension gains and losses are recorded in the Other (Income) Expense, net caption on our consolidated statement of (loss) income. In addition we experienced lower gains from foreign exchange in 2019 compared to 2018.

Comprehensive (Loss) Income

Comprehensive loss increased \$72.1 million, from a comprehensive loss position of \$72.4 million for the year-ended December 31, 2018 to a comprehensive loss position of \$144.5 million for the year-ended December 31, 2019. This change was primarily driven by an increase in net loss of \$103.1 million in our discontinued operations, partially offset by \$15.8 million of lower negative effects of foreign currency translation, and reduced losses in our continuing operations of \$8.6 million, as compared to the prior year.

(Benefit from) Provision for Income Taxes

The table below outlines the change in effective tax rate for 2019 and 2018 (in thousands, except percentages).

	2019	2018	Change
Income (Loss) Before Tax	\$(10,092)	\$(23,896)	\$13,804
Expected federal income tax rate	21.0%	21.0%	—%
State income taxes, net of federal tax benefit	15.5	3.8	11.7
Impairment	—	—	—
US permanent differences	(1.6)	(1.0)	(0.6)
Foreign tax rate differential	4.5	5.1	(0.6)
Tax reserve	(0.3)	1.3	(1.6)
Rate Change	5.9	—	5.9
GILTI	(3.9)	(20.7)	16.8
Foreign tax credit writeoff	—	(45.6)	45.6
Foreign-derived intangible income ("FDII")	10.7	0.1	10.6
Prior period adjustment	44.1	4.3	39.8
Dispositions	(227.0)	—	(227.0)
Valuation Allowance	(0.5)	(5.5)	5.0
Other, net	(16.1)	(0.8)	(15.3)
Equity compensation	(10.8)	(4.2)	(6.6)
Research and development	13.1	2.7	10.4
Effective tax rate	(145.4)%	(39.5)%	(105.9)%

Liquidity and Capital Resources

Our liquidity needs arise primarily from capital investment in machinery, equipment and the improvement of facilities, funding working capital requirements to support business growth initiatives, acquisitions, and debt service costs. We have historically generated cash from operations and remain in a strong financial position, with resources available for reinvestment in existing businesses, strategic acquisitions and managing our capital structure on a short and long-term basis.

The following table summarizes our cash flow activities for the year-ended indicated (in thousands):

	2020	2019	2018
Cash flow provided by (used in):			
Operating activities	\$ (22,723)	\$ 15,913	\$ 53,994
Investing activities	144,295	153,036	(16,877)
Financing activities	(133,798)	(152,944)	(74,073)
Effect of exchange rate changes on cash and cash equivalents	4,195	197	(5,812)
Increase (decrease) in cash and cash equivalents	<u>\$ (8,031)</u>	<u>\$ 16,202</u>	<u>\$ (42,768)</u>

Cash Flow Activities for the Year Ended December 31, 2020 Compared to the Year Ended December 31, 2019

During the year ended December 31, 2020, we used \$22.7 million in cash flow from operating activities compared to generating \$15.9 million during the year ended December 31, 2019. The \$38.6 million decrease in operating cash was primarily driven by lower income from continuing operations, payment of one-time professional fees, and transition costs related to exiting the upstream oil & gas business, partially offset by higher cash flows from inventory and accounts payable.

During the year ended December 31, 2020, we generated \$144.3 million from investing activities compared to generating \$153.0 million during the year ended December 31, 2019. The \$8.7 million year over year decrease in cash provided was primarily driven by cash used in discontinued investing activities.

During the year ended December 31, 2020, we used \$133.8 million in cash from financing activities compared to cash used of \$152.9 million during the year ended December 31, 2019. The \$19.1 million year over year decrease in cash used by financing activities resulted from lower repayment of long term debt.

As of December 31, 2020, total debt (including current portion) was \$507.9 million compared to \$636.3 million at December 31, 2019. Total debt is net of unamortized term loan debt issuance costs of \$12.0 million and \$17.6 million at December 31, 2020 and 2019, respectively. Total debt as a percentage of total shareholders' equity was 246% as of December 31, 2020 compared to 163% as of December 31, 2019. As of December 31, 2020, we had available capacity to borrow an additional \$91.7 million under our revolving credit facility.

As of December 31, 2020, we had borrowings of \$507.9 million outstanding under our credit facility and \$39.3 million outstanding under letters of credit.

We were in compliance with all financial covenants related to our existing debt obligations at December 31, 2020 and we believe it is likely that we will continue to meet such covenants for at least the next twelve months from date of issuance of the financial statements.

The ratio of current assets to current liabilities was 2.4:1 at December 31, 2020 compared to 2.4:1 at December 31, 2019. As of December 31, 2020, cash and cash equivalents totaled \$76.5 million and was substantially all held in foreign bank accounts. This compares to \$84.5 million of cash and cash equivalents as of December 31, 2019, with balances all substantially held in foreign bank accounts. These funds are considered indefinitely reinvested to be used to expand operations either organically or through acquisitions outside of the United States.

In 2021, we expect to generate positive cash flow from operating activities sufficient to support our capital expenditures and service our debt. Based on our expected cash flows from operations and contractually available borrowings under our credit facility, we expect to have sufficient liquidity to fund working capital needs and future growth over at least the next twelve months from date of filing the 2020 financial statements.

On February 26, 2020, the Company amended its term loan to lower the interest rate associated with the applicable margin calculation. The new terms lower the interest rate on the Company's term loan from LIBOR plus an applicable margin of 3.5% to LIBOR plus an applicable margin of 3.25%, based on its existing corporate family rating from Moody's. The applicable margin reduces to LIBOR plus an applicable margin of 3.00%, with a corporate family rating from Moody's of B1 or better.

During the fourth quarter of 2019, the Company entered into a definitive agreement to sell its non-core Instrumentation and Sampling ("I&S") business to Crane Co. for \$172 million, in cash, subject to working capital adjustments. The transaction

closed on January 31, 2020. The I&S business manufactures valves, fittings, regulators and sampling systems primarily serving energy end markets. The Company received net cash proceeds from sale of \$169.8 million and recognized a pre-tax gain on sale of \$54.6 million.

Cash Flow Activities for the Year Ended December 31, 2019 Compared to the Year Ended December 31, 2018

During the year ended December 31, 2019, we generated \$15.9 million in cash flow from operating activities compared to \$54.0 million during the year ended December 31, 2018. The \$38.1 million decrease in operating cash was primarily driven by higher cash taxes, higher working capital and cash used by discontinued operations.

During the year ended December 31, 2019, we generated \$153.0 million for investing activities compared to cash used of \$16.9 million during the year ended December 31, 2018. The \$169.9 million year over year increase in cash provided was primarily driven by cash proceeds from the sale of certain assets and liabilities related to Spence and Nicholson products lines for \$84.5 million and the sale of the Reliability Services business for approximately \$85 million.

During the year ended December 31, 2019, we used \$152.9 million in cash from financing activities as compared to cash used of \$74.1 million during the year ended December 31, 2018. The \$78.9 million year over year increase in cash used by financing activities resulted from payments to reduce long-term debt.

As of December 31, 2019, total debt (including current portion) was \$636.3 million compared to \$786.0 million at December 31, 2018. Total debt is net of unamortized term loan debt issuance costs of \$17.6 million and \$21.0 million at December 31, 2019 and 2018, respectively. Total debt as a percentage of total shareholders' equity was 163% as of December 31, 2019 compared to 149% as of December 31, 2018. As of December 31, 2019, we had available capacity to borrow an additional \$115.7 million under our revolving credit facility.

As of December 31, 2019, we had borrowings of \$636.3 million outstanding under our credit facility and \$42.0 million outstanding under letters of credit.

We were in compliance with all financial covenants related to our existing debt obligations at December 31, 2019 and we believe it is likely that we will continue to meet such covenants for at least the next twelve months from date of issuance of the financial statements.

Significant Contractual Obligations and Commercial Commitments

The following table summarizes our significant contractual obligations and commercial commitments at December 31, 2020 that affect our liquidity (in thousands):

	Payments due by Period				
	Total (1)	Less Than 1 Year	1 – 3 Years	3 – 5 Years	More than 5 years
Contractual Cash Obligations:					
Long-term debt, less current portion	\$ 519,938	\$ —	\$ 27,900	\$ 492,038	\$ —
Interest payments on debt	122,945	33,217	61,519	28,209	—
Operating leases	20,585	5,153	6,312	3,471	5,649
Total contractual cash obligations	<u>\$ 663,468</u>	<u>\$ 38,370</u>	<u>\$ 95,731</u>	<u>\$ 523,718</u>	<u>\$ 5,649</u>
Commercial Commitments:					
U.S. standby letters of credit	\$ 29,683	\$ 19,891	\$ 9,792	\$ —	\$ —
International standby letters of credit	9,619	6,164	2,137	614	704
Commercial contract commitments	100,965	83,686	12,168	5,083	28
Total commercial commitments	<u>\$ 140,267</u>	<u>\$ 109,741</u>	<u>\$ 24,097</u>	<u>\$ 5,697</u>	<u>\$ 732</u>

Our commercial contract commitments primarily relate to open purchase orders of \$94.0 million, \$11.7 million of which extend to 2022 and beyond.

In accordance with the authoritative guidance for accounting for uncertainty in income taxes, as of December 31, 2020, we had unrecognized tax benefits of \$1.1 million and \$0.1 million of accrued interest. The Company does not expect the unrecognized tax benefits to change over the next 12 months.

During the fiscal year ended December 31, 2020, we made cash contributions of approximately \$0.8 million to our U.S. plans and \$4.1 million to our foreign plans. During the fiscal year ended December 31, 2019, we made cash contributions of approximately \$0.8 million to our U.S. plans and \$4.3 million for our foreign plans. During the fiscal year ended December 31, 2018, we did not make any cash contributions to our defined benefit plan, but made \$0.4 million in payments for our non-qualified plans. In addition, we made \$0.5 million, \$3.4 million, \$1.8 million in payments to our 401(k) savings plan for 2020, 2019 and 2018, respectively.

In 2021, we expect to make defined benefit plan contributions based on the minimum required funding in accordance with statutory requirements (approximately \$1.1 million in the U.S. and approximately \$3.9 million for our foreign plans). The estimates for plan funding for future periods may change as a result of the uncertainties concerning the return on plan assets, the number of plan participants, and other changes in actuarial assumptions. We anticipate fulfilling these commitments through the generation of cash flow from operations.

Off-Balance Sheet Arrangements

Through December 31, 2020, we have not entered into any off-balance sheet arrangements or material transactions with unconsolidated entities or other persons that have, or are reasonably likely to have, a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures, or capital resources that is material to investors.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Market Risk

Business performance in the oil & gas refining sector is largely tied to refining margins, which are also driven by the market price of crude oil and gasoline demand. Seasonal factors such as hurricanes and peak gasoline demand in the summer months may also drive high crack spread margins. During periods when high crack spread margins exist, refineries prefer to operate continuously at full capacity. Refiners may decide to delay planned maintenance (commonly called “unit turnarounds”) during these periods to maximize their returns. Refining crack spread margins moderated in 2018, which resulted in unit turnarounds. As a result, the timing of major capital projects in our severe service refinery valves business were impacted. While planned maintenance and unit turnarounds are necessary for safe and efficient operation of the refineries, project timing driven by these factors may continue to create fluctuations in our performance.

Foreign Currency Exchange Risk

The Company is exposed to certain risks relating to its ongoing business operations including foreign currency exchange rate risk and interest rate risk. During 2019, the Company entered into a cross-currency swap (“cross-currency swap”) agreement to hedge against future volatility in exchange rates between the U.S. dollar and the Euro. We believe our exposure to changes in foreign currency is not material given our hedging policy. For additional information regarding our foreign currency exchange risk refer to Note 12, Financing Arrangements, of the consolidated financial statements included in this Annual Report.

Interest Rate Risk

Loans under our credit facility bear interest at variable rates which reset every 30 to 180 days depending on the rate and period selected by the Company. These loans are subject to interest rate risk as interest rates will be adjusted at each rollover date to the extent such amounts are not repaid. As of December 31, 2020, the annual rates on the revolving loans were 5.8975%. The Company entered into a hedging agreement to mitigate the inherent rate risk associated with our outstanding variable rate debt. We believe our exposure to changes in interest rates is not material given our hedging policy. Refer to Note 12, Financing Arrangements, of the consolidated financial statements included in this Annual Report.

Item 8. Financial Statements and Supplementary Data

Our consolidated financial statements and the related notes thereto are listed in Item 15(a)(1) on the Index to Consolidated Financial Statements.

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

Our management, with the participation of our Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO") (our principal executive officer and principal financial officer, respectively), has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934) as of the end of the period covered by this Annual Report on Form 10-K. The Company's disclosure controls and procedures are designed to provide reasonable assurance that information we disclose in reports that we file or submit under the Securities Exchange Act of 1934 is accumulated and communicated to management, including our principal executive and financial officers, to allow timely decisions regarding disclosure and that such information is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on that evaluation, our CEO and CFO concluded that, as of December 31, 2020, the Company's disclosure controls and procedures were effective at the reasonable assurance level.

Management's Report on Internal Control over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined by Rules 13a-15(f) and 15d-15(f) under the Exchange Act). The 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.

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of internal control over financial reporting as of December 31, 2020, based upon the framework presented in "Internal Control-Integrated Framework" (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on this evaluation, management concluded that the Company's internal control over financial reporting was effective as of December 31, 2020.

The effectiveness of our internal control over financial reporting as of December 31, 2020 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report, which is included herein.

Remediation of Previously Reported Material Weaknesses in Internal Control over Financial Reporting

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely manner.

As previously reported in our Annual Report on Form 10-K for the year ended December 31, 2019, we did not maintain a sufficient complement of corporate personnel with appropriate levels of accounting and controls knowledge and experience commensurate with our financial reporting requirements to appropriately analyze, record and disclose accounting matters completely and accurately. This material weakness contributed to the following additional material weaknesses detailed below.

- We did not design and maintain effective controls to analyze, account for and review non-routine transactions at the corporate level, including accounting for the financial statement effects of business dispositions, adverse purchase commitment liabilities, restricted cash balance sheet classification and other non-recurring transactions.
- We did not design and maintain effective controls over the preparation, review and approval of certain account reconciliations. Specifically, we did not maintain effective controls over the completeness and review of supporting schedules and accuracy of underlying data supporting account reconciliations prepared at the corporate level and certain of our shared service locations.

These material weaknesses had resulted in audit adjustments to the Company's consolidated financial statements in the areas of income taxes, cash and cash equivalents (including restricted cash), adverse purchase commitment liabilities and other liabilities, and special charges related to non-recurring transactions as of and for the year ended December 31, 2019.

During the year ended December 31, 2020, we implemented remedial actions to implement new controls, enhance existing controls and change processes. The remedial actions included the following:

- Hired additional full-time corporate accounting resources with appropriate levels of experience
- Allocated additional resources to the Corporate accounting function, including the use of independent consultants with sufficient expertise to assist in the preparation and review of certain non-recurring transactions and timely review of the account reconciliations
- Enhanced training on a regular basis related to internal control over financial reporting for our finance and accounting personnel
- Added additional controls for review of transactions with higher level of subjectivity and non-routine transactions
- Improved processes and enhanced controls over the preparation and review of account reconciliations including specific controls on completeness and accuracy of underlying data.

During the quarter ended December 31, 2020, we completed the implementation and testing of the operating effectiveness of the remediated controls and concluded that the previously identified material weaknesses have been remediated as of December 31, 2020.

Changes in Internal Control over Financial Reporting

Except for the remediation of the 2019 material weaknesses described above there were no changes in our internal control over financial reporting that occurred during the quarter ended December 31, 2020, that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

Part III

Item 10. Directors, Executive Officers and Corporate Governance

The information required under this item is incorporated by reference to the Company's definitive proxy statement pursuant to Regulation 14A, which proxy statement will be filed with the Securities and Exchange Commission no later than 120 days after the close of the Company's fiscal year ended December 31, 2020.

Code of Ethics

The Company has implemented and regularly monitors compliance with a comprehensive Code of Conduct & Business Ethics (the "Code of Conduct"), which applies uniformly to all directors, executive officers, and employees. Among other things, the Code of Conduct addresses conflicts of interest, confidentiality, fair dealing, protection and proper use of Company assets, compliance with applicable law (including insider trading and anti-bribery laws), and reporting of illegal or unethical behavior. The Code of Conduct is available on the Company's website at www.CIRCOR.com under the "Investors" tab and a hard copy will be provided by the Company to any stockholder who requests it by writing to the Company's Secretary at the Company's executive offices. In addition, we will post on our website all disclosures that are required by SEC regulations or NYSE listing standards with respect to amendments to, or waivers from, any provision of the Code of Conduct.

Item 11. Executive Compensation

The information required under this item is incorporated by reference to the Company's definitive proxy statement pursuant to Regulation 14A, which proxy statement will be filed with the Securities and Exchange Commission no later than 120 days after the close of the Company's fiscal year ended December 31, 2020.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Except for the information required by Section 201(d) of Regulation S-K which is set forth below, the information required under this item is incorporated by reference to the Company's definitive proxy statement pursuant to Regulation 14A, which proxy statement will be filed with the Securities and Exchange Commission no later than 120 days after the close of the Company's fiscal year ended December 31, 2020.

EQUITY COMPENSATION PLAN INFORMATION

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights		Weighted-average exercise price of outstanding options, warrants and rights		Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(a)		(b)		(c)
Equity compensation plans approved by security holders	1,217,199	(1)	\$31.92	(3)	457,953
Equity compensation plans not approved by security holders	194,511	(2)	\$10.89	(3)	N/A
Total	1,411,710		\$23.61		457,953

(1) Reflects 15,460 stock options granted under the Company's Amended and Restated 1999 Stock Option and Incentive Plan, 501,325 stock options and 167,047 restricted stock units granted under the Company's 2014 Stock Option and Incentive Plan, and 533,367 restricted stock units granted under the Company's 2019 Stock Option and Incentive Plan.

(2) Reflects 150,000 stock options issued as an inducement equity award to our President and CEO on April 9, 2013 as well as 44,511 restricted stock units issued as an inducement equity award to our SVP and CFO on April 2, 2020. These awards were granted pursuant to the inducement award exemption under Section 303A.08 of the NYSE Listed Company Manual. Details of this grant, including vesting terms, are set forth in Note 13, Share-Based Compensation, of the consolidated financial statements included in this Annual Report.

(3) The weighted-average exercise price does not take into account the shares issuable upon vesting of outstanding restricted stock units, which have no exercise price.

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

The information required under this item is incorporated by reference to the Company's definitive proxy statement pursuant to Regulation 14A, which proxy statement will be filed with the Securities and Exchange Commission no later than 120 days after the close of the Company's fiscal year ended December 31, 2020.

Item 14. Principal Accounting Fees and Services

The information required under this item is incorporated by reference to the Company's definitive proxy statement pursuant to Regulation 14A, which proxy statement will be filed with the Securities and Exchange Commission no later than 120 days after the close of the Company's fiscal year ended December 31, 2020.

Part IV

Item 15. Exhibits, Financial Statement Schedules

(a)(1) Financial Statements

Topic	Page Number
Report of Independent Registered Public Accounting Firm	44
Consolidated Balance Sheets	49
Consolidated Statements of (Loss) Income	50
Consolidated Statements of Comprehensive (Loss) Income	51
Consolidated Statements of Cash Flows	52
Consolidated Statements of Shareholders' Equity	53
Notes to Consolidated Financial Statements	54

Report of Ernst & Young LLP dated March 15, 2021 on the Company's financial statements filed as a part hereof for the fiscal year ended December 31, 2020 and on the Company's internal control over financial reporting as of December 31, 2020 is included in this Annual Report on Form 10-K. The independent registered public accounting firm's consent with respect to this report appears in Exhibit 23.1 of this Annual Report on Form 10-K. Report of PricewaterhouseCoopers LLP dated March 30, 2020, except for the change in reportable segments discussed in Note 18 to the consolidated financial statements, as to which the date is March 15, 2021 on the Company's financial statements filed as a part hereof as of December 31, 2019 and for the fiscal years ended December 31, 2019 and 2018 is included in this Annual Report on Form 10-K. The independent registered public accounting firm's consent with respect to this report appears in Exhibit 23.2 of this Annual Report on Form 10-K.

(a)(2) Financial Statement Schedules

	Page
Schedule II - Valuation and Qualifying Accounts for the years ended December 31, 2020, 2019 and 2018	96

Other than our Allowance for Doubtful Accounts Rollforward included in Schedule II Valuation and Qualifying Accounts, all other schedules are omitted because they are not applicable or not required, or because the required information is included either in the consolidated financial statements or in the notes thereto.

(a)(3) Exhibits

Unless otherwise indicated, references to exhibits in the table below being incorporated by reference are made in each case with respect to filings of the Company, SEC File No. 001-14962.

Exhibit No.	Description and Location
2.1	Share Purchase Agreement, dated April 15, 2015, between the Company and affiliates and Schroedahl-ARAPP Spezialarmaturen GmbH & Co. KG and affiliates, incorporated herein by reference to Exhibit 2.1 to the Company's Form 8-K filed with the SEC on April 15, 2015
2.2	Agreement and Plan of Merger dated October 12, 2016 by and among the Company, Downstream Holding, LLC, Downstream Acquisition LLC, and Sun Downstream, LP., incorporated herein by reference to Exhibit 2.1 to the Company's Form 8-K filed with the SEC on October 14, 2016
2.3	Purchase Agreement, dated as of September 24, 2017, by and between Colfax Corporation and the Company, incorporated herein by reference to Exhibit 2.1 to the Company's Form 8-K filed with the SEC on September 25, 2017
2.4	Quota Purchase Agreement, dated as of July 13, 2019, as amended by Amendment No. 1 to the Quota Purchase Agreement, dated as of July 26, 2019, between CEP Holdings Sarl and P&P Flow Control AG, incorporated herein by reference to Exhibit 2.1 of the Company's Form 8-K, filed with the SEC on August 1, 2019

- [2.5](#) Asset Purchase Agreement, dated as of August 30, 2019, by and among Spence Engineering Company, Inc., Leslie Controls, Inc., Emerson Process Management Regulator Technologies, Inc. and the Company (for certain enumerated provisions), incorporated herein by reference to Exhibit 2.1 of the Company's Form 8-K, filed with the SEC on September 6, 2019
- [2.6](#) Amended and Restated Securities Purchase Agreement, dated as of January 31, 2020, by and among CIRCOR Dovianus Holdings B.V., CIRCOR Aerospace, Inc., the Company and Crane Co., incorporated herein by reference to Exhibit 2.1 of the Company's Form 8-K, filed with the SEC on February 5, 2020
- [2.7](#) Securities Purchase Agreement, dated as of June 5, 2020, by and between CIRCOR Energy Products, LLC and Rheinsee 765. V V GmbH (Renamed into "MS Valves GmbH"), incorporated herein by reference to Exhibit 2.1 to the Company's Form 8-K, filed with the SEC on June 23, 2020
- [3.1](#) Amended and Restated Certificate of Incorporation of the Company, incorporated herein by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q filed with the SEC on August 7, 2020
- [3.2](#) Second Amended and Restated By-Laws of the Company, incorporated herein by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K, filed with the SEC on June 17, 2020
- [4.1**](#) Description of Securities Registered under Section 12 of the Exchange Act
- [10.1](#) Credit Agreement, dated as of December 11, 2017, by and among the Company, as borrower, certain subsidiaries of the Company, as guarantors, the lenders from time to time party thereto, Deutsche Bank AG New York Branch, as term loan administrative agent and collateral agent, SunTrust Bank, as revolver administrative agent, swing line lender and a letter of credit issuer, Deutsche Bank Securities Inc. and SunTrust Robinson Humphrey, Inc., as joint-lead arrangers and joint-bookrunners, and Citizens Bank, N.A. and HSBC Securities (USA) Inc. as co-managers incorporated herein by reference to Exhibit 10.2 to the Company's Form 8-K, filed with the SEC on December 12, 2017
- [10.2](#) Amendment No. 2. to the Credit Agreement, dated as of February 19, 2020, by and among the Company, certain domestic subsidiaries of the Company, as guarantors, the lenders party thereto, Deutsche Bank AG New York Branch, as term loan administrative agent and as collateral agent and Trust Bank (formerly known as SunTrust Bank), as revolver administrative agent, incorporated herein by reference to Exhibit 10.56 to the Company's Form 10-K, filed with the SEC on March 31, 2020
- [10.33](#) Amendment No. 3 to the Credit Agreement, dated as of February 26, 2020, by and among the Company, certain domestic subsidiaries of the Company, as guarantors, the lenders party thereto, Deutsche Bank AG New York Branch, as term loan administrative agent and as collateral agent and Trust Bank (formerly known as SunTrust Bank), as revolver administrative agent, incorporated herein by reference to Exhibit 10.1 to the Company's Form 8-K, filed with the SEC on February 28, 2020
- [10.4](#) Amendment No. 4 to the Credit Agreement, dated as of May 18, 2020, by and among the Company, Inc., certain domestic subsidiaries of the Company, as guarantors, the lenders party thereto, Deutsche Bank AG New York Branch, as term loan administrative agent and as collateral agent and Truist Bank (formerly known as SunTrust Bank), as revolver administrative agent, incorporated herein by reference to Exhibit 10.1 to the Company's Form 8-K, filed with the SEC on May 22, 2020
- [10.5§](#) CIRCOR International, Inc. Amended and Restated 1999 Stock Option and Incentive Plan (as amended, the "1999 Stock Option and Incentive Plan"), incorporated herein by reference to Exhibit 4.4 to the Company's Registration Statement on Form S-8, File No. 333-125237, filed with the SEC on May 25, 2005
- [10.6§](#) First Amendment to the 1999 Stock Option and Incentive Plan, dated as of December 1, 2005, incorporated herein by reference to Exhibit 10.1 to the Company's Form 8-K, filed with the SEC on December 7, 2005
- [10.7§](#) Second Amendment to the 1999 Stock Option and Incentive Plan, dated as of February 12, 2014, incorporated herein by reference to Exhibit 10.6 to the Company's Form 10-K, filed with the SEC on March, 1 2018
- [10.8§](#) Form of Non-Qualified Stock Option Agreement for Employees (Three Year Cliff Vesting) under the 1999 Stock Option and Incentive Plan , incorporated herein by reference to Exhibit 10.1 to the Company's Form 10-Q, filed with the SEC on May 10, 2010
- [10.9§](#) CIRCOR International, Inc. Amended and Restated Management Stock Purchase Plan dated as of January 1, 2017, incorporated herein by reference to Exhibit 10.8 to the Company's Form 10-K, filed with the SEC on March1, 2018
- [10.10§](#) Form of Indemnification Agreement entered into by the Company and its directors and certain of its officers incorporated herein by reference to Exhibit 10.12 to the Company's Form 10-K, filed with the SEC on March 12, 2003
- [10.11§](#) Stock Option Inducement Award Agreement, dated as of April 9, 2013, between the Company and Scott A Buckhout, incorporated herein by reference to Exhibit 10.3 to the Company's Form 8-K, filed with the SEC on April 15, 2013
- [10.12§](#) Severance Agreement, dated as of April 9, 2013, between the Company and Scott A Buckhout, incorporated herein by reference to Exhibit 10.4 to the Company's Form 8-K, filed with the SEC on April 15, 2013

