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, 2017

OR

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

Commission file number 01-07698

ACME UNITED CORPORATION

Exact name of registrant as specified in its charter

Connecticut	**06-0236700**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*
55 Walls Drive **Fairfield, Connecticut**	**06824**
(Address of principal executive offices)	*(Zip Code)*

Registrant's telephone number, including area code **(203) 254-6060**

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

Title of each class	*Name of each exchange on which registered*
$2.50 par value Common Stock	**NYSE American**

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

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. YES [_] NO [X]

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 [X]

Indicate by check mark whether the registrant (l) 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 [X] NO [_]

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (sec. 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). YES [X] NO [_]

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (sec. 229.405) 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, or a smaller reporting company. See definitions of “large accelerated filer”, “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act (Check one).

Large accelerated filer [_]   Accelerated filer [X]   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(s) of the Exchange Act. [_]

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES [_]   NO [X]

The aggregate market value of the voting and non-voting stock held by non-affiliates of the registrant as of the last business day of the registrant’s most recently completed second fiscal quarter was $84,519,435.

Registrant had 3,374,061 shares of its $2.50 par value Common Stock outstanding as of March 3, 2018.

Documents Incorporated By Reference

(1) Certain portions of the Company’s Proxy Statement for the Annual Meeting scheduled for April 23, 2018 are incorporated into the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2017, in Part III.

PART I

Item 1. Business

Overview

Acme United Corporation, a Connecticut corporation (together, with its subsidiaries, the "Company"), is a leading worldwide supplier of innovative cutting, measuring, first aid and sharpening products to the school, home, office, hardware, sporting goods and industrial markets. The Company's operations are in the United States, Canada, Europe (located in Germany) and Asia (located in Hong Kong and China). The operations in the United States, Canada and Europe are primarily involved in product development, marketing, sales, administrative, manufacturing and distribution activities. The operations in Asia consist of sourcing, product development, production planning, quality control and sales activities. Total net sales in 2017 were $130.6 million. The Company was organized as a partnership in l867 and incorporated in l882 under the laws of the State of Connecticut.

The Company has grouped its operations into three reportable segments based on the Company’s geographical organization and structure: (1) United States (which includes its Asian operations); (2) Canada; and (3) Europe. Net sales in 2017 for each of our segments were: United States (including direct import sales from Asia) - $115.5 million, Europe - $8.2 million and Canada - $6.9 million. Principal products across all segments are scissors, shears, knives, rulers, pencil sharpeners, first aid kits, and safety related products. We sell our products primarily to wholesale, contract and retail stationery distributors, office supply super stores, mass market and e-commerce retailers, industrial distributors, school supply distributors, drug store retailers, sporting goods stores, hardware chains and wholesale florists. Refer to Note 10 of the Notes to Consolidated Financial Statements for additional segment information.

The Company sources most of its products from suppliers located outside the United States, primarily in Asia. The Company assembles its first aid kits at its facilities in Vancouver, WA and Rocky Mount, NC. The components for the first aid kits are primarily sourced from U.S. suppliers.

Business Strategy

The Company’s business strategy includes the following key elements:

· a commitment to technological innovation achieved through consumer insight, creativity and speed to market;
· a broad selection of products in both brand and private label;
· prompt response;
· superior customer service; and
· value pricing.

Purchase of Property

On October 26, 2017, the Company exercised its option to purchase its First Aid Only manufacturing and distribution center in Vancouver, WA for $4.0 million. The property consists of 53,000 square feet of office, manufacturing, and warehouse space on 2.86 acres. The purchase was financed by a variable rate mortgage with HSBC Bank, N.A. at an interest rate of LIBOR plus 2.5%.

Acquisitions

On February 1, 2017 the Company acquired the assets of Spill Magic, Inc. (“Spill Magic”), for $7.2 million in cash. The Spill Magic products are leaders in absorbents that encapsulate spills into dry powders that can be safely disposed. Many large retail chains use Spill Magic products to remove liquids from broken glass containers, oil and gas spills, bodily fluids, and solvents. The easy-to-use and environmentally friendly products permanently absorb the spills, leaving the floors underneath dry and reducing injuries from falls. The Spill Magic product line also includes spill clean-up kits and blood borne pathogen kits for the safety market.

On February 1, 2016, the Company acquired the principal assets of Vogel Capital, Inc., d/b/a Diamond Machining Technology ("DMT") based in Marlborough, MA for $7.0 million in cash. The DMT products are leaders in sharpening tools for knives, scissors, chisels, and other cutting tools. They complement the Company's existing brands and products within the industrial, hardware, floral, food preparation and sporting goods markets.

Principal Products

The Company markets and sells under three main categories – School, Home and Office (Westcott® brand), First Aid & Safety (First Aid Only®, PhysiciansCare®, Pac-Kit® and Spill Magic® brands), and Hardware, Industrial and Sporting Goods (Clauss®, Camillus®, Cuda® and DMT® brands).

School, Home and Office

Westcott

Westcott, with a history of quality dating back to 1872, provides innovative cutting and measuring products for the school, home and office. Principal products under the Westcott brand include scissors, rulers, pencil sharpeners, paper trimmers, lettering products and math tools. It is one of the leading scissor and ruler brands in North America. The iPoint pencil sharpener, introduced in 2008, and its successor, the iPoint Evolution, have won GOOD DESIGN awards from the Chicago Athenaeum, Museum of Architecture and Design.

Many of the Westcott branded cutting products contain patented titanium bonding and proprietary non-stick coatings, making the blades more than three times harder than stainless steel as well as reducing friction and corrosion. Significant product introductions in 2015 included a Carbo titanium line of scissors which are 8x harder than steel allowing the blades to stay shaper longer. Westcott also launched a line of safety ceramic utility cutters for use in home and office. Significant product introductions in 2016 included our new line of ergonomic scissors for children designed in tandem with the U.S. Ergonomics Institute. Significant product introductions in 2017 included Westcott hot glue guns and glue pen line which feature ergonomic triggers and handles. The glue guns also feature a safety and performance tip that turns red when hot and blue when cool. They were a winner of the 2017 GOOD DESIGN award.

First Aid & Safety

First Aid Only

The First Aid Only brand offers first aid kits, refills, and safety products that meet regulatory requirements for a broad range of industries. The Smart Compliance® first aid system is an effective technique for maintaining OSHA compliance. Our SafetyHub App technology streamlines the inspection and replenishment process for a broad range of Safety products and provides data analytics to optimize costs.

Pac-Kit

The Pac-Kit brand offers first aid kits, industrial stations and refills, emergency medical travel and recreational kits for the industrial, safety, transportation and marine markets. The brand has a long history dating back to the 19th century. Although Pac-Kit's products are similar to the PhysiciansCare brand, the Pac-Kit brand is especially known for its customized products which are designed to meet customer specifications.

PhysiciansCare

The PhysiciansCare brand offers a wide assortment of first aid kits, emergency and disaster kits, kit refills, hearing, eye, and head protection, as well as ergonomic supports and braces. PhysiciansCare also carries a branded line of over-the counter medications, including the active ingredients aspirin, acetaminophen and ibuprofen.

Spill Magic

The Spill Magic brand is a leader in absorbents that encapsulate spills into dry powders that can safely be disposed. The spill response system reduces slip & fall accidents in their locations, including grocery, retail, big box and other stores; food service & hotel chains; municipalities; and industry-specific distributors in the U.S. and Europe. Acquired in February 2017, we introduced additional Spill Magic products in 2017, including clean-up kits for bodily fluids and blood-borne pathogens.

Hardware, Industrial and Sporting Goods

Clauss

Clauss, with its roots dating back to 1877, offers a line of quality cutting tools for professionals in the hardware & industrial, lawn & garden, food processing, sewing and housewares channels. Many of the Clauss products are enhanced with the Company's patented titanium and proprietary non-stick coatings.

Camillus

Since 1876 Camillus has been supplying the world with innovative and high quality knives. The Camillus brand has a strong heritage in the hunting, sporting and tactical markets. The Company acquired the brand in 2007 and re-launched it in 2009 with an updated and innovative line of fixed blade, folding knives, line of sight cutting tools and tactical tools. Many of the knives are enhanced with Titanium Carbonitride coatings to increase the hardness of the blade of up to 10 times that of untreated stainless steel.

In 2014, Camillus launched a wide variety of new products, including the Camillus Carnivore X machete, Ravenous tomahawk, Heat Sizzle and WildFire knives and the Trench multi tool. In 2015, Camillus introduced Glide, its first pocket sharpener. In 2016, Camillus launched a new line of assisted folding knives using its patented linkage system and its ball-bearing assisted system. In 2017, Camillus introduced a new line of knives and tools featuring the Prym1 camouflage providing patterns that are both aesthetically desirable and also functional in the field. In addition, Camillus launched a line of knives and tools called Line Of Sight™. Line of Sight tools provide the consumer with cutting tools to clear shooting lanes during hunting season.

