

ALBANY INTERNATIONAL CORP /DE/
Form 10-K
March 14, 2019
UNITED STATES

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

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

For the fiscal year ended: December 31, 2018
OR

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

For the transition period from _____ to _____

Commission file number: 1-10026

ALBANY INTERNATIONAL CORP.
(Exact name of registrant as specified in its charter)

Delaware 14-0462060
(State or other jurisdiction of (IRS Employer
incorporation or organization) Identification No.)

216 Airport Drive, Rochester, New Hampshire 03867
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code 603-330-5850

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

<u>Title of each class</u>	<u>Name of each exchange on which registered</u>
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Class A Common Stock (\$0.001 par value)	New York Stock Exchange
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Securities registered pursuant to Section 12(g) of the Act: None
(Title
of Class)

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

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

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 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 if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. []

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

Large accelerated filer Accelerated filer

Non-accelerated filer Smaller reporting company

Emerging growth company

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

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

The aggregate market value of the Common Stock held by non-affiliates of the registrant on June 30, 2018, the last business day of the registrant's most recently completed second quarter, computed by reference to the price at which Common Stock was last sold on such a date, was \$1.7 billion.

The registrant had 29.0 million shares of Class A Common Stock and 3.3 million shares of Class B Common Stock outstanding as of February 28, 2019.

DOCUMENTS INCORPORATED BY REFERENCE

PART

Portions of the Registrant's Proxy Statement for the Annual Meeting of Shareholders to be held on May 10, 2019

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Forward-Looking Statements

This annual report and the documents incorporated or deemed to be incorporated by reference in this annual report contain statements concerning our future results and performance and other matters that are “forward-looking” statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). The words “believe,” “expect,” “anticipate,” “intend,” “estimate,” “plan,” “project,” “should,” and variations of such words or similar expressions are intended, but are not the exclusive means, to identify forward-looking statements. Because forward-looking statements are subject to risks and uncertainties, actual results may differ materially from those expressed or implied by the forward-looking statements.

There are a number of risks, uncertainties, and other important factors that could cause actual results to differ materially from the forward-looking statements, including, but not limited to:

- Conditions in the industries in which our Machine Clothing and Albany Engineered Composites segments compete, along with the general risks associated with macroeconomic conditions;

- In the Machine Clothing segment, greater than anticipated declines in the demand for publication grades of paper or, lower than anticipated growth in other paper grades;

- In the Albany Engineered Composites segment, unanticipated reductions in demand, delays, technical difficulties or cancellations in aerospace programs that are expected to drive growth;

- Failure to achieve or maintain anticipated profitable growth in our Albany Engineered Composites segment; and

- Other risks and uncertainties detailed in this report.

Further information concerning important factors that could cause actual events or results to be materially different from the forward-looking statements can be found in “Business Environment Overview and Trends” as well as in Item 1A - “Risk Factors”, in Item 7 of this annual report. Statements expressing our assessments of the growth potential of the Albany Engineered Composites segment are not intended as forecasts of actual future growth, and should not be relied on as such. While we believe such assessments to have a reasonable basis, such assessments are, by their nature, inherently uncertain. This report sets forth a number of assumptions regarding these assessments, including projected timing and volume of demand for aircraft and for LEAP aircraft engines. Such assumptions could prove incorrect. Although we believe the expectations reflected in our other forward-looking statements are based on reasonable assumptions, it is not possible to foresee or identify all factors that could have a material and negative impact on our future performance. The forward-looking statements included or incorporated by reference in this annual report are made on the basis of our assumptions and analyses, as of the time the statements are made, in light of our experience and perception of historical conditions, expected future developments, and other factors believed to be appropriate

under the circumstances.

Except as otherwise required by the federal securities laws, we disclaim any obligations or undertaking to publicly release any updates or revisions to any forward-looking statement contained or incorporated by reference in this annual report to reflect any change in our expectations with regard thereto or any change in events, conditions, or circumstances on which any such statement is based.

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PART I

Item 1.

Business

Albany International Corp. (the Registrant, the Company, we, us, or our) and its subsidiaries are engaged in two business segments.

The Machine Clothing (MC) segment supplies permeable and impermeable belts used in the manufacture of paper, paperboard, tissue and towel, pulp, nonwovens, fiber cement and several other industrial applications.

We design, manufacture, and market paper machine clothing (used in the manufacturing of paper, paperboard, tissue, and towel) for each section of the paper machine and for every grade of paper. We manufacture and sell approximately twice as much paper machine clothing worldwide than any other company. Paper machine clothing products are customized, consumable products of technologically sophisticated design that utilize polymeric materials in a complex structure. The design and material composition of paper machine clothing can have a considerable effect on the quality of paper products produced and the efficiency of the paper machines on which it is used. Principal paper machine clothing products include forming, pressing, and dryer fabrics, and process belts. A forming fabric assists in paper sheet formation and conveys the very wet sheet (more than 75 percent water) through the forming section. Press fabrics are designed to carry the sheet through the press section, where water is pressed from the sheet as it passes through the press nip. In the dryer section, dryer fabrics manage air movement and hold the sheet against heated cylinders to enhance drying. Process belts are used in the press section to increase dryness and enhance sheet properties, as well as in other sections of the machine to improve runnability and enhance sheet qualities.

The MC segment also supplies customized, consumable fabrics used in the manufacturing process in the pulp, corrugator, nonwovens, fiber cement, building products, and tannery and textile industries.

We sell our Machine Clothing products directly to customer end-users in countries across the globe. Our products, manufacturing processes, and distribution channels for MC are substantially the same in each region of the world in which we operate. The sales of paper machine clothing forming, pressing, and dryer fabrics, individually and in the aggregate, accounted for more than 10 percent of our consolidated net sales during one or more of the last three years. No individual customer accounted for as much as 10 percent of MC net sales in any of the periods presented.

The Albany Engineered Composites (AEC) segment, including Albany Safran Composites, LLC (ASC), in which our customer SAFRAN Group owns a 10 percent noncontrolling interest, provides highly engineered, advanced composite structures to customers in the commercial and defense aerospace industries. AEC's largest aerospace customer is the SAFRAN Group and sales to SAFRAN (consisting primarily of fan blades and cases for CFM's LEAP engine)

accounted for approximately 19 percent of the Company's consolidated net sales in 2018. AEC, through ASC, is the exclusive supplier to this program of advanced composite fan blades and cases under a long-term supply contract. Other significant programs served by AEC include the F-35, Boeing 787, Sikorsky CH-53K, and JASSM programs. AEC also supplies; vacuum waste tanks for the Boeing 7-Series programs; specialty components for the Rolls Royce lift fan on the F-35; as well as the fan case for the GE9X engine. In 2018, approximately 25 percent of the AEC segment's sales were related to U.S. government contracts or programs.

See "Business Environment Overview and Trends" under Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, for a discussion of general segment developments in recent years.

Following is a table of net sales by segment for 2018, 2017, and 2016.

(in thousands)	2018	2017	2016
Machine Clothing	\$611,858	\$590,357	\$582,190
Albany Engineered Composites	370,621	273,360	197,649
Consolidated total	\$982,479	\$863,717	\$779,839

The table setting forth certain sales, operating income, and balance sheet data that appears in Note 3, “Reportable Segments and Geographic Data,” of the Consolidated Financial Statements, included under Item 8 of this Form 10-K, is incorporated herein.

International Operations

Our Machine Clothing business segment maintains manufacturing facilities in Brazil, Canada, China, France, Italy, Mexico, South Korea, Sweden, the United Kingdom, and the United States. Our AEC business segment maintains manufacturing facilities in the United States, France, and Mexico.

Our global presence subjects us to certain risks, including tariffs and other restrictions on trade, and controls on foreign exchange and the repatriation of funds. While the direct impact to date of recent developments in global trade and tariff policy has not been significant, there is a risk that the impact of such developments on companies in our supply chain will be reflected in higher costs from affected suppliers. We have a cash repatriation strategy that targets a certain amount of foreign current year earnings that are not indefinitely reinvested. To date, while we have been able to make such repatriations without substantial governmental restrictions, and while the 2017 U.S. tax reform should reduce the costs of such repatriation, changes in the trade or regulatory compliance in any country that we have significant cash balances could make it more difficult to repatriate foreign earnings cost-effectively in the future. We believe that the risks associated with our operations outside the United States are no greater than those normally associated with doing business in those locations.

Working Capital, Customers, Seasonality, and Backlog

Payment terms granted to paper industry and other machine clothing customers reflect general competitive practices. Terms vary with product, competitive conditions, and the country of operation. In some markets, customer agreements require us to maintain significant amounts of finished goods inventories to assure continuous availability of our products.

In addition to supplying paper, paperboard, and tissue companies, the MC segment is a leading supplier to the nonwovens (which includes the manufacture of products such as diapers, personal care and household wipes), building products, and tannery and textile industries. These non-paper industries have a wide range of customers, with markets that vary from industrial applications to consumer use.

The AEC segment primarily serves customers in the commercial and defense aerospace market through both engine and airframe applications. Sales and working capital rose sharply in the last few years in this segment. Additionally, we anticipate intensive growth in the future, which could lead to further increases in working capital levels.

In the MC segment, the Chinese New Year, summer months, and the end of the year are often periods of lower production for some of our customers, which, in the past has contributed to seasonal variation in sales and orders. In recent years, shorter order cycles and lower inventory levels throughout the supply chain have become a more significant factor in quarterly sales. The impact of these combined factors on any quarter can be difficult to predict, and can make quarterly comparisons less meaningful than annual comparisons. While seasonality is generally not a significant factor in the Albany Engineered Composites segment, the commercial terms of the supply agreement governing the LEAP program resulted in fourth quarter sales volatility in recent years.

Backlog in the MC segment was \$204.6 million at December 31, 2018, compared to \$201.1 million at December 31, 2017. Backlog in the AEC segment increased to \$377.3 million at December 31, 2018, compared to \$327.9 million at December 31, 2017, reflecting the ramp-up in several key programs. All of the backlog in MC and approximately 90% of the AEC backlog is expected to be invoiced during the next 12 months.

Research and Development and Technology

We invest in research, new product development, and technical analysis with the objective of maintaining our technological leadership in each business segment. While much of our research activity supports existing products, we also engage in significant research and development activities for new technology platforms, products and product enhancements.

Machine Clothing is custom-designed for each user, depending on the type, size, and speed of the machine, and the products being produced. Product design is also a function of the machine section, the grade of product being produced, and the quality of the stock used. Technical expertise, judgment, and experience are critical in designing the appropriate clothing for machine, position, and application. As a result, many employees in sales and technical functions have engineering degrees, paper mill experience, or other manufacturing experience in the markets in which they operate. Our market leadership position reflects our commitment to technological innovation. This innovation has resulted in a continuing stream of new MC products and enhancements across all of our product lines.

Albany Engineered Composites designs, develops and manufactures advanced composite parts for complex aerospace applications, using a range of core technologies, including its proprietary 3D-woven reinforced composites technology, traditional 2D laminated composite structures, automated material placement, filament winding, through-thickness reinforcement and braiding.

In addition to continuous significant investment in core research and development activities in pursuit of new proprietary products and manufacturing processes, experienced research and development employees in each business segment also work collaboratively with customers, OEMs and suppliers on targeted development efforts to introduce new products and applications in their respective markets.

Company-funded research expenses totaled \$29.8 million in 2018, \$30.7 million in 2017, and \$28.8 million in 2016. In 2018, these costs were 3 percent of total Company net sales, including \$12.3 million, or 3.3 percent of net sales, in our AEC segment. Research and development in the AEC segment includes both Company-sponsored and customer-funded activities. Some customer funded research and development may be on a cost sharing basis, in which case, amounts charged to the customer are credited against research and development costs. For customer-funded research and development in which we anticipate funding to exceed expenses, we include amounts charged to the customer in Net sales. Cost of sales associated with customer-funded research was \$3.5 million in 2018, \$4.7 million

in 2017, and \$2.0 million in 2016.

We have developed, and continue to develop, proprietary intellectual property germane to the industries we serve. Our intellectual property takes many forms, including patents, trademarks, trade names and domains, and trade secrets. Our trade secrets include, among other things, manufacturing know-how and unique processes and equipment. Because intellectual property in the form of patents is published, we often forgo patent protection and preserve the intellectual property as trade secrets. We aggressively protect our proprietary intellectual property, pursuing patent protection when appropriate. Our active portfolio currently contains over 2,400 patents, and approximately 250 new patents are typically granted each year. While we consider our total portfolio of intellectual property, including our patents, to be an important competitive advantage, we do not believe that any single patent is critical to the continuation of our business. All brand names and product names are trade names of Albany International Corp. or its subsidiaries. We have from time to time licensed some of our patents and/or know-how to one or more competitors, and have been licensed under some competitors' patents, in each case mainly to enhance customer acceptance of new products. The revenue from such licenses is less than 1 percent of consolidated net sales.

Raw Materials

Primary raw materials for our MC products are polymer monofilaments and fibers, which have generally been available from a number of suppliers. In addition, we manufacture polymer monofilaments, a basic raw material for all types of machine clothing, at our facility in Homer, New York, which supplies approximately 30 percent of our worldwide monofilament requirements. In the AEC segment, the primary raw materials are carbon fiber and resin. While there are a number of potential suppliers of carbon fiber and other raw materials used by AEC, the use of certain suppliers may be mandated by customer agreements, and alternative suppliers would be subject to material qualification or other requirements that may preclude or delay their availability. In the case of mandated suppliers, AEC endeavors to enter into long-term supply agreements to help mitigate price and availability risks. Currently, the primary raw materials used in each segment are derived from petroleum, and are therefore sensitive to changes in the price of petroleum and petroleum intermediates.

Competition

In the paper machine clothing market, we believe that we had a worldwide market share of approximately 30 percent in 2018, while the two largest competitors each had a market share of approximately half of ours.

While some competitors in the MC segment tend to compete more on the basis of price, and others attempt to compete more on the basis of technology, both are significant competitive factors in this industry. Albany's Machine Clothing product portfolio is broad and deep, with products for every part of the machine and for every machine type and paper grade. The Company's research and development team works closely with the sales and technical organization to develop new products to meet changes in customer needs, and also pursues targeted joint development activities with customers and equipment manufacturers to create new products. Albany's experienced sales and technical team members – many of whom have worked in the industries that we serve - work closely with each customer to acquire deep understanding of the customer's combination of raw materials, manufacturing equipment, manufacturing processes, and paper, pulp, nonwovens or other product being produced – a combination that is unique to each customer, plant and machine. This experience and knowledge, combined with knowledge of and experience with the Company's own extensive product portfolio, allows the sales and technical teams to ensure that the appropriate machine clothing products are being supplied for each part of the machine, to customize those products as needed for best performance, and to continuously propose new Machine Clothing products that offer each customer the possibility of even better performance and increased savings. These efforts – which effectively integrate the Company's experience and technological expertise into each product we sell – are reflected in the Company's strong competitive position in the marketplace. Some of the Company's paper machine clothing competitors also supply paper machines, papermaking equipment, and aftermarket parts and services, and endeavor to compete by bundling clothing with original equipment and aftermarket services.