- [10.13§](#) CIRCOR International, Inc. 2014 Stock Option and Incentive Plan (the "2014 Stock Option and Incentive Plan") incorporated herein by reference to Exhibit A to the Company's Definitive Proxy Statement, filed with the SEC on March 21, 2014
- [10.14§](#) First Amendment to 2014 Stock Option and Incentive Plan, dated February 12, 2014, incorporated herein by reference to Exhibit 10.36 to the Company's Form 10-K, filed with the SEC on February 18, 2015
- [10.15§](#) Form of Non-Qualified Stock Option Agreement for Employees under the 2014 Stock Option and Incentive Plan, incorporated herein by reference to Exhibit 10.34 of the Company's Form 10-K, filed with the SEC on February 21, 2017
- [10.16§](#) Form of Restricted Stock Unit Agreement for Employees under the 2014 Stock Option and Incentive Plan, incorporated herein by reference to Exhibit 10.35 of the Company's Form 10-K, filed with the SEC on February 21, 2017
- [10.17§](#) Form of Performance-Based Restricted Stock Unit Agreement for Employees under the 2014 Stock Option and Incentive Plan, incorporated herein by reference to Exhibit 10.1 of the Company's Form 10-Q, filed with the SEC on May 14, 2019
- [10.18§](#) Form of Management Stock Purchase Plan Restricted Stock Unit Agreement for Employees and Directors under the 2014 Stock Option and Incentive Plan, incorporated herein by reference to Exhibit 10.2 of the Company's Form 10-Q, filed with the SEC on May 14, 2019
- [10.19§](#) Form of Non-Qualified Stock Option Agreement for Employees under the 2014 Stock Option and Incentive Plan, incorporated herein by reference to Exhibit 10.3 of the Company's Form 10-Q, filed with the SEC on May 14, 2019
- [10.20§](#) Form of Restricted Stock Unit Agreement for Employees under the 2014 Stock Option and Incentive Plan, incorporated herein by reference to Exhibit 10.4 of the Company's Form 10-Q, filed with the SEC on May 14, 2019
- [10.21§](#) Form of Restricted Stock Unit Agreement for Directors under the 2014 Stock Option and Incentive Plan, incorporated herein by reference to Exhibit 10.5 of the Company's Form 10-Q, filed with the SEC on May 14, 2019
- [10.22§](#) CIRCOR International, Inc. 2019 Stock Option and Incentive Plan (the "2019 Stock Option and Incentive Plan"), incorporated herein by reference to Exhibit 99.1 to the Company's Form 8-K, filed with the SEC on May 14, 2019
- [10.23§](#) Form of Performance-Based Restricted Stock Unit Agreement for Employees under the 2019 Stock Option and Incentive Plan, incorporated herein by reference to Exhibit 10.1 of the Company's Form 10-Q, filed with the SEC on August 1, 2019
- [10.24§](#) Form of Updated Performance-Based Restricted Stock Unit Agreement under the 2019 Stock Option and Incentive Plan, incorporated herein by reference to Exhibit 10.8 to the Company's Form 10-Q, filed with the SEC on June 1, 2020
- [10.25§](#) Form of 2020 Special One Year Restricted Stock Unit Agreement under the 2019 Stock Option and Incentive Plan, incorporated herein by reference to Exhibit 10.9 to the Company's Form 10-Q, filed with the SEC on June 1, 2020
- [10.26§](#) Form of Restricted Stock Unit Agreement for Employees under the 2019 Stock Option and Incentive Plan, incorporated herein by reference to Exhibit 10.10 to the Company's Form 10-Q, filed with the SEC on June 1, 2020
- [10.27§](#) Form of Restricted Stock Unit Agreement for Directors under the 2019 Stock Option and Incentive Plan, incorporated herein by reference to Exhibit 10.11 to the Company's Form 10-Q, filed with the SEC on June 1, 2020
- [10.28§](#) First Amendment to the Amended and Restated Management Stock Purchase Plan, incorporated herein by reference to Exhibit 10.2 of the Company's Form 10-Q, filed with the SEC on November 13, 2019
- [10.29§](#) Offer Letter, dated March 28, 2020, between the Company and Abhishek Khandelwal, incorporated herein by reference to Exhibit 10.4 to the Company's Form 10-Q, filed with the SEC on June 1, 2020
- [10.30§](#) Form of Inducement Restricted Stock Unit Agreement between the Company and Abhishek Khandelwal, incorporated herein by reference to Exhibit 99.1 to the Company's Registration Statement on Form S-8, File No. 333-237554, filed with the SEC on April 2, 2020
- [10.31§](#) Form of Amended and Restated Executive Change in Control Agreement, incorporated herein by reference to Exhibit 10.5 to the Company's Form 10-Q, filed with the SEC on August 7, 2020
- [10.32§**](#) Form of Severance Agreement between the Company and each of its executive officers other than Scott A. Buckhout
- [10.33§**](#) Form of Restrictive Covenants Agreement between the Company and each of its executive officers
- [10.34](#) Letter from PricewaterhouseCoopers LLP to the SEC, dated June 5, 2020, incorporated herein by reference to Exhibit 16.1 to the Company's Form 8-K, filed with the SEC on June 5, 2020

<u>21**</u>	Schedule of Subsidiaries of CIRCOR International, Inc.
<u>23.1**</u>	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm
<u>23.2**</u>	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm
<u>31.1**</u>	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
<u>31.2**</u>	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
<u>32.1**</u>	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101	The following financial statements from CIRCOR International, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2020, as filed with the SEC on March 15, 2020, formatted in XBRL (eXtensible Business Reporting Language), as follows:
(i)	Consolidated Balance Sheets as of December 31, 2020 and 2019
(ii)	Consolidated Statements of (Loss) Income for the years ended December 31, 2020, 2019 and 2018
(iii)	Consolidated Statements of Comprehensive (Loss) Income for the years ended December 31, 2020, 2019 and 2018
(iv)	Consolidated Statements of Cash Flows for the years ended December 31, 2020, 2019 and 2018
(v)	Consolidated Statements of Shareholders' Equity for the years ended December 31, 2020, 2019 and 2018
(vi)	Notes to the Consolidated Financial Statements

* The Company hereby agrees to provide the Commission, upon request, copies of any omitted exhibits or schedules to this exhibit required by Item 601(b)(2) of Regulation S-K.

** Filed with this report.

*** Furnished with this report.

§ Indicates management contract or compensatory plan or arrangement.

Item 16. Form 10-K Summary

Not applicable.

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.

CIRCOR INTERNATIONAL, INC.

By: /s/ Scott A. Buckhout
Scott A. Buckhout
President and Chief Executive Officer

Date: March 15, 2021

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.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ Scott A. Buckhout Scott A. Buckhout	President and Chief Executive Officer (Principal Executive Officer)	March 15, 2021
/s/ Abhi Khandelwal Abhi Khandelwal	Senior Vice President and Chief Financial Officer (Principal Financial Officer)	March 15, 2021
/s/ Amit Goel Amit Goel	Vice President and Chief Accounting Officer (Principal Accounting Officer)	March 15, 2021
/s/ Helmuth Ludwig Helmuth Ludwig	Chair of the Board of Directors	March 15, 2021
/s/ Samuel Chapin Samuel Chapin	Director	March 15, 2021
/s/ David F. Dietz David F. Dietz	Director	March 15, 2021
/s/ Tina M. Donikowski Tina M. Donikowski	Director	March 15, 2021
/s/ Bruce M. Lisman Bruce M. Lisman	Director	March 15, 2021
/s/ John A. O'Donnell John A. O'Donnell	Director	March 15, 2021
/s/ Jill D. Smith Jill D. Smith	Director	March 15, 2021
/s/ Peter M. Wilver Peter M. Wilver	Director	March 15, 2021

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of CIRCOR International, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheet of CIRCOR International, Inc. (the Company) as of December 31, 2020, the related consolidated statements of (loss) income, comprehensive (loss) income, shareholders' equity and cash flows for the year ended December 31, 2020, and the related notes and financial statement schedule listed in the Index at Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2020, and the results of its operations and its cash flows for the year ended December 31, 2020, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated March 15, 2021 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our 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 the financial statements are free of material misstatement, whether due to error or fraud. Our audit 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 audit 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 audit provides a reasonable basis for our opinion.

Critical Audit Matters

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

Income Taxes – Realizability of Deferred Tax Assets

Description of the Matter

As described in Note 10 to the consolidated financial statements, as of December 31, 2020, the Company had deferred tax assets before valuation allowance of \$166.8 million. As of December 31, 2020, the Company recorded a valuation allowance of \$125.3 million for its deferred tax assets. The Company records a valuation allowance based on management's assessment of the realizability of the Company's deferred tax assets. In assessing the ability to realize deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized, considering the available positive and negative evidence to estimate whether sufficient future taxable income will be generated to permit use of the existing deferred tax assets.

Auditing management's assessment of the realizability of deferred tax assets was complex and highly judgmental because of the subjectivity involved in projecting future taxable income and the complexities involved in considering relevant tax laws and regulations. In addition, the weighting of available positive and negative evidence relevant to the assessment involved significant judgment.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's process to assess the realizability of its deferred tax assets. Our procedures included testing management's controls over the consideration of various tax laws and regulations and the weighting of available positive and negative evidence.

Among other procedures performed, we tested the Company's projections of future taxable income supporting the realizability of deferred tax assets. We tested the Company's forecasts by comparing them to historical results and current industry, market and economic trends. We involved our tax professionals in evaluating relevant tax laws and regulations affecting the Company's assessment and testing the other sources of taxable income that were considered. We also assessed the weighting of available positive and negative evidence by management in evaluating whether it was more likely than not that some portion or all of the deferred tax assets will not be realized. In addition, we tested the completeness and accuracy of the underlying data that was used in the Company's assessment.

Goodwill Impairment Assessment for the Industrial Reporting Unit

Description of the Matter

As discussed in Note 9 to the consolidated financial statements, the Industrial reporting unit goodwill balance was \$101.4 million as of December 31, 2020. Management performs an impairment assessment at the reporting unit level on an annual basis as of the Company's October month end or more frequently if circumstances warrant. As a result of an interim impairment assessment in March 2020, the Company recorded a \$116.2 million goodwill impairment loss for the Industrial reporting unit. In its interim and annual goodwill impairment assessment, the Company measured the fair value of the Industrial reporting unit using an income approach based on the present value of future cash flows. The fair value was compared to the carrying value of the reporting unit as of the dates of each assessment.

Auditing management's goodwill impairment analyses for the Industrial reporting unit was complex and judgmental due to the significant estimation required in determining the fair value of the reporting unit. In particular, the fair value estimates were sensitive to significant assumptions such as revenue growth rates and discount rates, which are affected by expectations about business, market and overall economic conditions.

*How We Addressed
the Matter in Our
Audit*

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's process to complete its goodwill impairment assessment. Our procedures included testing management's controls over the review of each reporting unit's valuation model, including review of the significant assumptions discussed above.

To test the estimated fair value of the Company's Industrial reporting unit, with the support of our valuation specialists, we performed audit procedures that included, among others, assessing the valuation methodology used by the Company and testing the significant assumptions and the completeness and accuracy of underlying data used by management in its analyses. We compared the revenue growth rates to management's internal projections and historical results, current and forecasted industry and economic trends, analyst reports, and forecasted peer company information. We also evaluated the selection of the discount rates by developing a range of independent estimates and comparing those to the rates selected by management. In addition, we assessed the historical accuracy of management's estimates and performed sensitivity analyses over the significant assumptions to evaluate the changes in the fair value of the reporting unit that would result from changes in the assumptions.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2020.

Boston, Massachusetts
March 15, 2021

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of CIRCOR International, Inc.

Opinion on Internal Control Over Financial Reporting

We have audited CIRCOR International, Inc.'s internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, CIRCOR International, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheet of the Company as of December 31, 2020, the related consolidated statement of (loss) income, comprehensive (loss) income, shareholders' equity and cash flows for the year ended December 31, 2020, and the related notes and schedule listed in the Index at Item 15(a)(2) and our report dated March 15, 2021 expressed an unqualified opinion thereon.

Basis for Opinion

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

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

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

Definition and Limitations of Internal Control Over Financial Reporting

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

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

/s/ Ernst & Young LLP

Boston, Massachusetts
March 15, 2021

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of CIRCOR International, Inc.

Opinion on the Financial Statements

We have audited the consolidated balance sheet of CIRCOR International, Inc. and its subsidiaries (the “Company”) as of December 31, 2019, and the related consolidated statements of (loss) income, comprehensive (loss) income, shareholders’ equity and cash flows for each of the two years in the period ended December 31, 2019, including the related notes and financial statement schedule listed in the index appearing under Item 15(a)(2) for each of the two years in the period ended December 31, 2019 (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, 2019, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2019 in conformity with accounting principles generally accepted in the United States of America.

Changes in Accounting Principles

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2019 and the manner in which it accounts for revenue from contracts with customers in 2018.

Basis for Opinion

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

We conducted our audits of these consolidated financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/PricewaterhouseCoopers LLP
Boston, Massachusetts

March 30, 2020, except for the change in reportable segments discussed in Note 18 to the consolidated financial statements, as to which the date is March 15, 2021

We served as the Company's auditor from 2015 to 2020.

CIRCOR INTERNATIONAL, INC.
Consolidated Balance Sheets
(in thousands, except share and per share data)

	December 31,	
	2020	2019
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$ 76,452	\$ 84,531
Trade accounts receivable, less allowance for doubtful accounts of \$9,035 and \$3,086, respectively	102,730	125,422
Inventories	129,084	137,309
Prepaid expenses and other current assets	93,226	66,664
Assets held for sale	5,073	161,193
Total Current Assets	406,565	575,119
PROPERTY, PLANT AND EQUIPMENT, NET	168,763	172,179
OTHER ASSETS:		
Goodwill	158,944	271,893
Intangibles, net	353,595	385,542
Deferred income taxes	779	30,852
Other assets	41,882	35,360
TOTAL ASSETS	\$ 1,130,528	\$ 1,470,945
LIABILITIES AND SHAREHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	\$ 61,236	\$ 79,399
Accrued expenses and other current liabilities	75,624	94,169
Accrued compensation and benefits	28,332	19,518
Liabilities held for sale	—	43,289
Total Current Liabilities	165,192	236,375
LONG-TERM DEBT	507,888	636,297
DEFERRED INCOME TAXES	28,980	21,425
PENSION LIABILITY, NET	163,642	146,801
OTHER NON-CURRENT LIABILITIES	58,785	38,636
SHAREHOLDERS' EQUITY:		
Preferred stock, \$0.01 par value; 1,000,000 shares authorized; no shares issued and outstanding	—	—
Common stock, \$0.01 par value; 29,000,000 shares authorized; 21,373,813 and 21,284,850 shares issued at December 31, 2020 and 2019, respectively	214	213
Additional paid-in capital	452,728	446,657
(Accumulated deficit) retained earnings	(86,461)	99,280
Common treasury stock, at cost (1,372,488 shares at December 31, 2020 and 2019)	(74,472)	(74,472)
Accumulated other comprehensive loss	(85,968)	(80,267)
Total Shareholders' Equity	206,041	391,411
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$ 1,130,528	\$ 1,470,945

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

CIRCOR INTERNATIONAL, INC.
Consolidated Statements of (Loss) Income
(in thousands, except per share data)

	Year Ended December 31,		
	2020	2019	2018
Net revenues	\$ 773,271	\$ 964,313	\$ 1,013,470
Cost of revenues	530,844	655,504	688,267
Gross Profit	242,427	308,809	325,203
Selling, general and administrative expenses	220,994	248,256	284,641
Impairment charges	116,182	—	—
Special and restructuring (recoveries) charges, net	(34,303)	22,872	18,909
Operating (loss) income	(60,446)	37,681	21,653
Other expense (income):			
Interest expense, net	34,219	48,609	52,975
Other (income) expense, net	(529)	(836)	(7,426)
Total other expense, net	33,690	47,773	45,549
(Loss) income from continuing operations before income taxes	(94,136)	(10,092)	(23,896)
Provision for (Benefit from) income taxes	56,222	14,676	9,451
(Loss) Income from continuing operations, net of tax	(150,358)	(24,768)	(33,347)
(Loss) Income from discontinued operations, net of tax	(35,140)	(109,167)	(6,037)
Net (Loss) Income	<u>\$ (185,498)</u>	<u>\$ (133,935)</u>	<u>\$ (39,384)</u>
Basic (Loss) Income per common share:			
Basic from continuing operations	\$ (7.52)	\$ (1.24)	\$ (1.68)
Basic from discontinued operations	\$ (1.76)	\$ (5.48)	\$ (0.30)
Net (Loss) Income	\$ (9.28)	\$ (6.73)	\$ (1.99)
Diluted (Loss) Income per common share:			
Diluted from continuing operations	\$ (7.52)	\$ (1.24)	\$ (1.68)
Diluted from discontinued operations	\$ (1.76)	\$ (5.48)	\$ (0.30)
Net (Loss) Income	\$ (9.28)	\$ (6.73)	\$ (1.99)
Weighted average common shares outstanding:			
Basic	19,982	19,903	19,834
Diluted	19,982	19,903	19,834

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

CIRCOR INTERNATIONAL, INC.
Consolidated Statements of Comprehensive (Loss) Income
(in thousands)

	Year Ended December 31,		
	2020	2019	2018
Net (loss) income	\$ (185,498)	\$ (133,935)	\$ (39,384)
Other comprehensive (loss) income:			
Foreign currency translation adjustments	6,949	(4,740)	(20,523)
Interest rate swap adjustments (1)	1,196	(5,390)	(1,516)
Other net changes in post-retirement liabilities and assets - recognized actuarial (loss) gains (2)	(13,846)	(398)	(11,087)
Net periodic pension costs amortization	—	—	117
Other comprehensive (loss) income	(5,701)	(10,528)	(33,009)
COMPREHENSIVE (LOSS) INCOME	\$ (191,199)	\$ (144,463)	\$ (72,393)

(1) Net of an income tax effect of \$0.5 million, \$1.6 million and \$(0.5) million for the years ended December 31, 2020, 2019 and 2018, respectively.

(2) Net of an income tax effect of \$0.0 million, \$1.9 million, and \$3.3 million for the years ended December 31, 2020, 2019 and 2018, respectively.

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

CIRCOR INTERNATIONAL, INC.
Consolidated Statements of Cash Flows
(in thousands)

	Year Ended December 31,		
	2020	2019	2018
OPERATING ACTIVITIES			
Net (loss) income	\$ (185,498)	\$ (133,935)	\$ (39,384)
(Loss) from discontinued operations	(35,140)	(109,167)	(6,037)
(Loss) income from continuing operations	(150,358)	(24,768)	(33,347)
Adjustments to reconcile net (loss) income to net cash provided by (used in) operating activities:			
Depreciation	20,385	22,045	26,183
Amortization	43,662	47,591	49,129
Provision for bad debt expense	6,099	617	(261)
Write down of inventory	3,618	366	7,675
Compensation expense of share-based plans	5,488	5,418	4,965
Amortization of debt issuance costs	7,460	4,622	3,937
Deferred income tax expense (benefit)	48,770	(3,440)	(2,367)
(Gain) loss on disposal of property, plant and equipment	—	(1,793)	1,380
Goodwill Impairment	116,182	—	—
(Gain) Loss on sale of businesses	(54,429)	3,615	1,882
Changes in operating assets and liabilities, net of effects of acquisitions and divestitures:			
Trade accounts receivable	23,506	24,339	(12,229)
Inventories	5,780	(9,557)	6,620
Prepaid expenses and other assets	(34,824)	7,360	(26,770)
Accounts payable, accrued expenses and other liabilities	(49,501)	(34,168)	30,458
Net cash (used in) provided by continuing operations	(8,162)	42,247	57,255
Net cash (used in) provided by discontinued operations	(14,561)	(26,334)	(3,261)
Net cash (used in) provided by operating activities	(22,723)	15,913	53,994
INVESTING ACTIVITIES			
Additions of property, plant and equipment	(12,222)	(13,855)	(20,114)
Proceeds from the sale of property, plant and equipment	(322)	6,172	156
Proceeds from collection of beneficial interest of factored receivables	2,957	861	—
Proceeds from sale of business	165,540	162,591	2,753
Business acquisitions, net of cash acquired	—	—	3,727
Net cash provided by (used in) continuing investing activities	155,953	155,769	(13,478)
Net cash (used in) provided by discontinued investing activities	(11,658)	(2,733)	(3,399)
Net cash provided by (used in) investing activities	144,295	153,036	(16,877)
FINANCING ACTIVITIES			
Proceeds from long-term debt	219,000	281,600	248,300
Payments of long-term debt	(352,916)	(434,797)	(260,146)
Proceeds from the exercise of stock options	118	253	690
Return of cash to seller	—	—	(62,917)
Net cash used in continuing financing activities	(133,798)	(152,944)	(74,073)
Net cash (used in) provided by financing activities	(133,798)	(152,944)	(74,073)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	4,195	197	(5,812)
(DECREASE) INCREASE IN CASH, CASH EQUIVALENTS AND RESTRICTED CASH	(8,031)	16,202	(42,768)
Cash, cash equivalents and restricted cash at beginning of year	85,727	69,525	112,293
CASH, CASH EQUIVALENTS, AND RESTRICTED CASH AT END OF YEAR	\$ 77,696	\$ 85,727	\$ 69,525
Cash paid during the year for:			
Income taxes	\$ 13,074	\$ 16,711	\$ 633
Interest	\$ 33,993	\$ 47,544	\$ 50,326
Non-cash supplemental information:			
Change in fair value for shares issued in acquisition	\$ —	\$ —	\$ (3,783)
Accrued purchase price settled	\$ —	\$ —	\$ (2,299)

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

CIRCOR INTERNATIONAL, INC.
Consolidated Statements of Shareholders' Equity
(in thousands)

	Common Stock		Additional Paid-in Capital	Retained Earnings (Accumulated deficit)	Accumulated Other Comprehensive (Loss) Income	Treasury Stock	Total Shareholders' Equity
	Shares	Amount					
BALANCE AT DECEMBER 31, 2017	19,785	\$ 212	\$ 438,721	\$ 274,243	\$ (36,730)	\$ (74,472)	\$ 601,974
Net loss	—	—	—	(39,384)	—	—	(39,384)
Cumulative effect adjustment related to the adoption of revenue recognition standard (ASC 606)	—	—	—	(2,757)	—	—	(2,757)
Other comprehensive loss, net of tax	—	—	—	—	(33,009)	—	(33,009)
Stock options exercised	18	—	690	—	—	—	690
Conversion of restricted stock units	42	—	291	—	—	—	291
Share-based plan compensation	—	—	4,971	—	—	—	4,971
Measurement period change in fair value of common stock to acquire a business	—	—	(3,783)	—	—	—	(3,783)
BALANCE AT DECEMBER 31, 2018	19,845	\$ 212	\$ 440,890	\$ 232,102	\$ (69,739)	\$ (74,472)	\$ 528,993
Net loss	—	—	—	(133,935)	—	—	(133,935)
Cumulative effect adjustment related to adoption of ASC 842	—	—	—	1,113	—	—	1,113
Other comprehensive loss, net of tax	—	—	—	—	(10,528)	—	(10,528)
Stock options exercised	6	—	253	—	—	—	253
Conversion of restricted stock units	61	1	(65)	—	—	—	(64)
Share-based plan compensation	—	—	5,579	—	—	—	5,579
BALANCE AT DECEMBER 31, 2019	19,912	\$ 213	\$ 446,657	\$ 99,280	\$ (80,267)	\$ (74,472)	\$ 391,411
Net loss	—	—	—	(185,498)	—	—	(185,498)
Cumulative effect adjustment related to adoption of current expected credit loss standard (ASC 326)	—	—	—	(222)	—	—	(222)
Other comprehensive loss, net of tax	—	—	—	—	(5,701)	—	(5,701)
Other	—	—	—	(21)	—	—	(21)
Stock options exercised	3	—	118	—	—	—	118
Conversion of restricted stock units	86	1	239	—	—	—	240
Share-based plan compensation	—	—	5,714	—	—	—	5,714
BALANCE AT DECEMBER 31, 2020	20,001	\$ 214	\$ 452,728	\$ (86,461)	\$ (85,968)	\$ (74,472)	\$ 206,041

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

CIRCOR INTERNATIONAL, INC.
Notes to Consolidated Financial Statements

(1) Description of Business

CIRCOR International, Inc. ("CIRCOR" or the "Company" or "we") designs, manufactures and distributes a broad array of flow and motion control products and certain services to a variety of end-markets for use in a wide range of applications to optimize the efficiency and/or ensure the safety of flow control systems. CIRCOR has a global presence and operates major manufacturing facilities in North America, Western Europe, Morocco, India and China.

As of December 31, 2020, the Company organized its business segment reporting structure into two segments: CIRCOR Aerospace & Defense ("Aerospace & Defense") and CIRCOR Industrial ("Industrial"). Refer to Note 18, Business Segment and Geographical Information, for further information about the segments.

During 2019 and 2020, the Company entered into several significant transactions as described below.

In January 2019, the Company sold its Reliability Services ("RS") business for approximately \$85 million in cash, on a cash-free, debt-free basis, subject to working capital and other adjustments of approximately \$(5) million. The RS business provided lubrication management, chemical flushing services, and oil misting equipment to the oil and gas industry. The RS business was acquired as part of the acquisition of the Colfax Fluid Handling ("FH") business. The disposal group did not meet the criteria to be classified as discontinued operations. However, it did meet the criteria for presentation as held for sale. Accordingly, the RS assets and liabilities were collapsed as held for sale within the consolidated balance sheet at December 31, 2018.

In July 2019, the Company sold its Engineered Valves ("EV") business for a nominal amount, with an earnout of 50% of net income over seven years up to a maximum of \$21.8 million (€18 million). The EV business is a long-cycle upstream oil and gas engineered value business. The disposal group met the criteria to be classified as discontinued operations, and is recorded as such within the consolidated financial statements. All prior period comparative financial information has been reclassified to conform with this presentation.

In August 2019, the Company sold certain assets and liabilities related to its Spence and Nicholson product lines for \$84.5 million, subject to adjustment for working capital and other specified items of approximately \$(0.5) million. The Spence and Nicholson product lines include steam regulators, control valves, safety relief valves, temperature regulators, steam traps and other steam accessories and solutions. The disposal group did not meet the criteria to be classified as discontinued operations.

In January 2020, the Company completed the sale of the non-core Instrumentation and Sampling ("I&S") business to Crane Co. for \$169.1 million in cash, net of working capital adjustments. The I&S business manufactured fittings, regulators, sampling systems and valves. The disposal group did not meet the criteria to be classified as a discontinued operation. However, it did meet the criteria for presentation as held for sale as of the end of 2019. Accordingly, the I&S assets and liabilities were collapsed as held for sale within the consolidated balance sheet at December 31, 2019.

In June 2020, the Company completed the disposition of its Distributed Valves ("DV") business at a cost of \$10.8 million inclusive of working capital adjustments, while also retaining certain liabilities related to the business. The DV business was a long-cycle upstream oil and gas engineered valve business. This disposal group met the criteria to be classified as held for sale and a discontinued operation, and was recorded as such within the consolidated financial statements as of December 31, 2019. All prior period comparative financial information has been reclassified to conform with this presentation.

For more information on the discontinued operations and held for sale transactions, see Note 3, Discontinued Operations and Assets Held for Sale.

Throughout this Annual Report on Form 10-K, unless otherwise indicated, amounts and activity are presented on a continuing operations basis.

COVID-19

In March 2020, the World Health Organization declared the outbreak of COVID-19, which continues to spread throughout the U.S. and the world, as a pandemic. The COVID-19 pandemic is continuing to impact on the global economy, resulting in rapidly changing market and economic conditions. As of March 29, 2020, the Company experienced a significant decline in its

market capitalization below its consolidated book value. As a result, management concluded that there was a goodwill and an indefinite-lived intangible asset impairment triggering event for the Company in the first quarter of 2020. Through its impairment analysis, the Company determined that goodwill in its Industrial segment was impaired and recognized a \$116.2 million impairment. See Note 9, Goodwill and Other Intangibles Assets, for additional information on the goodwill impairment. The Company expects the effects of the COVID-19 pandemic to continue to negatively impact its results of operations, cash flows and financial position. While the Company's consolidated financial statements presented herein reflect management's estimates and assumptions regarding the effects of the COVID-19 pandemic as of the date of the consolidated financial statements, the estimates and assumptions are subject to inherent uncertainties surrounding the severity and duration of COVID-19.

(2) Summary of Significant Accounting Policies

Principles of Consolidation and Basis of Presentation

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP"). The consolidated financial statements include the accounts of CIRCOR and its subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation. The results of companies acquired or divested are included in the consolidated financial statements from the date of acquisition or up to the date of disposal. Certain reclassifications have been made to prior period amounts to conform to the current period financial statement presentation, including the results of discontinued operations and reportable segment information. These reclassifications have no effect on the previously reported net (loss) income.

Use of Estimates

The preparation of these financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying disclosures. Some of the more significant estimates, some of which are impacted by management's estimates and assumptions regarding the effects of the COVID-19 pandemic, relate to recoverability of goodwill and indefinite-lived trade names, estimated total costs for ongoing long-term revenue contracts where transfer of control occurs over time, inventory valuation, share-based compensation, amortization and impairment of long-lived assets, income taxes (including valuation allowance), fair value of disposal group, pension benefits obligations, acquisition accounting, penalty accruals for late shipments, asset valuations, and product warranties. While management believes that the estimates and assumptions used in the preparation of the financial statements are appropriate, actual results could differ materially from those estimates considering the increased uncertainties surrounding the severity and duration of COVID-19.