Cuda

We launched the Cuda line of fishing tools and knives in 2014. Featuring titanium bonded German steels and alloys, Cuda tools provide world class hardness, corrosion and adhesive resistance. In July of 2014, Cuda won Best of Show in the "Fish Smart" category at the ICast show in Orlando, Florida. In January 2016, Cuda won six GOOD DESIGN awards from the Chicago Athenaeum, Museum of Architecture and Design. In 2017, Cuda launched a line of cut and puncture resistant gloves which feature quadruple layered Kevlar® and a line of telescopic landing nets featuring replaceable nets and a net containment system.

DMT

DMT products are leaders in diamond sharpening tools for knives, scissors, chisels, skis, skates and many other edges that require sharpening. DMT was founded in 1976 by aerospace engineers. The DMT products use a proprietary process of finely dispersed diamonds bonded to the surfaces of sharpeners and are recognized for providing diamond sharpeners with the flattest sharpening surface, greatest concentrated amount of diamonds and the highest quality diamonds per sharpener. In 2017, DMT launched 12 new diamond sharpeners that include a gear-driven sharpener, sonic sharpener and pull through sharpeners that provide a simple sharpening solution for beginners as well as sharpening enthusiast.

Product Development

Our strong commitment to understanding our consumers and defining products that fulfill their needs through innovation drives our product development strategy, which we believe is and will be a key contributor to our success. The Company incurred research and development costs of $752,000 in 2017 and $750,000 in 2016.

Intellectual Property

The Company owns many patents and trademarks that are important to its business. The Company's success depends in part on its ability to maintain patent protection for its products, to preserve its proprietary technology and to operate without infringing upon the patents or proprietary rights of others. The Company generally files patent applications in the United States and foreign countries where patent protection for its technology is appropriate and available. The Company also considers its trademarks important to the success of its business. The more significant trademarks include Westcott, Clauss, Camillus, PhysiciansCare, First Aid Only, Cuda, DMT, Pac-Kit and Spill Magic. Patents and trademarks are amortized over their estimated useful lives. The weighted average amortization period remaining for intangible assets at December 31, 2017 was 10 years.

Product Distribution; Major Customers
Independent manufacturer representatives and direct sales are primarily used to sell the Company’s line of consumer products to wholesale, contract and retail stationery distributors, office supply super stores, school supply distributors, industrial distributors, wholesale florists, mass market and ecommerce retailers and hardware chains (including through their websites). The Company also sells a limited selection of its products directly to consumers through its own websites. In each 2017 and 2016, the Company had two customers that individually exceeded 10% of consolidated net sales. In 2017, net sales to these customers amounted to approximately 16% and 11%, respectively, of consolidated net sales, and approximately 14% and 11%, respectively, for each in 2016.

Competition
The Company competes with many companies in each market and geographic area. The Company believes that the principal points of competition in these markets are product innovation, quality, price, merchandising, design and engineering capabilities, product development, timeliness and completeness of delivery, conformity to customer specifications and post-sale support. The major competitors in the cutting category are 3M and Fiskars Corporation. The major competitors in the measuring category are Maped and Staedtler. The major competitor in the pencil sharpener category is Bostitch. The major competitors in the first aid & safety category are Honeywell, 3M and Johnson & Johnson.

Seasonality
Traditionally, the Company’s sales are stronger in the second and third quarters of the fiscal year due to the seasonal nature of the back-to-school business.

Compliance with Environmental Laws
The Company believes that it is in compliance with applicable environmental laws. The Company anticipates that no material adverse financial impact will result from compliance with current environmental rules and regulations.

Employees
As of December 31, 2017, the Company employed 421 people, all of whom are full time and none of whom is covered by union contracts. Employee relations are considered good and no foreseeable problems with the work force are evident.

Available Information
The Company files its annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K pursuant to Section 13(a) of the Securities Exchange Act of 1934 with the SEC electronically. These filings may also be read and copied at the SEC’s Public Reference Room which is located at 100 F Street N.E., Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains a website that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The address of that site is http://www.sec.gov.

You may obtain at no charge, a copy of the Company’s annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K and amendments to those reports on the Company’s website at http://www.acmeunited.com or by contacting the Investor Relations Department at the Company’s corporate offices by calling (203) 254-6060. Such reports and other information are made available as soon as reasonably practicable after such material is filed with or furnished to the SEC.

Item 1A. Risk Factors

The Company is subject to a number of significant operational risks that might cause the Company’s actual results to vary materially from its forecasts, targets or projections, including:

- achieving planned revenue and profit growth in each of the Company's business segments;
- changes in customer requirements and in the volume of sales to principal customers;
- the timing of orders and shipments;

- emergence of new competitors or consolidation of existing competitors; and

- industry demand fluctuations.

The Company's expectations for both short and long-term future net revenues are based on the Company's estimates of future demand. Orders from the Company's principal customers are ultimately based on demand from end-users and end-user demand can be difficult to predict. Low end-user demand would negatively affect orders the Company receives from distributors and other principal customers which could, in turn adversely affect the Company's revenues in any fiscal period. If the Company's estimates of sales are not accurate and the Company experiences unforeseen variability in its revenues and operating results, the Company may be unable to adjust its expense levels accordingly and its profit margins could be adversely affected.

Uncertainties in the interpretation and application of the 2017 Tax Cuts and Jobs Act could materially affect our tax obligations and effective tax rate.

The 2017 Tax Cuts and Jobs Act (the Tax Act) was enacted on December 22, 2017, and significantly affected U.S. tax law by changing how the U.S. imposes income tax on multinational corporations. The U.S. Department of Treasury has broad authority to issue regulations and interpretative guidance that may significantly impact how we will apply the law and impact our results of operations in the period issued.

The Tax Act requires complex computations not previously provided in U.S. tax law. As such, the application of accounting guidance for such items is currently uncertain. Further, compliance with the Tax Act and the accounting for such provisions require accumulation of information not previously required or regularly produced. As a result, we have provided a provisional estimate on the effect of the Tax Act in our financial statements. As additional regulatory guidance is issued by the applicable taxing authorities, as accounting treatment is clarified, as we perform additional analysis on the application of the law, and as we refine estimates in calculating the effect, our final analysis, which will be recorded in the period completed, may be different from our current provisional amounts, which could materially affect our tax obligations and effective tax rate.

Because our products are primarily sold by third parties, our financial results depend in part on the financial health of these parties and any loss of a third party distributor could adversely affect the Company's revenues.

A large majority of the Company's products are sold through third-party distributors and large retailers. Some of our distributors also market products that compete with our products. Changes in the financial or business conditions or the purchasing decisions of these third parties or their customers could affect our sales and profitability.

Additionally, no assurances can be given that any or all of such distributors or retailers will continue their relationships with the Company. Distributors and other significant retail customers cannot easily be replaced and the loss of revenues and the Company's inability to reduce expenses to compensate for the loss of revenues could adversely affect the Company's net revenues and profit margins.

The ability to deliver products to our customers in a timely manner and to satisfy our customers' fulfillment standards are subject to several factors, some of which are beyond our control.

Customers place great emphasis on timely delivery of our products for specific selling seasons, especially during our second and third fiscal quarters, and on the fulfillment of consumer demand throughout the year. We cannot control all of the various factors that might affect product delivery to customers. Vendor production delays, cybersecurity attacks on our vendors, difficulties encountered in shipping from overseas and customs clearance delays are on-going risks of our business. We also rely upon third-party carriers for our product shipments from our distribution centers to customers. Accordingly, we are subject to risks, including labor disputes, inclement weather, natural disasters, cybersecurity attacks, possible acts of terrorism, availability of shipping containers, and increased security restrictions associated with such carriers' ability to provide delivery services to meet our shipping needs. Failure to deliver products to our customers in a timely and effective manner, often under special vendor requirements to use specific carriers and delivery schedules, could damage our reputation and brands and result in loss of customers or reduced orders.

Reliance on foreign suppliers could adversely affect the Company's business.
The Company sources its products from suppliers located in Asia, Europe and the United States. The Company's Asia vendors are located primarily in China, which subjects the Company to various risks within the region including regulatory, political, economic and foreign currency changes. The Company's ability to select and retain reliable vendors and suppliers who provide timely deliveries of quality products efficiently will impact its success in meeting customer demand for timely delivery of quality products. The Company's sourcing operations and its vendors are impacted by labor costs in China. Labor historically has been readily available at low cost relative to labor costs in North America. However, as China is experiencing rapid social, political and economic changes, labor costs have risen in some regions and there can be no assurance that labor will continue to be available to the Company in China at costs consistent with historical levels or that changes in labor or other laws will not be enacted which would have a material adverse effect on the Company's operations in China. Interruption of supplies from any of the Company's vendors, or the loss of one or more key vendors, could have a negative effect on the Company's business and operating results.