The primary competitive factors in the markets in which our Albany Engineered Composites segment competes is product performance and price. Achieving lower weight without sacrificing strength is the key to improving fuel

efficiency, and is a critical performance requirement in the aerospace industry. Our broad array of capabilities in composites enable us to offer customers the opportunity to displace metal components and, in some cases, conventional composites with lower-weight, high-strength, and potentially high-temperature composites. The dominant competitive factor is how the customer weighs these performance benefits, which include fuel savings due to lower weight, against the possible cost advantage of more traditional metal and composite components.

Employees

We employ approximately 4,400 persons, of whom 68 percent are engaged in manufacturing our products. Wages and benefits are competitive with those of other manufacturers in the geographic areas in which our facilities are located. In general, we consider our relations with employees to be excellent.

A number of hourly employees outside of the United States are members of various unions.

Executive Officers of the Registrant

The following table sets forth certain information with respect to the executive officers of the Company as of March 14, 2019:

Olivier M. Jarrault, 57, President and Chief Executive Officer, joined the Company in 2018. He has served the Company as President and Chief Executive Officer since March 2, 2018. Effective March 2, 2018, he assumed the role of President, Albany Engineered Composites. He has been a director of the Company since 2018. From 2001 until 2016, he served as an Executive Vice President and Group President for Alcoa Engineered Products and Solutions (“EPS”). Prior to being named President of EPS, he served in a number of senior management positions at Alcoa.

John B. Cozzolino, 52, Chief Financial Officer and Treasurer, joined the Company in 1994. He has served the Company as Chief Financial Officer and Treasurer since February 2011. From September 2010 to February 2011, he served as Vice President – Corporate Treasurer and Strategic Planning/Acting Chief Financial Officer, from February 2009 to September 2010, he served as Vice President – Corporate Treasurer and Strategic Planning, and from 2007 to February 2009 he served as Vice President – Strategic Planning. From 2000 until 2007 he served as Director – Strategic Planning, and from 1994 to 2000 he served as Manager – Corporate Accounting.

Daniel A. Halftermeyer, 57, President – Machine Clothing, joined the Company in 1987. He has served the Company as President – Machine Clothing since February 2012. He previously served the Company as President – Paper Machine Clothing and Engineered Fabrics from August 2011 to February 2012, as President – Paper Machine Clothing from January 2010 until August 2011, Group Vice President – Paper Machine Clothing Europe from 2005 to August 2008, Vice President and General Manager – North American Dryer Fabrics from 1997 to March 2005, and Technical Director – Dryer Fabrics from 1993 to 1997. He held various technical and management positions in St. Stephen, South Carolina, and Sélestat, France, from 1987 to 1993.

Alice McCarvill, 54, has served the Company as Executive Vice President- Human Resources and Chief Human Resources Officer since February 2019. She joined the Company in March 2018 as Executive Vice President- Human Resources since March 26, 2018. Prior to 2018 she was Group VP Human Resources for Arconic Engineered Products and Solutions.

Robert A. Hansen, 61, Senior Vice President and Chief Technology Officer, joined the Company in 1981. He has served the Company as Senior Vice President and Chief Technology Officer since January 2010. He previously served as Vice President – Corporate Research and Development from April 2006 to January 2010, and Director of Technical and Marketing – Europe Press Fabrics from 2004 to April 2006. From 2000 to 2004, he served as Technical Director – Press Fabrics, Göppingen, Germany. Before 2000, he served the Company in a number of technical management and research and development positions in Europe and the U.S.

David M. Pawlick, 58, Vice President – Controller, joined the Company in 2000. He has served the Company as Vice President – Controller since 2008, and as Director of Corporate Accounting from 2000 to 2008. From 1994 to 2000 he served as Director of Finance and Controller for Ahlstrom Machinery, Inc. in Glens Falls, New York. Prior to 1994, he was employed as an Audit Manager for Coopers & Lybrand.

Charles J. Silva Jr., 59, Vice President – General Counsel and Secretary, joined the Company in 1994. He has served the Company as Vice President – General Counsel and Secretary since 2002. He served as Assistant General Counsel from 1994 until 2002. Prior to 1994, he was an associate with Cleary, Gottlieb, Steen and Hamilton, an international law firm with headquarters in New York City.

Joseph M. Gaug, 55, Associate General Counsel and Assistant Secretary, joined the Company in 2004. He has served the Company as Associate General Counsel since 2004 and as Assistant Secretary since 2006. Prior to 2004, he was a principal with McNamee, Lochner, Titus & Williams, P.C., a law firm located in Albany, New York.

We are incorporated under the laws of the State of Delaware and are the successor to a New York corporation originally incorporated in 1895, which was merged into the Company in August 1987 solely for the purpose of changing the domicile of the corporation. References to the Company that relate to any time prior to the August 1987 merger should be understood to refer to the predecessor New York corporation.

Our Corporate Governance Guidelines, Business Ethics Policy, and Code of Ethics for the Chief Executive Officer, Chief Financial Officer, and Controller, and the charters of the Audit, Compensation, and Governance Committees of the Board of Directors are available at the Corporate Governance section of our website (www.albint.com).

Our current reports on Form 8-K, quarterly reports on Form 10-Q, and annual reports on Form 10-K are electronically filed with the Securities and Exchange Commission (SEC), and all such reports and amendments to such reports filed subsequent to November 15, 2002, have been and will be made available, free of charge, through our website (www.albint.com) as soon as reasonably practicable after such filing. The public may read and copy any materials filed by the Company with the SEC at the SEC's Public Reading Room at 100 F Street, N.E., Room 1580, Washington, D.C. The public may obtain information on the operation of the Public Reading Room by calling the SEC at 1-800-SEC-0330. The SEC maintains a website (www.sec.gov) that contains reports, proxy, information statements, and other information regarding issuers that file electronically with the SEC.

Item 1A. RISK FACTORS

The Company's business, operations, and financial condition are subject to various risks. Some of these risks are described below and in the documents incorporated by reference, and investors should take these risks into account in evaluating any investment decision involving the Company. This section does not describe all risks applicable to the Company, its industry or business, and it is intended only as a summary of certain material factors.

A number of industry factors have had, and in future periods could have, an adverse impact on sales, profitability and cash flow in the Company's MC and AEC segments

Significant consolidation and rationalization in the paper industry in recent years have reduced global consumption of paper machine clothing in certain markets. Developments in digital media have adversely affected demand for newsprint and for printing and writing grades of paper, which has had, and is likely to continue to have, an adverse

effect on demand for paper machine clothing in those markets. At the same time, technological advances in papermaking, including in paper machine clothing, while contributing to the papermaking efficiency of customers, have in some cases lengthened the useful life of our products and reduced the number of pieces required to produce the same volume of paper. These factors have had, and in future are likely to have, an adverse effect on paper machine clothing sales.

The market for paper machine clothing in recent years has been characterized by continuous pressure to provide more favorable commercial terms, which has unfavorably affected our operating results. We expect such pressure to remain intense in all paper machine clothing markets, especially during periods of customer

consolidation, plant closures, or when major contracts are being renegotiated. The emergence of Chinese competitors exacerbates this risk.

Similar pressures exist in the markets in which AEC competes. Many of AEC's customers, as well as the companies supplied by our customers are under pressure to achieve acceptable returns on their substantial investments in recent years in new technologies, new programs and new product introductions. This has contributed to a relentless focus on reducing costs, resulting in continuous pressure for cost reduction and pricing improvement throughout the supply chain. The recent wave of consolidation in the aerospace industry could continue or intensify these pressures.

AEC is subject to significant execution risk related to the ramp up of key programs in the short and medium term

The expected steep ramp-up of the LEAP engine program continues to put significant pressure on AEC to execute on deliveries in the short- and medium-term. In the short term, AEC must continue to fulfill critical program schedule and production-readiness milestones at its LEAP facilities in Rochester, New Hampshire and Commercy, France, as well as at the third LEAP facility in Queretaro, Mexico. In addition, a number of programs acquired in the purchase of Harris Corporation's composite aerostructures business – including airframe components for the F-35, forward fuselage frames for the Boeing 787, and sponsons, tail-rotor pylons, horizontal stabilizers and struts for the CH-53K helicopter – will be ramping significantly during the next few years while LEAP output increases toward full production. AEC will be required to execute all of these program ramp-ups while continuing to maintain and improve performance on legacy programs. AEC's ability to realize its full growth potential will depend on how effectively it accomplishes these goals. Failure to accomplish these goals could have a material adverse impact on the amount and timing of anticipated AEC revenues, income, and cash flows, which could in turn have a material adverse impact on our consolidated financial results.

AEC is subject to significant financial risk related to potential quality escapes that could cause customer recalls, or production shortfalls that could cause delays in customer deliveries

In the short term, AEC must continue to ramp up and mature its manufacturing capacity while meeting increasingly demanding quality, delivery, and cost targets across a broad spectrum of programs and facilities. In addition to LEAP, these programs include airframe components for the F-35, forward fuselage frames for the Boeing 787, and sponsons, tail-rotor pylons, horizontal stabilizers and struts for the CH-53K helicopter. AEC's ability to realize its full financial objectives will depend on how effectively it meets these challenges. Failure to accomplish these customer quality, delivery, and cost targets on any key program could result in material losses to the Company and have a material adverse impact on the amount and timing of anticipated AEC revenues, income, and cash flows, which could in turn have a material adverse impact on our consolidated financial results.

The long-term organic growth prospects of AEC are subject to a number of risks

The prospect of future successful organic growth in AEC depends in large part on its ability to maintain and grow a healthy pipeline of potential new products and applications for its technologies, to transform a sufficient number of those potential opportunities into commercial supply agreements, and to then execute its obligations under such agreements. In addition, existing and future supply agreements, especially for commercial and defense aerospace, are subject to the same curtailment or cancellation risks as the programs they support.

AEC is currently working on a broad portfolio of potential new product applications in the aerospace industry. These development projects may or may not result in commercial supply opportunities. In the event that AEC succeeds in developing products and securing contracts to manufacture and supply them, it will face the same industrialization and manufacturing ramp-up risks that it currently faces in the LEAP and other programs, and may or may not be successful in meeting its obligations under these contracts. Failure to manage these development, commercialization and execution risks could have a material adverse impact on AEC's prospects for revenue growth.

In addition to dealing with these development and manufacturing execution risks, future AEC growth will likely require increasingly larger amounts of cash to fund the investments in equipment, capital, and development efforts needed to achieve this growth. While AEC is starting to generate increasing amounts of cash, it is not yet generating sufficient cash to fund this growth. Until that time, absent the incurrence of additional indebtedness to fund this growth, AEC will remain dependent on the MC segment's ability to generate cash, and a significant decline in MC sales, operating income or cash flows could therefore have a material adverse impact on AEC's growth.

Long-term supply contracts in our Albany Engineered Composites segment pose certain risks

AEC has a number of long-term contracts with fixed pricing, and is likely to enter into similar contracts in the future. While long-term contracts provide an opportunity to realize steady and reliable revenues for extended periods, they pose a number of risks, such as program cancellations, reductions or delays in orders by AEC's customers under these contracts, the termination of such contracts or orders, or the occurrence of similar events over which AEC has no or limited control. The occurrence of one or more of these events could have a material adverse effect on AEC revenues and earnings in any period. Such events could also result in the write-off of deferred charges that have been accumulated in anticipation of future revenues.

While long-term fixed-price contracts also provide AEC with the opportunity to enjoy increased profits as the result of cost reductions and efficiencies, their profitability is dependent on estimates and assumptions regarding contract performance costs over the life of the contract, which in some cases can last for many years. Such estimates and assumptions are subject to many variables, and may prove over time to have been inaccurate when made, or may become inaccurate over time. Additionally, many of the parts AEC agrees to develop and produce have highly complex designs, and challenging technical, quality, and engineering specifications. Manufacturing or development challenges, disagreements over technical, quality or other contract requirements, and other variables may arise during development or production that result in higher costs, or an inability to achieve required specifications. If actual production and/or development costs should prove higher, or revenues prove lower, than AEC's estimates, our expected profits may be reduced, or if such costs should exceed contract prices, we may be required to recognize losses for current or future periods. One or more of these events could have a material adverse effect on AEC's revenues or operating results in any period. Such events could also result in the write-off of deferred charges that have been or could be accumulated in anticipation of future revenues.

In the second quarter of 2017, AEC recorded a charge of \$15.8 million related to the revision in the estimated profitability of its BR725 and A380 programs. The charge was driven primarily by a reduction in the estimated future demand in these long-term contracts. Each quarter, the Company updates its outlook for each of its long-term contracts and records the effect of the change in estimated profitability. While the Company believes its estimates on long-term contracts to be accurate based on available information, new information may become available in future periods, or other changes in the program could occur, which may lead to additional program losses, which could have a material effect on operating results in future periods.

Sales of components for a number of programs that are currently considered to be important to the future sales growth of AEC are pursuant to short-term purchase orders for a finite period or number of parts, or short-term supply agreements with terms of one to four years. Such programs include airframe components for the F-35, forward fuselage frames for the Boeing 787, and sponsons, tail-rotor pylons, horizontal stabilizers and struts for the CH-53K helicopter. As a result, while AEC reasonably expects to continue as a supplier on these programs as long as it meets its obligations, there can be no assurance that this will be the case, or that, in programs where it is currently a sole supplier that this sole supplier status will continue even if it continues as a supplier. Even if AEC's status as a supplier is extended or renewed, there can be no assurance that such extension or renewal will be on the same or similar commercial or other terms. Any failure by AEC to maintain its current supplier status

under these programs, or any material change in their commercial or other terms, could have a material adverse effect on AEC's future sales and operating income.