Assets and Liabilities Held for Sale

The Company classifies assets and liabilities (disposal groups) to be sold as held for sale in the period in which all of the following criteria are met: management, having the authority to approve the action, commits to a plan to sell the disposal group; the disposal group is available for immediate sale in its present condition subject to terms customary for sales of such disposal groups; an active program to locate a buyer and other actions required to complete the plan to sell the disposal group have been initiated; the sale of the disposal group is probable, and transfer of the disposal group is expected to qualify for recognition as a completed sale within one year; the disposal group is being actively marketed for sale at a price that is reasonable in relation to its current fair value; and actions required to complete the plan indicate that it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn.

The Company initially measures a disposal group that is classified as held for sale at the lower of its carrying value or fair value less any costs to sell. Any loss resulting from this measurement is recognized in the period in which the held for sale criteria are met. Conversely, gains are not recognized on the sale of a disposal group until the date of sale. The Company assesses the fair value of a disposal group, less any costs to sell, each reporting period it remains classified as held for sale and reports any subsequent changes as an adjustment to the carrying value of the disposal group, as long as the new carrying value does not exceed the carrying value of the disposal group at the time it was initially classified as held for sale.

Upon determining that a disposal group meets the criteria to be classified as held for sale, the Company reports the assets and liabilities of the disposal group, if material, as separate line items on the consolidated statements of financial position. Refer to Note 3, Discontinued Operations and Assets Held for Sale, for further information.

Revenue Recognition

The Company recognizes revenue to depict the transfer of control to the Company's customers in an amount reflecting the consideration the Company expects to be entitled to in exchange for performance obligations. In order to apply this revenue recognition principle, the Company applies the following five step approach: (1) identify the contract with a customer, (2) identify the performance obligations in the contract, (3) determine the transaction price, (4) allocate the transaction price to the performance obligations in the contract, and (5) recognize revenue when, or as, a performance obligation is satisfied. See Note 4, Revenue Recognition for further information.

Revenues on point in time contracts are recognized when customer obtains control of the product, which is generally at the time of shipping. Revenues and costs on certain long-term contracts are recognized on the percentage-of-completion method measured on the basis of costs incurred to estimated total costs for each contract. This method is used because management considers it to be the best available measure of progress towards completion on these contracts. Revenues and costs on contracts are subject to changes in estimates throughout the duration of the contracts, and any required adjustments are made in the period in which a change in estimate becomes known. Unbilled receivables for net revenues recognized in excess of the amounts billed for active projects are recognized as contract assets on the balance sheet.

The Company provides for the estimated costs to fulfill customer warranty obligations upon the recognition of the related revenue. Shipping and handling costs invoiced to customers are recorded as components of revenues and the associated costs are recorded as cost of revenues. The Company recognizes revenue net of sales returns, rebates, penalties, and discounts. Accounts receivable allowances include sales returns and bad debt allowances. The Company monitors and tracks the amount of product returns and reduces revenue at the time of shipment for the estimated amount of such future returns, based on historical experience.

Allowance for Credit Losses

The Company continuously monitors collections and payments from its customers and maintains a provision for estimated credit losses or doubtful accounts based upon expected losses, its historical experience, expectation of changes in risk of loss and any specific customer collection issues that it has identified. Account balances are charged off against the allowance when the Company believes it is probable the receivable will not be recovered.

The following table presents changes in the allowance for doubtful accounts for the years ended December 31 (in thousands):

Description	Balance at Beginning of Period	Additions (Reductions)		Deductions (1)	Balance at End of Period
		Charged to Costs and Expenses	Charged to Other Accounts		
Year ended					
December 31, 2020					
Deducted from asset account:					
Allowance for doubtful accounts	\$ 3,086	\$ 6,099	\$ 929	\$ (1,079)	\$ 9,035
Year ended					
December 31, 2019					
Deducted from asset account:					
Allowance for doubtful accounts	\$ 2,270	\$ 1,777	\$ (198)	\$ (763)	\$ 3,086
Year ended					
December 31, 2018					
Deducted from asset account:					
Allowance for doubtful accounts	\$ 2,865	\$ (262)	\$ (95)	\$ (238)	\$ 2,270
(1) Uncollectible accounts written off, net of recoveries.					

Goodwill

Goodwill is measured as the excess of the cost of acquisition over the sum of the amounts assigned to identifiable tangible and intangible assets acquired less liabilities assumed. The Company performs an impairment assessment for goodwill at the reporting unit level on an annual basis as of the end of its October month end or more frequently if circumstances warrant. Its annual impairment assessment requires a comparison of the fair value of each of its reporting units to the respective carrying value. If the fair value of a reporting unit exceeds its carrying amount, goodwill of the reporting unit is considered not impaired. If the carrying value of a reporting unit is greater than its fair value, an impairment loss will be recognized in an amount equal to that excess, limited to the total amount of goodwill allocated to that reporting unit. Additionally, the Company will consider the income tax effect from any tax-deductible goodwill on the carrying amount of the reporting unit when measuring the goodwill impairment loss.

Determining the fair value of a reporting unit is subjective and requires the use of significant estimates and assumptions. With the assistance of an independent third-party appraisal firm, the Company estimates the fair value of its reporting units using an income approach based on the present value of future cash flows. It believes this approach yields the most appropriate evidence of fair value. The Company also utilizes the comparable company multiples method and market transaction fair value method to validate the fair value estimate using the income approach. The key assumptions utilized in its discounted cash flow model includes estimates of the rate of revenue growth and the discount rate based on a weighted average cost of capital. Any unfavorable material changes to these key assumptions could potentially impact its fair value determinations.

For additional information, see Note 9, Goodwill and Other Intangible Assets.

Cost of Revenues

Cost of revenues primarily reflects the costs of manufacturing and preparing products for sale and, to a much lesser extent, the costs of performing services. Cost of revenues is primarily comprised of the cost of materials, outside processing, inbound freight, production, direct labor and overhead including indirect labor, which are expenses that directly result from the level of production activity at a manufacturing site. Additional expenses that directly result from the level of production activity at a manufacturing site include purchasing and receiving costs, inspection costs, warehousing costs, internal transfer costs, utility expenses, property taxes, amortization of inventory step-up from revaluation at the date of acquisition, depreciation of production building and equipment assets, warranty costs, salaries and benefits paid to plant manufacturing management and maintenance supplies.

Inventories

Inventories are stated at the lower of cost or net realizable value. Where appropriate, standard cost systems are utilized for purposes of determining cost; the standards are adjusted as necessary to ensure they approximate actual cost. Cost is generally determined on the first-in, first-out ("FIFO") basis. The Company typically analyzes its inventory aging and projected future usage on a quarterly basis to assess the adequacy of its inventory valuation reserve, which primarily consists of obsolescence and net realizable value estimates. These estimates are measured either on an item-by-item basis or higher-level inventory grouping and determined based on the difference between the cost of the inventory and estimated net realizable value. The provision for inventory valuation reserves is a component of the Company's cost of revenues. Assumptions about future demand are among the primary factors utilized to estimate net realizable value. At the point of the loss recognition, a new, lower-cost basis for that inventory is established, and subsequent changes in facts and circumstances do not result in the restoration or increase in that newly established cost basis. Only subsequent inventory transactions via sale or disposal would then release the established inventory reserve.

If there were to be a sudden and significant decrease in demand for its products, significant price reductions, or a higher incidence of inventory obsolescence for any reason, including a change in technology or customer requirements, the Company could be required to increase its inventory valuation reserves, which could adversely affect its gross profits.

Legal Contingencies

The Company is currently involved in various legal claims and legal proceedings, some of which may involve substantial dollar amounts. Periodically, the Company reviews the status of each significant matter and assesses its potential financial exposure. If the potential loss from any claim or legal proceeding is considered probable and the amount can be estimated, it accrues a liability for the estimated loss. The determination of probability and the determination as to whether exposure can be reasonably estimated requires management estimates. Because of uncertainties related to these matters, accruals are based on the best information available at the time. As additional information becomes available, the Company reassesses the potential liability

related to its pending claims and litigation and may revise its estimates. Such revisions in the estimates of the potential liabilities could have a material adverse effect on its business, results of operations and financial position.

For more information see Note 16, Contingencies, Commitments and Guarantees.

Indefinite-Lived Intangible Assets

Indefinite-lived intangible assets, such as trade names, are generally recorded and valued in connection with a business acquisition. For these assets, the Company performs a qualitative assessment on an annual basis to determine if it is more likely than not the asset is impaired ("Step 0" test). These assets are reviewed at least annually for impairment as of the October month end, or more frequently if facts and circumstances warrant. For any that fail the Step 0 test, the Company performs an impairment assessment at the asset level utilizing a fair value calculation. The Company has the option to bypass the qualitative assessment for an indefinite lived intangible asset in any period and proceed directly to the quantitative impairment test. Determining the fair value is subjective and requires the use of significant estimates and assumptions. With the assistance of an independent third-party appraisal firm, the Company estimates the fair value using the relief from royalty method.

For more information see Note 9, Goodwill and Other Intangible Assets.

Other Long-Lived Assets

In accordance with ASC Topic 360, Plant, Property, and Equipment, the Company performs impairment analyses of long-lived asset groups whenever events and circumstances indicate impairment. If indicators are present, it performs a recoverability test by comparing the sum of the undiscounted future cash flows specific to the asset group to its carrying value. If the recoverability test fails (sum of undiscounted cash flows are less than the asset group's carrying value), it then determines the fair value of the asset group and recognizes an impairment loss if the carrying value exceeds the estimated fair value.

For more information, see Note 8, Property, Plant and Equipment.

Post-Retirement Benefits

Pensions and other post-retirement benefit obligations and net periodic benefit costs are actuarially determined and are affected by several assumptions including the discount rate, mortality, and the expected long-term return on plan assets. Changes in assumptions and differences from actual results will affect the amounts of net periodic benefit cost recognized in future periods. These assumptions may also effect the amount and timing of future cash contributions.

As required in the recognition and disclosure provisions of ASC Topic 715, Compensation - Retirement Benefits, the Company recognizes the over-funded or under-funded status of defined benefit post-retirement plans in its balance sheet, measured as the difference between the fair value of plan assets and the benefit obligations (the projected benefit obligation for pension plans and the accumulated post-retirement benefit obligation for other post-retirement plans). The change in the funded status is the net of the recognized net periodic benefit cost, cash contributions to the trust/benefits paid directly by the Company and recognized changes in other comprehensive income. Other comprehensive income changes are due to new actuarial gains and losses, new plan amendments and the amortizations of amounts in the net periodic benefit cost.

Unrecognized actuarial gains and losses in excess of the 10% corridor (defined as the threshold above which gains or losses need to be amortized) are being recognized for all plans over the weighted average expected remaining service period of the employee group unless substantially all participants are inactive in which case the average remaining lifetime of covered participants is used. Unrecognized actuarial gains and losses arise from several factors including changes in the benefit obligations from actuarial experience and assumption changes, as well as the difference between expected returns and actual returns on plan assets.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carry-forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is recognized if the Company anticipates that it is more likely than not that it may not realize some or all of a deferred tax asset.

In accordance with the provisions of ASC Topic 740, Income Taxes, the Company initially recognizes the financial statement effect of a tax position when, based solely on its technical merits, it is more likely than not (a likelihood of greater than fifty percent) that the position will be sustained upon examination by the relevant taxing authority. Those tax positions failing to qualify for initial recognition are recognized in the first interim period in which they meet the more likely than not standard, are resolved through negotiation or litigation with the taxing authority, or upon expiration of the statute of limitations. De-recognition of a tax position that was previously recognized occurs when an entity subsequently determines that a tax position no longer meets the more likely than not threshold of being sustained.

If future results of operations exceed the Company's current expectations, its existing tax valuation allowances may be adjusted, resulting in future tax benefits. Alternatively, if future results of operations are less than expected, future assessments may result in a determination that some or all of the deferred tax assets are not realizable. Consequently, the Company may need to establish additional tax valuation allowances for a portion or all of the gross deferred tax assets, which may have a material adverse effect on its results of operations.

Under ASC Topic 740, only the portion of the liability that is expected to be paid within one year is classified as a current liability. As a result, liabilities expected to be resolved without the payment of cash (e.g., due to the expiration of the statute of limitations) or are not expected to be paid within one year are classified as non-current. It is the Company's policy to record estimated interest and penalties as income tax expense, and tax credits as a reduction in income tax expense.

With respect to global intangible low-taxed income ("GILTI"), the Company has adopted a policy to account for this provision as a period cost. Also, the Company has adopted the impact of Financial Accounting Standards Board ("FASB") Accounting Standards Update ("ASU") 2018-05 in its financial statements.

For additional information, see Note 10, Income Taxes.

Share-Based Compensation

Share-based compensation costs are based on the grant date fair value estimated in accordance with the provisions of ASC Topic 718, Accounting for Share Based Payments, and these costs are recognized over the requisite vesting period. The Black-Scholes option pricing model is used to estimate the fair value of each stock option at the date of grant. Black-Scholes utilizes assumptions related to volatility, the risk-free interest rate, the dividend yield and employee exercise behavior. Expected volatilities utilized in the model are based on the historic volatility of the Company's stock price. The risk-free interest rate is derived from the U.S. Treasury Yield curve in effect at the time of the grant. The model incorporates exercise and post-vesting service termination assumptions based on an analysis of historical data.

For additional information, see Note 13, Share-Based Compensation.

Environmental Compliance and Remediation

Environmental expenditures that relate to current operations are expensed or capitalized as appropriate. Expenditures that relate to existing conditions caused by past operations, which do not contribute to current or future revenue generation, are expensed. Expenditures that meet the criteria of "Regulated Operations" are capitalized. Liabilities are recorded when environmental assessments and/or remedial efforts are probable and the costs can be reasonably estimated. In accordance with ASC Topic 450, Contingencies, estimated costs are based upon current laws and regulations, existing technology and the most probable method of remediation.

Foreign Currency and Foreign Currency Contracts

The Company's international subsidiaries operate and report their financial results using local functional currencies. Accordingly, all assets, liabilities, revenues, and costs of these subsidiaries are translated into United States ("U.S.") dollars using exchange rates in effect at the end of the relevant periods. The resulting translation adjustments are presented as a separate component of other comprehensive income. The Company does not provide for U.S. income taxes on foreign currency translation adjustments since it does not provide for such taxes on undistributed earnings of foreign subsidiaries.

The Company is exposed to certain risks relating to its ongoing business operations including foreign currency exchange rate risk and interest rate risk. The Company currently uses derivative instruments to manage foreign currency risk on certain

business transactions denominated in foreign currencies. To the extent the underlying transactions hedged are completed, these forward contracts do not subject us to significant risk from exchange rate movements because they offset gains and losses on the related foreign currency denominated transactions. These forward contracts do not qualify as hedging instruments and, therefore, do not qualify for fair value or cash flow hedge treatment. Any gains and losses on the Company's contracts are recognized as a component of other expense in its consolidated statements of (loss) income.

The Company is subject to exchange rate related gains or losses resulting from foreign currency denominated transactions. Its net foreign exchange losses / (gains) recorded for the years ended December 31, 2020, 2019 and 2018 were \$2.9 million, \$(0.4) million, and \$(1.7) million, respectively and are included in other (income) expense in the consolidated statements of (loss) income.

For additional information, see Note 12, Financing Arrangements.

Earnings Per Common Share

Basic earnings per common share is calculated by dividing net income by the number of weighted average common shares outstanding. Diluted earnings per common share is calculated by dividing net income by the weighted average common shares outstanding and assumes the conversion of all dilutive securities when the effects of such conversion would not be anti-dilutive.

Earnings per common share and the weighted average number of shares used to compute net earnings per common share, basic and assuming full dilution, are reconciled below (in thousands, except per share data):

	Year Ended December 31,								
	2020			2019			2018		
	Net (Loss)	Shares	Per Share Amount	Net (Loss)	Shares	Per Share Amount	Net (Loss)	Shares	Per Share Amount
Basic EPS	\$ (185,498)	19,982	\$ (9.28)	\$ (133,935)	19,903	\$ (6.73)	\$ (39,384)	19,834	\$ (1.99)
Dilutive securities, principally common stock awards	—	—	—	—	—	—	—	—	—
Diluted EPS	\$ (185,498)	19,982	\$ (9.28)	\$ (133,935)	19,903	\$ (6.73)	\$ (39,384)	19,834	\$ (1.99)

Certain stock options to purchase common shares and restricted stock units ("RSUs") were anti-dilutive. There were 663,986 anti-dilutive stock options, RSUs, and RSU MSPs for the year ended December 31, 2020 with exercise prices ranging from \$33.63 to \$71.56. There were 431,165 anti-dilutive stock options and RSUs for the year ended December 31, 2019 with exercise prices ranging from \$33.63 to \$71.56. There were 1,041,454 anti-dilutive stock options and RSUs for the year ended December 31, 2018 with exercise prices ranging from \$26.06 to \$71.56.

Cash and Cash Equivalents

The Company's cash equivalents are invested in time deposits of financial institutions, and it has established guidelines relative to credit ratings, diversification and maturities that are intended to maintain safety and liquidity. Cash equivalents include highly liquid investments with maturity periods of three months or less when purchased.

Restricted Cash

Restricted cash represents cash that is legally restricted as to withdrawal or usage and includes amounts required to be maintained in relation to employment laws in certain jurisdictions.

Other Assets

Other assets in the accompanying consolidated balance sheets include deferred debt issuance costs associated with the Company's revolving credit facility, tax receivable, non-current contract assets and other certain assets.

Fair Value

ASC Topic 820, Fair Value Measurement, defines fair value and includes a framework for measuring fair value and disclosing fair value measurements in financial statements. Fair value is a market-based measurement rather than an entity-specific measurement. The fair value hierarchy makes a distinction between assumptions developed based on market data obtained from independent sources (observable inputs) and the reporting entity's own assumptions (unobservable inputs). This hierarchy prioritizes the inputs into three broad levels as follows:

Level One: Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets.

Level Two: Inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets or liabilities in inactive markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.

Level Three: Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

Fair value information for those assets and liabilities, including their classification in the fair value hierarchy, is included in: Note 12, Financing Arrangements along with Derivative Financial Instruments, and Note 15, Retirement Plans (for assets held in trust).

Certain pension plan asset investments are measured at fair value using the net asset value per share (or its equivalent) practical expedient (the "NAV"). The carrying amounts of cash and cash equivalents, restricted cash, trade receivables and trade payables approximate fair value because of the short maturity of these financial instruments. Cash equivalents are carried at cost which approximates fair value at the balance sheet date and is a Level 1 financial instrument.

Property, Plant and Equipment

Property, plant and equipment are recorded at cost. Depreciation is generally provided on a straight-line basis over the estimated useful lives of the assets, which typically range from 3 to 40 years for buildings and improvements, 1 to 10 years for manufacturing machinery and equipment, and 3 to 7 years for computer equipment and software. Motor vehicles and furniture and fixtures are typically depreciated over 5 years. Leasehold improvements are amortized on a straight-line basis over the shorter of the lease term or estimated useful life of the asset. Repairs and maintenance costs are expensed as incurred.

The Company reports depreciation of property, plant and equipment in cost of revenue and selling, general and administrative expenses based on the nature of the underlying assets. Depreciation primarily related to equipment used in the production of inventory is recorded in cost of revenues. Depreciation related to selling and administrative functions is reported in selling, general and administrative expenses.

See Note 8, Property, Plant and Equipment for additional information.

Research and Development

Research and development expenditures, including certain engineering costs, are expensed when incurred and are included in selling, general and administrative expenses. Research and development expenditures for the years ended December 31, 2020, 2019 and 2018 were \$8.4 million, \$7.6 million and \$8.5 million, respectively.

Sale of Receivables

The Company has an active receivables purchasing agreement with a bank whereby the Company can sell selected account receivables and receive between 90% to 100% of the purchase price upfront, net of applicable discount fee, and the residual amount as the receivables are collected.

During 2020, the Company sold a total of \$58.9 million in receivables under the program, receiving \$58.0 million in cash. The outstanding purchase price component of \$0.8 million was recorded in prepaid expenses and other current assets on the consolidated balance sheet at December 31, 2020. During 2019, the Company sold a total of \$34.4 million in receivables under the program, receiving \$32.2 million in cash. The outstanding purchase price component of \$2.2 million was recorded in prepaid expenses and other current assets on the consolidated balance sheet at December 31, 2019.

New Accounting Standards

Adopted

On January 1, 2020, the Company adopted FASB ASU No. 2016-13, Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, which amends the impairment model by requiring entities to use a forward-looking approach based on expected losses rather than incurred losses to estimate credit losses on certain types of financial instruments, including trade receivables. The Company adopted the standard using a modified retrospective approach through a cumulative-effect adjustment to retained earnings. It recognized the cumulative effect of adopting the new credit loss standard as an adjustment to the opening balance of retained earnings as of January 1, 2020. The adoption of the standard did not have a material impact on the Company's consolidated financial statements.

In December 2019, the FASB issued Accounting Standards Update ("ASU") No. 2019-12, Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes, as part of its initiative to reduce complexity in the accounting standards. The amendments in ASU 2019-12 eliminate certain exceptions related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. ASU 2019-12 also clarifies and simplifies other aspects of the accounting for income taxes. The amendments in ASU 2019-12 are effective for fiscal years beginning after December 15, 2020. Early adoption is permitted, including adoption in any interim period. The Company early adopted this amendment as of June 28, 2020. The adoption of the standard did not have a material impact to the Company's condensed consolidated financial position and results of operations as well as related income tax disclosures.

On January 1, 2019, the Company adopted FASB ASU 2016-02, Leases, and all related amendments ("ASC Topic 842"), under the modified retrospective approach. Consequently, periods prior to January 1, 2019 are not restated for the adoption of ASC Topic 842. In addition, it elected the package of practical expedients permitted under the transition guidance within the new standard, which among other things, allowed us to carry forward the historical lease classification. Adoption of the new standard resulted in the recording of additional Right-of-Use ("ROU") assets and lease liabilities of \$10.7 million and \$10.9 million, respectively, as of January 1, 2019. ROU assets represent its right to use an underlying asset for the lease term, and the lease liabilities represent its obligation to make lease payments arising from the lease. The difference between the additional lease assets and lease liabilities was recorded as an adjustment to deferred rent and prepaid rent. The standard did not materially impact consolidated net earnings. See Note 6, Leases for further information.

On January 1, 2018, we adopted the FASB ASU 2014-09, Revenue from Contracts with Customers and all the related amendments ("ASC Topic 606" or the "new revenue standard") using the modified retrospective transition approach. We recognized the cumulative effect of adopting the new revenue standard as an adjustment to the opening balance of retained earnings as of January 1, 2018.

Not Yet Adopted

In March 2020, the FASB issued ASU 2020-04, Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting. This guidance contains optional expedients and exceptions for applying GAAP to contract modifications, hedging relationships, and other areas or transactions that are impacted by reference rate reform (i.e., by the transition of LIBOR and other interbank offered rates to alternative reference interest rates). The new standard was effective upon issuance and generally can be applied to applicable contract modifications through December 31, 2022. The Company is currently evaluating the impact of adopting this standard on its consolidated financial statements and related disclosures.

(3) Discontinued Operations and Assets Held for Sale

Discontinued Operations

During the third quarter of 2019, the Company instituted a strategic shift to exit the upstream oil and gas valves market to focus on more attractive end markets. In line with that shift, during the third quarter of 2019 the Company sold its EV business and classified its DV business as held for sale. These businesses were previously part of the Energy segment.

In accordance with ASC Topic 205-20, Presentation of Financial Statements - Discontinued Operations, the Company determined that the EV and DV businesses represented a strategic shift that has or will have a major effect on the Company's operations and financial results. As a result, these businesses met the conditions for discontinued operations and are recorded as such in the consolidated financial statements. Prior period comparative financial information has been reclassified to conform to

this presentation. The Company reports financial results for discontinued operations separately from continuing operations in order to distinguish the financial impact of the disposal transactions from ongoing operations.

Upon classifying the DV business as held for sale, the Company was required to measure the disposal group at the lower of its carrying value or fair value less expected costs to sell. The Company calculated fair value of the DV business using an income approach based on the present value of projected future cash flows. This approach incorporates several key assumptions which include the rate of revenue growth including the rate of growth used in the terminal year value, the projected operating margin, as well as the discount rate based on a weighted average cost of capital. Through this process, the Company determined that the carrying value exceeded fair value and recognized a goodwill impairment of \$6.9 million and an intangible asset impairment of \$1.0 million. At December 31, 2019, the Company recognized a valuation allowance of \$39.8 million, to adjust the carrying value of the disposal group to its fair value less expected costs to sell.

During the second quarter of 2020, the Company completed the sale of its DV business to MS Valves GmbH for negative \$8.25 million and a working capital adjustment of negative \$2 million at the time of closing. The transaction is subject to an earnout of 50% of net profit (only if positive) from closing through December 31, 2022. The Company has agreed to provide certain transition services for six to twelve months, depending on the nature of the services. As part of transaction the Company retained certain supplier and lease liabilities and responsibility for shutting down DV's Mexico manufacturing facility. The Company recognized a loss of \$21.6 million in 2020 from the sale of DV, including costs to sell and working capital adjustments.

The following table presents the summarized components of (loss) income from discontinued operations, for the EV and DV businesses for the years ended December 31, 2020, 2019 and 2018 (in thousands):

	Year Ended		
	December 31, 2020	December 31, 2019	December 31, 2018
Net revenues	\$ 10,055	\$ 79,848	\$ 162,355
Cost of revenues	26,399	105,132	145,908
Gross (loss) profit	(16,344)	(25,284)	16,447
Selling, general and administrative expenses	9,074	15,487	23,786
Special and restructuring charges, net (1)	17,831	85,603	4,930
Operating (loss) income	(43,249)	(126,374)	(12,269)
Other (income) expense:			
Interest (income), net	(14)	(8)	(62)
Other (income) expense, net	614	(378)	(9)
Total other (income) expense, net	600	(386)	(71)
(Loss) income from discontinued operations, pre tax	(43,849)	(125,988)	(12,198)
(Benefit from) provision for income taxes	(8,709)	(16,821)	(6,161)
(Loss) income from discontinued operations, net of tax	\$ (35,140)	\$ (109,167)	\$ (6,037)

(1) The year ended December 31, 2020 includes a loss on the sale of the DV business of \$21.6 million. The year ended December 31, 2019, includes a valuation allowance of \$39.8 million for the DV business, loss on sale of the EV business of \$37.9 million, and goodwill and intangible asset impairments related to the DV business of \$7.9 million.

Assets Held for Sale

In addition to its businesses classified as discontinued operations, the Company has other disposal groups that meet the requirements of ASC 360-10 to be classified as held for sale in its consolidated balance sheets. In December 2019, the Company entered into a definitive agreement to dispose of its I&S business which was part of the Energy segment. The disposal group met the requirements to be classified as held for sale in the Company's consolidated balance sheet as of December 31, 2019.

In December 2020, the Company determined that its Cryogenic Valves business ("Cryo") which is part of the Industrial segment constituted a disposal group that satisfied the held for sale classification criteria. In accordance with ASC 360-10, prior period results have not been restated to reflect the Cryo business as held for sale.

The following table presents the balance sheet information for assets and liabilities held for sale as of December 31, 2020 and December 31, 2019 (in thousands):

	December 31, 2020			December 31, 2019		
	Discontinued Operations	Other Held for Sale (1)	Total	Discontinued Operations (2)	Other Held for Sale (1)	Total
Trade accounts receivable, net	\$ —	\$ —	\$ —	\$ 467	\$ 9,935	\$ 10,402
Inventories	—	2,963	2,963	55,521	13,878	69,399
Prepaid expenses and other current assets	—	48	48	2,867	616	3,483
Property, plant, and equipment, net	—	162	162	6,742	6,409	13,151
Goodwill	—	1,900	1,900	—	91,492	91,492
Deferred tax asset	—	—	—	778	1,089	1,867
Other assets	—	—	—	4,793	6,363	11,156
Valuation adjustment on classification to assets held for sale	—	—	—	(39,757)	—	(39,757)
Classified as current (3)	—	5,073	5,073	31,411	129,782	161,193
Classified as noncurrent	—	—	—	—	—	—
Total assets held for sale	\$ —	\$ 5,073	\$ 5,073	\$ 31,411	\$ 129,782	\$ 161,193
Accounts payable	\$ —	\$ —	\$ —	\$ 8,708	\$ 5,997	\$ 14,705
Accrued and other current liabilities	—	—	—	5,834	2,192	8,026
Deferred income taxes	—	—	—	638	151	789
Other noncurrent liabilities	—	—	—	13,931	5,838	19,769
Classified as current (3)	—	—	—	29,111	14,178	43,289
Classified as noncurrent	—	—	—	—	—	—
Total liabilities held for sale	\$ —	\$ —	\$ —	\$ 29,111	\$ 14,178	\$ 43,289

(1) Reflects the assets and liabilities of disposal groups that did not meet the criteria to be classified as discontinued operations. At December 31, 2020, the balances consist of assets and liabilities of the Cryo disposal group. At December 31, 2019, the balances consist of assets and liabilities of the I&S disposal group.