Changes in currency exchange rates might negatively affect the profitability and business prospects of the Company and its overseas vendors. In particular, although the Chinese Renminbi has recently depreciated against the U.S. Dollar, if the Chinese Renminbi appreciates with respect to the U.S. Dollar in the future, the Company may experience cost increases on such purchases, and this can adversely impact profitability. Future interventions by China may result in further currency appreciation and increase our product costs over time. The Company may not be successful at implementing customer pricing or other actions in an effort to mitigate the related effects of the product cost increases.

Additional factors that could adversely affect the Company's business include increases in transportation costs, new or increased import duties, transportation delays, work stoppages, capacity constraints and poor quality.

The Company's operations are increasingly global in nature. Our business, financial condition and results of operations could be adversely affected by the political and economic conditions in the countries in which we conduct business, by fluctuations in currency exchange rates and other factors related to our international operations.
As our international operations and activities expand, we face increasing exposure to the risks of operating in foreign countries. These factors include:

- Changes generally in political, regulatory or economic conditions in the countries in which we conduct business.
- Trade protection measures in favor of local producers of competing products, including government subsidies, tax benefits, changes in local tax rates, trade actions (such as anti-dumping proceedings) and other measures giving local producers a competitive advantage over the Company.
- Changes in foreign currency exchange rates which could adversely affect our competitive position, selling prices and manufacturing costs, and therefore the demand for our products in a particular market.

These risks could affect the cost of manufacturing and selling our products, our pricing, sales volume, and ultimately our financial performance. The likelihood of such occurrences and their potential effect on the Company vary from country to country and are unpredictable.

Continuing uncertainty in the global economy could negatively impact our business.
Uncertainty in the global economy could adversely affect our customers and our suppliers and businesses such as ours. In addition, any uncertainty could have a variety of negative effects on the Company, such as reduction in revenues, increased costs, lower gross margin percentages, increased allowances for doubtful accounts and/or write-offs of accounts receivable and could otherwise have material adverse effects on our business, results of operations, financial condition and cash flows.

The Company's business is subject to risks associated with seasonality which could adversely affect its cash flow, financial condition, or results of operations.
The Company's business, historically, has experienced higher sales volume in the second and third quarters of the calendar year, when compared to the first and fourth quarters. The Company is a major supplier of products related to the "back-to-school" season, which occurs principally during the months of May, June, July and August. If this typical seasonal increase in sales of certain portions of the Company's product line does not materialize in any year, the Company could experience a material adverse effect on its business, financial condition and results of operations.

Failure to manage growth and continue to expand our operations successfully could adversely affect our financial results.
Our business has experienced significant historical growth over the years, and we expect our business to continue to grow organically and through strategic acquisitions. This growth places significant demands on management and operational systems. If we cannot effectively manage our growth, it is likely to result in operational inefficiencies and ineffective management of our business thus negatively impacting our operating results. To the extent we grow through strategic acquisitions, our success will depend on selecting the appropriate targets, integrating such acquisitions quickly and effectively and realizing any expected synergies and cost savings related to such acquisitions.

Loss of a major customer could result in a decrease in the Company's future sales and earnings.
Sales of our products are primarily concentrated in a few major customers including office product superstores and mass market distributors. In each 2017 and 2016, the Company had two customers that individually exceeded 10% of consolidated net sales. In 2017, net sales to these customers amounted to approximately 16% and 11%, respectively, of consolidated net sales, and approximately 14% and 11%, respectively, of consolidated net sales for each in 2016. The Company anticipates that a limited number of customers may account for a substantial portion of its total net revenues for the foreseeable future. The business risks associated with this concentration, including increased credit risks for these and other customers and the possibility of related bad debt write-offs, could negatively affect our margins and profits. Additionally, the loss of a major customer, whether through competition or consolidation, or a disruption in sales to such a customer, could result in a decrease of the Company's future sales and earnings.

The loss of key management could adversely affect the Company's ability to run its business.
The Company's success depends, to a large extent, on the continued service of its executive management team, operating officers and other key personnel. The Company must therefore continue to recruit, retain and motivate management and operating personnel sufficient to maintain its current business and support its projected growth. The Company's inability to meet its staffing requirements in the future could adversely affect its results of operations.

Execution or the lack thereof, of our e-commerce business may reduce our operating results.
Our e-commerce business constituted approximately 13% of our net sales in 2017 and has been our fastest growing distribution channel over the last several years. The continued successful growth of our e-commerce business depends, in part, on third parties and factors over which we have limited control, including difficulty forecasting demand, changing consumer preferences, and e-commerce buying trends, both domestically and abroad, as well as promotional or other advertising initiatives employed by our customers or other third parties on their e-commerce sites. Additionally, sales in our e-commerce distribution channel may also divert sales from our other customers.

Additionally, the success of our e-commerce business depends, in part, on the timely receipt of our products by our customers and their end users. The efficient flow of our products requires that our distribution facilities have adequate capacity to support increases in our e-commerce business. If we encounter difficulties with forecasting and supply to our distribution facilities, we could face shortages of inventory, resulting in "out of stock" conditions in the e-commerce sites operated by our customers or other third parties, and we could incur significantly higher costs and longer lead times associated with distributing our products to our customers.

Our failure to successfully respond to these risks and uncertainties might adversely affect the sales in our e-commerce business, as well as damage our brands.

Failure to protect the Company’s proprietary rights or the costs of protecting these rights could adversely affect its business.
The Company’s success depends in part on its ability to obtain patents and trademarks and to preserve other intellectual property rights covering its products and processes. The Company has obtained certain domestic and foreign patents, and intends to continue to seek patents on its inventions when appropriate. The process of seeking patent protection can be time consuming and expensive. There can be no assurance that pending patents related to any of the Company’s products will be issued, in which case the Company may not be able to legally prevent others from producing similar and/or compatible competing products. If other companies were to sell similar and/or compatible competing products, the Company’s results of operations could be adversely affected. Furthermore, there can be no assurance that the Company’s efforts to protect its intellectual property will be successful. Any infringement of the Company’s intellectual property or legal defense of such action could have a material adverse effect on the Company.

The Company is subject to intense competition in all of the markets in which it competes.
The Company’s products are sold in highly competitive markets including at mass merchants, high volume office supply stores and online. The Company believes that the principal points of competition in these markets are product innovation, quality, price, merchandising, design and engineering capabilities, product development, timeliness and completeness of delivery, conformity to customer specifications and post-sale support. Competitive conditions may require the Company to match or better competitors’ prices to retain business or market shares. The Company believes that its competitive position will depend on continued investment in innovation and product development, manufacturing and sourcing, quality standards, marketing and customer service and support. The Company’s success will depend in part on its ability to anticipate and offer products that appeal to the changing needs and preferences of our customers in the various market categories in which it competes. The Company may not have sufficient resources to make the investments that may be necessary to anticipate those changing needs and the Company may not anticipate, identify, develop and market products successfully or otherwise be successful in maintaining its competitive position. In addition there are numerous uncertainties inherent in successfully developing and commercializing innovative new products on a continuing basis, and new product launches may not provide expected growth results. There are no significant barriers to entry into the markets for most of the Company’s products.

Compromises of our information systems or unauthorized access to confidential information or our customers' or associates' personal information may materially harm our business or damage our reputation.
Through our sales and marketing activities and our business operations, we collect and store confidential information and certain personal information from our customers and associates. We also process payment card information and check information. In addition, in the normal course of business, we gather and retain personal information about our associates and generate and have access to confidential business information. Although we have taken steps designed to safeguard such information, there can be no assurance that such information will be protected against unauthorized access or disclosure. Computer hackers may attempt to penetrate our or our vendors' network security and, if successful, misappropriate such information. An Acme United associate, contractor or other third-party with whom we do business may also attempt to circumvent our security measures in order to obtain such information or inadvertently cause a breach involving such information. We could be subject to liability for failure to comply with privacy and information security laws, for failing to protect personal information, or for misusing personal information, such as use of such information for an unauthorized marketing purpose. Any compromise of our systems or data could disrupt our operations, damage our reputation, and expose us to claims from customers, financial institutions, regulators, payment card associations, employees and other persons, any of which could have an adverse effect on our business, financial condition and results of operations.

The Company may not be able to maintain or to raise prices in response to inflation and increasing costs.
Future market and competitive pressures may prohibit the Company from raising prices to offset increased product costs, freight costs and other inflationary items or to offset currency fluctuations. The inability to pass these costs through to the Company’s customers could have a negative effect on its results of operations.

The Company may need to raise additional capital to fund its operations.
The Company's management believes that, under current conditions, the Company's current cash and cash equivalents, cash generated by operations, together with the borrowing availability under its revolving loan agreement with HSBC Bank N.A., will be sufficient to fund planned operations for the next twelve months. However, if the Company is unable to generate sufficient cash from operations, it may be required to find additional funding sources. If adequate financing is unavailable or is unavailable on acceptable terms, the Company may be unable to maintain, develop or enhance its operations, products and services, take advantage of future opportunities or adequately respond to competitive pressures.