AEC is subject to significant risks related to the potential manufacture and sale of defective or non-conforming products

AEC manufactures and sells products that are incorporated into commercial and military aircraft. If AEC were to supply products with manufacturing defects, or products that failed to conform to contractual requirements, we could be required to recall and/or replace them, and could also be subject to substantial contractual damages or warranty claims from our customers. AEC could also be subject to product liability claims if such failures were to cause death, injury or losses to third parties, or damage claims resulting from the grounding of aircraft into which such defective or non-conforming products had been incorporated. While we maintain product liability insurance and other insurance at levels we believe to be prudent and consistent with industry practice to help mitigate these risks, these coverages may not be sufficient to fully cover AEC's exposure for such risks, which could have a material adverse effect on AEC's results of operations and cash flows.

Deterioration of current global economic conditions could have an adverse impact on the Company's business and results of operations

The Company identifies in this section a number of risks, the effects of which may be exacerbated by an unfavorable economic climate. For example, a recession could lead to lower consumption in all paper grades including tissue and packaging, which would not only reduce consumption of paper machine clothing but could also increase the risk of greater price competition in the machine clothing industry.

Similarly, in the Company's AEC segment, a decline in global or regional economic conditions could result in lower orders for aircraft or aircraft engines, or the cancellation of existing orders, which would in turn result in reduced demand for the AEC components utilized on such aircraft or engines. Demand for AEC's light-weight composite aircraft components is driven by demand for the lighter, more fuel-efficient aircraft engine and other applications into which they are incorporated, such as the CFM LEAP engine. Fuel costs are a significant part of operating costs for airlines and, in many cases, may constitute a carrier's single largest operating expense. A sustained drop in oil prices, and related decline in the price of jet fuel, could prompt airlines to defer orders or delivery dates for such newer, more fuel-efficient airframes and aircraft engines, as the urgency to reduce fuel consumption may be lessened. In addition, any economic conditions that led to sustained high interest rates could affect the airline's ability to finance new aircraft and engine orders.

Weak or unstable economic conditions also increase the risk that one or more of our customers could be unable to pay outstanding accounts receivable, whether as the result of bankruptcy or an inability to obtain working capital financing

from banks or other lenders. In such a case, we could be forced to write off such accounts, which could have a material adverse effect on our business, financial condition, or operating results. Furthermore, both the MC and AEC business segments manufacture products that are custom-designed for a specific customer application. In the event of a customer liquidity issue, the Company could also be required to write off amounts that are included in inventories. In the case of AEC, such write-offs could also include investments in equipment, tooling, and non-recurring engineering, some of which could be significant depending on the program.

AEC derives a significant portion of its revenue from contracts with the U.S. government, which are subject to unique risks

The funding of U.S. government programs is subject to congressional appropriations. Many of the U.S. government programs in which we participate may last several years, but they are normally funded annually. Changes in military strategy and priorities may affect our future procurement opportunities and existing programs. Long-term government contracts and related orders are subject to cancellation, delay or restructure, if appropriations for subsequent performance periods are not made. The termination or reduction of funding for

existing or new U.S. government programs could result in a material adverse effect on our earnings, cash flow and financial position.

Additionally, our business with the U.S. government is subject to specific procurement regulations and our contract costs are subject to audits by U.S. government agencies. U.S. government representatives may audit our compliance with government regulations, and such audits could result in adjustments to our contract costs. Any costs found to be improperly allocated to a specific contract will not be reimbursed, and such costs already reimbursed must be refunded. If any audit uncovers improper or illegal activities, we may be subject to civil and criminal penalties and administrative sanctions, including termination of contracts, forfeiture of profits, suspension of payments, fines and suspension or prohibition from doing business with the U.S. government, which could result in a material adverse effect on our earnings, cash flow and financial position.

The loss of one or more major customers could have a material adverse effect on sales and profitability

One customer (Safran) accounted for approximately 50 percent of net sales in the AEC segment in 2018, substantially all of which was under an exclusive long-term supply agreement relating to parts for the LEAP engine. Although we are an exclusive supplier of such parts, our customer is not obligated to purchase any minimum quantity of parts, and cancellation of the LEAP program, or of existing orders for LEAP engines, would have a material adverse impact on segment sales and profitability. LEAP engines are currently used on the Boeing 737 Max, Airbus A320neo and COMAC aircraft. A number of countries, including the United States, have recently issued orders grounding Boeing 737 Max 8 and/or Max 9 aircraft. If these recent groundings cause a decrease in demand for, or production of, this aircraft, it could have an adverse impact on demand for LEAP engines, which could in turn have an adverse impact on demand for our LEAP engine parts. The LEAP long-term supply agreement also contains certain events of default that, if triggered, could result in termination of the agreement by the customer, which would also have a material adverse impact on segment sales and profitability.

AEC's short- and medium-term non-LEAP future sales growth is currently limited to and dependent upon a small number of customers and program. Unlike the 3D-woven composite components supplied by ASC, parts supplied for such non-LEAP programs are capable of being made by a number of other suppliers. Such programs include airframe components for the F-35, forward fuselage frames for the Boeing 787, and sponsons, tail-rotor pylons, horizontal stabilizers and struts for the CH-53K helicopter. Any failure by AEC to maintain its current supplier status under these programs, or any material change in their commercial or other terms, could have a material adverse effect on AEC's future sales and operating income.

Our top ten customers in the MC segment accounted for a significant portion of our net sales in 2018. The loss of one or more of these customers, or a significant decrease in the amount of machine clothing they purchase from us, could have a material adverse impact on segment sales and profitability. We could also be subject to similar impacts if one or more such customers were to suffer financial difficulties and be unable to pay us for products they have purchased. While we normally enter into long-term supply agreements with significant MC customers, the agreements generally

do not obligate the customer to purchase any products from us, and may be terminated by the customer at any time with appropriate notice.

The Company may experience supply constraints due to a limited number of suppliers of certain raw materials and equipment

There are a limited number of suppliers of polymer fiber and monofilaments, key raw materials used in the manufacture of Machine Clothing, and of carbon fiber and carbon resin, key raw materials used by AEC. In addition, there are a limited number of suppliers of some of the equipment used in each of the MC and AEC segments. While we have always been able to meet our raw material and equipment needs, the limited number of suppliers of these items creates the potential for disruptions in supply. AEC currently relies on single suppliers to meet the carbon fiber and carbon resin requirements for the LEAP program. Lack of supply, delivery delays, or quality problems relating to supplied raw materials or for our key manufacturing equipment could harm our production capacity, and could require the Company to attempt to qualify one or more additional suppliers, which could be a lengthy, expensive and uncertain process. Such disruptions could make it difficult to supply our customers with products on time, which could have a negative impact on our business, financial condition, and results of operations.

Some of the Company's competitors in the MC segment have the capability to make and sell paper machines and papermaking equipment as well as other engineered fabrics

Although customers historically have tended to view the purchase of paper machine clothing and the purchase of paper machines as separate purchasing decisions, the ability to bundle fabrics with new machines and after-market services could provide a competitive advantage. This underscores the importance of our ability to maintain the technological competitiveness and value of our products, and a failure to do so could have a material adverse effect on our business, financial condition, and results of operations.

Moreover, we cannot predict how the nature of competition in this segment may continue to evolve as a result of future consolidation among our competitors, or consolidation involving our competitors and other suppliers to our customers.

Conditions in the paper industry have required, and could further require, the Company to reorganize its operations, which could result in significant expense and could pose risks to the Company's operations

During the last several years, we have engaged in significant restructuring that included the closing of manufacturing operations. These restructuring activities were intended to match manufacturing capacity to shifting global demand, and also to improve the efficiency of manufacturing and administrative processes. Future shifting of customer demand, the need to reduce costs, or other factors could cause us to determine in the future that additional restructuring steps are required. Restructuring involves risks such as employee work stoppages, slowdowns, or strikes, which can threaten uninterrupted production, maintenance of high product quality, meeting of customers' delivery deadlines, and maintenance of administrative processes. Increases in output in remaining manufacturing operations can likewise impose stress on these remaining facilities as they undertake the manufacture of greater volume and, in some cases, a greater variety of products. Competitors can be quick to attempt to exploit these situations. Although we plan each step of the process carefully, and work to reassure customers who could be affected that their requirements will continue to be met, we could lose customers and associated revenues if we fail to execute properly.

Natural disasters at one or more of our facilities could make it difficult for us to meet our supply obligations to our customers

AEC's production of LEAP engine components is currently located in three facilities. An interruption at any of these locations would have a significant adverse effect on AEC's ability to timely satisfy orders for LEAP components. Production of almost all of AEC's other legacy and growth programs – including components for the F-35, fuselage components for the Boeing 787, components for the CH-53K helicopter, vacuum waste tanks for Boeing 7-Series aircraft, and missile bodies for Lockheed Martin's JASSM air-to-surface missiles – is located primarily in facilities in Salt Lake City, Utah or Boerne, Texas.

Significant consolidation of manufacturing operations in our MC segment over the past decade has reduced the number of facilities available to produce our products, and increased utilization significantly at remaining facilities. Not all product lines are produced at, or capable of being produced at, all facilities. We have Machine Clothing facilities located near Mexico City, which has been identified as an area vulnerable to flood, storm surge and earthquake risks, and in the Pearl River Delta area of China, which has been identified as vulnerable to flood, storm and storm surge risks.

A significant interruption in the operation of any one or more of our plants, whether as the result of a natural disaster or other causes, could significantly impair our ability to timely meet our supply obligations to customers being supplied from an affected facility. While the occurrence of a natural disaster or other business interruption event in an area where we have a facility may not result in any direct damage to the facility itself, it may cause disruptions in local transportation and public utilities on which such locations are reliant, and may also hinder the ability of affected employees to report for work. Although we carry property and business interruption

insurance to help mitigate the risk of property loss or business interruption that could result from the occurrence of such events, such coverage may not be adequate to compensate us for all loss or damage that we may incur.

The Standish family has a significant influence on our Company and could prevent transactions that might be in the best interests of our other stockholders

As of December 31, 2018, Standish Family Holdings, LLC and related persons (including Christine L. Standish, a director of the Company) held in the aggregate shares entitling them to cast approximately 53 percent of the combined votes entitled to be cast by all stockholders of the Company. The Standish family has significant influence over the management and affairs of the Company and matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. The Standish family currently has, in the aggregate, sufficient voting power to elect all of our directors and determine the outcome of any shareholder action requiring a majority vote. This could have the effect of delaying or preventing a change in control or a merger, consolidation, or other business combination at a premium price, even if such transaction were favored by our other stockholders.

We are a “controlled company” within the meaning of the Corporate Governance Rules of the New York Stock Exchange (the “NYSE”) and qualify for, and rely on, certain exemptions from corporate governance requirements applicable to other listed companies

As a result of the greater-than-50 percent voting power of the Standish family described above, we are a “controlled company” within the meaning of the rules of the NYSE. Therefore, we are not required to comply with certain corporate governance rules that would otherwise apply to us as a listed company on the NYSE, including the requirement that the Compensation and Governance Committees be composed entirely of “independent” directors (as defined by the NYSE rules). In addition, although we have determined that all of our current directors, other than Olivier Jarrault, Christine Standish and Lee Wortham are deemed independent under the NYSE rules, as a controlled company our Board of Directors is not required to include a majority of “independent” directors. Should the interests of the Standish family differ from those of other stockholders, it is possible that the other stockholders might not be afforded such protections as might exist if our Board of Directors, or these Committees, were required to have a majority, or be composed exclusively, of directors who were independent of the Standish family or our management.

The Company is increasingly dependent on information technology and our business, systems, assets and infrastructure face certain risks, including cybersecurity and data leakage risks. The failure to prevent attacks on our operational systems or infrastructure could result in disruptions to our businesses, or the loss or disclosure of confidential and proprietary intellectual property or other assets.

As our dependence on information technology and communication systems has increased, so have the risks associated with cyber-attacks from third parties attempting to gain access to our systems, data, or assets using varied means, from

electronic “hacking” to traditional social engineering aimed at our employees. The Company has been, and will likely continue to be, the target of such attacks, none of which have, individually or in the aggregate, been material to the Company.

Any significant breakdown, invasion, destruction or interruption of our business systems by employees, others with authorized access to our systems, or unauthorized persons could negatively impact operations. There is also a risk that we could experience a business interruption, theft of information or other assets, or reputational damage. While we have made, and will continue to make, significant investments in business systems, information technology infrastructure, internal controls systems and employee training to attempt to reduce these risks, there can be no assurance that our efforts will prevent breakdowns, losses or breaches that could have a material adverse effect on our business, financial position and results of operations.

Inflation as a result of changes in prices of commodities and labor costs may adversely impact our financial results of operations

The Company is a significant user of raw materials that are based on petroleum or petroleum derivatives. Increases in the prices of petroleum or petroleum derivatives, particularly in regions that are experiencing higher levels of inflation, could increase our costs, and we may not be able to fully offset the effects through price increases, productivity improvements, and cost-reduction programs.

The Company also relies on the labor market in many regions of the world to meet our operational requirements, advance our technology and differentiate products. Low rates of unemployment in key geographic areas in which the Company operates can lead to high rates of turnover and loss of critical talent, which could in turn lead to higher labor costs.

Fluctuations in currency exchange rates could adversely affect the Company's business, financial condition, and results of operations

We operate our business in many regions of the world, and currency rate movements can have a significant effect on operating results. The effect of currency rate changes on gross profit in the MC segment can be difficult to anticipate because we use a global sourcing and manufacturing model. Under this model, while some non-U.S. sales and associated costs are in the same currency, other non-U.S. sales are denominated in currencies other than the currency in which most costs of such sales are incurred. At the same time, the geographic sources of materials purchased (and the currencies in which these purchases are denominated) can vary depending on market forces, and the Company may also shift production of its products between manufacturing locations, which can result in a change in the currency in which certain costs to produce such products are incurred.

Changes in exchange rates can result in revaluation gains and losses that are recorded in Selling, general and administrative expenses or Other expense, net. Revaluation gains and losses occur when our business units have cash, intercompany or third-party trade receivable or payable balances in a currency other than their local reporting (or functional) currency. Operating results can also be affected by the translation of sales and costs, for each non-U.S. subsidiary, from the local functional currency to the U.S. dollar. The translation effect on the income statement is dependent on our net income or expense position in each non-U.S. currency in which we do business. A net income position exists when sales realized in a particular currency exceed expenses paid in that currency; a net expense position exists if the opposite is true.

As a result of these exposures to foreign currency transactions and balances, changes in currency rates could adversely affect the Company's business, financial condition or results of operations.