(2) Reflects the assets and liabilities of the DV disposal group at December 31, 2019.

(3) The Company classifies all assets and liabilities held for sale as current on the consolidated balance sheet because it is probable that these assets will be sold within one year.

(4) Revenue Recognition

The Company's revenue is derived from a variety of contracts. A significant portion of revenues are from contracts associated with the design, development, manufacture or modification of highly engineered, complex and severe environment products with customers who are either in or service the aerospace, defense, industrial and energy markets. The Company's contracts within the defense markets are primarily with U.S. military customers. These contracts typically are subject to the Federal Acquisition Regulations ("FAR"). The Company accounts for a contract when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability of consideration is probable. Contracts may be modified to account for changes in contract specifications and requirements.

Performance Obligations

A performance obligation is a promise in a contract to transfer a distinct good or service to the customer, and is the unit of account. A contract's transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, control is transferred to the customer. Consistent with historical practice, the Company excludes from the transaction price amounts collected on behalf of third parties (e.g. taxes). Performance obligations are typically satisfied at a point in time and shipping and handling costs are treated as fulfillment costs. To determine the proper revenue recognition method for contracts for highly engineered, complex and severe environment products, which meet over-time revenue recognition criteria, the

Company evaluates whether two or more contracts should be combined and whether the combined or single contract should be accounted for as more than one performance obligation. For most of the Company's over-time revenue recognition contracts, the customer contracts with the Company to provide custom products which serve a single project or capability (even if that single project results in the delivery of multiple products) with enforceable right to payment. In circumstances where each distinct product in the contract transfers to the customer over time and the same method would be used to measure the entity's progress toward complete satisfaction of the performance obligation to transfer each unit to the customer, the Company then applies the series guidance to account for the multiple products as a single performance obligation. In certain instances, the Company may promise to provide distinct goods or services within the over-time revenue recognition contract, in which case the Company separates the contract into more than one performance obligation. For contracts with multiple performance obligations, the Company allocates the contract's transaction price to each performance obligation using estimated standalone selling price of each distinct good or service in the contract when not directly observable. If at the inception of the contract the period between the transfer of control of the good or service to the customer and when the customer pays for that good or service is less than a year the Company applies the practical expedient for significant financing component. Certain long-term contracts result in contract assets for unbilled receivables or contract liabilities for customer advances or deposits. Such unbilled receivables or customer advances and deposits are not considered a significant financing component because they are protective in nature for the customer or the Company.

Certain of the Company's contracts give rise to variable consideration, including penalties. The Company includes in its contract estimates a reduction to revenue for customer agreements, primarily in the large projects businesses, which contain late shipment penalty clauses whereby the Company is contractually obligated to pay consideration to customers if the Company does not meet specified shipment dates. Variable consideration is estimated using the most likely amount method or the expected value method depending on nature of the variability, and the method elected is consistently applied among performance obligations with similar uncertainties.

For revenue that is recognized from products and services transferred to customers over-time, the Company uses an input measure (e.g., costs incurred to date relative to total estimated costs at completion, known as the "cost-to-cost" method) to measure progress. The Company uses the cost-to-cost measure of progress because it best depicts the transfer of control to the customer which occurs as it incurs costs on its contracts. Under the cost-to-cost measure of progress, revenue is recognized proportionally as costs are incurred. Contract costs include labor, materials and subcontractors' costs, other direct costs and an allocation of overhead, as appropriate. Accounting for over-time contracts requires reliable estimates in order to estimate total contract revenue and costs. For these contracts, management reviews the progress and execution of the Company's performance obligations at least quarterly. Management estimates the profit on a contract as the difference between the total estimated revenue and estimate at completion ("EAC") costs and recognizes the resultant profit over the life of the contract, using the cost-to-cost EAC input method to measure progress toward complete satisfaction of a performance obligation. A change in one or more of these estimates could affect the profitability of the related contracts. Management recognizes adjustments in estimated profit on contracts under the cumulative catch-up method. Under this method, the impact of the adjustment on profit recorded to date is recognized in the period the adjustment is identified. Revenue and profit in future periods of contract performance is recognized using the adjusted estimate. The impact of adjustments in contract estimates on our operating earnings can be reflected in either operating expenses or revenue.

On December 31, 2020, the Company had \$176.4 million of transaction price related to remaining performance obligations. It expects to recognize approximately 71% of our remaining performance obligations as revenue during 2021, 18% in 2022, and 11% thereafter.

Contract Balances

The timing of revenue recognition, billings and cash collections results in billed accounts receivable, unbilled receivables (contract assets), and customer advances and deposits (contract liabilities) on the consolidated balance sheet. Contract assets include unbilled amounts typically resulting from over-time contracts when revenue recognized exceeds the amount billed to the customer, and right to payment is not just subject to the passage of time. Expected credit losses are considered and allowances recorded where applicable, which result in the net amount expected to be collected. Generally, payment terms are based on milestones or shipment and billing occurs subsequent to revenue recognition, resulting in contract assets for over-time revenue recognition products. However, the Company sometimes receives advances or deposits from its customers, before revenue is recognized, resulting in contract liabilities. These assets and liabilities are reported net on the consolidated balance sheet on a contract-by-contract basis at the end of each reporting period. The incremental costs of obtaining a contract are expensed when the amortization period for such contracts would have been one year or less.

In order to determine revenue recognized in the period from contract liabilities, the Company first allocates revenue to the individual contract liabilities balances outstanding at the beginning of the period until the revenue exceeds that balance. If additional advances are received on those contracts in subsequent periods, it assumes all revenue recognized in the reporting period first applies to the beginning contract liabilities as opposed to a portion applying to the new advances for the period. Revenue recognized during the year ended December 31, 2020 that was included in contract liabilities as of the beginning of the year amounted to \$22.4 million.

The Company's contract assets and contract liabilities as of December 31, 2020 and 2019 are as follows (in thousands):

	December 31, 2020	December 31, 2019	Increase/(Decrease)
Contract assets:			
Recorded within prepaid expenses and other current assets	\$ 67,352	\$ 52,781	\$ 14,571
Recorded within other non-current assets	10,824	—	10,824
	<u>\$ 78,176</u>	<u>\$ 52,781</u>	<u>\$ 25,395</u>
Contract liabilities:			
Recorded within accrued expenses and other current liabilities	\$ 23,585	\$ 35,007	\$ (11,422)
Recorded within other non-current liabilities	9,412	—	9,412
	<u>\$ 32,997</u>	<u>\$ 35,007</u>	<u>\$ (2,010)</u>

Contract assets increased by \$25.4 million. during the year ended December 31, 2020, primarily due to unbilled revenue recognized during the period for over-time revenue contracts within our Defense business and Refinery Valves business.

Contract liabilities decreased by \$2.0 million during the year ended December 31, 2020, primarily due to recognition of revenue against customer advances within our Defense business exceeded advances collected in current year.

Disaggregation of Revenue

The Company determined that disaggregating revenue into the categories shown in the table below meets the disclosure objective in ASC 606 which is to depict how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors.

The following tables present our revenue disaggregated by major product line and geographical market (in thousands):

Revenue by Major Product Line	Year Ended	
	December 31, 2020	December 31, 2019
Aerospace & Defense Segment		
Commercial Aerospace & Other	\$ 92,139	\$ 124,023
Defense	175,683	148,602
Total	<u>267,822</u>	<u>272,625</u>
Industrial Segment		
Valves	205,914	354,368
Pumps	299,535	337,320
Total	<u>505,449</u>	<u>691,688</u>
Net Revenue	<u>\$ 773,271</u>	<u>\$ 964,313</u>

Revenue by Geographical Market	Year Ended	
	December 31, 2020	December 31, 2019
Aerospace & Defense Segment		
EMEA	\$ 61,518	\$ 74,657
North America	190,629	172,676
Other	15,675	25,292
Total	267,822	272,625
Industrial Segment		
EMEA	222,343	292,987
North America	171,858	265,973
Other	111,248	132,728
Total	505,449	691,688
Net Revenue	\$ 773,271	\$ 964,313

(5) Special and Restructuring (Recoveries) Charges, net

Special and Restructuring (Recoveries) Charges, net

Special and restructuring (recoveries) charges, net consist of restructuring costs (including costs to exit a product line or program) as well as certain special charges such as significant litigation settlements and other transactions (charges or recoveries) that are described below as well as gain or loss on sale of businesses not classified as discontinued operations. All items described below are recorded in Special and restructuring (recoveries) charges, net on the Company's consolidated statements of (loss) income. Certain other special and restructuring charges such as inventory related items may be recorded in cost of revenues given the nature of the item.

The table below (in thousands) summarizes the amounts recorded within the special and restructuring (recoveries) charges, net line item on the consolidated statements of (loss) income for the periods ending December 31, 2020, 2019, and 2018:

	Special and Restructuring (Recoveries) Charges, net for the year ended December 31,		
	2020	2019	2018
Special (recoveries) charges, net	\$ (39,248)	\$ 17,686	\$ 13,061
Restructuring charges, net	4,945	5,186	5,848
Total special and restructuring (recoveries) charges, net	\$ (34,303)	\$ 22,872	\$ 18,909

Special Charges (Recoveries), net

The table below (in thousands) outlines the special charges (recoveries), net recorded for the year ended December 31, 2020:

	Special Charges (Recoveries), net for the year ended December 31, 2020			
	Aerospace & Defense	Industrial	Corporate	Total
Divestiture- related	\$ —	\$ (53,203)	\$ 46	\$ (53,157)
Professional fees to review and respond to an unsolicited tender offer to acquire the Company	—	—	6,937	\$ 6,937
Amortization debt issuance costs	—	—	3,541	\$ 3,541
Other cost savings initiatives	19	371	3,041	\$ 3,431
Total special charges (recoveries), net	\$ 19	\$ (52,832)	\$ 13,565	\$ (39,248)

Divestiture-related: The Company recovered net special recoveries of \$53.2 million for the year ended December 31, 2020 due to the gain on sale of the I&S business in the Industrial segment.

Professional fees: The Company incurred special charges of \$6.9 million for the year ended December 31, 2020, associated with milestones reached subsequent to its response to an unsolicited tender offer to acquire the Company in the prior year.

Amortization of debt issuance costs: During the first quarter of 2020, the Company amended its term loan agreement. As part of this event, the Company accelerated amortization of \$3.5 million in debt issuance costs related to creditors no longer participating in the credit agreement. Additional information can be found in the Financing Arrangements footnote.

The table below (in thousands) outlines the special charges, net recorded for the year ended December 31, 2019:

	Special Charges, net for the year ended December 31, 2019			
	Aerospace & Defense	Industrial	Corporate	Total
Divestiture- related	\$ —	\$ 4,070	\$ 1,881	\$ 5,951
Professional fees to review and respond to an unsolicited tender offer to acquire the Company	—	—	7,345	7,345
Other cost savings initiatives	—	2,598	1,792	4,390
Total special charges, net	\$ —	\$ 6,668	\$ 11,018	\$ 17,686

Divestiture-related: The Company incurred net special charges of \$6.0 million for the year ended December 31, 2019, primarily attributed to a gain on the sale of the RS business (in the Industrial segment) and losses in the Industrial segment associated with the sale of its Spence and Nicholson product lines. Corporate costs include certain costs associated with these and other divestiture activity.

Professional fees: The Company incurred special charges of \$7.3 million for the year ended December 31, 2019, associated with the review and response to an unsolicited tender offer to acquire the Company.

The table below (in thousands) outlines the special charges, net recorded for the year ending December 31, 2018:

	Special Charges, net for the year ending December 31, 2018			
	Aerospace & Defense	Industrial	Corporate	Total
Brazil operations	\$ —	\$ 921	\$ —	\$ 921
Acquisition and divestiture related charges	—	1,888	8,278	10,166
Other cost saving initiatives	—	986	988	1,974
Total special charges, net	\$ —	\$ 3,795	\$ 9,266	\$ 13,061

Brazil Operations: In 2015, the Company's Board of Directors approved the closure of its Brazil manufacturing operations due to the economic realities in Brazil and the ongoing challenges with its only significant end customer, Petrobras. In connection with the closure of manufacturing operations, the Company recorded \$0.9 million of charges within the Industrial segment during the year ended December 31, 2018.

Acquisition and divestiture related charges: In November 2018, the Company sold its Rosscor business for a nominal amount and recorded a \$1.9 million loss on the transaction. Rosscor was part of the Industrial segment. Corporate costs relate to (i) its December 2017 acquisition of FH from Colfax, comprised of internal costs and external professional fees to separate the FH business from Colfax and integrate the FH business into CIRCOR and (ii) \$2.2 million of transaction costs related to the January 2019 sale of the RS business.

Restructuring Charges, net

The tables below (in thousands) outline the charges (or any recoveries) associated with restructuring actions recorded for the year ended December 31, 2020, 2019, and 2018. A description of the restructuring actions is provided in the section titled "Restructuring Programs Summary" below.

Restructuring Charges, net as of and for the year ended December 31, 2020				
	Aerospace & Defense	Industrial	Corporate	Total
Facility related expenses	\$ 18	\$ 246	\$ 1	\$ 265
Employee related expenses	343	3,822	515	4,680
Total restructuring charges, net	<u>\$ 361</u>	<u>\$ 4,068</u>	<u>\$ 516</u>	<u>\$ 4,945</u>
Accrued restructuring charges as of December 31, 2019				\$ 5,199
Total year to date charges, net (shown above)				4,945
Charges paid / settled, net				(8,632)
Accrued restructuring charges as of December 31, 2020				<u>\$ 1,512</u>

The Company expects to make payment or settle the majority of the restructuring charges accrued as of December 31, 2020 during 2021.

Restructuring Charges (Recoveries), net as of and for the year ended December 31, 2019			
	Aerospace & Defense	Industrial	Total
Facility related expenses	\$ 35	\$ (1,458)	\$ (1,423)
Employee related expenses	560	6,049	6,609
Total restructuring charges, net	<u>\$ 595</u>	<u>\$ 4,591</u>	<u>\$ 5,186</u>
Accrued restructuring charges as of December 31, 2018			\$ 874
Total year to date charges, net (shown above)			5,186
Charges paid / settled, net			(861)
Accrued restructuring charges as of December 31, 2019			<u>\$ 5,199</u>

The Company made payment or settled the majority of the restructuring charges accrued as of December 31, 2019 during the first half of 2020.

Restructuring Charges, net as of and for the year ended December 31, 2018				
	Aerospace & Defense	Industrial	Corporate	Total
Facility related expenses	\$ 190	\$ 854	—	\$ 1,044
Employee related expenses	436	2,807	1,561	4,804
Total restructuring charges, net	<u>\$ 626</u>	<u>\$ 3,661</u>	<u>\$ 1,561</u>	<u>\$ 5,848</u>
Accrued restructuring charges as of December 31, 2017				\$ 882
Total year to date charges, net (shown above)				5,848
Charges paid / settled, net				(5,856)
Accrued restructuring charges as of December 31, 2018				<u>\$ 874</u>

Restructuring Programs Summary

As specific restructuring programs are announced, the amounts associated with that particular action may be recorded in periods other than when announced in certain instances to comply with the applicable accounting rules. The amounts shown below reflect the total cost for that restructuring program.

During 2020, 2019 and 2018 the Company initiated certain restructuring activities, under which it continued to simplify its business ("2020 Actions", "2019 Actions" and "2018 Actions", respectively). Under these restructurings, the Company reduced expenses, primarily through reductions in force. Charges associated with the 2020 Actions, 2019 Actions and the 2018 Actions were recorded during their respective years.

	2020 Actions Restructuring Charges, net as of December 31, 2020			
	Aerospace & Defense	Industrial	Corporate	Total
Facility related expenses - incurred to date	\$ 18	\$ 246	\$ 1	\$ 265
Employee related expenses - incurred to date	343	3,822	515	4,680
Total restructuring related special charges - incurred to date	<u>\$ 361</u>	<u>\$ 4,068</u>	<u>\$ 516</u>	<u>\$ 4,945</u>

	2019 Actions Restructuring Charges (Recoveries), net as of December 31, 2019		
	Aerospace & Defense	Industrial	Total
Facility related expenses - incurred to date	\$ 35	\$ (1,458)	\$ (1,423)
Employee related expenses - incurred to date	560	6,049	6,609
Total restructuring related special charges - incurred to date	<u>\$ 595</u>	<u>\$ 4,591</u>	<u>\$ 5,186</u>

	2018 Actions Restructuring Charges, net as of December 31, 2018		
	Aerospace & Defense	Industrial	Total
Facility related expenses - incurred to date	\$ —	\$ 1,964	\$ 1,964
Employee related expenses - incurred to date	382	3,088	3,470
Total restructuring related special charges - incurred to date	<u>\$ 382</u>	<u>\$ 5,052</u>	<u>\$ 5,434</u>

(6) Leases

The Company leases certain office spaces, warehouses, vehicles and equipment under operating leases. Leases with an initial term of 12-months or less are not recorded on the consolidated balance sheets. The Company recognizes lease expense for these leases on a straight-line basis over the lease term.

For lease agreements entered into after the adoption of ASC Topic 842, the Company combines lease and non-lease fixed components for real estate, vehicles and equipment leases. It does not combine lease and non-lease components for information technology leases. Variable lease costs are not included within the measurement of the lease liability as they are entirely variable or the difference between the portion captured within the lease liability and the actual cost will be expensed as incurred. Variable costs are contractually obligated and relate primarily to common area maintenance and taxes, which are not material to the financial statements.

The Company elected the package of practical expedients permitted under the transition guidance, which allowed it to carry forward the historical lease classification, not reassess if existing contracts are or contain leases, and not reassess indirect costs for existing leases. It has elected not to recast the comparable periods and rather used the effective adoption date of the standard as the date of initial application.

In determining the present value of lease payments, the Company uses the implicit borrowing rate in the lease, if available. In cases where a lease does not provide an implicit borrowing rate, it uses the incremental borrowing rate based on available information at the commencement date. As of December 31, 2020, none of its existing leases provided an implicit borrowing rate. The Company gives consideration to its debt issuances as well as publicly available data for instruments with similar characteristics when calculating our incremental borrowing rates. Additionally, it performs an entity-level financial assessment along with risk assessment by country or jurisdiction in the determination of our incremental borrowing rate. It updates its financial and risk assessments periodically. The Company reassesses lease classification and / or remeasures the lease liability in the event of the following: changes in assessment of renewal, termination or purchase option based on triggering events within our control, change in amounts probable of being owed under a residual guarantee, or contingency resolution.

Certain leases include one or more options to renew or terminate a lease early. The exercise of these options is at the Company's sole discretion. There are currently no renewal periods included in any of the leases' respective lease terms as they are not reasonably certain of being exercised. The Company does not have any material purchase options.

Certain of our lease agreements have rental payments that are adjusted periodically for inflation or that are based on usage. Our lease agreements do not contain any material residual value guarantees or material restrictive covenants.

Supplemental balance sheet information related to our leases is as follows (in thousands):

	Year Ended December 31, 2020		Year Ended December 31, 2019	
	Operating	Finance	Operating	Finance
Assets				
Gross ROU Assets (1)	\$ 27,831	\$ 4,991	\$ 21,116	\$ 3,527
Less: Accumulated Amortization	(10,473)	(858)	(3,492)	(338)
Net ROU Assets	<u>\$ 17,358</u>	<u>\$ 4,133</u>	<u>\$ 17,624</u>	<u>\$ 3,189</u>
Liabilities				
Current (2)	\$ 3,995	\$ 735	\$ 3,042	\$ 504
Non-current (3)	17,920	3,434	14,317	2,744
Total Lease Liabilities	<u>\$ 21,915</u>	<u>\$ 4,169</u>	<u>\$ 17,359</u>	<u>\$ 3,248</u>

(1) Operating and finance ROU assets are included within other assets on the consolidated balance sheets.

(2) The current portion of operating and finance lease liabilities are recorded within accrued expenses and other current liabilities on the consolidated balance sheets.

(3) The non-current portion of operating and finance lease liabilities are recorded within other non-current liabilities on the consolidated balance sheets.

The components of lease costs are as follows (in thousands):

Lease Costs	Year Ended	
	December 31, 2020	December 31, 2019
Operating lease cost (1)	\$ 6,765	\$ 5,071
Finance lease cost		
Amortization of leased assets (2)	568	251
Interest on lease liabilities (3)	70	40
Total finance lease costs	638	291
Total lease cost	\$ 7,403	\$ 5,362

(1) Operating lease costs are recorded within selling, general and administrative expenses or cost of revenues within the consolidated statements of (loss) income depending upon the nature of the underlying lease.

(2) Finance lease amortization costs are recorded in cost of revenues, as well as selling, general and administrative expenses within the consolidated statements of (loss) income.

(3) Finance lease interest costs are recorded in interest expense, net within the consolidated statements of (loss) income.

Short-term lease expense and variable lease cost for the years ended December 31, 2020 and 2019 were not significant.

The estimated future minimum lease payments only include obligations for which the Company is reasonably certain it will exercise its renewal option. Such future payments are as follows (in thousands):

Maturity of Lease Liabilities	Operating	Finance	Total
2021	\$ 5,153	\$ 780	\$ 5,933
2022	4,242	769	5,011
2023	3,455	692	4,147
2024	2,724	681	3,405
2025	2,246	596	2,842
After 2025	5,649	929	6,578
Less: Interest	(1,554)	(278)	(1,832)
Total	\$ 21,915	\$ 4,169	\$ 26,084

The weighted average remaining lease term and discount rates are as follows:

Lease Term and Discount Rate	December 31, 2020	December 31, 2019
Weighted average remaining lease term (years)		
Operating leases	6.4	6.7
Finance leases	6.3	6.8
Weighted average discount rate (percentage)		
Operating leases	7.3 %	4.6 %
Finance leases	4.9 %	2.0 %

Supplemental cash flow information related to leases are as follows (in thousands):

Other Information	Year Ended	
	December 31, 2020	December 31, 2019
Operating Activities		
Noncash lease expense on operating ROU assets	\$ 267	\$ (17,625)
Amortization expense on finance ROU assets	568	251
Change in total operating lease liabilities	4,556	17,359
Principal paid on operating lease liabilities	(4,892)	(4,301)
Total Operating Activities	\$ 499	\$ (4,316)
Financing Activities		
Principal paid on finance lease liabilities	\$ (822)	\$ (281)
Supplemental		
Interest Paid on finance lease liabilities	\$ 70	\$ 40

As of December 31, 2020, the Company has not entered into any lease agreements with related parties.

(7) Inventories

Inventories consisted of the following (in thousands):

	Year Ended	
	December 31, 2020	December 31, 2019
Raw materials	\$ 63,255	\$ 65,315
Work in process	45,867	53,891
Finished goods	19,962	18,103
Inventories	\$ 129,084	\$ 137,309

The Company regularly reviews inventory quantities on hand and records a provision to write-down excess and obsolete inventory to its estimated net realizable value, if less than cost, based primarily on our estimated forecast of product demand. Once our inventory value is written-down a new cost basis has been established. For 2020, 2019 and 2018, our charges for acquisition inventory step-up amortization, excess and obsolete inventory and net realizable value reserves totaled \$3.6 million, \$0.4 million and \$7.7 million, respectively.

(8) Property, Plant and Equipment

Property, plant and equipment consisted of the following (in thousands):

	Year Ended	
	December 31, 2020	December 31, 2019
Land	\$ 32,802	\$ 31,136
Buildings and improvements	85,292	82,149
Manufacturing machinery and equipment	137,748	126,942
Computer equipment and software	38,129	35,536
Furniture and fixtures	13,596	11,980
Vehicles	558	584
Construction in progress	12,133	12,597
Property, plant and equipment, at cost	320,258	300,924
Less: Accumulated depreciation	(151,495)	(128,745)
Property, plant and equipment, net	\$ 168,763	\$ 172,179

Depreciation expense for the years ended December 31, 2020, 2019, and 2018 was \$20.4 million, \$22.0 million, and \$26.2 million, respectively. For the years ended December 31, 2019, and 2018, depreciation expense of \$1.2 million, and \$1.6 million, respectively, related to assets classified as held for sale on our consolidated balance sheets.

Property, plant and equipment, net, at December 31, 2020 excludes \$0.2 million related to Cryo held for sale assets. Property, plant and equipment, net, at December 31, 2019 excludes \$6.4 million related to I&S held for sale assets.

The Company recorded additions to property, plant and equipment of \$1.0 million and \$1.2 million in the years ended December 31, 2020 and December 31, 2019, respectively, for which cash payments had not yet been made.

(9) Goodwill and Other Intangible Assets

The following table shows goodwill by segment as of December 31, 2020 and 2019 (in thousands):

	Aerospace & Defense	Industrial	Consolidated Total
Goodwill as of December 31, 2019	\$ 57,385	\$ 214,508	\$ 271,893
Impairment	—	(116,182)	(116,182)
Reclassification of Cryo to assets held for sale	—	(1,900)	(1,900)
Currency translation adjustments	189	4,944	5,133
Goodwill as of December 31, 2020	<u>\$ 57,574</u>	<u>\$ 101,370</u>	<u>\$ 158,944</u>

	Energy	Aerospace & Defense	Industrial	Consolidated Total
Goodwill as of December 31, 2018	\$ 96,272	\$ 57,418	\$ 296,915	\$ 450,605
Business divestiture	—	—	(85,474)	(85,474)
Reclassification of I&S to assets held for sale	(91,492)	—	—	(91,492)
Currency translation adjustments	(4,780)	(33)	3,067	(1,746)
Goodwill as of December 31, 2019	<u>\$ —</u>	<u>\$ 57,385</u>	<u>\$ 214,508</u>	<u>\$ 271,893</u>

During the year ended December 31, 2020 the Company recorded a goodwill impairment charge in the amount of \$116.2 million. During the year ended December 31, 2019, the Company recorded goodwill impairments of \$8.6 million related to the discontinued operations, which are excluded from the tables above which represents goodwill activity for continuing operations. No goodwill impairments were recorded related to continuing operations during the year ended December 31, 2019. Historical accumulated goodwill impairments in continuing operations prior to 2020 were immaterial.

At March 29, 2020, the Company reorganized its reporting units (see Note 18, Business Segment and Geographical Information) and had its stock price drop below book value, which the Company determined were triggering events requiring an assessment of its goodwill and indefinite-lived trade names. Our asset groups did not experience a triggering event, and our long-lived assets did not suffer a decline in utility requiring a reassessment of their useful lives. Through its assessment, management determined that its long-lived assets other than goodwill were not impaired.

For the assessment of goodwill as of March 29, 2020, the Company estimated the fair value of its two reporting units, Industrial and Aerospace & Defense, using an income approach based on the present value of future cash flows. The Company also utilized the implied market value method under the market approach to validate the fair value amount it obtained using a discounted cash flow model income approach which indicated a control premium. Management believes this approach was the best approximation of fair value of its reporting units in the current economic environment considering the uncertainty caused by the COVID-19 pandemic. The key assumptions utilized in our discounted cash flow model include our estimates of the rate of revenue growth and the discount rate based on a weighted average cost of capital. The estimated fair values using a discounted cash flow model were reconciled to the value indicated by the market capitalization including an assessment of the implied control premium. The relevant inputs, estimates and assumptions used in the implied market value method included our market capitalization as of March 29, 2020, and selection of a control premium.

Based on our impairment assessment as of March 29, 2020, the Company determined that goodwill in the Industrial reporting unit had been impaired and, accordingly, resulted in a goodwill impairment charge of \$116.2 million during the first quarter of

2020. The Company performs an impairment assessment for goodwill at the reporting unit level on an annual basis as of the end of our October month end or more frequently if circumstances warrant. Based on the annual impairment test during the fourth quarter of 2020, there was no impairment to the goodwill of our reporting units.