Changes in interest rates could adversely affect us.
We have exposure to increases in interest rates under our revolving credit loan agreement with HSBC, N.A. which presently bears interest at a rate of LIBOR plus 2%. In response to the last global economic recession, actions of the U.S. Federal Reserve and other central banking institutions, were taken to create and maintain a low interest rate environment. However, in 2017, the U.S. Federal Reserve raised its benchmark interest rate three times and indicated that additional increases would likely be forthcoming in 2018. While it is unclear whether these actions suggest a change in previous monetary policy positions, any such change or market expectation of such change may result in significantly higher long-term interest rates. Increases in interest rates would increase our interest costs on our variable-rate debt as well as any future fixed rate debt, we may incur at higher interest rates, and interest which we pay reduces our cash available for working capital, acquisitions, and other uses.

Product liability claims or regulatory actions could adversely affect the Company's financial results and reputation.
Claims for losses or injuries allegedly caused by some of the Company's products arise in the ordinary course of its business. In addition to the risk of substantial monetary judgments, product liability claims or regulatory actions could result in negative publicity that could harm the Company's reputation in the marketplace or the value of its brands. The Company also could be required to recall possible defective products, which could result in adverse publicity and significant expenses. Although the Company maintains product liability insurance coverage, potential product liability claims are subject to a deductible or could be excluded under the terms of the policy.

The Company is subject to environmental regulation and environmental risks.
The Company is subject to national, state, provincial and/or local environmental laws and regulations that impose limitations and prohibitions on the discharge and emission of, and establish standards for the use, disposal and management of, certain materials and waste. These environmental laws and regulations also impose liability for the costs of investigating and cleaning up sites, and certain damages resulting from present and past spills, disposals, or other releases of hazardous substances or materials. Environmental laws and regulations can be complex and may change often. Capital and operating expenses required to comply with environmental laws and regulations can be significant, and violations may result in substantial fines and penalties. In addition, environmental laws and regulations, such as the Comprehensive Environmental Response, Compensation and Liability Act, or CERCLA, in the United States impose liability on several grounds for the investigation and cleanup of contaminated soil, ground water and buildings and for damages to natural resources on a wide range of properties. For example, contamination at properties formerly owned or operated by the Company, as well as at properties it will own and operate, and properties to which hazardous substances were sent by the Company, may result in liability for the Company under environmental laws and regulations. The costs of complying with environmental laws and regulations and any claims concerning noncompliance, or liability with respect to contamination in the future could have a material adverse effect on the Company's financial condition or results of operations.

We cannot provide assurance that we will continue to pay dividends or purchase shares of our common stock under our stock repurchase program.
We continue to pay and declare dividends on a quarterly basis and we anticipate that we will continue to do so. However, there can be no assurance that we will have sufficient cash or surplus under the law to be able to continue to pay dividends or purchase shares of our common stock under our stock repurchase program. (At December 31, 2017, a total of 41,227 may be purchased in the future under the repurchase program which the Company announced in 2010.) This may result from extraordinary cash expenses, actual expenses exceeding contemplated costs, funding of capital expenditures, increases in reserves or lack of available capital. We may also suspend the payment of dividends or our stock repurchase program if the Board deems such action to be in the best interests of our shareholders. If we do not pay dividends, the price of our common stock would likely decrease.

Our shares of common stock are thinly traded and our stock price may be volatile.
Because our common stock is thinly traded, its market price may fluctuate significantly more than the stock market in general or the stock prices of other companies listed on major stock exchanges. There were approximately 2,959,874 shares of our common stock held by non-affiliates as of December 31, 2017. Thus, our common stock will be less liquid than the stock of companies with broader public ownership, and, as a result, the trading price for shares of our common stock may be more volatile. Among other things, trading of a relatively small volume of our common stock may have a greater impact on the trading price for our stock than would be the case if our public float were larger.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties

Location	**Square Footage**	**Purpose**
Owned		
Rocky Mount, NC	340,000	Warehousing and distribution
Vancouver, WA	53,000	Warehousing and distribution
Solingen, Germany	35,000	Warehousing, distribution and administrative
	428,000	
Leased		
Fairfield, CT	15,400	Administrative
Bentonville, AK	1,500	Administrative
Marlborough, MA	28,000	Manufacturing, warehousing and distribution
Santa Ana, CA	10,000	Manufacturing, warehousing, distribution and administrative
Smyrna, TN	13,000	Manufacturing, warehousing and distribution
Mount Forest, Ontario, Canada	42,500	Warehousing and distribution
Orangeville, Ontario, Canada	2,850	Administrative
Hong Kong, China	2,750	Administrative
Guangzhou, China	3,500	Administrative
Ningbo, China	1,800	Administrative
	121,300	
Total:	**549,300**	

The Company’s facilities located in the United States and China are utilized by all of its segments. The Company’s facilities located in Canada and Germany are utilized by its Canadian segment and its European segment, respectively.

Management believes that the Company's facilities, whether leased or owned, are adequate to meet its current needs and should continue to be adequate for the foreseeable future.

Item 3. Legal Proceedings

There are no pending material legal proceedings to which the Company is a party or, to the actual knowledge of the Company, contemplated by any governmental agency.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

The Company's Common Stock is traded on the NYSE American under the symbol "ACU". The following table sets forth the high and low sale prices on the NYSE American for the Common Stock for the periods indicated:

Year Ended December 31, 2017	High	Low	Dividends Declared
Fourth Quarter	$ 25.55	$ 20.20	$ .11
Third Quarter	28.80	22.52	.11
Second Quarter	29.49	26.00	.11
First Quarter	28.10	22.97	.10
Year Ended December 31, 2016			
Fourth Quarter	$ 26.66	$ 19.49	$ .10
Third Quarter	22.19	18.42	.10
Second Quarter	18.85	15.95	.10
First Quarter	17.97	13.01	.10

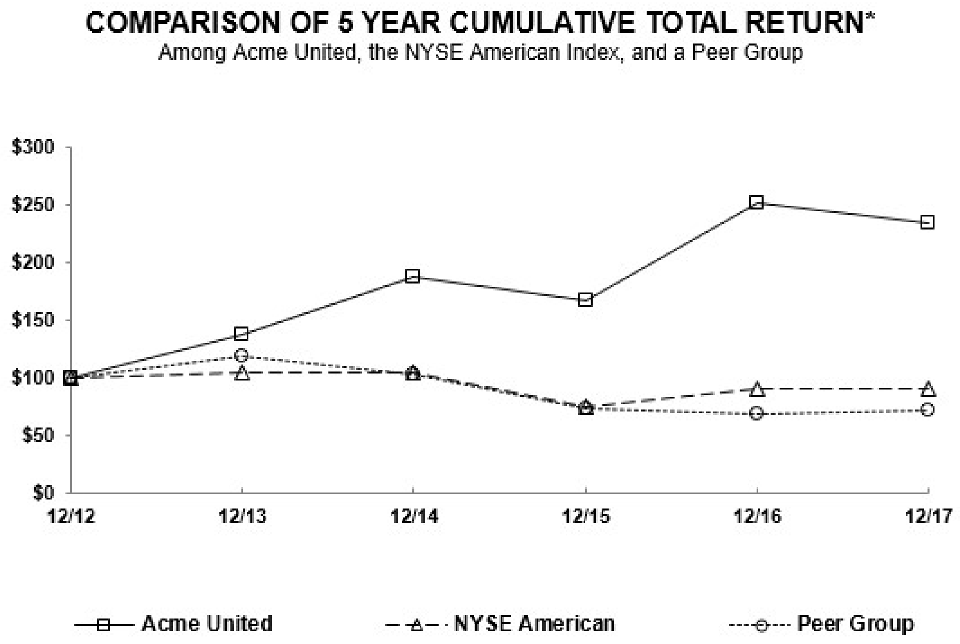
As of March 3, 2018 there were approximately 2,101 holders of record of the Company's Common Stock.

Performance Graph

The graph below compares the yearly cumulative total shareholder return on the Company’s Common Stock with the yearly cumulative total return of the following for the period 2013 to 2017: (a) the NYSE American Index and (b) a diversified peer group of companies that, like the Company, (i) are currently listed on the NYSE American, and (ii) have a market capitalization of $80 million to $90 million.

The Company does not believe that it can reasonably identify a peer group of companies, on an industry or line-of-business basis, for the purpose of developing a comparative performance index. While the Company is aware that some other publicly-traded companies market products in the Company’s line-of-business, none of these other companies provide most or all of the products offered by the Company, and many offer products or services not offered by the Company. Moreover, some of these other companies that engage in the Company’s line-of-business do so through divisions or subsidiaries that are not publicly-traded. Furthermore, many of these other companies are substantially more highly capitalized than the Company. For these reasons, any such comparison would not, in the opinion of the Company, provide a meaningful index of comparative performance.