The Company may fail to adequately protect its proprietary technology, which would allow competitors or others to take advantage of its research and development efforts

Proprietary trade secrets are a source of competitive advantage in each of our segments. If our trade secrets were to become available to competitors, it could have a negative impact on our competitive strength. We employ measures to maintain the confidential nature of these secrets, including maintaining employment and confidentiality agreements; maintaining clear policies intended to protect such trade secrets; educating our employees about such policies; clearly identifying proprietary information subject to such agreements and policies; and vigorously enforcing such agreements and policies. Despite such measures, our employees, consultants, and third parties to whom such information may be disclosed in the ordinary course of our business may breach their obligations not to reveal such information, and any legal remedies available to us may be insufficient to compensate our damages.

We have a substantial amount of indebtedness. At December 31, 2018, the Company had outstanding short-term debt of \$1.2 million and long-term debt of \$523.7 million

At December 31, 2018, our leverage ratio (as defined in our primary borrowing agreement) was 1.96 to 1, and we had borrowed \$499 million under our \$685 million revolving credit facility. While we feel that we generate sufficient cash from operations and have sufficient borrowing capacity to make required capital expenditures to

maintain and grow our business, any decrease in our cash generation could result in higher leverage. Higher leverage could hinder our ability to make acquisitions, capital expenditures, or other investments in our businesses, pay dividends, or withstand business and economic downturns. Our primary borrowing agreement contains a number of covenants and financial ratios that the Company is required to satisfy. The most restrictive of these covenants pertain to prescribed leverage and interest coverage ratios and asset dispositions. Any breach of any such covenants or restrictions would result in a default under such agreement that would permit the lenders to declare all borrowings under such agreement to be immediately due and payable and, through cross-default provisions, could entitle other lenders to accelerate their loans. In such an event, the Company would need to modify or restructure all or a portion of such indebtedness. Depending on prevailing economic conditions at the time, the Company might find it difficult to modify or restructure the debt on attractive terms, or at all.

We use interest rate swap agreements to help manage the interest cost associated with our borrowings. We account for those swaps as a hedge of future cash flows and, accordingly, changes in the fair value of the swaps are recorded in Other comprehensive income. Borrowings under the revolving credit facility and the interest rate swaps are currently based on LIBOR, which is expected to be phased out and replaced by 2021. Future changes in the interest rate benchmark could affect the Company's cash flows, or the effectiveness of the swap agreements which could have an effect on net income.

As of December 31, 2018, we had approximately \$186 million of additional borrowing capacity under our \$685 million revolving credit facility. Incurrence of additional indebtedness could increase the above-described risks associated with higher leverage. In addition, any such indebtedness could contain terms that are more restrictive than our current facilities.

The Company is subject to legal proceedings and legal compliance risks, and has been named as defendant in a large number of suits relating to the actual or alleged exposure to asbestos-containing products

We are subject to a variety of legal proceedings. Pending proceedings that the Company determines are material are disclosed in Note 20, to the Consolidated Financial Statements in Item 8, which is incorporated herein by reference. Litigation is an inherently unpredictable process and unanticipated negative outcomes are always possible. An adverse outcome in any period could have an adverse impact on the Company's operating results for that period.

We are also subject to a variety of legal compliance risks. While we believe that we have adopted appropriate risk management and compliance programs, the global and diverse nature of our operations means that legal compliance risks will continue to exist and related legal proceedings and other contingencies, the outcome of which cannot be predicted with certainty, are likely to arise from time to time. Failure to resolve successfully any legal proceedings related to compliance matters could have an adverse impact on our results in any period.

Changes in actuarial assumptions and differences between actual experience and assumptions could adversely affect our pension and postretirement benefit costs and liabilities

Although we have reduced pension liabilities by a significant amount during the past few years, as of December 31, 2018, remaining net liabilities under our defined benefit pension plans exceeded plan assets by \$22.5 million (\$9.3 million for the U.S. plan, \$13.2 million for non-U.S. plans). Additionally, the liability for unfunded postretirement welfare benefits, principally in the United States, totaled \$51.1 million. Annual expense associated with these plans, as well as annual cash contributions, are subject to a number of variables, including discount rates, return on plan assets, mortality, and differences between actuarial assumptions and actual experience. Those liabilities include \$72.9 million of deferred costs which are included in Accumulated other comprehensive income. The deferred costs will be amortized into expense in future periods, or a significant charge could be recorded if we were to settle pension or postretirement obligations.

Although the Company has taken actions to hedge certain pension plan assets to the pension liabilities, weakness in investment returns on plan assets, changes in discount rates or actuarial assumptions, and actual future experience could result in higher benefit plan expense and the need to increase pension plan contributions in future years.

The Company is exposed to the risk of increased expense in health-care related costs

We are largely self-insured for some employee and business risks, including health care and workers' compensation programs in the United States. Losses under all of these programs are accrued based upon estimates of the ultimate liability for claims reported and an estimate of claims incurred but not reported, with assistance from third-party actuaries and service providers. However, these liabilities are difficult to assess and estimate due to unknown factors, including the severity of an illness or injury and the number of incidents not reported. The accruals are based upon known facts and historical trends, and management believes such accruals to be adequate. The Company also maintains stop-loss insurance policies to protect against catastrophic claims above certain limits. If actual results significantly differ from estimates, our financial condition, results of operations, and cash flows could be materially impacted by losses under these programs, as well as higher stop-loss premiums in future periods.

Changes in or interpretations of tax rules, structures, country profitability mix, and regulations may adversely affect our effective tax rate

We are a United States-based multinational company subject to tax in the United States and foreign tax jurisdictions. Unanticipated changes in tax rates, or tax policies in the countries in which we operate, could affect our future results of operations. Our future effective tax rate could be unfavorably affected by changes in or interpretation of tax rules and regulations in the jurisdictions in which we do business, by structural changes in the Company's businesses, by unanticipated decreases in the amount of revenue or earnings in countries with low statutory tax rates, or by changes in the valuation of our deferred tax assets and liabilities. Additionally, changes in the tax laws in any country, including the U.S. tax reform in 2017, may be difficult to interpret without additional guidance, which could lead to future adjustments to our financial statements.

The Company has substantial deferred tax assets that could become impaired, resulting in a charge to earnings

The Company has substantial deferred tax assets in several tax jurisdictions, including the U.S. Realization of deferred tax assets is dependent upon many factors, including generation of future taxable income in specific countries. (See Note 7 to the Consolidated Financial Statements in Item 8, which is incorporated herein by reference, for a discussion of this matter.) Lower than expected operating results, organizational changes, or changes in tax laws could result in those deferred tax assets becoming impaired, thus resulting in a charge to earnings.

Our business could be adversely affected by adverse outcomes of pending or future tax audits

The Company is currently under audit in certain jurisdictions and could be audited in other jurisdictions in the future. While the Company believes its tax filings to be correct, a final adverse outcome with respect to pending or future audits could have a material adverse impact on the Company's results in any period in which it occurs.

The Company's insurance coverage may be inadequate to cover other significant risk exposures

In addition to asbestos-related claims, the Company may be exposed to other liabilities related to the products and services we provide. AEC is engaged in designing, developing, and manufacturing components for commercial jet aircraft and defense and technology systems and products. We expect this portion of the business to grow in future periods. Although we maintain insurance for the risks associated with this business, there can be no assurance that the amount of our insurance coverage will be adequate to cover all claims or liabilities. In

addition, there can be no assurance that insurance coverage will continue to be available to us in the future at a cost that is acceptable. Any material liability not covered by insurance could have a material adverse effect on our business, financial condition, and results of operations.

The Company has significant manufacturing operations outside of the U.S., which could involve many uncertainties

We currently have manufacturing facilities outside the U.S. In 2018, 47 percent of consolidated net sales were generated by our non-U.S. subsidiaries. Operations outside of the U.S. are subject to a number of risks and uncertainties, including: governments may impose limitations on our ability to repatriate funds; governments may impose withholding or other taxes on remittances and other payments from our non-U.S. operations, or the amount of any such taxes may increase; an outbreak or escalation of any insurrection or armed conflict may occur; governments may seek to nationalize our assets; or governments may impose or increase investment barriers or other restrictions affecting our business. In addition, emerging markets pose other uncertainties, including the protection of our intellectual property, pressure on the pricing of our products, and risks of political instability. The occurrence of any of these conditions could disrupt our business or prevent us from conducting business in particular countries or regions of the world.

We have significant manufacturing operations in Mexico, Canada and China. Changes in U.S. trade policy with these countries (including the North American Free Trade Agreement, NAFTA, or higher duties on imports from China or other countries), or other changes in U.S. laws and policies governing foreign trade, as well as any responsive or retaliatory changes in regulations or policies by such countries, could have an adverse impact on our business, either directly or in the form of increased costs due to their impacts on our supply chain. While the direct impact to date of recent developments in global trade and tariff policy has not been significant, there is a risk that the impact of such developments on companies in our supply chain will be reflected in higher costs from affected suppliers. In addition, the Company has manufacturing operations in the United Kingdom that could be impacted by Brexit. Due to the uncertainties surrounding the U.K.'s plan to exit the European Union, we are unable to assess the potential impact to the Company.

Our global presence subjects us to certain risks, including controls on foreign exchange and the repatriation of funds. While we have been able to repatriate current earnings in excess of working capital requirements from certain countries in which we operate without substantial governmental restrictions, there can be no assurance that we will be able to cost effectively repatriate foreign earnings in the future.

The Company is subject to laws and regulations worldwide, changes to which could increase our costs and have a material adverse effect on our financial condition or results of operations

The Company is subject to laws and regulations relating to employment practices and benefits, taxes, import and export matters, corruption, foreign-exchange controls, competition, workplace health and safety, intellectual property, health-care, the environment and other areas. These laws and regulations have a significant impact on our domestic and international operations.

We incur significant expenses to comply with laws and regulations. Changes or additions to laws and regulations could increase these expenses, which could have an adverse impact on our financial condition and results of operations. Such changes could also have an adverse impact on our customers and suppliers, which in turn could adversely impact the Company.

While we have implemented policies and training programs designed to ensure compliance, there can be no assurance that our employees or agents will not violate such laws, regulations or policies, which could have a material adverse impact on our financial condition or results of operations.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 2. PROPERTIES

Our principal manufacturing facilities are located in Brazil, Canada, China, France, Italy, Mexico, South Korea, Sweden, the United Kingdom, and the United States. The aggregate square footage of our operating facilities in the United States is approximately 2.0 million square feet, of which 1.1 million square feet are owned and 0.9 million square feet are leased. Our facilities located outside the United States comprise approximately 3.6 million square feet, of which 3.1 million square feet are owned and 0.5 million square feet are leased. We consider these facilities to be in good condition and suitable for our purpose. The capacity associated with these facilities is adequate to meet production levels required and anticipated through 2019.

Item 3. LEGAL PROCEEDINGS

The information set forth above under Note 20 to the Consolidated Financial Statements in Item 8, which is incorporated herein by reference.

Item 4. MINE SAFETY DISCLOSURES

None.

PART II**Item MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER
5. MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES**

We have two classes of Common Stock, Class A Common Stock and Class B Common Stock, each with a par value of \$0.001 and equal liquidation rights. Our Class A Common Stock is principally traded on the New York Stock Exchange under the symbol AIN. As of December 31, 2018, we estimate that there were over 20,000 beneficial owners of our Class A Common Stock, including employees owning shares through our 401(k) defined contribution plan. Our Class B Common Stock does not trade publicly. As of December 31, 2018, there were 6 holders of Class B Common Stock. Dividends are paid equally on shares of each class. Our cash dividends, and the high and low prices per share of our Class A Common Stock, were as follows for the periods presented:

Quarter Ended	March 31	June 30	September 30	December 31
2018				
Cash dividends per share	\$0.17	\$0.17	\$0.17	\$0.18
Class A Common Stock prices:				
High	\$67.30	\$65.45	\$81.40	\$78.31
Low	\$60.05	\$58.35	\$60.70	\$58.41
2017				
Cash dividends per share	\$0.17	\$0.17	\$0.17	\$0.17
Class A Common Stock prices:				
High	\$49.05	\$53.40	\$57.60	\$65.25
Low	\$43.90	\$43.90	\$50.25	\$56.45

The graph below matches the cumulative 5-Year total return of holders of Albany International Corp.'s common stock with the cumulative total returns of the Russell 2000 index and a customized peer group of twenty five companies that includes: Actuant Corp, Astronics Corp, Barnes Group Inc., CIRCOR International Inc., Curtiss-wright Corp, Ducommun Inc., Enpro Industries Inc., Esco Technologies Inc., Esterline Technologies Corp, Heico Corp, Hexcel Corp, IDEX Corp, Kadant Inc., Keyw Holding Corp, National Presto Industries Inc., Neenah Inc., Nordson Corp, Omnova Solutions Inc., P H Glatfelter Co, Raven Industries Inc., Rogers Corp, Schweitzer-mauduit International Inc., Tredegar Corp, Trimas Corp and Watts Water Technologies Inc. The graph assumes that the value of the investment in our common stock, in each index, and in the peer group (including reinvestment of dividends) was \$100 on December 31, 2013 and tracks it through December 31, 2018.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among Albany International Corp., the Russell 2000 Index,
and a Peer Group

*\$100 invested on 12/31/13 in stock or index, including reinvestment of dividends.
Fiscal year ending December 31.

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December 31,	2013	2014	2015	2016	2017	2018
Albany International Corp.	100.00	107.56	105.44	135.80	182.63	187.49
Russell 2000	100.00	104.89	100.26	121.63	139.44	124.09
Peer Group	100.00	98.57	87.56	117.73	147.16	133.38

The stock price performance included in this graph is not necessarily indicative of future stock price performance.

Restrictions on dividends and other distributions are described in Note 17 of the Consolidated Financial Statements in Item 8, which is incorporated herein by reference.

Disclosures of securities authorized for issuance under equity compensation plans are included under Item 12 of this Form 10-K.

In August 2006, we announced that the Board of Directors had authorized management to purchase up to 2 million additional shares of our Class A Common Stock. The Board's action authorized management to purchase shares from time to time, in the open market or otherwise, whenever it believes such purchase to be advantageous to our shareholders, and it is otherwise legally permitted to do so. Management has made no share purchases under this authorization.

Item 6. SELECTED FINANCIAL DATA

The following selected historical financial data have been derived from our Consolidated Financial Statements in Item 8, which is incorporated herein by reference. The data should be read in conjunction with those financial statements and Management's Discussion and Analysis of Financial Condition and Results of Operations in Item 7, which is incorporated herein by reference.