The tables below present gross intangible assets and the related accumulated amortization (in thousands):

	December 31, 2020		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Value
Patents	\$ 5,368	\$ (5,368)	\$ —
Customer relationships	310,458	(112,411)	198,047
Order backlog	2,000	(2,000)	—
Acquired technology	138,833	(60,760)	78,073
Total Amortized Assets	\$ 456,659	\$ (180,539)	\$ 276,120
Non-amortized intangibles (primarily trademarks and trade names)	\$ 77,475	\$ —	\$ 77,475
Net Carrying Value of Intangible assets			\$ 353,595

	December 31, 2019		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Value
Patents	\$ 5,368	\$ (5,368)	\$ —
Customer relationships	300,284	(83,411)	216,873
Order backlog	22,789	(20,517)	2,272
Acquired technology	134,731	(43,890)	90,841
Other	341	(341)	—
Total Amortized Assets	\$ 463,513	\$ (153,527)	\$ 309,986
Non-amortized intangibles (primarily trademarks and trade names)	\$ 75,556	\$ —	\$ 75,556
Net Carrying Value of Intangible assets			\$ 385,542

The table below presents estimated future amortization expense for intangible assets recorded as of December 31, 2020 (in thousands):

	2021	2022	2023	2024	2025	After 2025
Estimated amortization expense	\$ 42,839	\$ 37,536	\$ 32,900	\$ 28,899	\$ 25,278	\$ 108,668

The annual impairment testing of our non-amortized intangible assets was completed as of October 29, 2020 and consisted of a comparison of the fair value of the intangible assets with carrying amounts. No impairments of our non-amortized intangible assets were recorded for the year ended December 31, 2020.

(10) Income Taxes

The significant components of our deferred income tax liabilities and assets were as follows (in thousands):

	December 31,	
	2020	2019
Deferred income tax (liabilities):		
Fixed Assets	(12,813)	(14,044)
Intangible Assets	(51,893)	(54,032)
Right of Use Lease	(2,997)	—
Other	(2,000)	(3,259)
Total deferred income tax liabilities	(69,703)	(71,335)
Deferred income tax assets:		
Accrued expenses	5,958	5,202
Bad Debt	3,935	2,247
Equity Compensation	3,565	3,373
Inventory	4,795	7,439
Other	11,270	11,513
Net operating loss and credit carry-forward	77,533	52,577
Pension	36,532	32,901
Interest	16,022	9,836
Goodwill	7,235	—
Total deferred income tax assets	166,845	125,088
Valuation allowance	(125,343)	(44,326)
Deferred income tax asset, net of valuation allowance	41,502	80,762
Deferred income tax (liability)/asset, net	<u>\$ (28,201)</u>	<u>\$ 9,427</u>

Prior year balance of deferred tax assets as well as valuation allowance has been adjusted by an equal and offsetting amount of \$30.0 million. This relates to deferred tax assets for net operating losses related to certain foreign tax jurisdictions and corresponding valuation allowances. This adjustment to the disclosure has no effect on the consolidated balance sheets, statements of (loss) income, statements of comprehensive (loss) income and statements of cash flows.

The (benefit from) provision for income taxes is based on the following pre-tax (loss) income (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Domestic	\$ (153,327)	\$ (45,209)	\$ (71,059)
Foreign	59,191	35,117	47,163
(Loss) income before income taxes	<u>\$ (94,136)</u>	<u>\$ (10,092)</u>	<u>\$ (23,896)</u>

The provision for income taxes consisted of the following (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Current provision:			
Federal - U.S.	\$ 165	\$ —	\$ —
Foreign	6,739	17,522	11,583
State -U.S.	548	594	235
Total current provision	<u>\$ 7,452</u>	<u>\$ 18,116</u>	<u>\$ 11,818</u>
Deferred expense (benefit):			
Federal - U.S.	\$ 38,521	\$ 8,414	\$ 621
Foreign	7,250	(11,768)	(1,323)
State -U.S.	2,999	(86)	(1,665)
Total expense (benefit) deferred	<u>48,770</u>	<u>(3,440)</u>	<u>(2,367)</u>
Total provision (benefit) for income taxes	<u><u>\$ 56,222</u></u>	<u><u>\$ 14,676</u></u>	<u><u>\$ 9,451</u></u>

Actual income taxes reported from operations were different from those that would have been computed by applying the federal statutory tax rate to (loss) income before income taxes. The expense for income taxes differed from the U.S. statutory rate due to the following:

	Year Ended December 31,		
	2020	2019	2018
Expected federal income tax rate	21.0 %	21.0 %	21.0 %
State income taxes, net of federal tax benefit	(3.8)	15.5	3.8
Impairment	(7.1)	—	—
US permanent differences	—	(1.6)	(1.0)
Foreign tax rate differential	4.6	4.5	5.1
Tax reserve	(0.8)	(0.3)	1.3
Rate Change	(0.1)	5.9	—
GILTI	(4.0)	(3.9)	(20.7)
Foreign tax credit writeoff	—	—	(45.6)
Foreign-derived intangible income ("FDII")	—	10.7	0.1
Prior period adjustment	0.4	44.1	4.3
Dispositions	(1.0)	(227.0)	—
Valuation Allowance	(68.8)	(0.5)	(5.5)
Other, net	0.4	(16.1)	(0.8)
Equity compensation	(0.5)	(10.8)	(4.2)
Research and development	—	13.1	2.7
Effective tax rate	<u><u>(59.7)%</u></u>	<u><u>(145.4)%</u></u>	<u><u>(39.5)%</u></u>

ASC 740, Income Taxes, requires a valuation allowance to reduce deferred tax assets if, based on the weight of available evidence, it is more likely than not that some portion, or all, of the deferred tax assets will not be realized. The weight given to the potential effect of negative and positive evidence should be commensurate with the extent to which it can be objectively verified. The more negative evidence that exists, (a) the more positive evidence is necessary and (b) the more difficult it is to support a conclusion that a valuation allowance is not needed for some portion, or all, of the deferred tax asset. Should there be a cumulative loss in recent years it is considered a significant piece of negative evidence that is difficult to overcome in assessing the need for a valuation allowance.

Management assesses the available positive and negative evidence to estimate whether sufficient future taxable income will be generated to permit use of the existing deferred tax assets. On July 9, 2020, the US Department of the Treasury (Treasury) and Internal Revenue Service (IRS) released Final Regulations (Final Regulations) that provide guidance on the section 250 deduction for foreign-derived intangible income (FDII) and global intangible low-taxed income (GILTI). In addition, on July

20, 2020, Treasury released Proposed Regulations concerning GILTI. Based on the impact of these regulations, we believe less reliance should be placed on the US taxation of foreign earnings, which would adversely impact our ability to realize our US deferred tax assets. With the release of these Final Regulations during the third quarter, coupled with the negative evidence of cumulative losses in the US, the negative evidence outweighed the positive evidence as of the third quarter of 2020. As such, the Company has not relied on projections of future taxable income in our assessment of the realization of deferred tax assets at September 27, 2020, and recognized a valuation allowance of \$42.2 million in income tax expense in the third quarter of 2020. In addition, the Company recorded a valuation allowance related to German deferred tax assets of \$14.8 million in income tax expense in the fourth quarter of 2020. The Company relied solely on the expected reversal of taxable temporary differences to support the realizability of the German deferred tax assets and no reliance was placed on projections of future taxable income.

As of December 31, 2020 and 2019, the Company maintained a total valuation allowance of \$125.3 million and \$44.3 million, respectively, which relates to foreign, federal, and state deferred tax assets as of December 31, 2020 and foreign, federal and state deferred tax assets as December 31, 2019. The amount of the deferred tax asset considered realizable, however, could be adjusted if estimates of future taxable income during the carryforward period are reduced or increased or if objective negative evidence in the form of cumulative losses is no longer present and additional weight is given to subjective evidence such as our projections for growth.

The following table provides a summary of the changes in the deferred tax valuation allowance for the years ended December 31, 2020, 2019, and 2018 (in thousands):

	December 31,		
	2020	2019	2018
Deferred tax valuation allowance at January 1	\$ 44,326	\$ 53,531	\$ 56,910
Additions	81,160	—	12,086
Acquired	—	150	(15,432)
Deductions	(143)	(9,355)	(33)
Deferred tax valuation allowance at December 31	<u>\$ 125,343</u>	<u>\$ 44,326</u>	<u>\$ 53,531</u>

As discussed previously, the prior year balances of deferred tax assets and valuation allowance have been adjusted by equal and offsetting amounts relating to net operating losses for certain foreign tax jurisdictions and corresponding valuation allowances. The adjustments increased the ending balances of valuation allowance for 2019 and 2018 by \$30.0 million and \$36.0 million, respectively, offset by corresponding adjustments to the deferred tax assets. These adjustments to the disclosure have no effect to the consolidated balance sheets, statements of (loss) income, statements of comprehensive (loss) income and statements of cash flows.

The Company files income tax returns in the U.S. federal, state and local jurisdictions and in foreign jurisdictions. The Company is no longer subject to examination by the Internal Revenue Service ("IRS") for years prior to 2017 and is no longer subject to examination by the tax authorities in foreign and state jurisdictions prior to 2006, with the exception of net operating loss carryforwards. The Company is currently under examination for income tax filings in various foreign jurisdictions.

As of December 31, 2020, the Company had US net operating losses of \$12.7 million, US tax credits of \$20.8 million, foreign net operating losses of \$175.8 million, state net operating losses of \$107.1 million and state tax credits of \$2.3 million. As of December 31, 2019, the Company had US tax credits of \$15.9 million, foreign net operating losses of \$128.3 million, state net operating losses of \$68.8 million and state tax credits of \$2.0 million. The foreign tax credits, if not utilized, will expire in 2026-2037. A portion of the foreign net operating losses (\$81.1 million) expire at various dates through 2035; the remainder have an unlimited carryforward period. The federal net operating losses have an unlimited carryforward period. The state net operating losses and state tax credits, if not utilized, will expire at various dates through 2039.

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security (CARES) Act was signed into law as a result of the COVID-19 pandemic, and contains among other things, numerous income tax provisions. Some of these tax provisions are expected to be effective retroactively for years ending before the date of enactment. The Company has evaluated the current legislation and at this time does not anticipate the CARES Act to have a material impact on its financial statements.

As of December 31, 2020, the liability for uncertain income tax positions was approximately \$1.1 million. Approximately \$0.7 million as of December 31, 2020 represents the amount that if recognized would affect the Company's effective income tax rate in future periods. The Company does not expect the unrecognized tax benefits to change over the next 12 months. The table below does not include interest and penalties of \$0.1 million and \$0.0 million as of December 31, 2020 and 2019, respectively.

The following is a reconciliation of the Company's liability for uncertain income tax positions for the years ended December 31, 2020, 2019 and 2018 (in thousands):

	December 31,		
	2020	2019	2018
Balance beginning January 1	\$ 630	\$ 593	\$ 3,014
Additions/(reductions) for tax positions of prior years	448	—	(460)
Additions/(reductions) based on tax positions related to current year	—	37	(340)
Acquired uncertain tax position balance	—	—	(512)
Settlements	—	—	(1,103)
Lapse of statute of limitations	—	—	(6)
Balance ending December 31	<u>\$ 1,078</u>	<u>\$ 630</u>	<u>\$ 593</u>

Undistributed earnings of our foreign subsidiaries amounted to nil and \$196.4 million at December 31, 2020 and December 31, 2019, respectively. The undistributed earnings of our foreign subsidiaries (except for one of our China subsidiaries) are considered to be indefinitely reinvested unless earnings can be repatriated in a tax efficient manner and accordingly, no provision for income taxes has been recorded (except for withholding taxes related to the forementioned China subsidiary). Determination of the amount of unrecognized deferred tax liability on these undistributed earnings is not practicable because of the complexity of laws and regulations, the varying tax treatment of alternative repatriation scenarios, and the variation due to multiple potential assumptions relating to the timing of any future repatriation.

(11) Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following (in thousands):

	December 31,	
	2020	2019
Customer deposits and obligations	\$ 17,268	\$ 24,006
Commissions payable and sales incentive	3,601	2,472
Penalty accruals	135	1,847
Warranty reserve	2,206	1,642
Professional fees	1,824	2,318
Taxes other than income tax	3,900	3,551
Other Contract Liabilities	6,182	9,153
Income tax payable	3,833	5,521
Other	36,675	43,659
Total accrued expenses and other current liabilities	<u>\$ 75,624</u>	<u>\$ 94,169</u>

(12) Financing Arrangements

Debt

Long-term debt consisted of the following (in thousands):

	December 31,	
	2020	2019
Term Loan at interest rates ranging from 4.3%-5.2% in 2020 and 5.24%-6.0% in 2019	\$ 492,038	\$ 653,850
Line of Credit at interest rates ranging from 3.6%-7.2% in 2020 and 5.65%-8.00% in 2019	27,900	—
Total Principal Debt Outstanding	519,938	653,850
Less: Term Loan Debt Issuance Costs	12,050	17,553
Total Long-Term Debt, net	\$ 507,888	\$ 636,297

	2021	2022	2023	2024	2025	Thereafter
Minimum principal payments	\$ —	\$ 27,900	\$ —	\$ 492,038	\$ —	\$ —

On December 11, 2017, the Company entered into a secured credit agreement (the "Credit Agreement"), which provides for a \$150.0 million revolving line of credit with a five year maturity and a \$785.0 million term loan with a seven year maturity which was funded in full at closing of the FH acquisition. The Credit Agreement replaced and terminated the Company's prior credit agreement, dated as of May 11, 2017 (the "Prior Credit Agreement"). The Prior Credit Agreement, under which the Company had borrowings of \$273.5 million outstanding, was terminated on December 11, 2017 and replaced by the Credit Agreement.

The term loan requires quarterly principal payments of 0.25% of initial aggregate principal amount beginning March 29, 2018 with the balance due at maturity. During 2020, the Company paid down \$161.8 million on its term loan from proceeds received through the sale of the I&S business. In March 2020, the Company drew down \$80 million on its line of credit due to concerns about possible disruptions to global capital markets stemming from COVID-19. The Company has since paid down a portion of draw down for a remaining balance of \$27.9 million as of December 31, 2020. During 2019, the Company paid down its term loan by \$123.3 million primarily with divestiture-related proceeds thereby satisfying all future amortization obligations (previously \$2.0 million per quarter) until 2024 under the Credit Agreement. Additional loans of up to \$150.0 million (plus the amount of certain voluntary prepayments) and an amount subject to compliance with a first lien net leverage ratio of 6.50 to 1.00 may be made available under the Credit Agreement upon request of the Company subject to specified terms and conditions. The Company may repay any borrowings under the Credit Agreement at any time, subject to certain limited and customary restrictions stated in the Credit Agreement; provided, however, that if the Company prepays all or any portion of the term loan in connection with a repricing transaction on or prior to the 6-month anniversary of the origination date, the Company must pay a prepayment premium of 1.0% of the aggregate principal amount of the term loan so prepaid. The Company incurred \$23.9 million of debt issuance costs associated with the term loan which have been recorded as a debt discount within long-term debt, and \$5.2 million of fees associated with the revolver which have been recorded in other assets.

The Company had \$30.4 million and \$34.3 million in letters of credit issued under the Credit Agreement as of December 31, 2020 and December 31, 2019, respectively. The Company recorded non-cash interest expense of \$4.1 million, \$3.9 million, and \$3.9 million for the years ended December 31, 2020, 2019 and 2018, respectively, related to the amortization of its deferred financing costs described above. The Credit Agreement revolving line of credit facility matures on December 11, 2022 whereas the term loan facility matures on December 11, 2024.

The Company's outstanding debt balances are characterized as Level 2 financial instruments. As of December 31, 2020, the estimated fair value of its gross debt (before netting debt issuance costs) was \$517.3 million, or \$2.6 million under its carrying value of \$519.9 million.

During the first quarter of 2020, the Company amended its term loan to lower the interest rate associated with the applicable margin calculation. The new terms lower the interest rate on the term loan from LIBOR plus an applicable margin of 3.5% to LIBOR plus an applicable margin of 3.25%, based on its existing corporate family rating from Moody's. The applicable margin reduces to LIBOR plus an applicable margin of 3.0%, with a corporate family rating from Moody's of B1 or better.

As part of the debt repricing, the Company's outstanding loan balance was reallocated amongst the lender group. The Company evaluated the changes in outstanding loan balance for each individual lender to determine the amount of capitalized debt issuance costs that required adjustment. Through this exercise, the Company determined that certain creditors under the original term loan did not participate in this refinancing transaction and ceased being creditors of the Company. As a result, the Company recorded a debt extinguishment loss of \$3.5 million in the first quarter of 2020 which is recorded to Special and restructuring (recoveries) charges, net, on the consolidated statements of (loss) income. For the remainder of the creditors, this transaction was accounted for as a modification. The Company accounted for the amendment pursuant to ASC 470, Debt, and third-party costs of \$0.2 million related to this transaction were expensed and \$0.3 million of lender fees were recorded as a reduction to debt representing deferred issuance costs.

Financial Instruments

As of December 31, 2020 and December 31, 2019, the Company had restricted cash balances of \$1.2 million and \$1.2 million, respectively. These balances are recorded within prepaid expenses and other current assets on the consolidated balance sheets, and are included within cash, cash equivalents and restricted cash in the consolidated statements of cash flows.

Effective July 2019, the Company entered into a cross-currency swap agreement to hedge its net investment in non-U.S. subsidiaries against future volatility in exchange rates between the U.S. dollar and the Euro. The cross-currency swap agreement is pursuant to an ISDA Master Agreement with Deutsche Bank AG. The three-year cross-currency swap has a fixed notional value of \$100.0 million at an annual rate of 2.4065% and a maturity date of July 12, 2022. At inception, the cross-currency swap was designated as a net investment hedge. This hedging agreement mitigates foreign currency exchange rate exposure on the Company's net investment in Euro denominated subsidiaries and is not for speculative trading purposes. The net investment hedge was deemed effective as of year-end.

Effective April 2018, the Company entered into an interest rate swap pursuant to an ISDA Master Agreement with Citizens Bank, National Association. The four-year interest rate swap has a fixed notional value of \$400.0 million with a 1% LIBOR floor (in line with the Company's credit agreement) and a maturity date of April 12, 2022. The fixed rate of interest paid by the Company is comprised of its current credit spread of 325 basis points plus 2.6475% for a total interest rate of 5.8975%. The ISDA Master Agreement, together with its related schedules, contain customary representations, warranties and covenants. The Company has designated the interest rate swap as a qualifying hedging instrument and is treating it as a cash flow hedge for accounting purposes pursuant to ASC Topic 815, Derivatives and Hedging.

The aggregate net fair value of the interest rate swap and cross currency swap as of December 31, 2020 and December 31, 2019 are summarized in the table below (in thousands):

	Significant Other Observable Inputs	
	Level 2	
	2020	2019
Derivative asset	\$ 2,359	\$ 476
Derivative liabilities	\$ (17,139)	\$ (9,168)

December 31, 2020 balances are recorded in other non-current liabilities of \$(10.6) million, accrued expenses and other current liabilities of \$(6.5) million, and prepaid expenses and other current assets of \$2.4 million on the Company's consolidated balance sheets as of December 31, 2020. December 31, 2019 balances are recorded in other non-current liabilities of \$(5.1) million, accrued expenses and other current liabilities of \$(4.0) million, and prepaid expenses and other current assets of \$0.5 million.

The amount of gain (loss) recognized in other comprehensive (loss) income ("OCI") and reclassified from accumulated other comprehensive (loss) income ("AOCI") to income are summarized below (in thousands):

	Year Ended	
	December 31, 2020	December 31, 2019
Amount of gain (loss) recognized in OCI	\$ (5,433)	\$ (8,580)
Amount of gain (loss) reclassified from AOCI into earnings (interest expense, net)	\$ (6,162)	\$ (1,583)
At December 31, 2020, amounts expected to be reclassified from AOCI into interest expense in the next 12 months is a loss of \$6.5 million.		

Interest expense related to the portion of the Company's term loan subject to the interest-rate swap agreement was \$24.1 million for the year ended December 31, 2020 and \$24.9 million for the year ended December 31, 2019.

(13) Share-Based Compensation

The Company has three share-based compensation plans as of December 31, 2020: (1) the 2019 Stock Option and Incentive Plan (the "2019 Plan"), (2) the 2014 Stock Option and Incentive Plan (the "2014 Plan"), and (3) the Amended and Restated 1999 Stock Option and Incentive Plan (the "1999 Plan"). The 2019 Plan was adopted by its Board of Directors (subject to shareholder approval) on February 20, 2019 and approved by its shareholders at the Company's annual meeting on May 9, 2019. As of May 9, 2019, no new awards will be granted under either the 2014 Plan or the 1999 Plan. As a result, any shares subject to outstanding awards under the 2014 Plan and the 1999 Plan that expire, are canceled or otherwise terminate, or are withheld to satisfy tax withholding obligations will not be available for award grant purposes under the 2019 Plan. All plans permit the grant of the following types of awards to its officers, other employees and non-employee directors: incentive stock options, nonqualified stock options, deferred stock awards, restricted stock awards, restricted stock unit ("RSU") awards, unrestricted stock awards, performance share awards, cash based awards, stock appreciation rights ("SARs") and dividend equivalent rights. The 2019 Plan provides for the issuance of up to 1,000,000 shares of common stock (subject to adjustment for stock splits and similar events). Under the 2019 Plan, shares issued for all awards count against the aggregate share limit as 1.0 share for every share actually issued. All stock options and RSUs granted under the 1999 Plan are either 100% vested or have been terminated. RSUs granted under the 2014 Plan and the 2019 Plan generally vest within three years. RSUs will be settled in shares of the Company's common stock. As of December 31, 2020, there were 457,953 shares available for grant under the 2019 Plan.

As of December 31, 2020, there were 666,785 stock options (including the CEO stock option award noted below) and 744,925 RSUs outstanding.

The Company measures the cost of all share-based payments, including stock options, at fair value on the grant date and recognizes this cost in the consolidated statements of (loss) income, net of actual forfeitures. Compensation expense related to its share-based plans for the years ended December 31, 2020, 2019 and 2018 was \$5.7 million, \$5.4 million and \$5.0 million respectively. During 2020, expenses related to share-based compensation were recorded as follows: \$5.4 million in selling, general and administrative expenses, \$0.1 million in special charges related to the sale of the I&S business, and \$0.2 million in discontinued operations related to the sale of the DV business. The special charges and discontinued operations costs relate to the accelerated vesting of awards as a result of the sale transactions. As of December 31, 2020, there was \$5.4 million of total unrecognized compensation cost related to the Company's outstanding share-based compensation arrangements. That cost is expected to be recognized over a weighted average period of 1.6 years. This compares to \$8.1 million for 2019 and \$7.6 million for 2018, respectively.

Stock Options

During the year ended December 31, 2020, there were no stock option awards granted for the purchase of shares of the Company's common stock, compared with 153,726 in 2019 and 127,704 in 2018.

On April 9, 2013, the Company granted a stock option to purchase 200,000 shares of common stock to its President and Chief Executive Officer at an exercise price of \$41.17 per share. This award included a service period and a market performance vesting condition. In 2014, certain of these targets were achieved and 150,000 shares vested and remain exercisable. The remaining 50,000 shares were canceled in 2018 as the performance condition was not satisfied.

On March 5, 2014, the Company granted a stock option to purchase 100,000 shares of common stock to its President and Chief Executive Officer at an exercise price of \$70.42 per share. This option award includes a service period and market performance vesting conditions which were not met and all 100,000 shares were canceled in 2018.

The Company uses the Black Scholes pricing model to fair value the option awards. The average fair value of stock options granted during the years ended December 31, 2019, and 2018 of \$11.84 and \$14.68, respectively, was estimated using the following weighted-average assumptions:

	Year Ended December 31,	
	2019	2018
Risk-free interest rate	2.6 %	2.5 %
Expected life (years)	4.3	4.3
Expected stock volatility	38.1 %	37.2 %
Expected dividend yield	— %	— %

There were no stock option grants during 2020.

Restricted Stock Units

The Company accounts for RSU awards by expensing the weighted average fair value to selling, general and administrative expenses ratably over vesting periods generally ranging up to three years. During the years ended December 31, 2020, December 31, 2019 and December 31, 2018 it granted 616,612, 205,291 and 167,480 RSUs, respectively, with weighted average fair values of \$12.88, \$32.92 and \$42.87 per RSU award, respectively.

On April 2, 2020, the Company granted 44,511 RSUs to its Senior Vice President and Chief Financial Officer as an inducement RSU award upon his joining the Company. This award was granted outside the 2019 Plan pursuant to applicable New York Stock Exchange rules and vests ratably over a three year period.

During 2020, 2019, and 2018, the Company granted performance-based RSUs as part of the overall mix of RSU awards. In 2020, these performance-based RSU Awards include metrics for achieving Adjusted Operating Margin and Adjusted Measurement Cash Flow with target payouts ranging from 0% to 200%. In 2019, these performance-based RSUs included metrics for achieving adjusted operating margin and adjusted free cash flow with the same target payouts. In 2018 and prior years, these performance-based RSUs included metrics for achieving return on invested capital and adjusted operating margin with the same target payouts. Of the different performance-based RSU tranches, the Company anticipates approximately 29% overall achievement and probability to vest. Of the 616,612 RSUs granted during 2020, 109,278 are performance-based RSU awards. This compares to 67,362 and 48,080 performance-based RSU awards granted in 2019 and 2018, respectively.

The CIRCOR Management Stock Purchase Plan ("MSPP"), which is a component of all three of the Company's share-based compensation plans, provides that eligible employees may elect to receive RSUs in lieu of all or a portion of their pre-tax annual incentive bonus and, in some cases, make after-tax contributions in exchange for RSUs ("RSU MSPs"). Each RSU MSP represents a right to receive one share of the Company's common stock after a three-year vesting period. RSU MSPs are granted at a discount of 33% from the fair market value of the shares of common stock on the date of grant. This discount is amortized as compensation expense, to selling, general and administrative expenses, over a four-year period. There were no RSU MSPs granted during 2020. RSU MSPs totaling 56,379 and 34,937 with per unit discount amounts representing fair values of \$11.10 and \$14.06, respectively, were granted under the MSPP during the years ended December 31, 2019 and December 31, 2018, respectively.

A summary of the status of all stock options and RSU awards granted to employees and non-employee directors as of December 31, 2020 and changes during the year are presented in the table below:

	December 31, 2020					
	Stock Options		RSU Awards		RSU MSPs	
	Shares	Weighted Average Exercise Price	Shares	Weighted Average Price	Shares	Weighted Average Price
Options and awards outstanding at beginning of period	712,500	\$ 43.76	274,959	\$ 38.51	106,602	\$ 28.06
Granted	—	\$ —	616,612	\$ 12.88	—	\$ —
Exercised	(3,010)	\$ 38.89	(86,764)	\$ 37.32	(24,670)	\$ 39.58
Forfeited	(9,704)	\$ 34.00	(138,180)	\$ 28.14	(3,634)	\$ 23.48
Expired	(33,001)	\$ 56.26	—	—	—	—
Options and awards outstanding at end of period	666,785	\$ 43.31	666,627	\$ 17.11	78,298	\$ 24.99
Options and awards exercisable at end of period	539,304	\$ 44.99	892	\$ 42.62	1,469	\$ 40.86

The weighted average contractual term for stock options outstanding and exercisable as of December 31, 2020 was 3.1 years and 2.7 years, respectively. The aggregate intrinsic value of stock options exercised during the years ended December 31, 2020, 2019 and 2018 was \$0.0 million, \$0.0 million and \$0.2 million, respectively. The aggregate fair value of stock-options vested during the years ended December 31, 2020, 2019 and 2018 was \$1.7 million, \$1.8 million and \$2.1 million, respectively. The aggregate intrinsic value of stock options outstanding and exercisable as of December 31, 2020 was \$0.7 million and \$0.2 million, respectively. As of December 31, 2020, there was \$0.7 million of total unrecognized compensation cost related to stock options expected to be recognized over a weighted average period of 1.0 years.

The aggregate intrinsic value of RSU awards settled during the years ended December 31, 2020, 2019 and 2018 was \$1.9 million, \$2.0 million, and \$1.2 million, respectively. The aggregate fair value of RSU awards vested during the 12 months ended December 31, 2020, 2019 and 2018 was \$3.0 million, \$2.6 million and \$1.5 million, respectively. The aggregate intrinsic value of RSU awards outstanding as of December 31, 2020 was \$25.6 million. As of December 31, 2020, there was \$4.5 million of total unrecognized compensation cost related to RSU awards that is expected to be recognized over a weighted average period of 1.8 years.