The comparisons in the graph below are based on historical data and are not indicative of, or intended to forecast, the possible future performance of the Company’s Common Stock.



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

Issuer Purchases of Equity Securities

On November 22, 2010, the Company announced a Common Stock repurchase program of up to a total 200,000 shares. The program does not have an expiration date. During the twelve months ended December 31, 2017, the Company did not repurchase shares of its Common Stock. As of December 31, 2017, a total of 41,227 shares may be purchased in the future under the repurchase program announced in 2010.

Item 6. Selected Financial Data

FIVE YEAR SUMMARY OF SELECTED FINANCIAL DATA
(All figures in thousands except per share data)

	2017	2016	2015	2014	2013
Net sales	$ 130,550	$ 124,574	$ 109,812	$ 107,222	$ 89,577
Net income	$ 4,052	$ 5,851	$ 4,794	$ 4,789	$ 4,003
Total assets	$ 114,730	$ 92,066	$ 81,421	$ 79,308	$ 68,079
Long-term debt, less current portion	$ 43,450	$ 32,936	$ 25,913	$ 24,147	$ 22,912
Net income					
Per share (Basic)	$ 1.21	$ 1.76	$ 1.44	$ 1.48	$ 1.26
Per share (Diluted)	$ 1.09	$ 1.64	$ 1.30	$ 1.36	$ 1.22
Dividends per share	$ 0.43	$ 0.40	$ 0.37	$ 0.34	$ 0.31

Non-GAAP measures:	2017	2016	2015	2014	2013
Net income	$ 4,052	$ 5,851	$ 4,794	$ 4,789	$ 4,003
Adjustment for tax expense related to U.S. tax reform	1,245	—	—	—	—
Non-GAAP net income	$ 5,297	$ 5,851	$ 4,794	$ 4,789	$ 4,003
Non-GAAP earnings per share:					
Per share (Basic)	$ 1.21	$ 1.76	$ 1.44	$ 1.48	$ 1.26
Adjustment for tax expense	0.37	—	—	—	—
Per share as adjusted (Basic)	$ 1.58	$ 1.76	$ 1.44	$ 1.48	$ 1.26
Per share (Diluted)	$ 1.09	$ 1.64	$ 1.30	$ 1.36	$ 1.22
Adjustment for tax expense	0.37	—	—	—	—
Per share as adjusted (Diluted)	$ 1.42	$ 1.64	$ 1.30	$ 1.36	$ 1.22

The Company believes that the presentation of non-GAAP financial measures, when presented together with the corresponding GAAP financial measures, provide useful information to investors and management regarding financial and business trends relating to its results of operations. However, non-GAAP financial measures have certain limitations in that they do not reflect the tax expenses associated with the Tax Cuts and Jobs Act, which ultimately impact the Company's determination of net income in accordance with GAAP.

Tax Reform

Tax reform legislation in the U.S. was signed into law in December 2017 with the enactment of the Tax Cuts and Jobs Act (the "Tax Act"). Among the tax reforms was a transitional tax assessed on undistributed earnings of foreign operations amounting to $1,170,000. Also, among the tax reforms was a reduction of the corporate tax rate from 35% to 21%. Historically, we have recognized deferred tax assets for items providing future reductions of taxable income. These deferred tax assets are valued based on the corporate tax rate expected to be available when the deductions are taken. With the enactment of the lower corporate tax rate in 2017, we have reduced our deferred tax assets by $75,000. The total impact of the tax reform was a non-cash increase in 2017 income tax expense of $1,245,000 taken in the fourth quarter of 2017.

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

Forward-Looking Information

The Company may from time to time make written or oral "forward-looking statements" including statements contained in this report and in other communications by the Company, which are made in good faith pursuant to the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. Such statements are based on our beliefs as well as assumptions made by and information currently available to us. When used in this document, words like "may," "might," "will," "except," "anticipate," "believe," "potential," and similar expressions are intended to identify forward-looking statements. Actual results could differ materially from our current expectations.

Forward-looking statements in this report, including without limitation, statements related to the Company's plans, strategies, objectives, expectations, intentions and adequacy of resources, are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Investors are cautioned that such forward-looking statements involve risks and uncertainties including, without limitation, the following: (i) changes in the Company's plans, strategies, objectives, expectations and intentions, which may be made at any time at the discretion of the Company; (ii) the impact of uncertainties in global economic conditions, including the impact on the Company's suppliers and customers; (iii) changes in client needs and consumer spending habits; (iv) the impact of competition and technological changes on the Company; (v) the Company's ability to manage its growth effectively, including its ability to successfully integrate any business it might acquire; (vi) currency fluctuations; (vii) increases in the cost of borrowings resulting from rising interest rates (viii) uncertainties arising from the interpretation and application of the recently enacted Tax Act; and (ix) other risks and uncertainties indicated from time to time in the Company's filings with the Securities and Exchange Commission. For a more detailed discussion of these and other factors affecting the Company, see the Risk Factors set forth above in Item 1A of this Annual Report on Form 10-K.

Critical Accounting Policies

The following discussion and analysis of financial condition and results of operations are based upon the Company's consolidated financial statements, which have been prepared in conformity with accounting principles generally accepted in the United States of America. The Company's significant accounting policies are more fully described in Note 2 of the Notes to Consolidated Financial Statements. Certain accounting estimates are particularly important to the understanding of the Company's financial position and results of operations and require the application of significant judgment by the Company's management and can be materially affected by changes from period to period in economic factors or conditions that are outside the control of management. The Company's management uses its judgment to determine the appropriate assumptions to be used in the determination of certain estimates. Those estimates are based on historical operations, future business plans and projected financial results, the terms of existing contracts, the observance of trends in the industry, information provided by customers and information available from other outside sources, as appropriate. The following discusses the Company's critical accounting policies and estimates:

Estimates. Operating results may be affected by certain accounting estimates. The most sensitive and significant accounting estimates in the financial statements relate to customer rebates, valuation allowances for deferred income tax assets, obsolete and slow moving inventories, potentially uncollectible accounts receivable, pension liability and accruals for income taxes. Although the Company's management has used available information to make judgments on the appropriate estimates to account for the above matters, there can be no assurance that future events will not significantly affect the estimated amounts related to these areas where estimates are required. However, historically, actual results have not been materially different than original estimates.

Revenue Recognition. The Company recognizes revenue from the sales of its products when ownership transfers to the customers, which occurs either at the time of shipment or upon delivery based upon contractual terms with the customer. The Company recognizes customer program costs, including rebates, cooperative advertising, slotting fees and other sales related discounts, as a reduction to sales.

Allowance for doubtful accounts. The Company provides an allowance for doubtful accounts based upon a review of outstanding accounts receivable, historical collection information and existing economic conditions. The allowance for doubtful accounts represents estimated uncollectible accounts receivables associated with potential customer defaults on contractual obligations, usually due to potential insolvencies. The allowance includes amounts for certain customers where a risk of default has been specifically identified. In addition, the allowance includes a provision for customer defaults based on historical experience. The Company actively monitors its accounts receivable balances, and its historical experience of annual accounts receivable write offs has been negligible.

Customer Rebates. Customer rebates and incentives are a common practice in the office products industry. We incur customer rebate costs to obtain favorable product placement, to promote sell-through of products and to maintain competitive pricing. Customer rebate costs and incentives, including volume rebates, promotional funds, catalog allowances and slotting fees, are accounted for as a reduction to gross sales. These costs are recorded at the time of sale and are based on individual customer contracts. Management periodically reviews accruals for these rebates and allowances, and adjusts accruals when appropriate.

Obsolete and Slow Moving Inventory. Inventories are stated at the lower of cost, determined on the first-in, first-out method, or net realizable value. An allowance is established to adjust the cost of inventory to its net realizable value. Inventory allowances are recorded for obsolete or slow moving inventory based on assumptions about future demand and marketability of products, the impact of new product introductions and specific identification of items, such as discontinued products. These estimates could vary significantly from actual requirements if future economic conditions, customer inventory levels or competitive conditions differ from expectations.

Income Taxes. Deferred income tax liabilities or assets are established for temporary differences between financial and tax reporting bases and are subsequently adjusted to reflect changes in tax rates expected to be in effect when the temporary differences reverse. A valuation allowance is recorded to reduce deferred income tax assets to an amount that is more likely than not to be realized.