(in thousands, except per share amounts)	2018	2017	2016	2015	2014
Summary of Operations					
Net sales (1) (4)	\$982,479	\$863,717	\$779,839	\$709,868	\$745,345
Cost of goods sold (1) (2) (3)	632,730	567,434	478,555	429,929	452,508
Restructuring and other (2) (3) (7)	15,570	13,491	8,488	23,846	5,759
Operating income/(loss) (2)	137,408	78,676	94,132	67,128	82,312
Interest expense, net	18,124	17,091	13,464	9,984	10,713
Income/(loss) from continuing operations	83,019	32,585	52,812	57,265	41,749
Net income attributable to the Company	82,891	33,111	52,733	57,279	41,569
Earnings per share attributable to Company Shareholders-Basic	2.57	1.03	1.64	1.79	1.31
Earnings per share attributable to Company Shareholders-Diluted	2.57	1.03	1.64	1.79	1.30
Dividends declared per share	0.69	0.68	0.68	0.67	0.63
Weighted average number of shares outstanding - basic	32,252	32,169	32,086	31,978	31,832
Capital expenditures, including software	82,886	87,637	73,492	50,595	58,873
Financial position					
Cash	\$197,755	\$183,727	\$181,742	\$185,113	\$179,802
Asset held for sale (5)	-	-	-	4,988	-
Property, plant and equipment, net (5)	462,055	454,302	422,564	357,470	395,113
Total assets (1) (3) (4)	1,417,992	1,361,198	1,263,433	1,009,562	1,029,304
Current liabilities (6)	189,306	161,517	200,009	126,231	183,398
Long-term debt	523,707	514,120	432,918	265,080	222,096
Total noncurrent liabilities (6)	620,406	626,666	552,134	380,778	332,338
Total liabilities (1)	809,712	788,183	752,143	507,009	515,736
Total equity (1)	608,280	573,015	511,290	502,553	513,568

(1) In 2018, we adopted the provisions of ASC 606, "Revenue from contracts with customers", using the modified retrospective (or cumulative effect) method for transition. Under this transition method, periods prior to 2018 have not been restated and the cumulative effect of initially applying the new standard was recorded as an adjustment to

Retained earnings at January 1, 2018.

(2) In 2018, we adopted the provisions of ASU 2017-07, “Compensation – Retirement Benefits: improving the presentation of net periodic pension cost and net periodic postretirement benefit cost”. This update resulted in some pension costs being presented on different line items in the Consolidated Statement of Income. As required by that update, we have reclassified pension costs for periods prior to 2018.

In 2017, we discontinued the Bear Claw® line of hydraulic fracturing components used in the oil and gas industry, (3) which led to a charge of \$2.8 million to Cost of goods sold for the write-off of inventory, and a non-cash restructuring charge of \$4.5 million for the write-off of equipment and intangibles.

In 2016, we acquired the outstanding shares of Harris Corporation's composite aerostructures business for cash of (4) \$187 million, plus the assumption of certain liabilities. The table above includes operational results from April 8, 2016 to December 31, 2016 and for full years 2017 and 2018.

In 2015, we discontinued operations at the Company's press fabric manufacturing facility in Germany, and recorded (5) a charge of \$3.3 million related to the write down of the land and building to their estimated fair market value. This asset was reclassified from Property, plant, and equipment to Asset held for sale.

(6) In 2015, we adopted the provisions of ASU 2015-17, "Income Taxes" using the prospective transition method. This accounting update affected the amount and classification of deferred tax assets and liabilities.

(7) During the period 2014 through 2018, we recorded restructuring charges related to organizational changes and cost reduction initiatives.

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

Management's Discussion and Analysis ("MD&A") is intended to help the reader understand the results of operations and financial condition of the Company. MD&A is provided as a supplement to, and should be read in conjunction with, our Consolidated Financial Statements and the accompanying Notes.

Business Environment Overview and Trends

Our reportable segments, Machine Clothing (MC) and Albany Engineered Composites (AEC) draw on the same advanced textiles and materials processing capabilities, and compete on the basis of product-based advantage that is grounded in those core capabilities.

The MC segment is the Company's long-established core business and primary generator of cash. While it has suffered from well-documented declines in publication grades in the Company's traditional markets, the paper and paperboard industry is still expected to grow slightly on a global basis, driven by demand for packaging and tissue grades, as well as the expansion of paper consumption and production in Asia and South America. We feel we are now well-positioned in key markets, with high-quality, low-cost production in growth markets, substantially lower fixed costs in mature markets, and continued strength in new product development, technical product support, and manufacturing technology. Because of pricing pressures and industry overcapacity, the machine clothing and paper industries will continue to face top line pressure. Despite continued market pressure on revenue, the business retains the potential for maintaining stable earnings in the future. It has been a significant generator of cash, and we seek to maintain the cash-generating potential of this business by maintaining the low costs that we have achieved through continuous focus on cost reduction initiatives, and competing vigorously by using our differentiated and technically superior products to reduce our customers' total cost of operation and improve their paper quality.

The AEC segment provides significant growth potential for our Company both near and long term. Our strategy is to grow by focusing our proprietary 3D-woven technology, as well as our non-3D technology capabilities, on high-value aerospace (both commercial and defense) applications, while at the same time performing successfully on our portfolio of growth programs. AEC (including Albany Safran Composites, LLC (ASC), in which our customer SAFRAN Group owns a 10 percent noncontrolling interest) supplies a number of customers in the aerospace industry. AEC's largest aerospace customer is the SAFRAN Group and sales to SAFRAN, through ASC, (consisting primarily of fan blades and cases for CFM's LEAP engine) accounted for approximately 19 percent of the Company's consolidated net sales in 2018. AEC, through ASC, also supplies 3D-woven composite fan cases for the GE9X engine. AEC's current portfolio of non-3D programs includes

components for the F-35, fuselage components for the Boeing 787, components for the CH-53K helicopter, vacuum waste tanks for Boeing 7-Series aircraft, and missile bodies for Lockheed Martin's JASSM air-to-surface missiles. AEC is actively engaged in research to develop new applications in both commercial and defense aircraft engine and airframe markets.

Consolidated Results of Operations

Effective January 1, 2018, the Company adopted the provisions of ASC 606, "Revenue from contracts with customers", using the modified retrospective (or cumulative effect) method for transition. Under this transition method, periods prior to 2018 are not restated. The following table summarizes the effect on various financial statement line items that resulted from the adoption of ASC 606:

Increase/(decrease) attributable to adoption of ASC 606 for the year ended December 31, 2018

(in thousands)	Machine Clothing	Albany Engineered Composites	Income tax and noncontrolling interest effects	Total Company
Net sales	\$(3,970)	\$(3,150)	\$-	\$(7,120)
Gross profit	(1,617)	4,930	-	3,313
Selling, technical, general and research expenses	(12)	-	-	(12)
Operating income and Income before income taxes	(1,605)	4,930	-	3,325
Income taxes	-	-	877	877
Net income	(1,605)	4,930	(877)	2,448
Net income attributable to the noncontrolling interest in ASC	-	-	129	129
Net income attributable to the Company	\$(1,605)	\$4,930	\$(1,006)	\$2,319

The Company acquired the outstanding shares of Harris Corporation's composite aerostructures business for \$187 million in cash, plus the assumption of certain liabilities, on April 8, 2016. As the acquisition occurred during the year, the Company's 2016 results of operations include only a portion of the year, which can affect comparability amongst periods. The acquired entity, located in Salt Lake City (SLC), Utah, is part of the AEC segment. Management believes that the acquisition broadened and deepened AEC's products, experience and manufacturing capabilities, and significantly increased opportunities for future growth.

The following table presents operational results of the acquired entity that are included in the Consolidated Statements of Income:

(in thousands)	January 1 to December 31, 2018	January 1 to December 31, 2017	April 8 to December 31, 2016
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Net sales	\$135,508	\$108,112	\$67,011
Gross profit	16,376	12,524	9,375
Selling, technical, general and research expenses	12,028	11,849	10,310
Restructuring expense	1,880	6,594	311
Operating income/(loss)	2,468	(5,919) (1,246)

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Net sales

The following table summarizes our Net sales by business segment:

	(in thousands, except percentages)		
Years ended December 31,	2018	2017	2016
Machine Clothing	\$611,858	\$590,357	\$582,190
Albany Engineered Composites	370,621	273,360	197,649
Total	\$982,479	\$863,717	\$779,839
% change	13.8	% 10.8	% -

The following table summarizes 2018 Net sales by business segment, excluding the impact of ASC 606 and currency translation effects:

(in thousands, except percentages)	2018 Net sales, as reported	Decrease due to ASC 606	Increase due to changes in currency translation rates	2018 sales on same basis as 2017	% Change excluding currency rate and ASC 606 effects compared to 2017	
Machine Clothing	\$611,858	\$(3,970)) \$6,128	\$609,700	3.3	%
Albany Engineered Composites	370,621	(3,150)) 2,399	371,372	35.9	%
Total	\$982,479	\$(7,120)) \$8,527	\$981,072	13.6	%

2018 vs. 2017

Changes in currency translation rates had the effect of increasing net sales by \$8.5 million (0.9% of net sales), compared to 2017. That currency translation effect was principally due to the euro being stronger in 2018 as compared to 2017.

Excluding the effect of changes in currency translation rates:

§ Consolidated Net sales increased 12.8%. Excluding the additional effect of ASC 606, Net sales increased 13.6%.

§ Net sales in MC increased 2.6%. Excluding the additional effect of adopting ASC 606, Net sales increased 3.3%, principally due to global growth in sales for packaging and tissue grades.

§ Net sales in AEC increased 34.7%. Excluding the additional effect of adopting ASC 606, Net sales increased 35.9%, primarily driven by growth in the LEAP, Boeing 787, F-35, and CH-53K programs.

2017 vs. 2016

Changes in currency translation rates had the effect of increasing net sales by \$3.7 million (0.4% of net sales), compared to 2016. That currency translation effect was principally due to the effect on European sales that resulted from the euro strengthening in the second half of 2017.

.	Excluding the effect of changes in currency translation rates:
§	Consolidated Net sales increased 10.3%.
§	Net sales in MC increased \$5.1 million, or 0.9%.
§	Net sales in AEC increased \$75.0 million, or 38.0%.

The increase in MC Net sales was due to the growth in tissue, packaging and pulp grades, which more than offset declines in the publication grades.

The increase in AEC Net sales was principally due to:

§ SLC sales increased \$41.1 million. The 2016 SLC acquisition occurred in the second quarter of 2016, resulting in an additional quarter of sales in 2017. The SLC sales increase was also due to the ramping up of key programs.

§ Sales in the LEAP program increased \$32.8 million, or 39.5%, compared to 2016.

Backlog

Backlog in the MC segment was \$204.6 million at December 31, 2018, compared to \$201.1 million at December 31, 2017. Backlog in the AEC segment increased to \$377.3 million at December 31, 2018, compared to \$327.9 million at December 31, 2017, reflecting the ramp-up in several key programs. All of the backlog in MC and approximately 90% of the AEC backlog is expected to be invoiced during the next 12 months.

Gross Profit

The following table summarizes Gross profit by business segment:

(in thousands, except percentages)

Years ended December 31,	2018	2017	2016
Machine Clothing	\$297,416	\$280,686	\$276,380
Albany Engineered Composites	52,550	15,875	25,121
Corporate expenses	(217)	(278)	(217)
Total	\$349,749	\$296,283	\$301,284
% of Net Sales	35.6 %	34.3 %	38.6 %

The increase in 2018 gross profit, as compared to 2017, was principally due to the net effect of the following individually significant items:

The increase in MC Gross profit of \$16.7 million, was principally due to the effect of the following individually significant items:

§ Higher sales in MC generated an increase in gross profit of approximately \$10 million.

§ Changes in currency translation rates, principally the Brazilian real, had the effect of increasing MC Gross profit by approximately \$5 million.

MC Gross profit was also increased as a result of productivity improvements, which include the impact of continuous cost reduction initiatives.

The increase in AEC Gross profit of \$36.7 million, was principally due to the effect of the following individually significant items:

In the second quarter of 2017, we recorded a charge of \$15.8 million for a revision in the contract profitability of two long-term manufacturing contracts for the BR725 and A380 programs.

During the third quarter of 2017, the Company decided to discontinue the Bear Claw® line of hydraulic fracking components used in the oil and gas industry,

which was part of the 2016 SLC acquisition. That decision resulted in a \$2.8 million charge to Cost of goods sold for the write-off of inventory.

§ The Net sales increase in 2018, as described above, increased Gross profit by approximately \$10 million.

Favorable adjustments to estimates of contract profitability in the fourth quarter of each year resulted in a reduction to Cost of goods sold of \$2.5 in 2018 and \$4.9 million in 2017. In 2018, the favorable adjustment related to a § reduction in the estimated loss on a long-term contract. In 2017, the adjustment related to an amendment to a long-term agreement with a licensor for the A380 program.

§ In the fourth quarter of each year, we recorded additional Cost of goods sold of approximately \$4 million for inefficiencies in the ramp-up of production.

§ The remaining 2018 increase in AEC Gross profit was principally due to improved productivity resulting from the deployment of a disciplined standardized operational system across AEC plants, as well as the favorable impact of continuous improvement programs.

The decrease in 2017 Gross profit, as compared to 2016, was principally due to the net effect of the following individually significant items:

The increase in MC Gross profit was principally due to the increase in net sales, as noted above. Changes in currency translation rates did not have a significant effect on MC Gross profit in 2017.

· Machine Clothing Gross profit as a percentage of sales was 47.5% in both 2017 and 2016.

· The decrease in AEC Gross profit was principally due to the net effect of the following individually significant items:

§ The Net sales increase in 2017, as described above.

§ In 2017, we recorded the \$15.8 million charge related to the BR725 and A380 programs.

§ In 2017, we recorded the \$2.8 million charge to Cost of goods sold for the write-off of Bear Claw® inventory.

§ The acquired business generated \$3.1 million of additional gross profit in 2017 as compared 2016 due, in part, to an additional quarter of operations in 2017.

§ In 2017, we recorded the \$4.9 million decrease to Cost of goods sold for the amendment to a long-term agreement with a licensor for the A380 program.

§ In 2017, we recorded a charge to Cost of goods sold of approximately \$4 million for inefficiencies in the ramp-up of production, and an additional charge of \$1.1 million related to an unfavorable change in the estimated profitability of a long-term contract.

Selling, Technical, General, and Research (STG&R)

Selling, technical, general and research (STG&R) expenses include selling, general, administrative, technical, product engineering and research expenses. The following table summarizes STG&R by business segment:

(in thousands, except percentages)

Years ended December 31,	2018	2017	2016
Machine Clothing	\$115,305	\$123,277	\$117,806
Albany Engineered Composites	32,855	37,470	38,170
Corporate expenses	48,611	43,369	42,688
Total	\$196,771	\$204,116	\$198,664
% of Net Sales	20.0	% 23.6	% 25.5

The decrease in STG&R expenses in 2018 compared to 2017, was principally due to the following individually significant items:

MC revaluation of nonfunctional currency assets and liabilities resulted in gains of \$0.8 million in 2018 and losses of \$3.9 million in 2017.