There were 1,469 RSU MSPs exercisable as of December 31, 2020 compared to 5,446 as of December 31, 2019, and 7,972 as of December 31, 2018. The aggregate intrinsic value of RSU MSPs settled during the years ended December 31, 2020, 2019, and 2018 was \$0.0 million, \$0.0 million and \$0.4 million, respectively. The aggregate fair value of RSU MSPs vested during the years ended December 31, 2020, 2019, and 2018 was \$0.4 million, \$0.2 million and \$0.6 million, respectively. The aggregate intrinsic value of RSU MSPs outstanding as of December 31, 2020 was \$1.1 million. As of December 31, 2020, there was \$0.2 million of total unrecognized compensation costs related to RSU MSPs that is expected to be recognized over a weighted average period of 1.1 years.

The following table summarizes information about equity awards outstanding at December 31, 2020:

(aggregate intrinsic value in thousands)	Equity Awards Outstanding				Equity Awards Exercisable			
	Awards	Average Share Price *	Aggregate Intrinsic Value	Remaining Term **	Awards	Average Share Price *	Aggregate Intrinsic Value	Remaining Term **
Stock Options	666,785	43.31	\$ 673	3.1	539,304	44.99	\$ 235	2.7
RSU Awards	666,627	17.11	\$ 25,625	1.4	892	42.62	\$ 34	2.2
RSU MSPs	78,298	24.99	\$ 1,057	0.8	1,469	40.86	\$ —	0.2

* Weighted-average exercise price per share for options and weighted- average grant date price for RSUs.

** Weighted-average contractual remaining term in years.

The Company also grants cash settled stock unit awards to some of its international employee participants. These cash settled awards generally vest ratably over a three year period based on the closing price of the Company's common stock at the time of vesting. As of December 31, 2020, there were 43,061 cash settled stock unit awards outstanding compared with 45,681 cash settled stock unit awards outstanding as of December 31, 2019. During 2020, the aggregate cash used to settle cash settled

stock unit awards was \$0.9 million. As of December 31, 2020, the Company had \$0.7 million in accrued expenses and other current liabilities for cash settled stock unit awards compared with \$0.9 million as of December 31, 2019. Cash settled stock unit award related compensation costs for the year ended December 31, 2020 totaled \$0.7 million and were recorded as follows: \$0.6 million in selling, general and administrative expense and \$0.1 million as special charges related to the sale of the I&S business. The special charge amount related to the accelerated vesting of awards as a result of the transaction. In 2019, cash settled stock unit award-related compensation costs totaled \$1.4 million and were recorded as follows: \$1.1 million as selling, general and administrative expense and \$0.3 million as special charges related to the sale of the EV business. In 2018, there was no compensation cost related to cash settled stock unit awards. The variability in cash settled stock unit award related compensation costs year over year was primarily driven by changes in stock price.

(14) Concentrations of Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash, cash equivalents, short-term investments and trade receivables. A significant portion of its revenue and receivables are from customers associated with the aerospace, defense, and industrial markets. The Company performs ongoing credit evaluations of its customers and maintain allowances for potential credit losses. For the years ended December 31, 2020, 2019 and 2018, the Company had no customers that accounted for more than 10% of its consolidated revenues.

(15) Retirement Plans

U.S. Contribution Plan

The Company offers a savings plan to eligible U.S. employees. The plan is intended to qualify under Section 401(k) of the Internal Revenue Code. Substantially all of its U.S. employees are eligible to participate in the 401(k) savings plan. Participating employees may defer a portion of their pre-tax compensation, as defined, but not more than statutory limits. Under this plan, the Company matches a specified percentage of employee contributions, and are able to make a discretionary core contribution, subject to certain limitations. For the first part of 2018, it contributed 50% of the amount contributed by the employee, up to a maximum of 5% of the employee's earnings. The Company's matching contributions vested at a rate of 20% per year of service, with full vesting after five years of service. Effective August 28, 2018, the Company had a 401(k) benefit update, wherein the Company contributed 100% of the amount contributed by the employee, up to a maximum of 4% of the employee's earnings. Matching contributions under the updated 401(k) benefit plan vest 0% after one year, 50% after two years, and full vesting after three years of service. In the first quarter of 2020, the Company temporarily suspended the 401(k) match for certain employee populations for the year. In the first quarter of 2021 the Company reinstated the temporarily suspended 401(k) match.

The cost of the Company's 401(k) plan is outlined below (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Cost of 401(k) plan	\$ 458	\$ 3,428	\$ 1,847

Pension & Other Post-Retirement Benefit Obligations

The Company also sponsors various defined benefit plans, and other post-retirement benefits plans, including health and life insurance, for former employees of an acquired business. These plans include significant benefit obligations which are calculated based on actuarial valuations. Key assumptions are made in determining these obligations and related net periodic benefit costs, including discount rates, mortality, and expected long-term return on plan assets.

The Company maintains a qualified noncontributory defined benefit pension plan, a nonqualified, noncontributory defined benefit supplemental pension plan, and other post-retirement benefit plans, including health and life insurance in the U.S. which are frozen. To date, the supplemental and the other post-retirement benefits plans remain unfunded. Outside of the U.S., the Company sponsors various funded and unfunded defined benefit plans. The obligations are primarily attributed to a partially funded plan in Germany and a fully funded plan in the U.K.

During fiscal year 2020, the Company made cash contributions of approximately \$0.8 million to its U.S. plans and \$4.1 million to its foreign plans. In 2021, it expects to make defined benefit plan contributions based on the minimum required funding in accordance with statutory requirements (approximately \$1.1 million in the U.S. and approximately \$3.9 million for its foreign

plans). The estimates for plan funding for future periods may change as a result of the uncertainties concerning the return on plan assets, the number of plan participants, and other changes in actuarial assumptions. The Company anticipates fulfilling these commitments through the generation of cash flow from operations.

The components of net periodic benefit cost for the postretirement plans were as follows (in thousands):

	Pension Benefits			Other Post-retirement Benefits		
	Year Ended December 31,			Year Ended December 31,		
	2020	2019	2018	2020	2019	2018
Components of net periodic benefit cost:						
Service cost	\$ 2,812	\$ 2,694	\$ 2,993	\$ 3	\$ 2	\$ 1
Interest cost	6,958	10,061	9,164	262	359	336
Expected return on assets	(11,731)	(11,979)	(15,418)	—	—	—
Net periodic benefit cost	(1,961)	776	(3,261)	265	361	337
Net loss (gain) amortization	279	441	153	—	(32)	—
Prior service cost amortization	15	15	—	—	—	—
Total amortization	294	456	153	—	(32)	—
Net periodic benefit cost	\$ (1,667)	\$ 1,232	\$ (3,108)	\$ 265	\$ 329	\$ 337

The weighted average assumptions used in determining the net periodic benefit cost and benefit obligations for the post-retirement plans are shown below:

	Pension Benefits			Other Post-retirement Benefits		
	Year Ended December 31,			Year Ended December 31,		
	2020	2019	2018	2020	2019	2018
Net periodic benefit cost:						
Discount rate – U.S.	2.83%	3.93%	3.27%	3.05%	4.10%	3.48%
Discount rate – Foreign	1.24%	2.00%	1.97%	N/A	N/A	N/A
Expected return on plan assets - U.S.	5.50%	6.25%	7.00%	N/A	N/A	N/A
Expected return on plan assets - Foreign	2.95%	3.7%	3.53%	N/A	N/A	N/A
Rate of compensation increase - Foreign	3.20%	3.15%	3.11%	N/A	N/A	N/A
Benefit obligations:						
Discount rate – U.S.	1.93%	2.83%	3.93%	2.26%	3.05%	4.10%
Discount rate – Foreign	0.82%	1.24%	2.00%	N/A	N/A	N/A
Rate of compensation increase - Foreign	3.20%	3.09%	3.14%	N/A	N/A	N/A

The amounts reported for net periodic benefit cost and the respective benefit obligation amounts are dependent upon the actuarial assumptions used. The Company reviews historical trends, future expectations, current market conditions, and external data to determine the assumptions. The actuarial assumptions used to determine the net periodic pension cost are based upon the prior year's assumptions used to determine the benefit obligation.

Effective with fiscal year 2018, the Company changed the method used to estimate the service and interest cost components of the net periodic benefit costs for all of its plans in the U.S., U.K., and Germany. The new method uses the spot yield curve approach to estimate the service and interest costs by applying the specific spot rates along the yield curve used to determine the benefit obligations to relevant projected cash outflows. The Company changed to the new method to provide a more precise measure of interest and service costs by more closely correlating the application of the discrete spot yield curve rates with the projected benefit cash flows. Prior to fiscal year 2018, the service and interest costs were determined using a single weighted-average discount rate used to measure the benefit obligation at the measurement date.

Assumed health care cost trend rates pre-65 trend at December 31, 2020 and 2019 were 6.5% and 6.8%, respectively. The rate to which the cost trend rate is assumed to decline (the ultimate trend rate) for December 31, 2020 and 2019 were 4.5% and 4.5%, respectively, and the years that the rate reaches the ultimate trend rate were 2029 and 2028, respectively. Assumed health care cost trend rates post-65 trend at December 31, 2020 and 2019 were 6.5% and 6.8%, respectively. The rate to which the cost trend rate is assumed to decline (the ultimate trend rate) for December 31, 2020 and 2019 were 4.5% and 4.5%, respectively, and the year that the rate reaches the ultimate trend rate were 2029 and 2028, respectively.

In selecting the expected long-term return on assets for the qualified and foreign plans, the Company considered the average rate of earnings expected on the funds invested or to be invested to provide for the benefits of these plans. It, with input from the plans' professional investment managers and actuaries, also considered the average rate of earnings expected on the funds invested or to be invested to provide plan benefits. This process included determining expected returns for the various asset classes that comprise the plans' target asset allocation. This basis for selecting the long-term return on assets is consistent with the prior year. Using generally accepted diversification techniques, the plans' assets, in aggregate and at the individual portfolio level, are invested so that the total portfolio risk exposure and risk-adjusted returns best meet the plans' long-term benefit obligations to employees. Plan asset allocations are reviewed periodically and rebalanced to achieve target allocation among the asset categories when necessary. This included considering the pension asset allocation and the expected returns likely to be earned over the life of the plans.

The funded status of the defined benefit post-retirement plans and amounts recognized in the consolidated balance sheets, measured as of December 31, 2020 and December 31, 2019 were as follows (in thousands):

	Pension Benefits		Other Post-retirement Benefits	
	December 31,		December 31,	
	2020	2019	2020	2019
Change in projected benefit obligation:				
Balance at beginning of year	\$ 382,179	\$ 363,334	\$ 10,193	\$ 10,276
Service cost	2,812	2,694	3	2
Interest cost	6,958	10,061	262	359
Amendments	12	—	—	—
Actuarial loss (gain) (1)	30,833	37,243	828	(12)
Exchange rate loss (gain)	12,541	(1,692)	—	—
Benefits paid	(22,501)	(24,533)	(393)	(432)
Settlement payments	—	(3,451)	—	—
Curtailments (2)	—	(1,477)	—	—
Balance at end of year	\$ 412,834	\$ 382,179	\$ 10,893	\$ 10,193
Change in fair value of plan assets:				
Balance at beginning of year	\$ 235,297	\$ 210,993	\$ —	\$ —
Actual return on assets	29,624	46,665	—	—
Exchange rate gain	895	935	—	—
Benefits paid	(22,501)	(24,533)	(393)	(432)
Settlement payments	—	(3,451)	—	—
Employer contributions	4,506	4,688	393	432
Fair value of plan assets at end of year (3)	\$ 247,821	\$ 235,297	\$ —	\$ —
Funded status:				
Excess of benefit obligation over the fair value of plan assets	\$ (165,013)	\$ (146,882)	\$ (10,893)	\$ (10,193)
Pension plan accumulated benefit obligation (“ABO”)	\$ 412,834	\$ 382,179	N/A	N/A

(1) The changes in benefit obligations were primarily drive by changes in discount rates in both US and foreign obligations.

(2) On December 31, 2019, the Company transitioned its defined benefit plan in Norway to a defined contribution plan.

(3) Refer to table below for further disclosure regarding the fair value of plan assets.

The fair values of the Company's pension plan assets as of December 31, 2020 and 2019 utilizing the fair value hierarchy were as follows (in thousands):

	December 31, 2020					December 31, 2019				
	Measured at Net Asset Value (1)	Level 1	Level 2	Level 3	Total	Measured at Net Asset Value (1)	Level 1	Level 2	Level 3	Total
U.S. Plans:										
Cash Equivalents:										
Money Market Funds	\$ 21	\$ 656	\$ —	\$ —	\$ 677	\$ 208	\$ 2,076	\$ —	\$ —	\$ 2,284
Mutual Funds:										
Bond Funds	—	—	—	—	—	—	—	—	—	—
Large Cap Funds	—	—	—	—	—	—	—	—	—	—
International Funds	—	—	—	—	—	28,036	—	—	—	28,036
Small Cap Funds	—	—	—	—	—	—	—	—	—	—
Blended Funds	—	—	—	—	—	—	—	—	—	—
Mid Cap Funds	—	—	—	—	—	—	—	—	—	—
Comingled Pools:										
Opportunistic	20,827	—	—	—	20,827	12,480	—	—	—	12,480
Investment Grade	59,013	—	—	—	59,013	62,134	—	—	—	62,134
Non-U.S. Equity	53,570	—	—	—	53,570	20,363	—	—	—	20,363
U.S. Equity	84,186	—	—	—	84,186	81,209	—	—	—	81,209
Global Low Volatility	20	—	—	—	20	1,396	—	—	—	1,396
Insurance Contracts	—	—	807	—	807	—	—	806	—	806
Foreign Plans:										
Cash	—	85	—	—	85	—	42	—	—	42
Equity	—	11,229	—	—	11,229	—	10,742	—	—	10,742
Non-U.S. government and corporate bonds	—	17,092	—	—	17,092	—	15,504	—	—	15,504
Insurance Contracts	—	—	38	277	315	—	—	30	271	301
Other	—	—	—	—	—	—	—	—	—	—
Total Fair Value	\$ 217,637	\$ 29,062	\$ 845	\$ 277	\$ 247,821	\$ 205,826	\$ 28,364	\$ 836	\$ 271	\$ 235,297

(1) Certain investments that are measured at fair value using NAV have not been classified in the fair value hierarchy. These investments, consisting of common/collective trusts, are valued using the NAV provided by the Trustee. The NAV is based on the underlying investments held by the fund that are traded in an active market, less its liabilities. These investments are able to be redeemed in the near-term.

The following information is presented as of December 31, 2020 and 2019 (in thousands):

	Pension Benefits		Other Post-retirement Benefits	
	2020	2019	2020	2019
Funded status, end of year:				
Fair value of plan assets	\$ 247,821	\$ 235,297	\$ —	\$ —
Projected Benefit obligation	(412,834)	(382,179)	(10,893)	(10,193)
Net pension liability	<u>\$ (165,013)</u>	<u>\$ (146,882)</u>	<u>\$ (10,893)</u>	<u>\$ (10,193)</u>
Post-retirement amounts recognized in the balance sheet consists of:				
Non-current asset	\$ 2,885	\$ 3,917	\$ —	\$ —
Current liability	(4,256)	(3,998)	(683)	(669)
Non-current liability	(163,642)	(146,801)	(10,210)	(9,524)
Total	<u>\$ (165,013)</u>	<u>\$ (146,882)</u>	<u>\$ (10,893)</u>	<u>\$ (10,193)</u>
Amounts recognized in accumulated other comprehensive loss consist of:				
Net losses (gains)	\$ 45,339	\$ 30,872	\$ (55)	\$ (883)
Prior service cost	328	322	—	—
Total	<u>\$ 45,667</u>	<u>\$ 31,194</u>	<u>\$ (55)</u>	<u>\$ (883)</u>

As of December 31, 2020, the benefit payments expected to be paid in each of the next five years and the aggregate for the five fiscal years thereafter were as follows (in thousands):

	2021	2022	2023	2024	2025	Thereafter
Pension Benefits - All Plans	\$ 23,100	\$ 22,916	\$ 22,510	\$ 22,128	\$ 21,577	\$ 99,223
Other Post-retirement Benefits	683	645	620	590	573	2,507
Expected benefit payments	<u>\$ 23,783</u>	<u>\$ 23,561</u>	<u>\$ 23,130</u>	<u>\$ 22,718</u>	<u>\$ 22,150</u>	<u>\$ 101,730</u>

(16) Contingencies, Commitments and Guarantees

Legal Proceedings

The Company is subject to various legal proceedings and claims pertaining to matters such as product liability or contract disputes. The Company is also subject to other proceedings and governmental inquiries, inspections, audits or investigations pertaining to issues such as tax matters, patents and trademarks, pricing, contractual issues, business practices, governmental regulations, employment and other matters. Although the results of litigation and claims cannot be predicted with certainty, the Company expects that the ultimate disposition of these matters, to the extent not previously provided for, will not have a material adverse effect, individually or in the aggregate, on its business, financial condition, results of operations or liquidity.

Asbestos-related product liability claims continue to be filed against two of the Company's subsidiaries: CIRCOR Instrumentation Technologies, Inc. (f/k/a Hoke, Inc.) ("Hoke"), the stock of which the Company acquired in 1998 and Spence Engineering Company, Inc., the stock of which the Company acquired in 1984. The Hoke subsidiary was divested in January 2020 through the sale of the I&S business. However, the Company has indemnified the buyer for asbestos-related claims that are made against Hoke. Due to the nature of the products supplied by these entities, the markets they serve and the Company's historical experience in resolving these claims, the Company does not expect that these asbestos-related claims will have a material adverse effect on the financial condition, results of operations or liquidity of the Company.

Standby Letters of Credit

The Company executes standby letters of credit, which include bank guarantees, bid bonds and performance bonds, in the normal course of business to ensure its performance or payments to third parties. The aggregate notional value of these instruments was \$39.3 million at December 31, 2020 of which \$30.4 million were syndicated under the Credit Agreement and \$42.0 million at December 31, 2019 of which \$34.3 million were syndicated under the Credit Agreement. The Company's historical experience with these types of instruments has been good and no claims have been paid in the current or past several

fiscal years. The Company believes that the likelihood of demand for payments relating to the outstanding instruments is remote. These instruments generally have expiration dates ranging from less than 1 month to 5 years from December 31, 2020.

The following table contains information related to standby letters of credit instruments outstanding as of December 31, 2020 (in thousands):

Term Remaining	Maximum Potential Future Payments
0–12 months	\$ 26,055
Greater than 12 months	13,247
Total	\$ 39,302

Commercial Contract Commitment

As of December 31, 2020, the Company had approximately \$94.0 million of commercial contract commitments related to open purchase orders.

Insurance

The Company maintains insurance coverage of a type and with such limits as it believe are customary and reasonable for the risks it faces and in the industries in which it operates. While many of its policies do contain a deductible, the amount of such deductible is typically not material. The accruals for insured liabilities are not discounted and take into account these deductibles and are based on claims filed and reported as well as estimates of claims incurred but not yet reported.

(17) Guarantees and Indemnification obligations

As permitted under Delaware law, we have agreements whereby we indemnify certain of our officers and directors for certain events or occurrences while the officer or director is, or was, serving at our request in such capacity. The term of the indemnification period is for the officer's or director's lifetime. The maximum potential amount of future payments we could be required to make under these indemnification agreements is unlimited. However, we have directors and officers liability insurance policies that limit our exposure for events covered under the policies and should enable us to recover a portion of any future amounts paid. As a result of the coverage under these insurance policies, we believe the estimated fair value of these indemnification agreements is minimal and, therefore, have no liabilities recorded from those agreements as of December 31, 2020.

We record provisions for the estimated cost of product warranties, primarily from historical information, at the time product revenue is recognized. While we engage in extensive product quality programs and processes, our warranty obligation is affected by product failure rates, utilization levels, material usage, service delivery costs incurred in correcting a product failure, and supplier warranties on parts delivered to us. Should actual product failure rates, utilization levels, material usage, service delivery costs or supplier warranties on parts differ from our estimates, revisions to the estimated warranty liability would be required. Our warranty liabilities are included in accrued expenses and other current liabilities on our consolidated balance sheets.

The following table sets forth information related to our product warranty reserves for the years ended December 31, 2020 and 2019 (in thousands):

	December 31,	
	2020	2019
Balance beginning January 1	\$ 1,642	\$ 2,860
Provisions	2,825	1,894
Claims settled	(2,313)	(2,830)
Acquired reserves/other	—	(11)
Currency translation adjustment	52	(271)
Balance ending December 31	<u>\$ 2,206</u>	<u>\$ 1,642</u>

Warranty obligations of \$2.2 million as of December 31, 2020 increased \$0.6 million from \$1.6 million as of December 31,

2019. For the year ended December 31, 2020, increases in warranty obligations were primarily driven by provisions and claims within our Refinery Valves, Aerospace & Defense and Industrial Pumps North America businesses.

(18) Business Segment and Geographical Information

The Company's reportable segments have been identified in accordance with ASC Topic 280-10-50 through its evaluation of how it engages in business activities to earn revenues and incur expenses, which operating results are regularly reviewed by its chief operating decision maker ("CODM") to assess performance and make decisions about resources to be allocated, and the availability of discrete financial information. CIRCOR's reportable segments are generally organized based upon the end markets it sells its products and services into. No individual operating segments have been aggregated for purposes of determining the reportable segments. The reporting segments are Industrial and Aerospace & Defense.

During the quarter ended March 29, 2020, the Company divested its Instrumentation & Sampling business, which was previously part of the Energy segment. In light of this divestiture, effective March 29, 2020, the Company realigned its segments by eliminating the Energy segment and moving the remaining businesses into the Industrial segment. Following the Q1 2020 realignment the new reporting segments are Industrial and Aerospace & Defense, which is the level at which the CODM regularly reviews operating results and makes resource allocation decisions. The current and prior periods are reported under this new segment structure.

Each reporting segment is individually managed, as each requires different technology and marketing strategies, and has separate financial results that are reviewed by the Company's CODM. The CODM evaluates segment performance and determines how to allocate resources utilizing, among other data, segment operating income. Segment operating income excludes special and restructuring charges, net. In addition, certain administrative expenses incurred at the corporate level for the benefit of the reporting segments are allocated to the segments based upon specific identification of costs, employment related information or net revenues. Each segment contains related products and services particular to that segment.

Corporate is reported on a net "after allocations" basis. Inter-segment intercompany transactions affecting net operating profit have been eliminated within the respective reportable segments.

The amounts reported in the Corporate expenses line item in the following table consists primarily of the following: compensation and fringe benefit costs for executive management and other corporate staff; Board of Director compensation; corporate development costs (relating to mergers and acquisitions); human resource development and benefit plan administration expenses; legal, accounting and other professional and consulting costs; facilities, equipment and maintenance costs; and travel and various other administrative costs related to the corporate office and respective functions. The above costs are incurred in the course of furthering the business prospects of the Company and relate to activities such as: implementing strategic business growth opportunities; corporate governance; risk management; tax; treasury; investor relations and shareholder services; regulatory compliance; strategic tax planning; and stock transfer agent costs.

The Company's CODM evaluates segment operating performance using segment operating income. Segment operating income is defined as GAAP operating income excluding intangible amortization and amortization of fair value step-ups of inventory and fixed assets from acquisitions completed subsequent to December 31, 2011, the impact of restructuring related inventory write-offs, impairment charges and special charges or gains. The Company also refers to this measure as adjusted operating income. The Company uses this measure because it helps management understand and evaluate the segments' core operating results and facilitate comparison of performance for determining incentive compensation achievement.

The following table presents certain reportable segment information (in thousands):

	As of and for the year ended December 31,		
	2020	2019	2018
Net revenues			
Industrial	\$ 505,449	\$ 691,688	\$ 776,453
Aerospace & Defense	267,822	272,625	237,017
Consolidated revenues	<u>\$ 773,271</u>	<u>\$ 964,313</u>	<u>\$ 1,013,470</u>
Segment income			
Aerospace & Defense - Segment Operating Income	59,093	52,480	36,047
Industrial - Segment Operating Income	39,823	90,789	104,831
Corporate expenses	(31,285)	(33,469)	(39,011)
Subtotal	67,631	109,800	101,867
Special restructuring charges, net	4,945	5,186	5,848
Special other (recoveries) charges, net	(39,248)	17,686	13,061
Special and restructuring (recoveries) charges, net	(34,303)	22,872	18,909
Restructuring related inventory (recoveries) charges, net	(250)	(820)	346
Amortization of inventory step-up	—	—	6,600
Acquisition amortization	42,463	45,715	47,310
Acquisition depreciation	3,985	4,352	7,049
Impairment charges	116,182	—	—
Restructuring, impairment and other cost, net	162,380	49,247	61,305
Consolidated Operating (Loss) Income	(60,446)	37,681	21,653
Interest Expense, net	34,219	48,609	52,975
Other Expense (Income), net	(529)	(836)	(7,426)
(Loss) income from continuing operations before income taxes	<u>\$ (94,136)</u>	<u>\$ (10,092)</u>	<u>\$ (23,896)</u>
Identifiable assets			
Industrial	\$ 1,378,710	\$ 1,760,926	\$ 2,161,678
Aerospace & Defense	450,597	426,405	399,102
Corporate	(698,779)	(716,386)	(769,168)
Consolidated Identifiable assets	<u>\$ 1,130,528</u>	<u>\$ 1,470,945</u>	<u>\$ 1,791,612</u>
Capital expenditures			
Industrial	\$ 7,201	\$ 7,523	\$ 14,627
Aerospace & Defense	4,400	4,376	4,739
Corporate	466	1,074	1,787
Consolidated Capital expenditures	<u>\$ 12,067</u>	<u>\$ 12,973</u>	<u>\$ 21,153</u>
Depreciation and amortization			
Industrial	\$ 50,945	\$ 57,576	\$ 63,724
Aerospace & Defense	12,492	11,531	10,937
Corporate	610	529	750
Consolidated Depreciation and amortization	<u>\$ 64,047</u>	<u>\$ 69,636</u>	<u>\$ 75,411</u>

The total assets for each reportable segment have been reported as the Identifiable Assets for that segment, including inter-segment intercompany receivables, payables and investments in other CIRCOR companies. Identifiable assets reported in Corporate include both corporate assets, such as cash, deferred taxes, prepaid and other assets, fixed assets, as well as the elimination of all inter-segment intercompany assets. The elimination of intercompany assets results in negative amounts

reported in Corporate for Identifiable Assets. Corporate Identifiable Assets after elimination of intercompany assets were \$12.1 million, \$18.9 million, and \$23.8 million as of December 31, 2020, 2019 and 2018, respectively.

The following tables present net revenue and long-lived assets by geographic area. The net revenue amounts are based on shipments to each of the respective areas (in thousands).

<u>Net revenues by geographic area</u>	Year Ended December 31,		
	2020	2019	2018
United States	\$ 344,018	\$ 412,686	\$ 430,575
France	36,621	49,724	48,344
Germany	81,328	96,232	97,526
Canada	18,417	25,963	33,531
Saudi Arabia	6,467	11,562	9,643
United Kingdom	34,077	36,760	35,869
China	27,036	32,779	35,732
Norway	12,792	23,045	15,009
Rest of Europe	87,679	111,852	101,787
Rest of Asia-Pacific	80,309	96,711	86,261
Other	44,527	66,999	119,193
Total net revenues	<u>\$ 773,271</u>	<u>\$ 964,313</u>	<u>\$ 1,013,470</u>

<u>Long-lived assets by geographic area</u>	December 31,	
	2020	2019
United States	\$ 84,325	\$ 90,136
Germany	54,106	52,843
UK	12,035	11,510
India	7,698	8,319
France	3,274	3,130
Other	7,325	6,241
Total long-lived assets	<u>\$ 168,763</u>	<u>\$ 172,179</u>

(19) Other (Income) Expense, Net

The following table outlines other (income) expense, net (in thousands):

	December 31,		
	2020	2019	2018
Pension - Interest cost	\$ 6,958	\$ 10,061	\$ 9,164
Pension - Expected return on assets	(11,731)	(11,979)	(15,418)
Foreign Currency Translations	2,914	(395)	(1,677)
Other	1,330	1,477	505
Other (income) expense, net	<u>\$ (529)</u>	<u>\$ (836)</u>	<u>\$ (7,426)</u>

On January 1, 2018, the Company adopted FASB ASU 2017-07, Compensation—Retirement Benefits (Topic 715), which amends the presentation requirements of service cost and other components of net benefit cost in the income statement. Service costs are recorded within the selling, general and administrative caption of the Company's consolidated statements of (loss) income, while the other components of net benefit cost are recorded in the other (income) expense, net caption of its consolidated statements of (loss) income.