The Tax Act was signed into law in December 2017 and legislation represents a fundamental and dramatic shift in U.S. taxation, with many provisions of the Act differing significantly from previous U.S. tax law. With enactment occurring late in 2017, companies with calendar reporting years have not had extensive time to analyze the impacts of the legislation. Applying the effects of a lower corporate tax rate to deferred tax assets and liabilities, evaluating the one-time transition tax on undistributed earnings of foreign operations, examining the implications of changes to net operating loss and other credit carryforwards and considering other provisions of the Act in a relatively compressed time frame necessitates significant estimation and judgment. Following the guidance of the U.S. Securities and Exchange Commission's Staff Accounting Bulletin No. 118, we have made reasonable estimates of the Act's provisions and have recorded a non-cash charge to fourth quarter tax expense of $1,245,000 to reflect these effects. This provisional estimate could be affected based on further analysis of the Act's requirements. Given the Act's broad and complex changes, further clarification, interpretation and regulatory guidance could affect the assumptions we used in making our reasonable estimate. As we continue to assess the Act's provisions, any adjustments to our provisional estimate will be reported as a component of income tax expense in 2018 and disclosed in the period when any such adjustments have been determined.

Intangible Assets and Goodwill. Intangible assets with finite useful lives are recorded at cost upon acquisition and amortized over the term of the related contract, if any, or useful life, as applicable. Intangible assets held by the Company with finite useful lives include patents and trademarks. The weighted average amortization period for intangible assets at December 31, 2017 was 10 years. The Company periodically reviews the values recorded for intangible assets and goodwill to assess recoverability from future operations whenever events or changes in circumstances indicate that its carrying amount may not be recoverable. At December 31, 2017 and 2016, the Company assessed the recoverability of its long-lived assets and goodwill and believed that there were no events or circumstances present that would that would require a test of recoverability on those assets. As a result, there was no impairment of the carrying amounts of such assets and no reduction in their estimated useful lives. The net book value of the Company's intangible assets was $17,882,005 as of December 31, 2017, compared to $13,988,186 as of December 31, 2016, and the net book value of the Company's goodwill was approximately $4,696,000 at December 31, 2017 compared to $3,948,000 at December 31, 2016.

Pension Obligation. The pension benefit obligation is based on various assumptions used by third-party actuaries in calculating this amount. These assumptions include discount rates, expected return on plan assets, mortality rates and other factors. Revisions in assumptions and actual results that differ from the assumptions affect future expenses, cash funding requirements and obligations. Our funding policy is to fund the plan in accordance with applicable requirements of the Internal Revenue Code and regulations.

These assumptions are reviewed annually and updated as required. The Company has a frozen defined benefit pension plan. Two assumptions, the discount rate and the expected return on plan assets, are important elements of expense and liability measurement.

We determine the discount rate used to measure plan liabilities as of the December 31 measurement date. The discount rate reflects the current rate at which the associated liabilities could be effectively settled at the end of the year. In estimating this rate, we look at rates of return on fixed-income investments of similar duration to the liabilities in the plan that receive high, investment grade ratings by recognized ratings agencies. Using these methodologies, we determined a discount rate of 3.14% to be appropriate as of December 31, 2017, which is a decrease of 0.26 percentage point from the rate used as of December 31, 2016.

The expected long-term rate of return on assets considers the Company's historical results and projected returns for similar allocations among asset classes. In accordance with generally accepted accounting principles, actual results that differ from the Company's assumptions are accumulated and amortized over future periods and, therefore, affect expense and obligation in future periods. For the U.S. pension plan, our assumption for the expected return on plan assets was 6.0% for 2017. For more information concerning these costs and obligations, see the discussion in Note 6 – Pension and Profit Sharing, in the Notes to the Company's Consolidated Financial Statements in this report.

Accounting for Stock-Based Compensation. Stock based compensation cost is measured at the grant date fair value of the award and is recognized as expense over the requisite service period. The Company uses the Black-Scholes option - pricing model to determine fair value of the awards, which involves certain subjective assumptions. These assumptions include estimating the length of time employees will retain their vested stock options before exercising them ("expected term"), the estimated volatility of the Company's common stock price over the expected term ("volatility") and the number of options for which vesting requirements will not be completed ("forfeitures"). Changes in the subjective assumptions can materially affect estimates of fair value stock-based compensation, and the related amount recognized on the consolidated statements of operations. Refer to Note 11 - Stock Option Plans - in the Notes to Consolidated Financial Statements in this report for a more detailed discussion.

Results of Operations 2017 Compared with 2016

On October 26, 2017, the Company exercised its option to purchase its First Aid Only manufacturing and distribution center in Vancouver, WA for $4.0 million. The property consists of 53,000 square feet of office, manufacturing, and warehouse space on 2.86 acres. The purchase was financed by a variable rate mortgage with HSBC Bank, N.A. at an interest rate of LIBOR plus 2.5%.

On February 1, 2017, the Company purchased the assets of Spill Magic, Inc., located in Santa Ana, CA and Smyrna, TN for $7.2 million in cash. The Spill Magic products are leaders in absorbents that encapsulate spills into dry powders that can be safely disposed. Many large retail chains use its products to remove liquids from broken glass containers, oil and gas spills, blood and solvents. Additional information concerning the acquisition of Spill Magic assets is set forth in Note 17 – Business Combinations, in the Notes to Consolidated Financial Statements in this report.

On February 1, 2016, the Company purchased certain assets of Vogel Capital, Inc., d/b/a Diamond Machining Technology (DMT), located in Marlborough, MA. DMT products are leaders in sharpening tools for knives, scissors, chisels and other cutting tools. The DMT products use finely dispersed diamonds on the surfaces of sharpeners. The Company purchased inventory, accounts receivable, equipment, patents, trademarks and other intellectual property for $7 million using funds borrowed under its revolving credit facility with HSBC. Additional information concerning the acquisition of DMT assets is set forth in Note 17 – Business Combinations, in the Notes to Consolidated Financial Statements in this report.

Net Sales

In 2017, sales increased by $5,976,000, or 4.8%, to $130,550,000 compared to $124,574,000 in 2016.

The U.S. segment sales increased by $4,614,000, or 4%, in 2017 compared to 2016. Our acquisition of Spill Magic assets in February 2017 contributed $6.5 million to sales in 2017. Excluding Spill Magic, net sales in the U.S. segment declined $1.9 million, or 2%. Sales of first aid products were strong, but due to a large back-to-school promotion that did not repeat this year, Westcott school and office product sales were slightly lower than 2016.

Sales in Canada increased 2% in U.S. dollars and were constant in local currency in 2017 compared to 2016.

European sales increased by $1,251,000, or 18%, in U.S. dollars and 16% in local currency in 2017 compared to 2016. The increase in sales in Europe in 2017 was primarily due to increased market share in the office products channel and higher sales of DMT products.

Gross Profit

Gross profit was 36.7% of net sales in 2017 compared to 36.6% in 2016.

Selling, General and Administrative

Selling, general and administrative expenses were $40,103,000 in 2017 compared with $37,113,000 in 2016, an increase of $2,990,000, or 8%. SG&A expenses were 30.7% of net sales in 2017 compared to 29.8% in 2016. The increase in SG&A expenses was primarily the result of increases in delivery costs and sales commissions which resulted from higher sales, incremental fixed costs resulting from the acquisition of Spill Magic assets, and higher headcount, which include compensation and recruiting costs.

Operating Income

Operating income was $7,796,000 in 2017, compared with $8,442,000 in 2016. Operating income in the U.S. decreased by approximately $1,068,000 primarily as a result of lower profit margins due to customer/product mix and higher fixed selling, general and administrative costs. Operating income in Canada increased by approximately $207,000 principally due to a better product mix and higher sales. Operating income in the European segment increased by approximately $215,000 primarily due to higher sales.

Interest Expense, Net

Net interest expense for 2017 was $1,327,000, compared with $869,000 for 2016, an increase of $458,000. The increase in interest expense, net for 2017, was primarily the result of higher average borrowings under the Company's bank revolving credit facility compared to 2016 and a higher average interest rate during 2017. The higher borrowings were primarily the result of funding the acquisition of assets of Spill Magic.

Other Income (Expense), Net

Net other income was $24,000 in 2017 compared to net other expense of $77,000 in 2016. The increase in other income, net for 2017, was primarily due to lower losses from foreign currency transactions.

Income Tax

Income tax expense was $2,441,000 in 2017, resulting in a tax rate of 38%. With the enactment of the Tax Act in December 2017 in the U.S., provisions of this tax reform were required to be recognized in 2017. The most significant 2017 impact on the Company of this legislation was the imposition of a transition tax on undistributed earnings of foreign operations in the amount of $1,170,000. The other impact of the legislation was an adjustment to deferred tax assets. As a result of the reduction of the corporate tax rate from 34% to 21%, we have taken a charge of $75,000 to reduce the value of these assets. The total impact of the tax reform resulted in a non-cash in 2017 income tax expense of $1,245,000. Without this special charge, income tax expense was $1,196,000 or an effective tax rate of 18% compared to 22% in 2016. In 2017, the Company recorded approximately $350,000 in excess tax benefits resulting from the adoption of ASU 2016-09 in 2017. Excluding the impact of the tax benefit, the effective tax rate would have been 24% for 2017. Excluding the impact of a charitable product donation in 2016, the effective tax rate would have been 25%.