Changes in currency translation rates increased MC STG&R expenses by \$0.4 million, principally due to the stronger euro, which more than offset decreases that resulted from the weaker Brazilian real.

· AEC STG&R expenses decreased \$4.6 million principally due to restructuring and other organization changes.

Corporate STG&R expenses increased by \$5.2 million principally due to higher costs to support continued growth in AEC.

The increase in STG&R expenses in 2017 compared to 2016, was principally due to the following individually significant items:

MC revaluation of nonfunctional currency assets and liabilities resulted in losses of \$3.9 million in 2017 and gains of \$0.4 million in 2016.

Changes in currency translation rates increased MC STG&R expenses by \$1.1 million, of which approximately \$0.7 million was attributable to the Brazilian real which strengthened during 2017. The remainder of the increase was principally attributable to the stronger euro.

AEC STG&R expenses decreased \$0.7 million, principally due to the net effect of the following individually significant items:

§ 2016 SLC acquisition expenses were \$5.4 million. There was no comparable item in 2017.

§ STG&R expenses of the SLC business were \$1.5 million higher in 2017, principally due to the timing of the acquisition in 2016.

§ STG&R expenses were \$2.3 million higher in 2017 due to expansion of our facilities outside of the U.S.

Research and Development

The following table is a subset of the STG&R table above and summarizes expenses associated with internally funded research and development by business segment:

(in thousands)

Years ended December 31,	2018	2017	2016
Machine Clothing	\$17,474	\$18,483	\$16,884
Albany Engineered Composites	12,278	12,188	11,920
Corporate expenses	-	-	-
Total	\$29,752	\$30,671	\$28,804

Restructuring

In addition to the items discussed above affecting gross profit, and STG&R expenses, operating income was affected by restructuring costs of \$15.6 million in 2018, \$13.5 million in 2017, and \$8.5 million in 2016.

The following table summarizes restructuring expense by business segment:

	(in thousands)		
Years ended December 31,	2018	2017	2016
Machine Clothing	\$12,278	\$3,429	\$6,181
Albany Engineered Composites	3,048	10,062	2,314
Corporate expenses	244	-	(7)
Total	\$15,570	\$13,491	\$8,488

In 2017, the Company announced a proposal to close its MC production facility in Sélestat, France, and the proposal was approved by the French Labor Ministry in 2018. The restructuring program was driven by the Company's need to balance manufacturing capacity with demand. We recorded restructuring expense of \$1.1 million in 2017 and \$10.7 million in 2018, which included severance and outplacement costs for the approximately 50 positions that were terminated under this plan. To date, we have recorded \$11.8 million of restructuring charges related to these actions. Annual cost savings associated with this action principally resulted in lower Cost of goods sold in 2018.

In 2016, the Company discontinued research and development activities at its MC facility in Sélestat, France, which resulted in \$2.2 million of restructuring expense in 2016. In 2017 and 2018, we recorded additional restructuring charges of \$1.6 million and \$1.0 million, respectively, principally related to additional termination benefits paid to former employees. To date, we have recorded \$4.8 million of restructuring charges related to these actions.

In 2017, the Company initiated work force reductions in AEC locations in Salt Lake City, Utah and Rochester, New Hampshire. The 2017 and 2018 restructuring charges include expenses of \$5.0 million and \$1.1 million, respectively. To date, we have recorded \$6.1 million of restructuring charges related to these actions.

AEC restructuring charges in 2018 included expenses related to the discontinuation of certain manufacturing processes in Salt Lake City, resulting in a non-cash restructuring charge of \$1.7 million, and an additional \$0.2 million for severance. The non-cash restructuring charge results from an impairment of related manufacturing equipment. The Company has decided to dispose of that equipment by sale and the impairment charge reflects management's estimate of proceeds that may be recovered in the sale. As of December 31, 2018, the asset value, net of the impairment charge, is included in Prepaid expenses and other current assets in the accompanying Consolidated Balance Sheets.

In 2017, the Company decided to discontinue the Bear Claw® line of hydraulic fracturing components used in the oil and gas industry. This decision resulted in a non-cash restructuring charge of \$4.5 million for the write-off of intangible assets and equipment, and a \$2.8 million charge to Cost of goods sold for the write-off of inventory.

AEC restructuring expenses in 2016 were principally related to the consolidation of legacy programs into Boerne, Texas.

In 2015, the Company announced a plan to discontinue manufacturing operations at its MC manufacturing facility in Göppingen, Germany. In 2016 and 2017, we recorded additional restructuring charges of \$2.6 and \$0.8 million, respectively, related to the final closure of the plant.

For more information on our restructuring charges, see Note 5 to the Consolidated Financial Statements in Item 8, which is incorporated herein by reference.

Operating Income

The following table summarizes operating income/(loss) by business segment:

	(in thousands)		
Years ended December 31,	2018	2017	2016
Machine Clothing	\$169,836	\$153,980	\$152,505
Albany Engineered Composites	16,647	(31,657)	(15,363)
Corporate expenses	(49,075)	(43,647)	(43,010)
Total	\$137,408	\$78,676	\$94,132

Other Earnings Items

	(in thousands)		
Years ended December 31,	2018	2017	2016
Interest expense, net	\$18,124	\$17,091	\$13,464
Other expense, net	4,037	6,877	2,402
Income tax expense	32,228	22,123	25,454
Net income/(loss) attributable to the noncontrolling interest	128	(526)	79

Interest Expense

Interest expense increased \$1.0 million in 2018 principally due to an increase in average debt outstanding. The higher debt balances related to funding expansion of the AEC business. See “Liquidity and Capital Resources” for further discussion of borrowings and interest rates.

Other Expense, net

The change in Other expense, net included the following individually significant items:

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In 2018, we recorded a \$2.2 million charge related to the settlement of a portion of our non-U.S. defined benefit pension plan liabilities and a curtailment gain of \$0.7 million related to the restructuring in Sélestat, France. Foreign currency revaluations of cash and intercompany balances resulted in gains of \$0.1 million in 2018, losses of \$4.6 million in 2017, and gains of \$3.5 million in 2016. In 2016, we recorded a \$2.5 million charge related to the theft of cash at the Company's subsidiary in Japan. In 2017, we recorded a gain of \$2.0 million based on an insurance settlement related to that theft.

Income Taxes

The Company has operations which constitute a taxable presence in 18 countries outside of the United States. The majority of these countries had income tax rates that are above the United States federal tax rate of 21% during 2018. The jurisdictional location of earnings is a significant component of our effective tax rate each year and therefore on our overall income tax expense.

The Company's effective tax rate for fiscal years 2018, 2017, and 2016 was 28.0%, 40.4% and 32.5%, respectively. New tax legislation in the U.S. had a significant impact on tax expense in 2018. Among other items, the 2017 Tax Cuts and Jobs Act (the "Tax Reform Act") implemented a territorial tax system and imposed a transition tax on deemed repatriated earnings of foreign subsidiaries. The Company recorded a net \$1.0 million reduction to the provisional transition tax in 2018. The \$1.0 million adjustment was comprised of a \$1.1 million federal tax benefit attributable to adjustments discovered while analyzing the post 1986 earnings and profits, and tax pools through 2017 and a \$0.1 million state tax charge based on interpretive guidance issued by various states during the year on how the deemed mandatory repatriation would be taxed in those jurisdictions. The

Company also recorded an additional tax expense of \$1.6 million related to the re-measurement of U.S. net deferred tax assets using the new lower corporate tax rate of 21%. This adjustment to the provisional amount was the result of further analysis of certain aspects of the Tax Reform Act, and refinement of our calculations during the 12 months ended December 31, 2018. Income tax expense of \$2.7 million was recorded to reflect the Company's global intangible low-taxed income (GILTI) inclusion, net of foreign tax credits. This is partially offset by a tax benefit of \$0.7 million for foreign-derived intangible income (FDII).

The tax rate is also affected by recurring items, such as the income tax rate in the U.S. and in non-U.S. jurisdictions and the mix of income earned in those jurisdictions and discrete items that may occur in any given year but are not consistent from year to year.

Significant items that impacted the 2018 effective tax rate included the following (percentages reflect the effect of each item as a percentage of income before income taxes):

- A tax benefit of \$1.0 million (-0.9%) related to the impact of the adjustment to the 2017 mandatory deemed repatriation provision.
- A tax charge of \$1.6 million (1.4%) related to the impact of the adjustment to the 2017 re-measurement of U.S. net deferred tax assets.
- A tax charge of \$0.4 million (0.4%) related to foreign tax rate changes.
- A tax benefit of \$1.3 million (-1.1%) related to U.S. and non-U.S. return to provision adjustments.
- A tax benefit of \$4.9 million (-4.2%) related to changes in the opening valuation allowances.
- A net effective tax rate expense of 0.2% was recognized from income tax rate differences between non-U.S. and U.S. jurisdictions. U.S. tax costs on foreign earnings that have been or will be repatriated and foreign withholdings resulted in an increase of 3.9% to the effective tax rate.
- A tax charge of \$1.3 million (1.1%) related to the settlement of audits throughout the year.
- Income tax rate on continuing operations, excluding discrete items, was 31.3%.

Significant items that impacted the 2017 effective tax rate included the following (percentages reflect the effect of each item as a percentage of income before income taxes):

- A tax charge of \$5.8 million (10.5%) related to the impact of the mandatory deemed repatriation.
- A tax charge of \$1.9 million (3.4%) related to the tax rate changes both foreign and domestic.
- A tax benefit of \$0.8 million (-1.5%) related to U.S. and non-U.S. return to provision adjustments.
- A tax benefit of \$3.5 million (-6.4%) related to changes in the opening valuation allowances.
- A net effective tax rate reduction of 10.5% was recognized from income tax rate differences between non-U.S. and U.S. jurisdictions. Earnings in Brazil, Switzerland, Mexico and China, where tax rates are lower than the U.S. notional rate of 35%, contributed to the majority of the reduction noted. U.S. tax costs on foreign earnings that have been or will be repatriated and foreign withholdings resulted in an increase of 1.4% to the effective tax rate.
- A tax charge of \$1.4 million (2.4%) related to the settlement of audits throughout the year.
- Income tax rate on continuing operations, excluding discrete items, was 32%.

Significant items that impacted the 2016 tax rate included the following (percentages reflect the effect of each item as a percentage of income before income taxes):

- A tax benefit of \$2.6 million (-3.4%) related to changes in uncertain tax positions.
- A \$0.5 million (0.6%) net tax expense related to other discrete items.
A net effective tax rate reduction of 9.7% was recognized from income tax rate differences between non-U.S. and U.S. jurisdictions. Earnings in Brazil, Switzerland, Mexico and China, where tax rates are lower than the U.S. notional rate of 35%, contributed to the majority of the reduction noted. U.S. tax costs on foreign earnings that have been or will be repatriated and foreign withholdings resulted in an increase of 5.8% to the effective tax rate.
- Income tax rate on continuing operations, excluding discrete items, was 35%.

Segment Results of Operations

Machine Clothing Segment

Machine Clothing is our primary business segment and accounted for 62 percent of our consolidated revenues during 2018. MC products are purchased primarily by manufacturers of paper and paperboard.

According to RISI, Inc., global production of paper and paperboard is expected to grow at an annual rate of approximately 1 percent over the next five years, driven primarily by global growth in packaging and tissue, which is expected to be greater than expected declines in publication grades.

While the MC business has suffered from well-documented declines in publication grades in the Company's traditional markets, the paper and paperboard industry is still expected to grow slightly on a global basis, driven by demand for packaging and tissue grades. We feel we are now well-positioned in these markets, with high-quality, low-cost production in growth markets, substantially lower fixed costs in mature markets, and continued strength in new product development, technical product support, and manufacturing technology. Recent technological advances in paper machine clothing, while contributing to the papermaking efficiency of customers, have lengthened the useful life of many of our products and had an adverse impact on overall paper machine clothing demand.

The Company's manufacturing and product platforms position us well to meet these shifting demands across product grades and geographic regions. Our strategy for meeting these challenges continues to be to grow share in all markets, with new products and technology, and to maintain our manufacturing footprint to align with global demand, while we offset the effects of inflation through continuous productivity improvement.

We have incurred significant restructuring charges in recent periods as we reduced MC manufacturing capacity and administrative positions in the United States, Germany and France.

Review of Operations

(in thousands, except percentages)

Years ended December 31,	2018	2017	2016
Net sales	\$611,858	\$590,357	\$582,190

% change from prior year	3.6	% 1.4	% -	
Gross profit	297,416	280,686	276,380	
% of net sales	48.6	% 47.5	% 47.5	%
STG&R expenses	115,305	123,277	117,806	
Operating income	169,836	153,980	152,505	

Net Sales

2018 vs. 2017

Changes in currency translation rates had the effect of increasing 2018 sales by \$6.1 million compared to 2017. That currency translation effect was principally due to the euro being stronger in 2018 than in 2017.

Excluding the effect of changes in currency translation rates, Net sales in MC increased 2.6%. Excluding the additional effect of adopting ASC 606, Net sales increased 3.3%, principally due to global growth in sales for the packaging and tissue grades.

2017 vs. 2016

Changes in currency translation rates had the effect of increasing 2017 sales by \$3.1 million compared to 2016. That currency translation effect was principally due to the effect on European sales that resulted from the euro strengthening in the second half of 2017.

Excluding the effect of changes in currency translation rates, Net sales in MC increased \$5.1 million, or 0.9%, principally due to the growth in tissue, packaging and pulp grades, which more than offset declines in the publication grades.

Gross Profit

2018 vs. 2017

Higher sales in MC generated an increase in gross profit of approximately \$10 million.

Changes in currency translation rates, principally the Brazilian real, had the effect of increasing MC gross profit approximately \$5 million.

MC Gross profit was also increased as a result of productivity improvements, which include the effect of continuous cost reduction initiatives.

2017 vs. 2016

The increase in MC Gross profit was principally due to the increase in net sales, as noted above. Gross profit, as a percentage of sales, was 47.5% in both 2017 and 2016.

Changes in currency translation rates did not have a significant effect on gross profit in 2017, compared to 2016.