(20) Accumulated Other Comprehensive Loss

The following table summarizes the changes in accumulated other comprehensive loss, net of tax, which is reported as a component of total shareholders' equity, for the years ended December 31, 2020, 2019 and 2018 (in thousands):

	Foreign Currency Translation Adjustments	Pension, net	Derivative	Total
Balance as of December 31, 2017	\$ (28,585)	\$ (8,145)	\$ —	\$ (36,730)
Other comprehensive (loss)	(20,523)	(10,970)	(1,516)	(33,009)
Balance as of December 31, 2018	(49,108)	(19,115)	(1,516)	(69,739)
Other comprehensive (loss)	(4,740)	(398)	(5,390)	(10,528)
Balance as of December 31, 2019	(53,848)	(19,513)	(6,906)	(80,267)
Other comprehensive (loss) income	6,949	(13,846)	1,196	(5,701)
Balance as of December 31, 2020	<u>\$ (46,899)</u>	<u>\$ (33,359)</u>	<u>\$ (5,710)</u>	<u>\$ (85,968)</u>

During the first quarter of 2019, an immaterial error was identified in the Company's calculation of currency translation adjustments related to goodwill, intangible assets and property, plant and equipment acquired in the FH acquisition. This error impacted other comprehensive income (loss). Specifically, other comprehensive income (loss) was overstated by \$2.2 million for fiscal 2018, and understated by \$2.2 million for the first quarter of 2019. The Company determined that these adjustments were not material to the prior periods or the Company's 2018 goodwill impairment analyses. These items were adjusted in 2019.

(21) Subsequent Event

Sale of Cryo Business

On January 15, 2021 the Company closed the sale of the Cryo business for a cash consideration of \$7.5 million subject to working capital adjustments. The Cryo business is engaged in the design, manufacture and marketing of valves for the industrial gas and cryogenic end markets. The Company expects to record a gain of approximately \$1 million on the sale of the Cryo business in the first quarter of 2021.

Schedule II — Valuation and Qualifying Accounts

CIRCOR INTERNATIONAL, INC.

Allowance for Doubtful Accounts

Description	Balance at Beginning of Period	Additions (Reductions)		Deductions (1)	Balance at End of Period
		Charged to Costs and Expenses	Charged to Other Accounts		
		(in thousands)			
Year ended					
December 31, 2020					
Deducted from asset account:					
Allowance for doubtful accounts	\$ 3,086	\$ 6,099	\$ 929	\$ (1,079)	\$ 9,035
Year ended					
December 31, 2019					
Deducted from asset account:					
Allowance for doubtful accounts	\$ 2,270	\$ 1,777	\$ (198)	\$ (763)	\$ 3,086
Year ended					
December 31, 2018					
Deducted from asset account:					
Allowance for doubtful accounts	\$ 2,865	\$ (262)	\$ (95)	\$ (238)	\$ 2,270

(1) Uncollectible accounts written off, net of recoveries.

DESCRIPTION OF SECURITIES REGISTERED UNDER SECTION 12 OF THE EXCHANGE ACT

The following description of the common stock, par value \$0.01 per share (the “Common Stock”) of CIRCOR International, Inc. (“us,” “our,” “we” or the “Company”), which is the only security of the Company registered under Section 12 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), summarizes certain information regarding the Common Stock in our Amended and Restated Certificate of Incorporation, as amended (the “Certificate of Incorporation”), our Second Amended and Restated By-Laws (the “Bylaws”) and applicable provisions of Delaware General Corporation Law (the “DGCL”), and is qualified by reference to the Certificate of Incorporation and the Bylaws, which are incorporated by reference as Exhibit 3.1 and Exhibit 3.2, respectively, to the Annual Report on Form 10-K of which this Exhibit 4.1 is a part.

Authorized Capital Stock

Our authorized capital stock consists of 29,000,000 shares of Common Stock and 1,000,000 shares of preferred stock, par value \$0.01 per share (the “Preferred Stock”).

Common Stock

Voting Rights. Each holder of Common Stock is entitled to one vote for each share held of record on all matters to be voted upon by stockholders, unless otherwise provided by law or by our Certificate of Incorporation. When a quorum is present at any meeting of stockholders, matters before the meeting other than an election to office shall be decided by a majority of the votes cast on such matter, except where a larger vote is required by law, the Certificate of Incorporation or the Bylaws. Except in a contested election, any election of directors by stockholders shall be determined by a majority of the votes cast at such meeting in favor of the nominee. In a contested election, a director shall be elected by a plurality of the votes cast at such meeting. A contested election shall be one in which there are more nominees than positions on the board of directors to be filled at the meeting as of the fifth day prior to the date on which we file our definitive proxy statement with the Securities and Exchange Commission.

Dividends. Subject to the rights, powers and preferences of any outstanding Preferred Stock, and except as provided by law or in our Certificate of Incorporation, dividends may be declared and paid or set apart for payment upon the Common Stock out of legally available assets or funds when and as declared by the board of directors.

Liquidation, Dissolution or Winding Up. Subject to the rights, powers and preferences of any outstanding Preferred Stock, in the event of our liquidation, dissolution or winding up, our net assets will be distributed pro rata to the holders of Common Stock.

Other Rights. Holders of the Common Stock have no right to:

- convert the stock into any other security;
- have the stock redeemed;
- purchase additional stock; or
- maintain their proportionate ownership interest.

The Common Stock does not have cumulative voting rights. Holders of shares of the Common Stock are not required to make additional capital contributions.

Provisions of Our Certificate of Incorporation and Bylaws and Delaware Law That May Have Anti-Takeover Effects

Board of Directors. The number of directors comprising our board of directors is fixed from time to time by the board of directors. Prior to our 2020 annual meeting of stockholders, our board of directors was divided into three classes, with directors of each class elected to serve a three year term. At the 2020 annual meeting of stockholders, our stockholders approved an amendment to the Certificate of Incorporation eliminating the classified board structure; subsequently, at the 2020 annual meeting of stockholders, each of the Class III directors were elected to a one-year term as a Class I director; at the 2021 annual meeting of stockholders, each of the Class I directors will be elected to a one-year term; and at the 2022 annual meeting of stockholders (and at each annual meeting thereafter), all directors will be elected to a one-year term.

Removal of Directors by Stockholders. Our Certificate of Incorporation provides that, subject to the rights, if any, of any series of Preferred Stock, for so long as our board directors is classified, any director may be removed from office (i) only with cause and (ii) only by the affirmative vote of the holders of two-thirds of the shares then entitled to vote at an election of directors; thereafter, directors may be removed from office with or without cause by the affirmative vote of the holders of a majority of the shares then entitled to vote at an election of directors.

Advance Notice Provisions. Our Bylaws provide that a stockholder must notify us in writing, within timeframe specified in the Bylaws, of any stockholder nomination of a director and of any other business that the stockholder intends to bring at a meeting of stockholders.

No Action By Written Consent. Our Certificate of Incorporation provides that our stockholders may not act by written consent and may only act at duly called meetings of stockholders.

Special Meetings of Stockholders. Except as otherwise required by law and subject to the rights, if any, of the holders of any series of Preferred Stock, special meetings of stockholders may be called only by the board of directors.

Preferred Stock. We are authorized to issue up to 1,000,000 shares of “blank check” Preferred Stock, which may be issued in one or more series upon authorization of our board of directors. Our board of directors is authorized to fix the designations, powers, preferences and the relative, participating, optional or other special rights, and any qualifications, limitations and restrictions of the shares of each series of Preferred Stock. A series of our Preferred Stock could, depending on the terms of such series, impede the completion of a merger, tender offer or other

takeover attempt. Our board of directors will make any determination to issue shares of Preferred Stock based upon its judgment as to the best interests of our stockholders. Our directors, in so acting, could issue Preferred Stock having terms that could discourage an acquisition attempt through which an acquirer may be able to change the composition of our board of directors, including a tender offer or other transaction that some, or a majority, of our stockholders might believe to be in their best interests or in which stockholders might receive a premium for their stock over the then-current market price of the stock.

Delaware Business Combination Statute. Section 203 of the DGCL is applicable to us. Section 203 of the DGCL restricts some types of transactions and business combinations between a corporation and a 15% stockholder. A 15% stockholder is generally considered by Section 203 to be a person owning 15% or more of the corporation's outstanding voting stock. Section 203 refers to a 15% stockholder as an "interested stockholder." Section 203 restricts these transactions for a period of three years from the date the stockholder acquires 15% or more of our outstanding voting stock. With some exceptions, unless the transaction is approved by the board of directors and the holders of at least two-thirds of the outstanding voting stock of the corporation, Section 203 prohibits significant business transactions such as:

- a merger with, disposition of significant assets to or receipt of disproportionate financial benefits by the interested stockholder, and
- any other transaction that would increase the interested stockholder's proportionate ownership of any class or series of our capital stock.

The shares held by the interested stockholder are not counted as outstanding when calculating the two-thirds of the outstanding voting stock needed for approval.

The prohibition against these transactions does not apply if:

- prior to the time that any stockholder became an interested stockholder, the board of directors approved either the business combination or the transaction in which such stockholder acquired 15% or more of our outstanding voting stock, or
- the interested stockholder owns at least 85% of our outstanding voting stock as a result of a transaction in which such stockholder acquired 15% or more of our outstanding voting stock. Shares held by persons who are both directors and officers or by some types of employee stock plans are not counted as outstanding when making this calculation.

SEVERANCE AGREEMENT

This Severance Agreement (the “Agreement”) is made and entered into as of _____, 2020, by and between CIRCOR International, Inc. (“CIRCOR” or “Company”) and _____ (the “Executive”).

WHEREAS, CIRCOR presently employs the Executive in which capacity the Executive serves as Chief Financial Officer and as an officer and/or director of other direct and indirect subsidiaries of the Company; and

WHEREAS, the Company desires to provide severance compensation to the Executive upon the occurrence of certain events; and

WHEREAS, in exchange for the severance compensation provided for under this Agreement, Executive agrees to certain non-competition and non-solicitation covenants as set forth herein,

NOW, THEREFORE, in consideration of the foregoing and the mutual promises of the parties herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and the Executive hereby covenant and agree with each other as follows:

1. Definitions. For purposes of the Agreement, the following terms shall have the following meanings:

i. “Accrued Benefits” shall mean (i) all accrued but unpaid Base Salary through the Date of Termination of Executive’s employment (including any accrued vacation) at the rate in effect at the time Notice of Termination is given, (ii) any unpaid or unreimbursed expenses incurred in accordance with Company policies, (iii) accrued but unused vacation days through the Date of Termination of Executive’s employment determined as per the Company’s vacation policy, and (iv) any amounts that are accrued and vested under any Company plan or policy as of the Date of Termination.

ii. “Base Salary” shall mean the Executive’s annual base salary.

iii. “Disability” shall mean, as a result of Executive’s incapacity due to physical or mental illness, Executive shall have been absent from his duties with the Company on a full-time basis for 180 calendar days in the aggregate in any twelve-month period.

iv. “For Cause” shall mean: (i) conduct by Executive constituting a material act of willful misconduct in connection with the performance of his duties, including, without limitation, misappropriation of funds or property of the Company or any of its affiliates other than the occasional, customary and de minimis use of Company property for personal purposes; (ii) criminal or civil conviction of Executive, a plea of nolo contendere by Executive or conduct by Executive that would reasonably be expected to result in material injury to the reputation of the Company if he was retained in his position with the Company, including, without limitation, conviction of a felony involving moral turpitude; (iii) continued, willful and deliberate nonperformance by Executive of his duties hereunder (other than by reason of Executive’s physical or mental illness, incapacity or disability) which has continued for more than thirty (30) days following written notice of such non-performance from the Board of Directors of the Company (the “Board”); or (iv) a violation by Executive of the Company’s employment policies which has continued following written notice of such violation from the Board.

v. “Good Reason” shall mean that Executive has complied with the “Good Reason Process” (hereinafter defined) following the occurrence of any of the following events: (a) a material diminution or other material adverse change, not consented to by Executive, in the nature or scope of Executive’s responsibilities, authorities, powers, functions or duties; (b) an involuntary material reduction in Executive’s Base Salary except for across-the-board reductions similarly affecting all or substantially all management employees; (c) a material breach of this Agreement by the Company; or (d) a material change in the geographic location at which the Executive provides services to the Company.

“Good Reason Process” shall mean that (i) Executive reasonably determines in good faith that a “Good Reason” event has occurred; (ii) Executive notifies the Company in writing of the occurrence of the Good Reason event within 60 days of such occurrence; (iii) Executive reasonably cooperates in good faith with the Company’s efforts following such notice (the “Cure Period”), to promptly remedy the condition; (iv) notwithstanding such efforts, the Good Reason event continues to exist; and (v) the Executive terminates his employment within 60 days after the end of the Cure Period. If the Company cures the Good Reason event during the Cure Period, Good Reason shall be deemed not to have occurred.

vi. “Severance Benefits” shall mean the payments described in Section 2(c) of this Agreement.

2. Post Termination Payments.

(a) Termination by the Company For Cause. Death or Disability. Upon termination of the Executive’s employment by the Company for Cause, death, or Disability, the Company shall, through the Date of Termination (hereinafter defined), pay

Executive the Accrued Benefits. Thereafter, the Company shall have no further obligations to Executive except as otherwise expressly provided under this Agreement or as required by law.

(b) Termination by the Executive other than for Good Reason. If Executive's employment is terminated by the Executive other than for Good Reason, then the Company shall, through the Date of Termination, pay Executive the Accrued Benefits. Thereafter, the Company shall have no further obligations to Executive except as otherwise expressly provided under this Agreement.

(c) Termination by the Company Other Than for Cause. Death or Disability or by the Executive for Good Reason. If Executive's employment is terminated (i) by the Company other than For Cause or Executive's death or Disability or (ii) by the Executive for Good Reason, then the Company shall, through the Date of Termination, pay Executive the Accrued Benefits. Subject to Section 2(d) and Section 18 below, the Executive shall also receive the following Severance Benefits:

(i) a lump sum payment equal to the Executive's current Base Salary in effect during the fiscal year in which such termination occurs payable in a single lump sum payment as soon as administratively practicable (but not later than sixty (60) days) following such Date of Termination;

(ii) a lump sum payment equal to the product of (A) the amount of the annual short-term bonus that would have been payable to the Executive if the Executive was still employed as of December 31st of the then current fiscal year in respect of the fiscal year in which employment termination occurs based on actual performance as compared to performance goals, and (B) the ratio of (x) the number of days elapsed during the fiscal year during which such termination of employment occurs on or prior to the date of such termination to (y) 365, payable as of the same time as annual short-term bonuses are paid to other senior executives; and

(iii) subject to the Executive's election of COBRA rights, monthly payment of an amount equal to the employer's cost coverage in accordance with its contribution percentage toward medical and dental coverage for active employees immediately prior to the Date of Termination for twelve (12) months after such termination; provided, however, that the installment payments under this Section 2(c)(iii) shall cease on the first day of the month immediately following the month that the Executive no longer qualifies for continued COBRA coverage for any reason, including but not limited to the Executive's failure to pay the Executive's portion of the COBRA cost or the Executive becoming eligible for medical/dental insurance under another group health insurance plan (as defined by COBRA). Notwithstanding the foregoing, if the Company determines, in its sole discretion, that it cannot pay the foregoing installment payments without a substantial risk of

violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Company shall be entitled to amend this Section 2(c)(iii) in order to preserve the value of such installment payments to the Executive without additional cost to either party.

(d) Required Release. The payment of the Severance Benefits shall be conditioned upon the Executive's execution, delivery to the Company, and non-revocation of the release of claims, in a form reasonably acceptable to the Company (and the expiration of any revocation period contained in such release of claims) within sixty (60) days following the date of Executive's termination of employment hereunder. If the Executive fails to execute the release of claims in such a timely manner so as to permit any revocation period to expire prior to the end of such sixty (60) day period, or timely revokes the Executive's execution of such release following its execution, the Executive shall not be entitled to any of the Severance Benefits. Further, to the extent that any of the Severance Benefits constitutes "nonqualified deferred compensation" for purposes of Section 409A of the Code, any payment of any amount or provision of any benefit otherwise scheduled to occur prior to the sixtieth (60th) day following termination of the Executive's employment hereunder, but for the condition on executing the release of claims as set forth herein, shall not be made until the first (1st) regularly scheduled payroll date following such sixtieth (60th) day, after which any remaining Severance Benefits shall thereafter be provided to Executive according to the applicable schedule set forth herein (and the first payment shall include any portion of the Severance Benefits, and any such other payments or benefits, that would have been paid during such sixty (60) day period).

(e) Termination Covered Under Executive Change of Control Agreement. If Executive's employment is terminated under circumstances that would afford Executive certain rights under the Executive Change of Control Agreement currently in effect between the Company and Executive (or any successor agreement), the provisions of the Executive Change of Control Agreement shall govern and this Agreement shall have no force and effect, it being intended that the Executive Change of Control Agreement shall govern the rights and obligations of the parties in the event of a termination covered under the Executive Change of Control Agreement and this Agreement shall govern the rights and obligations of the parties in the event of any other termination.

3. Notice of Termination. Any termination of Executive's employment by the Company or any such termination by Executive shall be communicated by written Notice of Termination to the other party hereto. For purposes of this Agreement, a "Notice of Termination" shall mean a notice that indicates the specific termination provision in this Agreement relied upon.

4. Date of Termination. The “Date of Termination” shall be the date on which Notice of Termination is provided by either party or such later date as may be specified in such Notice of Termination.
5. Withholding. All payments made to the Executive under this Agreement shall be net of any tax or other amounts required to be withheld by the Company under applicable law.
6. No Mitigation. The Company agrees that, if the Executive’s employment by the Company is terminated during the term of this Agreement, the Executive is not required to seek other employment or to attempt in any way to reduce any amounts payable to the Executive by the Company pursuant to any provision of this Agreement, including any payment under Section 2. Further, except as otherwise provided herein, the amount of any payment provided for in this Agreement shall not be reduced by any compensation earned by the Executive as the result of employment by another employer, by retirement benefits, by offset against any amount claimed to be owed by the Executive to the Company or otherwise.
7. Non-Competition and Non-Solicitation Covenants; Confidentiality. In consideration of the benefits afforded the Executive under the terms provided in this Agreement, Executive agrees that
- (a) during the term of Executive’s employment with the Company and for a period of twelve (12) months thereafter, regardless of the reason for termination of employment, Executive will not, directly or indirectly, as an owner, director, principal, agent, officer, employee, partner, consultant, servant, or otherwise, carry on, operate, manage, control, or become involved in any manner with any business, operation, corporation, partnership, association, agency, or other person or entity which is engaged in a business that is competitive with any of the Company’s or its affiliates’ products which are produced by the Company or its affiliates as of the date of Executive’s termination of employment with the Company, in any area or territory in which the Company or any affiliate conducts operations; provided, however, that the foregoing shall not prohibit Executive from owning up to one percent (1%) of the outstanding stock of a publicly held company engaged in the Fluid-Control Industry; and
- (b) during the term of Executive’s employment with the Company and for a period of twelve (12) months thereafter, regardless of the reason for termination of employment, Executive will not directly or indirectly solicit or induce any present or future employee of the Company or any affiliate to accept employment with Executive or with any business, operation, corporation, partnership, association, agency, or other person or entity with which Executive may be associated, and Executive will not employ or cause any business, operation, corporation, partnership, association, agency, or other person or entity with which Executive may be associated to employ any present

or future employee of the Company or its affiliates without providing the Company with ten (10) days' prior written notice of such proposed employment.

(c) in the course of Executive's employment with the Company (and, if applicable, its predecessors), Executive has been allowed to become, and will continue to be allowed to become, acquainted with the Company's business affairs, information, trade secrets, and other matters which are of a proprietary or confidential nature, including but not limited to the Company's and its affiliates' and predecessors' operations, business opportunities, price and cost information, finance, customer information, business plans, various sales techniques, manuals, letters, notebooks, procedures, reports, products, processes, services, and other confidential information and knowledge (collectively the "Confidential Information") concerning the Company's and its affiliates' and predecessors' business. The Company agrees to provide on an ongoing basis such Confidential Information as the Company deems necessary or desirable to aid Executive in the performance of his duties. Executive understands and acknowledges that such Confidential Information is confidential, and he agrees not to disclose such Confidential Information to anyone outside the Company except to the extent that (i) Executive deems such disclosure or use reasonably necessary or appropriate in connection with performing his duties on behalf of the Company, (ii) Executive is required by order of a court of competent jurisdiction (by subpoena or similar process) to disclose or discuss any Confidential Information, provided that in such case, Executive shall promptly inform the Company, as appropriate, of such event, shall cooperate with the Company, as appropriate, in attempting to obtain a protective order or to otherwise restrict such disclosure, and shall only disclose Confidential Information to the minimum extent necessary to comply with any such court order; (iii) such Confidential Information becomes generally known to and available for use in the Company's industry (the "Fluid-Control Industry"), other than as a result of any action or inaction by Executive; or (iv) such information has been rightfully received by a member of the Fluid-Control Industry or has been published in a form generally available to the Fluid-Control Industry prior to the date Executive proposes to disclose or use such information. Executive further agrees that he will not during employment and/or at any time thereafter use such Confidential Information in competing, directly or indirectly, with the Company. At such time as Executive shall cease to be employed by the Company, he will immediately turn over to the Company, all Confidential Information, including papers, documents, writings, electronically stored information, other property, and all copies of them provided to or created by him during the course of his employment with the Company. The provisions of this Paragraph 7(c) shall survive termination of this Agreement for any reason.

Should Executive violate any of the provisions of paragraphs 7(a) or (b), then in addition to all other rights and remedies available to the Company at law or in equity, the duration of this covenant shall automatically be extended for the period of time from which Executive began such violation until he permanently ceases such violation, the

Severance Benefits shall cease and the Company shall be entitled to recovery previously paid Severance Benefits.

8. Notice. For purposes of this Agreement, notices and all other communications provided for in the Agreement shall be in writing and shall be deemed to have been duly given when delivered or mailed by United States certified mail, return receipt requested, postage prepaid, addressed as follows:

If to the Executive:

At Executive's home address as shown in the Company's personnel records;

If to the Company:

CIRCOR International, Inc.
30 Corporate Drive, Suite 200
Burlington, MA 01803
Attn: Senior Vice President-Human Resources

or to such other address as either party may have furnished to the other in writing in accordance herewith, except that notices of change of address shall be effective only upon receipt.

9. Successor to Company. The Company shall require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business or assets of the Company expressly to assume and agree to perform this Agreement to the same extent that the Company would be required to perform it if no succession had taken place. Failure of the Company to obtain an assumption of this Agreement at or prior to the effectiveness of any succession shall be a breach of this Agreement and shall constitute Good Reason if the Executive elects to terminate employment.

10. Amendment; Other Agreements. No provisions of this Agreement may be amended, modified, or discharged unless such amendment, modification, or discharge is agreed to in writing and signed by Executive and such officer of the Company as may be specifically designated by the Board. No agreements or representations, oral or otherwise, express or implied, unless specifically referred to herein, with respect to the subject matter hereof have been made by either party which are not set forth expressly in this Agreement.

11. Governing Law. The validity, interpretation, construction, and performance of this Agreement shall be governed by the laws of the Commonwealth of Massachusetts (without regard to principles of conflicts of laws).

12. Counterparts. This agreement may be executed in several counterparts, each of which shall be deemed to be an original but all of which together will constitute one and the same instrument.

13. Arbitration; Other Disputes. In the event of any dispute or controversy arising under or in connection with this Agreement, the parties shall first promptly try in good faith to settle such dispute or controversy by mediation under the applicable rules of the American Arbitration Association before resorting to arbitration. In the event such dispute or controversy remains unresolved in whole or in part for a period of 30 days after it arises, the parties will settle any remaining dispute or controversy exclusively by arbitration in Boston, Massachusetts, in accordance with the rules of the American Arbitration Association then in effect. Judgment may be entered on the arbitrator's award in any court having jurisdiction. Notwithstanding the above, the Company shall be entitled to seek a restraining order or injunction in any court of competent jurisdiction to prevent any continuation of any violation of Section 7 of this Agreement. Furthermore, should a dispute occur concerning Executive's mental or physical capacity as described in Subparagraph 1(b) or 2(a), a doctor selected by Executive and a doctor selected by the Company shall be entitled to examine Executive. If the opinion of the Company's doctor and Executive's doctor conflict, the Company's doctor and Executive's doctor shall together agree upon a third doctor, whose opinion shall be binding.

14. Assignment. Neither the Company nor the Executive may make any assignment of this Agreement or any interest herein, by operation of law or otherwise, without the prior written consent of the other party, and without such consent any attempted transfer shall be null and void and of no effect. This Agreement shall inure to the benefit of and be binding upon the Company and the Executive, their respective successors, executors, administrators, heirs and permitted assigns. In the event of the Executive's death prior to the completion by the Company of all payments due him under this Agreement, the Company shall continue such payments to the Executive's beneficiary designated in writing to the Company prior to his death (or to his estate, if the Executive fails to make such designation).

15. Litigation and Regulatory Cooperation. During and after Executive's employment, Executive shall reasonably cooperate with the Company in the defense or prosecution of any claims or actions now in existence or which may be brought in the future against or on behalf of the Company which relate to events or occurrences that transpired while Executive was employed by the Company; provided, however, that such cooperation shall not materially and adversely affect Executive or expose Executive to an increased probability of civil or criminal litigation. Executive's cooperation in connection with such claims or actions shall include, but not be limited to, being available to meet with counsel to prepare for discovery or trial and to act as a witness on behalf of the Company at mutually convenient times. During and after Executive's

employment, Executive also shall cooperate fully with the Company in connection with any investigation or review of any federal, state or local regulatory authority as any such investigation or review relates to events or occurrences that transpired while Executive was employed by the Company. The Company shall also provide Executive with compensation on an hourly basis (to be derived from the sum of his Base Salary) for requested litigation and regulatory cooperation that occurs after his termination of employment and reimburse Executive for all costs and expenses incurred in connection with his performance under this Paragraph 15, including, but not limited to, reasonable attorneys' fees and costs.

16. Enforceability. If any portion or provision of this Agreement shall to any extent be declared illegal or unenforceable by a court of competent jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so-declared illegal or unenforceable, shall not be affected thereby, and each portion and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

17. Waiver. No waiver of any provision hereof shall be effective unless made in writing and signed by the waiving party. The failure of any party to require the performance of any term or obligation of this Agreement, or the waiver by any party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach.

18. Section 409A.

(a) It is intended that any compensation or benefits under this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A of the Internal Revenue Code of 1986, as amended ("Section 409A") provided under Treasury Regulations Sections 1.409A-1(b)(4), and 1.409A-1(b)(9), and this Agreement will be construed to the greatest extent possible as consistent with those provisions, and to the extent not so exempt, this Agreement (and any definitions hereunder) will be construed in a manner that complies with Section 409A. For purposes of Section 409A (including, without limitation, for purposes of Treasury Regulations Section 1.409A-2(b)(2)(iii)), the Executive's right to receive any installment payments under this Agreement (whether Severance Benefits or otherwise) shall be treated as a right to receive a series of separate payments and, accordingly, each installment payment hereunder shall at all times be considered a separate and distinct payment. Severance Benefits shall not commence until the Executive has a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h), without regard to any alternative definition thereunder, a "separation from service").

(b) Notwithstanding any provision to the contrary in this Agreement, if the Executive is deemed by the Company at the time of termination to be a "specified

employee” for purposes of Section 409A(a)(2)(B)(i), and if any of the payments set forth herein are deemed to be “deferred compensation,” then to the extent delayed commencement of any portion of such payments is required in order to avoid a prohibited distribution under Section 409A(a)(2)(B)(i) and the related adverse taxation under Section 409A, such payments shall not be provided prior to the earliest of (i) the expiration of the six-month period measured from the Executive’s employment termination, (ii) the date of Executive’s death or (iii) such earlier date as permitted under Section 409A without the imposition of adverse taxation. Upon the first business day following the expiration of such period, all payments deferred pursuant to this paragraph shall be paid in a lump sum, and any remaining payments due shall be paid as otherwise provided herein. No interest shall be due on any amounts so deferred.