Off-Balance Sheet Transactions

The Company did not engage in any off-balance sheet transactions during 2017.

Liquidity and Capital Resources

During 2017, working capital increased by approximately $8.9 million compared to December 31, 2016. Inventory increased by approximately $2.8 million, or 7%, which corresponds mostly to the increase in sales. The Company expects that changes in inventory levels will continue to be consistent with changes in sales, including the seasonal impact on the Company's revenue stream. Inventory turnover, calculated using a twelve month average inventory balance, increased to 2.2 from 2.1 at December 31, 2016. The reserve for slow moving and obsolete inventory was $654,855 at December 31, 2017 compared to $677,253 at December 31, 2016. We do not anticipate significant increases in the allowance for slow moving and obsolete inventory in the ordinary course of business during 2018.

Receivables increased by approximately $6.0 million at December 31, 2017 compared to December 31, 2016. The average number of days sales outstanding in accounts receivable was 65 days in 2017 compared to 64 days in 2016. Accounts payable and other current liabilities increased by approximately $4.0 million.

At December 31, 2017, total debt outstanding under the Company's revolving credit facility increased by approximately $10.5 million compared to total debt at December 31, 2016. The change in debt was primarily due to borrowings to fund the acquisition of assets of Spill Magic on February 1, 2017. As of December 31, 2017**,** $43,450,000 was outstanding and $6,550,000 was available for borrowing under the Company's revolving credit facility.

On May 6, 2016, the Company amended its revolving credit loan agreement with HSBC Bank, N.A. The amended facility provides for borrowings of up to an aggregate of $50 million at an interest rate of LIBOR plus 2.0%.

On January 27, 2017, the Company amended its revolving credit loan agreement with HSBC Bank, N.A. on a temporary basis in order to provide for the funding of the Company's acquisition of the assets of Spill Magic, Inc. as described in Note 17. The amended facility provided for an increase in borrowings from $50 million to $55 million for the period commencing April 1, 2017 and ending on September 30, 2017. Commencing October 1, 2017, the maximum amount outstanding at any time under the facility returned to $50 million. The interest rate on borrowings remained unchanged at a rate of LIBOR plus 2.0%. Under the revolving credit loan agreement, the Company must pay a facility fee, payable quarterly, in an amount equal to two tenths of one percent (.20%) per annum of the average daily unused portion of the revolving credit line. All principal amounts outstanding under the agreement are required to be repaid in a single amount on May 6, 2019, the date the agreement expires; interest is payable monthly. Funds borrowed under the agreement may be used for working capital, acquisitions, general operating expenses, share repurchases and certain other purposes.

Under the revolving loan agreement, the Company is required to maintain specific amounts of tangible net worth, a specified total liabilities to net worth ratio, and a fixed charge coverage ratio, and must have annual net income greater than $0, measured as of the end of each fiscal year. Specifically, under the loan agreement, the Company was required to maintain a ratio of total liabilities to tangible net worth of not more than 2.25 to 1, calculated as at December 31, 2017. However, at December 31, 2017, the Company's ratio was 2.37 to 1, or 5% higher than the maximum permitted ratio. The Company was not in compliance with the covenant at that date due solely to the impact on the Company of the Tax Cuts and Jobs Act which was enacted into law in December 2017, as a result of which the Company incurred a one-time, non-cash charge of $1,170,000 in the fourth quarter of 2017 relating to taxation of the Company's foreign earnings. The Company and HSBC Bank, N.A. subsequently agreed to amend the loan agreement to increase the permitted ratio of total liabilities to tangible net worth from 2.25 to 1 to 2.50 to 1, effective for the quarter ended December 31, 2017. All other covenants remain unchanged. Accordingly, as of December 31, 2017, the Company was in compliance with the covenants of the loan agreement as so amended.

On October 26, 2017, the Company exercised its option to purchase its First Aid Only manufacturing and distribution center in Vancouver, WA for $4.0 million. The purchase was financed by a variable rate mortgage with HSBC Bank, N.A. at an interest rate of LIBOR plus 2.5%. Commencing December 1, 2017, principal payments of $22,222 and interest are due monthly, with all amounts outstanding due on maturity on October 31, 2024. The outstanding principal on December 31, 2017 was $3,978,000.

Capital expenditures during 2017 and 2016 were $3,146,194 and $1,809,823, respectively, which were, in part, financed with borrowings under the Company's revolving credit facility. Capital expenditures in 2018 are expected to increase approximately $0.7 million over 2017, to continue to increase capacity and upgrade equipment at the Company's recently acquired DMT and Spill Magic facilities.

As a result of the Tax Cuts and Jobs Act, we have repatriated approximately $5.8 million so far in 2018. We have used the proceeds to pay down debt and plan to finance expanded production at our DMT, Spill Magic, and first aid facilities in the U.S. as well as acquisitions.

The Company believes that cash on hand, and cash generated from operating activities, together with funds available under its revolving credit facility, are expected, under current conditions, to be sufficient to finance the Company's planned operations for at least the next twelve months from the issuance of this Form 10-K.

Recently Issued and Adopted Accounting Standards

In February 2016, the FASB issued guidance that will change the requirements for accounting for leases. The principal change under the new accounting guidance is that lessees under leases classified as operating leases will recognize a right-of-use asset and a lease liability. Current lease accounting does not require lessees to recognize assets and liabilities arising under operating leases on the balance sheet. Under the new guidance, lessees (including lessees under leases classified as finance leases and operating leases) will recognize a right-to-use asset and a lease liability on the balance sheet, initially measured as the present value of lease payments under the lease. Expense recognition and cash flow presentation guidance will be based upon whether the lease is classified as an operating lease or a finance lease (the classification criteria for distinguishing between finance leases and operating leases is substantially similar to the classification criteria for distinguishing between capital leases and operating leases under current guidance). The standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. Early adoption is permitted. The new standard must be adopted using a modified retrospective transition approach for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements; the guidance provides certain practical expedients. The Company is currently evaluating this guidance to determine its impact on the Company's consolidated financial position, results of operations or cash flows of the Company.

In March 2016, the FASB issued ASU 2016-09 to improve the accounting for employee share-based payments. This standard simplifies several aspects of the accounting for share-based payment award transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows, as part of FASB's simplification initiative to reduce cost and complexity in accounting standards while maintaining or improving the usefulness of the information provided to the users of financial statements. The new standard was effective for the Company beginning on January 1, 2017. The adoption of the new standard resulted in the recognition of excess tax benefits in the amount of approximately $350,000 in our provision for income taxes within the Consolidated Statement of Operations for the twelve months ended December 31, 2017, rather than additional paid-in capital. Additionally, our Consolidated Statement of Cash Flows now present excess tax benefits as an operating activity included in other accrued liabilities, adjusted prospectively.

In August 2015, the FASB issued ASU No. 2015-14, which defers the effective date of ASU No. 2014-09, *Revenue from Contracts with Customers* (Topic 606) by one year. ASU 2015-14 is a comprehensive new revenue recognition model requiring a company to recognize revenue to depict the transfer of goods or services to a customer at an amount reflecting the consideration it expects to receive in exchange for those goods or services. As a result, the ASU is now effective for fiscal years, and interim periods within those years, beginning after December 15, 2017, which for us is the first quarter of 2018. The Company has elected to adopt the new guidance using the modified retrospective method. We have completed our analysis of the anticipated impact of ASU 2015-17 on our consolidated financial statements and related disclosures, and other than an increase in the level of such disclosures, we do not expect the impact to have a material effect on the consolidated financial position, results of operations or cash flows of the Company.

In November 2015, the FASB issued ASU 2015-17, *Balance Sheet Classification of Deferred Taxes* (Topic 740), which simplifies the presentation of deferred income taxes. This ASU requires that deferred tax assets and liabilities be classified as non-current in a statement of financial position. ASU 2015-17 may be adopted either prospectively or retrospectively and is effective for reporting periods beginning after December 15, 2016, with early adoption permitted. The Company adopted this ASU retrospectively, resulting in a reclassification of its net current deferred tax asset of $501,708 to the net non-current deferred tax asset on its consolidated balance sheet as of December 31, 2016.

In January 2017, the FASB issued ASU No. 2017-01, *Business Combinations* (Topic 805): *Clarifying the Definition of a Business*. The new guidance clarifies the definition of a business in order to allow for the evaluation of whether transactions should be accounted for as acquisitions or disposals of assets or businesses. The new guidance is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. We do not expect that ASU 2017-01 would be likely have a material effect on the consolidated financial position, results of operations or cash flows of the Company.