Operating Income

2018 vs. 2017

The increase in operating income was principally due to the net effect of the following individually significant items:

- Gross profit increased \$16.7 million due to higher sales, as changes in currency translation rates, as described above.

- STG&R expenses decreased \$8.0 million, principally due to year over year changes in foreign currency revaluation gains and losses, as described above.

- Restructuring charges were \$12.3 million in 2018, compared to \$3.4 million in 2017.

2017 vs. 2016

The increase in operating income was principally due to the net effect of the following individually significant items:

Gross profit increased \$4.3 million due to higher sales, as described above.

STG&R expenses increased \$5.5 million, principally due to year over year changes in foreign currency revaluation gains and losses, as described above.

Restructuring charges were \$3.4 million in 2017, compared to \$6.2 million in 2016.

Albany Engineered Composites Segment

The Albany Engineered Composites (AEC) segment, including Albany Safran Composites, LLC (ASC), in which our customer SAFRAN Group owns a 10 percent noncontrolling interest, provides highly engineered advanced composite structures to customers primarily in the aerospace (both commercial and defense) industry. AEC's largest program relates to CFM International's LEAP engine. AEC, through ASC, is the exclusive supplier of advanced composite fan blades and cases for this program under a long-term supply contract. Other significant AEC programs include components for the F-35, fuselage frames for the Boeing 787, components for the CH-53K helicopter, and the fan case for the GE9X engine.

Review of Operations

(in thousands, except percentages)

Years ended December 31,	2018	2017	2016
Net sales	\$370,621	\$273,360	\$197,649
% change from prior year	35.6	% 38.3	% -
Gross profit	52,550	15,875	25,121
% of net sales	14.2	% 5.8	% 12.7
STG&R expenses	32,855	37,470	38,170
Operating income/(loss)	16,647	(31,657)	(15,363)

Net Sales

2018 vs. 2017

The increase in net sales was principally due to the net effect of the following individually significant items:

Excluding the effect of changes in currency translation rates, Net sales increased 34.7%. Excluding the impact of adopting ASC 606, Net sales increased 35.9%, primarily driven by growth in the LEAP, Boeing 787, F-35, and CH-53K programs.

2017 vs. 2016

The increase in net sales was principally due to the net effect of the following individually significant items:

Net sales for the SLC business increased \$41.1 million, compared to 2016. The 2016 SLC acquisition occurred in the second quarter of 2016, resulting in an additional quarter of sales in 2017. SLC net sales were also higher as a result of growth in the Boeing 787 fuselage frames and F-35 programs.

Sales in the LEAP program increased \$32.8 million, or 39.5%, compared to 2016.

Gross Profit

2018 vs. 2017

The increase in AEC Gross profit in 2018 was principally due to the net effect of the following individually significant items:

In the second quarter of 2017, we recorded a charge of \$15.8 million for a revision in the contract profitability of two long-term manufacturing contracts for the BR725 and A380 programs.

During the third quarter of 2017, the Company decided to discontinue the Bear Claw® line of hydraulic fracking components used in the oil and gas industry, which was part of the 2016 SLC acquisition. That decision resulted in a \$2.8 million charge to Cost of goods sold for the write-off of inventory.

- The Net sales increase in 2018, as described above, increased Gross profit by approximately \$10 million.

Favorable adjustments to estimates of contract profitability in the fourth quarter of each year resulted in a reduction to Cost of goods sold of \$2.5 million in 2018 and \$4.9 million in 2017. In 2018, the favorable adjustment related to a reduction in the estimated loss on a long-term contract. In 2017, the adjustment related to an amendment to a long-term agreement with a licensor for the A380 program.

In the fourth quarter of each year, we recorded additional Cost of goods sold of approximately \$4 million for inefficiencies in the ramp-up of production.

The remaining 2018 increase in AEC Gross profit was principally due to improved productivity resulting from the deployment of a disciplined standardized operational system across AEC plants, as well as the favorable impact of continuous improvement programs.

2017 vs. 2016

The decrease in AEC Gross profit in 2017 was principally due to the net effect of the following individually significant items:

The Net sales increase in 2017, as described above.

In 2017, we recorded the \$15.8 million charge related to the BR725 and A380 programs.

In 2017, we recorded the \$2.8 million charge to Cost of goods sold for the write-off of Bear Claw® inventory.

The acquired business generated \$3.1 million of additional gross profit in 2017 as compared 2016 due, in part, to an additional quarter of operations in 2017.

In 2017, we recorded the \$4.9 million decrease to Cost of goods sold for the amendment to a long-term agreement with a licensor for the A380 program.

In 2017, we recorded a charge to Cost of goods sold of approximately \$4 million for inefficiencies in the ramp-up of production, and an additional charge of \$1.1 million related to an unfavorable change in the estimated profitability of a long-term contract.

Long-term contracts

AEC has contracts with certain customers, including its contract for the LEAP program, where revenue is determined by a cost-plus-fee arrangement. Revenue earned under these arrangements accounted for approximately 49 percent, 44 percent, and 45 percent of segment revenue for 2018, 2017, and 2016, respectively. LEAP engines are currently used on the Boeing 737 Max, Airbus A320neo and COMAC aircraft. A number of countries, including the United States, have recently issued orders grounding Boeing 737 Max 8 and/or Max 9 aircraft. If these recent groundings cause a decrease in demand for, or production of, this aircraft, it could have an adverse impact on demand for LEAP engines, which could in turn have an adverse impact on demand for our LEAP engine parts. Such a decrease could, in turn, trigger an increase in demand for A320neo aircraft, which could somewhat offset this negative impact.

In addition, AEC has long-term contracts in which the selling price is fixed. In accounting for those contracts, we estimate the profit margin expected at the completion for the contract and recognize a pro-rata share of that profit during the course of the contract using a cost-to-cost approach. Changes in estimated contract profitability will affect revenue and gross profit when the change occurs, which could have a significant favorable or unfavorable effect on revenue and gross profit in any reporting period.

In the fourth quarter of 2018, we had both favorable and unfavorable adjustments to the estimated profitability on long-term contracts that had a net effect of reducing gross profit by \$1.5 million. The favorable adjustment resulted from a reduction to the estimated loss on a long-term contract that resulted from better than expected ramp-up on a different program. The unfavorable adjustment resulted in a charge of \$4.0 million due to ramp-up inefficiencies on a key program and we also had a charge of \$4.0 million in the fourth quarter of 2017 related to ramp-up inefficiencies.

AEC has a contract for the manufacture of composite components for the Rolls-Royce BR725 engine, which powers Gulfstream's G-650 business jet. The contract obligates AEC to supply these components for the life of the BR725 program. During the second quarter of 2017, the Company revised its estimate of the profitability of this contract and we recorded a charge of \$10.2 million as a provision for anticipated losses through the end of the program. The charge was driven primarily by a reduction in the estimated future demand for these components. The Company previously recorded a charge of \$14.0 million in the second quarter of 2015 for this program, including \$10.9 million for the write-off of development costs for nonrecurring engineering and tooling, and \$3.1 million for anticipated future losses.

The SLC business has a contract for the manufacture of composite struts for the Airbus A380, under which it is obligated to supply composite wing box struts through 2020 and floor beam struts through 2023. During the second quarter of 2017, the Company revised its estimate of the profitability of this contract and determined that a charge of \$5.6 million should be recorded as a provision for anticipated losses through contract completion. The revision was driven by a decrease in estimated demand for these components during the contract term, as well as by program inefficiencies. In the fourth quarter of 2017, we amended a long-term agreement with a licensor for the A380 program, which resulted in a \$4.9 million decrease to Cost of goods sold.

Other than the changes in estimated profitability of contracts noted above, changes in contract estimates decreased gross profit by \$0.5 million in 2018, decreased gross profit by \$0.6 million in 2017, and increased gross profit by \$1.5 million in 2016.

Selling, Technical, General, and Research (STG&R)

2018 vs. 2017

STG&R expenses decreased \$4.6 million principally due to restructuring and other organization changes.

2017 vs. 2016

STG&R expenses decreased \$0.7 million principally due to the following individually significant items:

- 2016 acquisition expenses were \$5.4 million. There was no comparable item in 2017.
- STG&R expenses of the SLC business were \$1.5 million higher in 2017, principally due to the timing of the acquisition in 2016.
- STG&R expenses were \$2.3 million higher in 2017 due to expansion of our facilities outside of the U.S.

Operating Income/(Loss)

2018 vs. 2017

The increase in operating income of \$48.3 million in 2018 was principally due to the net effect of the following individually significant items:

- A significant increase in Net sales and strong productivity, as described above.
- The \$15.8 million charge recorded in the second quarter of 2017, as described above.
- The \$2.8 million charge to Cost of goods sold in 2017 for the write-off of Bear Claw® inventory.
- A decrease of \$7.0 million in Restructuring expenses, as described above.

2017 vs. 2016

The operating loss increased by \$16.3 million in 2017, principally due to the following individually significant items:

Gross profit decreased \$9.2 million in 2017, principally due to the \$15.8 million charge recorded in the second quarter of 2018, as noted above.

· Restructuring charges increased by \$7.7 million in 2017.

Liquidity and Capital Resources

Cash Flow Summary

	(in thousands)		
For the years ended December 31,	2018	2017	2016
Net income	\$83,019	\$32,585	\$52,812
Depreciation and amortization	79,036	71,956	67,461
Changes in working capital (a)	(21,034)	(15,859)	(23,109)
Changes in long-term liabilities, deferred taxes and other credits	3,493	(11,409)	657
Write-off of pension liability adjustment due to settlement/curtailment	1,494	-	51
Write-off of intangible assets in a discontinued product line	-	4,149	-
Other operating items	(13,523)	(17,206)	(16,932)
Net cash provided by operating activities	132,485	64,216	80,940
Net cash used in investing activities	(82,886)	(87,637)	(253,553)
Net cash (used in)/provided by financing activities	(27,258)	12,867	172,038
Effect of exchange rate changes on cash flows	(8,313)	12,539	(2,796)
Increase/(decrease) in cash and cash equivalents	14,028	1,985	(3,371)
Cash and cash equivalents at beginning of year	183,727	181,742	185,113
Cash and cash equivalents at end of year	\$197,755	\$183,727	\$181,742

(a) Includes Accounts receivable, Contract assets, Inventories, and Accounts payable.

Operating activities

Cash provided by operating activities was \$132.5 million in 2018, compared to \$64.2 million in 2017, and \$80.9 million in 2016. The net increase in cash provided by operating activities in 2018 was due to increased profitability in both MC and AEC, partially offset by increases in working capital. In 2018, the Company made a \$5 million voluntary contribution to its U.S. pension plan resulting in that plan being close to fully funded. Growth in AEC has resulted in working capital increases \$26.0 million in 2018, \$21.0 million in 2017, and \$41.8 million in 2016. Additionally, the Noncurrent receivables held by AEC have resulted in a use of cash of \$12.2 million in 2018, \$18.8 million in 2017 and \$14.0 million in 2016. Changes in long-term liabilities, deferred taxes and other liabilities resulted in an increase to cash flows of \$3.5 million in 2018, a use of cash of totaling \$11.4 million in 2017, and an increase of cash totaling \$0.7 million in 2016. The amount reported for 2017 was principally due to an amendment to a long-term agreement with a licensor for the A380 program. That agreement resulted in a \$3.0 million cash payment, plus a \$4.9 million reduction in the present value of the obligation to the supplier. Cash paid for income taxes was \$28.1 million, \$23.7 million, and \$23.4 million in 2018, 2017, and 2016, respectively.

At December 31, 2018, the Company had \$197.8 million of cash and cash equivalents, of which \$144.2 million was held by subsidiaries outside of the United States. As disclosed in Note 7 of the Consolidated Financial Statements in Item 8, we determined that all but \$82.4 million of this amount (which represents the amount of cumulative earnings expected to be repatriated to the United States at some point in the future) is intended to be utilized by these non-U.S. operations for an indefinite period of time. Our current plans do not anticipate that we will need funds generated from foreign operations to fund our domestic operations or satisfy debt obligations in the United States. In the event that such funds were to be needed to fund operations in the U.S., and if associated accruals for taxes have not already been provided, we would be required to record additional tax expense.

Investing Activities

On April 8, 2016, the Company acquired the outstanding shares of Harris Corporation's composite aerostructures business for \$187 million in cash, plus the assumption of certain liabilities. Total capital expenditures for continuing operations, including purchased software, were \$82.9 million in 2018, compared to \$87.6 million in 2017, and \$73.5 million in 2016. In the AEC segment, capital expenditures were \$60.1 million in 2018, compared to \$63.9 million in 2017, and \$54.7 million in 2016. We currently estimate capital expenditures to be \$80 million to \$100 million in 2019.

Financing Activities and Capital Resources

We finance our business activities primarily with cash generated from operations and borrowings, largely through our revolving credit agreement as discussed below. Our subsidiaries outside of the United States may also maintain working capital lines with local banks, but borrowings under such local facilities tend not to be significant. The

majority of our cash balance at December 31, 2018 was held by non-U.S. subsidiaries. Based on cash on hand and credit facilities, we anticipate that the Company has sufficient capital resources to operate for the foreseeable future. We were in compliance with all debt covenants as of December 31, 2018.

On November 7, 2017, we entered into a \$685 million unsecured Five-Year Revolving Credit Facility Agreement (the “Credit Agreement”) which amended and restated the prior \$550 million Agreement, entered into on April 8, 2016 (the “Prior Agreement”). Under the Credit Agreement, \$499 million of borrowings were outstanding as of December 31, 2018. The applicable interest rate for borrowings was LIBOR plus a spread, based on our leverage ratio at the time of borrowing. At the time of the last borrowing on December 17, 2018, the spread was 1.500%. The spread was based on a pricing grid, which ranged from 1.250% to 1.750%, based on our leverage ratio. Based on our maximum leverage ratio and our Consolidated EBITDA, and without modification to any other credit agreements, as of December 31, 2018, we would have been able to borrow an additional \$186 million under the Agreement.

As of December 31, 2018, our leverage ratio was 1.96 to 1.00 and our interest coverage ratio was 11.59 to 1.00. We may purchase our Common Stock or pay dividends to the extent our leverage ratio remains at or below 3.50 to 1.00, and may make acquisitions with cash provided our leverage ratio does not exceed the limits

noted above. On November 28, 2017, we entered into interest rate swap agreements for the period December 18, 2017 through October 17, 2022. These transactions have the effect of fixing the LIBOR portion of the effective interest rate (before addition of the spread) on \$350 million of indebtedness drawn under the Credit Agreement at the rate of 2.11% during the period. Under the terms of these transactions, we pay the fixed rate of 2.11% and the counterparties pay a floating rate based on the one-month LIBOR rate at each monthly calculation date, which on December 17, 2018 was 2.46%, during the swap period. On December 17, 2018, the all-in-rate on the \$350 million of debt was 3.61%.