(c) To the extent that any right to reimbursement of expenses or payment of any benefit in-kind under this Agreement constitutes nonqualified deferred compensation (within the meaning of Section 409A of the Code), (i) any such expense reimbursement shall be made by the Company no later than the last day of the taxable year following the taxable year in which such expense was incurred by Executive, (ii) the right to reimbursement or in-kind benefits shall not be subject to liquidation or exchange for another benefit, and (iii) the amount of expenses eligible for reimbursement or in-kind benefits provided during any taxable year shall not affect the expenses eligible for reimbursement or in-kind benefits to be provided in any other taxable year; provided, that the foregoing clause shall not be violated with regard to expenses reimbursed under any arrangement covered by Section 105(b) of the Code solely because such expenses are subject to a limit related to the period the arrangement is in effect.

(d) The parties agree that this Agreement may be amended, as reasonably requested by either party, and as may be necessary to fully comply with Section 409A of the Code and all related rules and regulations in order to preserve the payments and benefits provided hereunder without additional cost to either party.

(e) While the payments and benefits provided hereunder are intended to be structured in a manner to avoid the implication of any taxes or related liability under Section 409A of the Code, the Company makes no representation or warranty and shall have no liability to the Executive or any other person if any provisions of this Agreement are determined to constitute deferred compensation subject to Section 409A of the Code but do not satisfy an exemption from, or the conditions of, such Section.

IN WITNESS WHEREOF, the parties have executed this Agreement effective on the date and year first above written.

CIRCOR INTERNATIONAL, INC.

Scott Buckhout
President & CEO

Executive

Restrictive Covenants Agreement

This Restrictive Covenants Agreement (this “Agreement”) is made and effective as of _____, 20__ by and between _____ (“Executive”) and CIRCOR International, Inc. (the “Company”). Executive acknowledges that the below restrictions on Executive’s activities during and after Executive’s Employment or other service relationship with the Company or any of its subsidiaries or affiliates (Executive’s “Employment”) are necessary to protect the good will, Confidential Information (as defined below), trade secrets and other legitimate interests of the Company and its subsidiaries or affiliates. Therefore, in consideration of commencing employment with the Company and entering into the Change in Control Agreement being entered into between the Company and the Executive attached to this Agreement (the “Change in Control Agreement”), Executive’s Employment, and Executive being granted access to the trade secrets, other Confidential Information and good will of the Company and its subsidiaries and affiliates (collectively, the “Company Group”), Executive agrees as follows:

1. Confidential Information

During the course of Executive’s Employment with the Company Group, Executive will learn of Confidential Information and may develop Confidential Information on behalf of one or more members of the Company Group. Executive agrees that Executive will not use or disclose to any Person (except as required by applicable law or for the proper performance of Executive’s regular duties and responsibilities in the course of Executive’s Employment) any Confidential Information obtained by Executive incident to Executive’s Employment or any other association with any member of the Company Group. Executive agrees that this restriction shall continue to apply after Executive’s Employment terminates, regardless of the reason for such termination. Further, nothing in this Agreement limits, restricts or in any other way affects Executive’s ability to comply with any lawfully issued subpoena or other command to provide testimony or other information in a legal proceeding; *provided*, that Executive (i) gives prompt notice to the Company of such subpoena, command or legal proceeding; (ii) consults with the Company on the advisability of taking legally available steps to resist or narrow such request; and (iii) if disclosure of such Confidential Information is required, furnishes only that portion of the Information which, in the good faith and reasonable opinion of Executive’s counsel following consultation with the Company’s counsel, Executive is legally compelled to disclose, and exercises commercially reasonable efforts to obtain an order or other assurance (at the Company’s expense) that confidential treatment will be accorded to such portion of the disclosed Confidential Information. Notwithstanding the foregoing, Executive may make any of the disclosures permitted under Section 8 below.

2. Protection of Documents

All documents, records and files, in any media of whatever kind and description, relating to the business, present or otherwise, of any member of the Company Group, and any copies, in whole or in part, thereof (the “Documents”), whether or not prepared by Executive, shall be the sole and exclusive property of the Company. Executive agrees to safeguard all Documents and to surrender to the Company, at the time Executive’s Employment terminates or at such earlier

time or times as the board of directors of the Company (the “Board”) or its designee may specify, all Documents then in Executive’s possession or control. Executive also agrees to disclose to the Company, at the time Executive’s Employment terminates or at such earlier time or times as the Board or its designee may specify, all passwords necessary or desirable to obtain access to, or that would assist in obtaining access to, any information that Executive has password-protected on any computer equipment, network or system of any member of the Company Group.

3. Assignment of Rights to Intellectual Property

Executive shall promptly and fully disclose all Intellectual Property (as defined below) to the Company. Executive hereby assigns and agrees to assign to the Company (or as otherwise directed by the Company) Executive’s full right, title and interest in and to all Intellectual Property. Executive agrees to execute any and all applications for domestic and foreign patents, copyrights or other proprietary rights and to do such other acts (including, without limitation, the execution and delivery of instruments of further assurance or confirmation) requested by the Company to assign the Intellectual Property to the Company (or as otherwise directed by the Company) and to permit the Company to enforce any patents, copyrights or other proprietary rights to the Intellectual Property. Executive will not charge the Company for time spent in complying with these obligations. All copyrightable works that Executive creates during Executive’s Employment shall be considered “work made for hire” and shall, upon creation, be owned exclusively by the Company.

4. Non-Competition and Non-Solicitation

a. Non-Competition. During Executive’s Employment and for a period of twelve (12) months following termination of Executive’s Employment, for any reason except termination due to layoff or termination by the Company without Cause (in the aggregate, the “Non-Competition Period”), Executive shall not, directly or indirectly, whether as owner, partner, investor, consultant, agent, employee, co-venturer or otherwise, compete with any member of the Company Group by providing Services (as defined below) to, or undertaking any planning for, any business competitive with the Company or any of its subsidiaries or affiliates in the Restricted Area. Nothing herein shall prohibit Executive or any of his or her respective affiliates from being a passive owner of an investment of not more than two percent (2%) of any class of stock of a corporation, which class of stock is publicly traded. Notwithstanding the foregoing, this Section 4.1 will apply following termination of Executive’s Employment only if (i) the Company does not waive the restrictions set forth in this Section 4.1 at the time of termination of Executive’s Employment and (ii) the Company provides, as determined in its sole discretion for any or no reason, either (A) six months of additional credited service towards time-based vesting under Executive’s equity awards under the Company’s stock incentive plans and agreements, including any inducement awards or (B) monthly payments at a rate equal to fifty percent (50%) of Executive’s highest annualized base salary within the two (2) years immediately preceding termination of Executive’s Employment for the duration of the Non-Competition Period that follows such termination (the “Non-Competition Payments”); *provided*, that Executive’s right to receive and retain any Non-Competition Payments is conditioned on Executive’s compliance in full with this Section 4.1 following termination of Executive’s

Employment; and *provided, further*, that any cash-based severance payments that Executive is eligible to receive with respect to any given pay period pursuant to an employment or similar agreement with the Company or any of its subsidiaries or affiliates, including but not limited to the Change in Control Agreement, or pursuant to any severance plan or policy of the Company or any of its subsidiaries or affiliates shall be reduced by the amount of any Non-Competition Payments Executive receives with respect to the same pay period. For the avoidance of doubt, if the Company elects to waive the restrictions set forth in this Section 4.1 at the time of termination, it will have no obligation to pay Executive any Non-Competition Payments. The Company and Executive intend that Non-Competition Payments that the Company elects to pay Executive are intended to comply constitute mutually agreed upon consideration for purposes of Section 24L(b)(vii) of Chapter 149 of the Massachusetts General Laws.

b. Non-Solicitation of Business Partners. During Executive's Employment and for a period of twelve (12) months following termination of Executive's Employment, regardless of the reason therefor (in the aggregate, the "Non-Solicitation Period"), Executive shall not, directly or indirectly, (i) solicit or encourage any customer, vendor, supplier, manufacturer or other business partner (each, a "Business Partner") of any member of the Company Group to terminate or diminish its relationship with them; or (ii) seek to persuade any such Business Partner, or any prospective Business Partner of a member of the Company Group, to conduct with anyone else any business or activity which such Business Partner or such prospective Business Partner conducts or could conduct with the Company or any of its subsidiaries or affiliates; *provided, however*, in each case, that these restrictions shall apply (y) only with respect to those Persons who are or have been a Business Partner of a member of the Company Group at any time within the eighteen (18)-month period immediately preceding the activity that is restricted by this Section 4(b) or whose business has been solicited on behalf of one or more members of the Company Group by any of their officers, employees or agents within such eighteen (18) month period, other than by form letter, blanket mailing or published advertisement, and (z) only if Executive has performed work for such Person during Executive's Employment or been introduced to, or otherwise had contact with, such Person as a result of Executive's Employment or other associations with any member of the Company Group, or has had access to Confidential Information that would assist in Executive's solicitation of such Person.

c. Non-Solicitation of Employees. During the Non-Solicitation Period, Executive shall not, and shall not assist any other Person to, (i) hire or engage, or solicit for hiring or engagement, any employee of the Company or any of its subsidiaries or affiliates, or seek to persuade any employee of the Company or any of its subsidiaries or affiliates to discontinue employment; or (ii) solicit or encourage any independent contractor providing services to the Company or any of its subsidiaries or affiliates to terminate or diminish its relationship with them. For the purposes of this Agreement, an "employee" or an "independent contractor" of a member of the Company Group is any Person who was such at any time within the eighteen (18) month period immediately preceding the activity that is restricted by this Section 4.3.

5. Cooperation

Executive agrees to cooperate with the Company and its subsidiaries and affiliates in connection with any pending or subsequently filed litigation, investigation, proceeding, claims or other disputes involving the Company or its subsidiaries or affiliates and their respective directors, officers, employees, service providers or Business Partners. Without limiting the foregoing, Executive agrees (i) to meet with representatives of any member of the Company Group, its counsel or other designees at mutually convenient times and places for factual interviews, preparation for testimony, providing affidavits and similar activities) with respect to any items within the scope of this provision; (ii) to provide truthful testimony regarding same to any court, agency, or other adjudicatory body; and (iii) to provide the Company with notice of contact by any adverse party or such adverse party's representative, except as may be required by law. Executive's failure to cooperate with the Company Group as outlined herein shall constitute a material breach of this Agreement.

6. Enforcement

In signing this Agreement, Executive gives the Company assurance that Executive has carefully read and considered all the terms and conditions of this Agreement. Executive agrees without reservation that the restraints contained herein are necessary for the reasonable and proper protection of the Company Group, and that each and every one of the restraints is reasonable in respect to subject matter, length of time and geographic area. Executive further agrees that, were Executive to breach any of the covenants contained in this Agreement, the damage to the Company and each of its subsidiaries and affiliates would be irreparable. Executive therefore agrees that the Company, in addition, and not as an alternative, to any other remedies available to it (including, without limitation, any remedies set forth in the Award Agreement or the Plan), shall be entitled to preliminary and permanent injunctive relief against any breach or threatened breach by Executive of any such covenants, without having to post bond, together with an award of its reasonable attorney fees incurred in enforcing its rights hereunder. So that the Company may enjoy the full benefit of the covenants contained in Sections 4.2 and 4.3 hereof, Executive further agrees that the Non-Solicitation Period shall be tolled, and shall not run, during the period of any breach by Executive of any such covenants. If Executive violates any fiduciary duty to the Company or unlawfully takes any confidential or proprietary information or other property belonging to the Company, the Non-Competition Period will extend by the time during which Executive engages in such violation(s), for up to a total of two (2) years following the termination of Executive's Employment. Executive and the Company further agree that, in the event that any provision of this Agreement is determined by any court of competent jurisdiction to be unenforceable by reason of its being extended over too great a time, too large a geographic area or too great a range of activities, that provision shall be deemed to be modified to permit its enforcement to the maximum extent permitted by law. It is also agreed that each subsidiary and affiliate of the Company shall have the right to enforce all of Executive's obligations to such subsidiary and affiliate under this Agreement. Finally, no claimed breach of this Agreement or violation of law attributed to the Company or any of its subsidiaries or affiliates, nor any change in the nature or scope of Executive's Employment or

other association with the Company or any of its subsidiaries or affiliates, shall operate to excuse Executive from the performance of Executive's obligations hereunder.

7. Certain Definitions

“Cause” means, as determined by the Company in its reasonable judgment, means, as determined by the Company in its reasonable judgment, (i) Executive's willful failure substantially to perform the duties and responsibilities of Executive's position, adhere to the lawful direction of the Board or the senior executive to whom Executive reports, or adhere to the lawful policies and practices of the Company or any of its subsidiaries or affiliates, or substantial negligence by Executive in the performance of Executive's duties and responsibilities; (ii) Executive's commission or conviction of, or plea of guilty of or nolo contendere to, a felony or any crime involving moral turpitude; (iii) other misconduct by Executive that is or reasonably could be expected to be materially injurious to the Company or any of its subsidiaries or affiliates; (iv) Executive's performance (or nonperformance) of Executive's duties and responsibilities to the Company or any of its subsidiaries or affiliates in a manner deemed by the Company to be in any way unsatisfactory; (v) Executive's breach of this Agreement or any other agreement between Executive and the Company or any of its subsidiaries or affiliates; or (vi) Executive's violation of or disregard for any rule, procedure or policy of the Company or any of its subsidiaries or affiliates, or any other reasonable basis for Company dissatisfaction with Executive, including for reasons such as lack of capacity or diligence, failure to conform to usual standards of conduct, failure to achieve performance targets set by the Company, or other culpable or inappropriate behavior.

“Confidential Information” means any and all information of the Company and its subsidiaries or affiliates that is not generally available to the public. Confidential Information also includes any information received by the Company or any of its subsidiaries or affiliates from any Person with any understanding, express or implied, that it will not be disclosed. Confidential Information does not include information that enters the public domain other than through Executive's breach of Executive's obligations under this Agreement.

“Intellectual Property” means inventions, discoveries, developments, methods, processes, compositions, works, concepts and ideas (whether or not patentable or copyrightable or constituting trade secrets) conceived, made, created, developed or reduced to practice by Executive (whether alone or with others, whether or not during normal business hours or on or off premises of the Company or any of its subsidiaries or affiliates) during Executive's Employment that relate either to the business of the Company or any of its subsidiaries or affiliates or to any prospective activity of the Company or any of its subsidiaries or affiliates or that result from any work performed by Executive for the Company or any of its subsidiaries or affiliates or that make use of Confidential Information or any of the equipment or facilities of the Company or any of its subsidiaries or affiliates.

“Person” includes an individual, partnership, limited liability company, corporation or other business entity.

“Restricted Area” means any geographic area in which the Company or any of its subsidiaries or affiliates does business or is actively planning to do business during Executive’s Employment or, with respect to the portion of the Non-Competition Period that follows termination of Executive’s Employment, any geographic area in which Executive, at any time during the last two years of Executive’s Employment, provided services or had a material presence or influence.

“Services” means any of the services that Executive provided to the Company or any of its subsidiaries or affiliates at any time during Executive’s Employment or, with respect to the portion of the Non-Competition Period that follows the termination of Executive’s Employment, during the last two (2) years of Executive’s Employment.

8. Permitted disclosures

Nothing in this Agreement or any other agreement with the Company or its subsidiaries or affiliates shall (1) prohibit Executive from making reports of possible violations of federal law or regulation to any government agencies, including but not limited to the Securities and Exchange Commission, in accordance with the provisions of and rules promulgated under Section 21F of the Securities Exchange Act of 1934, as amended, or Section 806 of the Sarbanes-Oxley Act of 2002, or of any other whistleblower protection provisions of federal law or regulation, or (2) require notification or prior approval by the Company of any such report; provided that Executive is not authorized to disclose communications with counsel that were made for the purpose of receiving legal advice or that contain legal advice or that are protected by the attorney work product or similar privilege. Further, this Agreement does not limit Executive’s ability to communicate with any government agencies or otherwise participate in any investigation or proceeding that may be conducted by any government agency, including providing documents or other information, without notice to the Company. This Agreement does not limit Executive’s right to seek an award pursuant to Section 21F of the Securities Exchange Act of 1934. In addition, for the avoidance of doubt, pursuant to the federal Defend Trade Secrets Act of 2016, Executive shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that (x) is made (i) in confidence to a federal, state or local government official, either directly or indirectly, or to an attorney and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (y) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.

9. miscellaneous

a. If any term, provision, covenant or restriction of this Agreement is held by a court of competent jurisdiction or other applicable authority to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions of this Agreement shall remain in full force and effect and shall in no way be affected, impaired or invalidated.

b. Headings are used in this Agreement solely as a convenience and shall not be deemed in any way material or relevant to the construction or interpretation of this Agreement or any provision hereof.

c. The restrictive covenants contained in this Agreement are in addition to, and do not supersede, any restrictive covenants by which Executive is bound under any other agreement between Executive and the Company or any of its subsidiaries or affiliates. The restrictive covenants contained in this Agreement will survive any termination of Executive's Employment, and any expiration of the Change in Control Agreement.

d. Neither Executive nor the Company may make any assignment of this Agreement or any interest in it, by operation of law or otherwise, without the prior written consent of the other; *provided, however*, that the Company may assign its rights and obligations under this Agreement without Executive's consent to one of its subsidiaries or affiliates or to any Person with whom the Company may hereafter effect a reorganization, consolidation or merger, or to whom the Company may hereafter transfer all or substantially all of its property or assets. This Agreement shall inure to the benefit of and be binding upon Executive and the Company and each of their respective successors, executors, administrators, heirs and permitted assigns.

e. This Agreement may not be modified or amended, and no breach shall be deemed to be waived, unless agreed to in writing by Executive and an expressly authorized representative of the Company.

f. This is a Massachusetts contract and shall be governed and construed in accordance with the laws of Massachusetts, without regard to any conflict of laws principles that would result in the application of the laws of any other jurisdiction. Executive agrees to submit to the exclusive jurisdiction of the courts of or in Massachusetts in connection with any dispute arising out of this Agreement, and hereby waives and agrees not to assert, by way of motion, as a defense or otherwise, in any such action, any claim that any such dispute brought in one of the above-named courts should be dismissed on grounds of forum non conveniens.

g. This Agreement may be executed in counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same instrument.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, effective as set forth above.

CIRCOR INTERNATIONAL, INC.

By: _____
Scott A. Buckhout
President & CEO

Executive acknowledges that (i) the Company provided Executive with this Agreement at least ten (10) business days before Executive's employment commencement date; (ii) this Agreement will become effective on the date of Executive's employment with the Company; (iii) Executive has been and is hereby advised of Executive's right to consult an attorney before signing this Agreement; and (iv) Executive has carefully read this Agreement and understands and agrees to all of its provisions.

Executive

CIRCOR International, Inc.
 SCHEDULE OF SUBSIDIARIES – As of 12/31/2020

I. Subsidiaries of CIRCOR International, Inc.:

1. CIRCOR, LLC, a Massachusetts Limited Liability Company
2. CIRCOR (Jersey) Ltd., a Jersey Company* (83% ownership)
3. CIRCOR Aerospace, Inc., a Delaware Corporation
4. CIRCOR Dutch Holdings B.V., a Netherlands Limited Liability Company
5. CIRCOR Energy, LLC., a Delaware Limited Liability Company*
6. CIRCOR Energy Products (Canada) ULC, an Alberta Unlimited Liability Company*
7. CIRCOR France SAS, a French Corporation*
8. CIRCOR German Holdings Management GmbH, a German Closed Corporation*
9. CIRCOR Holdings, Inc., a Delaware Corporation*
10. CIRCOR Luxembourg Holdings Sarl, a Luxembourg Limited Liability Company* (21.1524%)
11. CIRCOR Naval Solutions, LLC, a Delaware Limited Liability Company
12. CIRCOR Pipeline Engineering, LLC, a Delaware Limited Liability Company*
13. CIRCOR Precision Metering, LLC, a Delaware Limited Liability Company
14. CIRCOR Pumps North America, LLC, a Delaware Limited Liability Company
15. Downstream Holding, LLC, a Delaware Limited Liability Company*
16. Leslie Controls, Inc., a Delaware Corporation
17. Spence Engineering Company, Inc., a Delaware Corporation*

II. Subsidiaries of CIRCOR Aerospace, Inc.:

1. CIRCOR IP Holdings Co., a Delaware Corporation*

III. Subsidiaries of CIRCOR Energy, LLC:

1. CIRCOR Energy Products, LLC, an Oklahoma Limited Liability Company*
2. CIRCOR Mexico, S.A. de C.V., a Mexico Corporation* (99%)
3. CIRCOR Empleados de Mexico S.A. de C.V., a Mexico Corporation* (99%)

IV. Subsidiaries of CIRCOR Energy Products, LLC:

1. CIRCOR Mexico, S.A. de C.V., a Mexico Corporation (1%)
2. CIRCOR Empleados de Mexico S.A. de C.V., a Mexico Corporation* (1%)

V. Subsidiaries of CIRCOR (Jersey), Ltd.:

- a. CIRCOR German Holdings, LLC, a Delaware Limited Liability Company*
2. CIRCOR Singapore Pte Ltd, a Singapore Private Limited Company*

VI. Subsidiaries of CIRCOR German Holdings, LLC:

1. CIRCOR German Holdings GmbH & Co. KG, a German Private Company*

VII. Subsidiaries of CIRCOR German Holdings GmbH & Co. KG:

1. Allweiler GmbH, a Germany Corporation
2. Regeltechnik Kornwestheim GmbH, a German Corporation
3. SCHROEDAHL-ARAPP Spezialarmaturen GmbH & Co. KG, a German Corporation

VIII. Subsidiaries of CIRCOR Luxembourg Holdings, Sarl.:

1. CIRCOR do Brasil Participações LTDA, a Brazilian Corporation*
2. CIRCOR (Barbados) Holdings SARL, a Barbados Corporation*

3. CIRCOR India Holdings BV, a Netherlands Corporation*
4. CIRCOR Middle East FZE, a United Arab Emirates Corporation*
5. Howitzer Acquisition Limited, a United Kingdom Corporation*

IX. Subsidiaries of CIRCOR do Brasil Participações LTDA.:

1. CIRCOR do Brasil Industria e Comercio LTDA, a wholly owned subsidiary of CIRCOR do Brasil Participacoes LTDA*

X. Subsidiaries of CIRCOR Energy Products (Canada) ULC, an Alberta Unlimited Liability Company:

- a. Imo Industries (Canada) Inc., a Canadian Corporation*
- b. CIRCOR Luxembourg Holdings Sarl, a Luxembourg Limited Liability Company* (78.8476%)

XI. Subsidiaries of Howitzer Acquisition Limited, a United Kingdom Corporation:

1. Hale Hamilton (Valves) Limited, a United Kingdom Corporation
2. Pipeline Engineering & Supply Co., Limited, a United Kingdom Corporation
3. TapcoEnpro UK Limited, a United Kingdom Corporation*

XII. Subsidiaries of CIRCOR India Holdings BV, a Netherlands Corporation:

1. CIRCOR Flow Technologies India Private Ltd, an Indian Private Corporation
2. CIRCOR India LLC, a Delaware Limited Liability Company*

XIII. Subsidiaries of CIRCOR France, a French Corporation

1. CIRCOR Bodet SAS, a French Corporation*
2. CIRCOR Industria SAS, a French Corporation
3. CIRCOR Maroc SARL A.U., a Moroccan Corporation

XIV. Subsidiaries of Downstream Holding, LLC, a Delaware Limited Liability Company:

- a. DeltaValve, LLC, a Delaware Limited Liability Company
- b. TapcoEnpro, LLC, a Delaware Limited Liability Company

XV. Subsidiaries of CIRCOR Holdings, Inc.:

- c. CIRCOR Netherlands Holdings B.V., a Netherlands Limited Liability Corporation

XVI. Subsidiaries of CIRCOR Netherlands Holdings B.V.

- d. CIRCOR Valve Company, Ltd., a Chinese Foreign Owned Enterprise*

XVII. Subsidiaries of CIRCOR Dutch Holdings B.V.

- e. Allweiler India Private Limited (formerly known as Tushaco Pumps Private Limited) (99.999%), an Indian Private Corporation
- f. CIRCOR Netherlands II Holdings BV, a Netherlands Corporation
- g. CIRCOR Pump (Weihai) Company Ltd., a Chinese Foreign Owned Enterprise*
- h. Colfax Fluid Handling Middle East Ltd., an England/Wales Corporation*

XVIII. Subsidiaries of Netherlands II Holdings BV, a Netherlands Corporation:

1. Houttuin BV, a Netherlands Corporation*
2. SES-Rosscor Holding B.V., a Netherlands Corporation* (19.9%)

XIX. Subsidiaries of Allweiler GmbH

1. Allweiler A/S, a Norway Entity
2. Allweiler AlFarid Pumps Co. (28%), a United Arab Emirates Entity*

3. Allweiler Finland Oy AB, a Finland Entity*
4. CIRCOR Allweiler Imo SpA, a Italian Entity
5. CIRCOR Imo Allweiler, a France Entity*
6. IMO AB, a Sweden Entity
7. PD-Technik Ingenieurbüro GmbH, a German Entity
8. Rapid Allweiler Pumps & Engineering Company (Pty) Ltd. (35%), a South African Private Corporation

XX. Subsidiaries of CIRCOR Naval Solutions, LLC

1. CIRCOR Sub Holding, LLC, a Delaware Limited Liability Company

XXI. Subsidiaries of CIRCOR Sub Holding, LLC

1. CIRCOR Sub Ltd., a England / Wales Corporation
2. Portland Valve LLC, a Delaware Limited Liability Company

XXII. Subsidiaries of Hale Hamilton (Valves) Limited

1. CIRCOR Energy Gulf Arabia (75%), a United Arab Emirates Corporation

*Subsidiaries designated as Immaterial Subsidiaries

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

1. Registration Statements (Form S-8 Nos. 333-91229 and 333-125237) pertaining to the CIRCOR International, Inc. Amended and Restated 1999 Stock Option and Incentive Plan,
2. Registration Statement (Form S-8 No. 333-190295) pertaining to the CIRCOR International, Inc. Stock Option Inducement Award,
3. Registration Statement (Form S-8 No. 333-197754) pertaining to the CIRCOR International, Inc. Stock Option Inducement Award and 2014 Stock Option and Incentive Plan,
4. Registration Statement (Form S-8 No. 333-231466) pertaining to the CIRCOR International, Inc. 2019 Stock Option and Incentive Plan, and
5. Registration Statement (Form S-8 No. 333-237554) pertaining to the CIRCOR International, Inc. Inducement Restricted Stock Unit Award;

of our reports dated March 15, 2021, with respect to the consolidated financial statements and schedule of CIRCOR International, Inc. and the effectiveness of internal control over financial reporting of CIRCOR International, Inc. included in this Annual Report (Form 10-K) of CIRCOR International, Inc. for the year ended December 31, 2020.

/s/ Ernst & Young LLP

Boston, Massachusetts
March 15, 2021

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-91229, 333-125237, 333-190295, 333-197754, 333-231466, and 333-237554) of CIRCOR International, Inc. of our report dated March 30, 2020, except for the change in reportable segments discussed in Note 18 to the consolidated financial statements, as to which the date is March 15, 2021 relating to the financial statements and financial statement schedule, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP
Boston, Massachusetts
March 15, 2021

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Scott A. Buckhout, certify that:

1. I have reviewed this annual report on Form 10-K of CIRCOR International, 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(s) 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(s) 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: March 15, 2021

Signature: /s/ Scott A. Buckhout

Scott A. Buckhout
President and Chief Executive Officer

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Abhi Khandelwal, certify that:

1. I have reviewed this annual report on Form 10-K of CIRCOR International, 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(s) 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(s) 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: March 15, 2021

Signature: _____ /s/ Abhi Khandelwal

Abhi Khandelwal
Senior Vice President and Chief Financial Officer

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

The undersigned officers, who are the President and Chief Executive Officer and Senior Vice President and Chief Financial Officer of CIRCOR International, Inc. (the “Company”), each hereby certifies to the best of his knowledge, that the Company’s annual report on Form 10-K to which this certification is attached (the “Report”), as filed with the Securities and Exchange Commission on the date hereof, fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended, and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Scott A. Buckhout

Scott A. Buckhout
President and Chief Executive Officer
Principal Executive Officer

March 15, 2021

/s/ Abhi Khandelwal

Abhi Khandelwal
Senior Vice President and Chief Financial Officer
Principal Financial Officer

March 15, 2021