Dividends have been declared each quarter since the fourth quarter of 2001. Decisions with respect to whether a dividend will be paid, and the amount of the dividend, are made by the Board of Directors each quarter. Cash dividends paid were \$21.9 million, \$21.9 million, and \$21.8 million, in 2018, 2017, and 2016, respectively. To the extent the Board declares cash dividends in the future, we expect to pay such dividends out of operating cash flows. Future cash dividends will also depend on debt covenants and on the Board's assessment of our ability to generate sufficient cash flows.

On May 6, 2016, we terminated other interest rate swap agreements that had effectively fixed the interest rate on \$120 million of revolving credit borrowings, in order to enter into a new interest rate swap with a greater notional amount, and the same maturity as the Credit Agreement. We paid \$5.2 million to terminate the swap agreements and that cost will be amortized into interest expense through June 2020. On November 27, 2017, we terminated interest rate swap agreements, originally entered into on May 9, 2016, that had effectively fixed the interest rate on \$300 million of revolving credit borrowings, in order to enter into a new interest rate swap with a greater notional amount, and the same maturity as the Credit Agreement. We received \$6.3 million to terminate the swap agreements. The amounts paid and received to terminate these swap agreements will be amortized into interest expense through March 2021.

Off-Balance Sheet Arrangements

As of December 31, 2018, we have no off-balance sheet arrangements required to be disclosed pursuant to Item 303(a)(4) of Regulation S-K.

Contractual Obligations

As of December 31, 2018, we have the following cash flow obligations:

Payments Due by Period		
Less than	Three to	After

(in millions)	Total	one year	One to three years	five years	five years
Total debt	\$524.9	\$1.2	\$3.7	\$503.5	\$16.5
Interest payments (a)	79.5	20.1	39.9	17.1	2.4
Pension plan contributions (b)	4.2	4.2	-	-	-
Other postretirement benefits (c)	51.1	3.9	7.5	7.3	32.4
Restructuring accruals	5.6	5.5	0.1	-	-
Other noncurrent liabilities (d)	-	-	-	-	-
Operating leases	17.9	4.6	5.3	2.9	5.1
Totals	\$683.2	\$39.5	\$56.5	\$530.8	\$56.4

The terms of variable-rate debt arrangements, including interest rates and maturities, are included in Note 17 of Notes to Consolidated Financial Statements. The interest payments are based on the assumption that we maintain (a) \$149 million of variable rate debt until the November 2017 Credit Agreement matures on November 7, 2022, and the rate as of December 31, 2018 (3.69%) continues until October 17, 2022, then continues at 3.96% until maturity. Both rates include the effects of interest rate hedging transactions.

We estimate pension benefits to be paid directly by the Company in 2019 to be \$4.1 million, however, that estimate is subject to revision based on many factors. The Company may also make contributions to pension trusts that exist (b) in certain countries. The amount of contributions after 2019 is subject to many variables, including return of pension plan assets, interest rates, and tax and employee benefit laws. Therefore, contributions beyond 2019 are not included in this schedule.

Estimated cash outflow for other postretirement benefits is consistent with the expected benefit payments as (c) presented in Note 4 of the Consolidated Financial Statements in Item 8 for the next five years. Beyond five years, expected benefit payments are not consistent with those presented in Note 4, due to the many variables associated with this estimate.

Estimated payments for deferred compensation, interest rate swap agreements, and other noncurrent liabilities are (d) not included in this table due to the uncertain timing of the ultimate cash settlement. Also, this table does not reflect unrecognized tax benefits, the timing of which is uncertain. Refer to Note 7 of the Consolidated Financial Statements in Item 8, for additional discussion on unrecognized tax benefits.

The foregoing table should not be deemed to represent all of our future cash requirements, which will vary based on our future needs. While the cash required to satisfy the obligations set forth in the table is reasonably determinable in advance, many other cash needs, such as raw materials costs, payroll, and taxes, are dependent on future events and are harder to predict. In addition, while the contingencies described in Note 20 of the Consolidated Financial Statements in Item 8 are not currently anticipated to have a material adverse effect on our Company, there can be no assurance that this may not change. Subject to the foregoing, we currently expect that cash from operations and the other sources of liquidity described above will be sufficient to enable us to meet the foregoing cash obligations, as well as to meet our other cash requirements.

Recent Accounting Pronouncements

The information set forth above may be found under Item 8. Financial Statements and Supplementary Data, Note 1, which is incorporated herein by reference.

Critical Accounting Policies and Estimates

For the discussion of our accounting policies, see Item 8. Financial Statements and Supplementary Data, Note 1, which is incorporated herein by reference. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make assumptions and estimates that directly affect the amounts reported in the Consolidated Financial Statements. Each of these assumptions is subject to uncertainties and changes in those assumptions or judgments can affect our results of operations. In addition to the accounting policies stated in Item 8. Financial Statements and Supplementary Data, Note 1, financial statement amounts and disclosures are significantly influenced by market factors, judgments and estimates as described below.

Revenue Recognition

Effective January 1, 2018, the Company adopted the provisions of ASC 606, Revenue from contracts with customers. The standard replaces numerous requirements in U.S. GAAP, including industry-specific requirements, and provides companies with a single model for recognizing revenue from contracts with customers. See additional information in Item 8.

Contracts with customers in the Machine Clothing segment have various terms that can affect the point in time when revenue is recognized. The contractual terms are closely monitored in order to ensure revenue is recognized in the proper period.

Products and services provided under long-term contracts represent a significant portion of sales in the Albany Engineered Composites segment. AEC's largest source of revenue is derived from the LEAP contract under a cost-plus-fee agreement. Beginning in 2018, the fee is variable based on our success in achieving certain cost targets. Revenue is recognized over time as costs are incurred. Under this contract, there is significant judgment involved in determining applicable contract costs and the amount of revenue to be recognized.

We also have fixed price long-term contracts, for which we use the percentage of completion (actual cost to estimated cost) method. That method requires significant judgment and estimation, which could be considerably different if the underlying circumstances were to change. When adjustments in estimated contract revenues or costs are required, any changes from prior estimates are included in earnings in the period the change occurs.

The Albany Engineered Composites segment also has some long-term aerospace contracts under which there are two phases: a phase during which the production part is designed and tested, and a phase of supplying production parts. During the design and testing phases we perform pre-production or nonrecurring engineering services, which are normally considered a fulfillment activity, rather than a performance obligation. Fulfillment activities that create resources that will be used in satisfying performance obligations in the future, and are expected to be recovered, are capitalized to Other assets. The capitalized costs are amortized into Cost of goods sold over the period over which the asset is expected to contribute to future cash flows which includes anticipated renewal periods. Accumulated capitalized costs are written-off when those costs are determined to be unrecoverable.

For contracts with anticipated losses, a provision for the entire amount of the estimated remaining loss is charged against income in the period in which the loss becomes known. Contract loss provisions include contract options that are probable of exercise, excluding any profitable options that might be expected to follow. Contract losses are determined considering all direct and indirect contract costs, exclusive of any selling, general or administrative cost allocations, which are treated as period expenses. Under the new standard, we are required to limit our estimate of contract values to the period of the legally enforceable contract, which in many cases is considerably shorter than the contract period used under the former standard. While certain contracts are expected to be profitable over the course of the program life when including expected renewals, under the new standard, our estimate of contract revenues and costs is limited to the estimated value of enforceable rights and obligations, excluding anticipated renewals. In some cases, this shorter contract period may result in a loss contract provision at the inception of the contract. Also, refer to information under *Long-term Contracts* in Item 7, *Management's Discussion and Analysis* of this Form 10-K, which is incorporated herein by reference.

Pension and Postretirement Liabilities

The Company has pension and postretirement benefit costs and liabilities that are developed from actuarial valuations. Inherent in these valuations are key assumptions, including discount rates and expected return on plan assets, which are updated on an annual basis. As of December 31, 2018, total liabilities under our defined benefit pension plans (including unfunded plans) exceeded plan assets by \$22.5 million, of which \$13.2 million was for plans outside of the

U.S. Additionally, at December 31, 2018, other postretirement liabilities totaled \$51.1 million, substantially all of which related to our U.S. plan. As of December 31, 2018, we have unrecognized pretax net losses of \$69.1 million for pension plans and \$3.8 million for other postretirement benefit plans that may be amortized into earnings in future periods.

We are required to consider current market conditions, including changes in interest rates, in making these assumptions. For 2019, we anticipate pension contributions and direct payments to retirees to total \$4.2 million, and payments for other postretirement benefit plans to be \$3.9 million. Changes in the related pension

and other postretirement benefit costs or credits may occur in the future due to changes in the assumptions. The amount of annual pension plan funding and annual expense is subject to many variables, including the investment return on pension plan assets and interest rates, and actual contributions could vary significantly. Assumptions used for determining pension and other postretirement plan liabilities and expenses are evaluated and updated at least annually.

Income Taxes

In the ordinary course of business there is inherent uncertainty in determining assets and liabilities related to income tax balances. We exercise significant judgment in order to estimate taxes payable or receivable in future periods. Tax-related balances may also be impacted by organizational changes or changes in the tax laws of any country in which we operate. We assess our income tax positions and record tax assets and liabilities for all years subject to examination based upon management's evaluation of the facts, circumstances, and information available at the reporting date. For those tax positions where it is more likely than not that a tax benefit will be sustained, we have determined the amount of the tax benefit to be recognized by estimating the largest amount of tax benefit that has a greater than 50 percent likelihood of being realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information.

Deferred tax assets are expected to be realized through the reversal of existing temporary differences and future taxable income. A valuation allowance is established, as needed, to reduce net deferred tax assets to the amount expected to be realized. In the event it becomes more likely than not that some or all of the deferred tax asset valuation allowances will not be needed, the valuation allowance will be adjusted.

In late 2017, new tax legislation was enacted in the United States which resulted in significant charges to income tax expense. Charges associated with the Tax Reform Act were recorded in 2017 and represent the Company's best estimates and provisional amounts. Adjustments recorded to the provisional amounts through the fourth quarter of 2018 are included in Income tax expense.

Goodwill and Intangible assets

Goodwill is not amortized, but is tested for impairment at least annually. Estimating the fair value of reporting units requires the use of estimates and significant judgments that are based on a number of factors including actual operating results. It is possible that these judgments and estimates could change in future periods.

The determination of the fair value of intangible assets and liabilities acquired in a business acquisition, including the Company's acquisition in 2016, is subject to many estimates and assumptions. We review amortizable intangible asset groups for impairment whenever events or changes in circumstances indicate that the related carrying amounts may not be recoverable.

Non-GAAP Measures

This Form 10-K contains certain non-GAAP metrics, including: net sales, and percent change in net sales, excluding the impact of ASC 606 and/or currency translation effects (for each segment and the Company as a whole); EBITDA and Adjusted EBITDA (for each segment and the Company as a whole, represented in dollars or as a percentage of net sales); net debt and net debt excluding the impact of certain non-cash items; and net income per share attributable to the Company, excluding adjustments. Such items are provided because management believes that, when reconciled from the GAAP items to which they relate, they provide additional useful information to investors regarding the Company's operational performance.

Presenting sales and increases or decreases in sales, after currency effects and/or the ASC 606 impact are excluded, can give management and investors insight into underlying sales trends. EBITDA, or net income

with interest, taxes, depreciation, and amortization added back, is a common indicator of financial performance used, among other things, to analyze and compare core profitability between companies and industries because it eliminates effects due to differences in financing, asset bases and taxes. An understanding of the impact in a particular period of specific restructuring costs, acquisition expenses, currency revaluation, pension settlement/curtailment charges, inventory write-offs associated with discontinued businesses, or other gains and losses, on net income (absolute as well as on a per-share basis), operating income or EBITDA can give management and investors additional insight into core financial performance, especially when compared to periods in which such items had a greater or lesser effect, or no effect. Restructuring expenses in the MC segment, while frequent in recent years, are reflective of significant reductions in manufacturing capacity and associated headcount in response to shifting markets, and not of the profitability of the business going forward as restructured. Net debt, and net debt excluding the impact of certain non-cash items, are, in the opinion of the Company, helpful to investors wishing to understand what the Company's debt position would be if all available cash were applied to pay down indebtedness. EBITDA, Adjusted EBITDA, and net income per share attributable to the Company, excluding adjustments, are performance measures that relate to the Company's continuing operations.

Net sales, or percent changes in net sales, excluding currency rate effects, are calculated by converting amounts reported in local currencies into U.S. dollars at the exchange rate of a prior period. The impact of ASC 606 on various financial statement line items is determined by calculating what the GAAP-reported amount would have been under the prior ASC 605 standard, and comparing that amount to the amount reported under the new ASC 606 standard. These amounts are then compared to the U.S. dollar amount as reported in the current period. The Company calculates EBITDA by removing the following from Net income: Interest expense net, Income tax expense, and Depreciation and amortization. Adjusted EBITDA is calculated by: adding to EBITDA costs associated with restructuring, inventory write-offs associated with discontinued businesses, and pension settlement/curtailment; adding (or subtracting) revaluation losses (or gains); subtracting (or adding) gains (or losses) from the sale of buildings or investments; subtracting insurance recovery gains in excess of previously recorded losses; and subtracting (or adding) Income (or loss) attributable to the non-controlling interest in Albany Safran Composites (ASC). Adjusted EBITDA may also be presented as a percentage of net sales by dividing it by net sales. Net income per share attributable to the Company, excluding adjustments, is calculated by adding to (or subtracting from) net income attributable to the Company per share, on an after-tax basis: restructuring charges; inventory write-offs associated with discontinued businesses; pension settlements/curtailments; discrete tax charges (or gains) and the effect of changes in the income tax rate; foreign currency revaluation losses (or gains); acquisition expenses; and losses (or gains) from the sale of investments.

EBITDA, Adjusted EBITDA, and net income per share attributable to the Company, excluding adjustments, as defined by the Company, may not be similar to similarly named measures of other companies. Such measures are not considered measurements under GAAP, and should be considered in addition to, but not as substitutes for, the information contained in the Company's statements of income.

The following tables show the calculation of EBITDA and Adjusted EBITDA:

	(in thousands)		
Consolidated results			
Years ended December 31,	2018	2017	2016
Operating income (GAAP)	\$137,408	\$78,676	\$94,132
Interest, taxes, other income/expense	(54,389)	(46,091)	(41,320)