In January 2017, the FASB issued ASU 2017-04 *Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment* ASU 2017-04 simplifies the subsequent measurement of goodwill by eliminating the second step of the goodwill impairment test. The second step measures a goodwill impairment loss by comparing the implied fair value of a reporting unit's goodwill with the carrying amount of that goodwill. Under ASU 2017-04, a company will record an impairment charge based on the excess of a reporting unit's carrying amount over its fair value. ASU 2017-04 will be applied prospectively and is effective for annual or interim goodwill impairment tests in fiscal years beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. We are currently evaluating the impact of this guidance on our consolidated financial position, results of operations and cash flows.

In February 2018, the FASB issued ASU No. 2018-02 *Income Statement — Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*. ASU No. 2018-02 provides companies with an option to reclassify stranded tax effects within accumulated other comprehensive income ("AOCI") to retained earnings in each period in which the effect of the change in the U.S. federal corporate income tax rate in the Tax Cuts and Jobs Act (or portion thereof) is recorded. ASU No. 2018-02 also requires disclosure of a description of the accounting policy for releasing income tax effects from AOCI and whether an election was made to reclassify the stranded income tax effects from the Tax Cuts and Jobs Act. ASU No. 2018-02 is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption is permitted. Companies can adopt the provisions of ASU No. 2018-02 in either the period of adoption or retrospectively to each period (or periods) in which the effect of the change in the U.S. federal corporate income tax rate in the Tax Cuts and Jobs Act is recognized. The Company is beginning to evaluate the impact the adoption of ASU No. 2018-02 will have on the Company's consolidated financial position, results of operations and cash flows.

Item 7A. Quantitative and Qualitative Disclosure about Market Risk

Not applicable.

Item 8. Financial Statements and Supplementary Data

Acme United Corporation and Subsidiaries
CONSOLIDATED STATEMENTS OF OPERATIONS

	For the years ended December 31,	
	2017	**2016**
Net sales	$ 130,550,349	$ 124,574,371
Cost of goods sold	82,651,076	79,019,315
Gross profit	47,899,273	45,555,056
Selling, general and administrative expenses	40,103,220	37,113,000
Operating income	7,796,053	8,442,056
Non operating items:		
Interest:		
Interest expense	(1,356,536)	(868,626)
Interest income	29,376	119
Interest expense, net	(1,327,160)	(868,507)
Other income (expense)	24,404	(76,846)
Total other expense, net	(1,302,756)	(945,353)
Income before income tax expense	6,493,297	7,496,703
Income tax expense	2,440,818	1,645,705
Net income	$ 4,052,479	$ 5,850,998
Earnings per share:		
Basic	$ 1.21	$ 1.76
Diluted	$ 1.09	$ 1.64

See accompanying Notes to Consolidated Financial Statements.

Acme United Corporation and Subsidiaries
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	For the Years Ended December 31,	
	2017	**2016**
Net income	$ 4,052,479	$ 5,850,998
Other comprehensive gain (loss) -		
Foreign currency translation	614,741	(89,556)
Change in net prior service credit and actuarial gains, net of income tax expense	87,461	284,145
Total other comprehensive income	702,202	194,589
Comprehensive income	$ 4,754,681	$ 6,045,587

See accompanying Notes to Consolidated Financial Statements.

Acme United Corporation and Subsidiaries
CONSOLIDATED BALANCE SHEETS

	December 31, 2017	December 31, 2016
ASSETS		
Current assets:		
Cash and cash equivalents	$ 9,338,269	$ 5,910,770
Accounts receivable, less allowance	26,012,368	20,020,984
Inventories, net	40,086,871	37,237,861
Prepaid expenses and other current assets	2,380,137	1,791,871
Total current assets	77,817,645	64,961,486
Property, plant and equipment:		
Land	1,428,597	412,598
Buildings	9,561,692	5,668,866
Machinery and equipment	16,242,764	13,428,678
Total property, plant and equipment	27,233,053	19,510,142
Less: accumulated depreciation	13,504,914	11,537,242
Net plant, property and equipment	13,728,139	7,972,900
Intangible assets, less accumulated amortization	17,882,005	13,988,186
Goodwill	4,696,370	3,948,235
Deferred income taxes	509,646	1,170,349
Other assets	96,001	24,936
Total assets	$ 114,729,806	$ 92,066,092
LIABILITIES		
Current liabilities:		
Accounts payable	$ 11,150,960	$ 7,338,798
Current portion of mortgage payable	266,667	—
Other accrued liabilities	5,365,344	5,480,950
Total current liabilities	16,782,971	12,819,748
Long-term debt	43,450,348	32,935,858
Mortgage payable, net of current portion	3,711,111	—
Other accrued liabilities - non current	847,383	190,140
Total liabilities	64,791,813	45,945,746
STOCKHOLDERS' EQUITY		
Common stock, par value $2.50: authorized 8,000,000 shares; issued - 4,838,071 shares in 2017 and 4,788,965 shares in 2016, including treasury stock	12,094,413	11,971,657
Treasury stock, at cost, 1,464,010 in 2017 and in 2016	(13,870,041)	(13,870,041)
Additional paid-in capital	8,880,543	8,493,256
Accumulated other comprehensive loss	(1,633,999)	(2,336,201)
Retained earnings	44,467,077	41,861,675
Total stockholders' equity	49,937,993	46,120,346
Total liabilities and stockholders' equity	$ 114,729,806	$ 92,066,092

See accompanying Notes to Consolidated Financial Statements.

Acme United Corporation and Subsidiaries
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

	Outstanding Shares of Common Stock	Common Stock	Treasury Stock	Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Total
Balances, December 31, 2015	3,348,543	$ 11,876,895	$ (12,962,947)	$ 9,460,008	$ (2,530,790)	$ 37,340,395	$ 43,183,561
Net income						5,850,998	5,850,998
Total other comprehensive income					194,589		194,589
Stock compensation expense				440,536			440,536
Tax benefit from exercise of employee stock options				567,309			567,309
Distribution to shareholders						(1,329,717)	(1,329,717)
Issuance of common stock	37,905	94,762		299,776			394,538
Cash settlement of stock options				(2,274,374)			(2,274,374)
Purchase of treasury stock	(61,493)		(907,094)				(907,094)
Balances, December 31, 2016	3,324,955	$ 11,971,657	$ (13,870,041)	$ 8,493,256	$ (2,336,201)	$ 41,861,675	$ 46,120,346
Net income						4,052,479	4,052,479
Total other comprehensive income					702,202		702,202
Stock compensation expense				684,351			684,351
Distribution to shareholders						(1,447,077)	(1,447,077)
Issuance of common stock	49,106	122,756		526,466			649,222
Cash settlement of stock options				(823,530)			(823,530)
Balances, December 31, 2017	3,374,061	$ 12,094,413	$ (13,870,041)	$ 8,880,543	$ (1,633,999)	$ 44,467,077	$ 49,937,993

See accompanying Notes to Consolidated Financial Statements.

Acme United Corporation and Subsidiaries
CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the years ended December 31,	
	2017	**2016**
Operating activities:		
Net income	$ 4,052,479	$ 5,850,998
Adjustments to reconcile net income to net		
cash provided by operating activities		
Depreciation	1,722,568	1,490,805
Amortization	1,172,292	930,941
Stock compensation expense	684,351	440,536
Deferred income taxes	660,703	100,529
Changes in operating assets and liabilities		
Accounts receivable	(5,230,159)	499,940
Inventories	(1,846,765)	(1,483,785)
Prepaid expenses and other current assets	82,679	314,824
Accounts payable	3,733,667	610,498
Other accrued liabilities	(220,939)	101,927
Total adjustments	758,397	3,006,214
Net cash provided by operating activities	4,810,876	8,857,211
Investing activities:		
Purchase of property, plant and equipment	(3,146,194)	(1,809,823)
Purchase of patents and trademarks	—	(29,371)
Purchase of building	(4,000,000)	—
Acquisitions (Note 17)	(7,233,114)	(6,970,910)
Net cash used by investing activities	(14,379,308)	(8,810,104)
Financing activities:		
Net borrowings of long-term debt	10,514,417	7,023,205
Borrowings on mortgage	4,000,000	—
Repayments on mortgage	(22,222)	—
Distributions to shareholders	(1,408,428)	(1,332,757)
Cash settlement of stock options	(823,530)	(2,274,374)
Excess tax benefit from the exercise of stock options	—	567,309
Purchase of treasury stock	—	(907,094)
Issuance of common stock	649,231	394,538
Net cash provided by financing activities	12,909,468	3,470,827
Effect of exchange rate changes	86,463	(33,056)
Net increase in cash and cash equivalents	3,427,499	3,484,880
Cash and cash equivalents at beginning of year	5,910,770	2,425,891
Cash and cash equivalents at end of year	$ 9,338,269	$ 5,910,770
Supplemental cash flow information:		
Cash paid for income taxes	$ 1,570,370	$ 1,779,879
Cash paid for interest expense	$ 1,255,190	$ 841,634

See accompanying Notes to Consolidated Financial Statements.

1. Operations

The operations of Acme United Corporation (the “Company”) consist of three reportable segments. The operations of the Company are structured and evaluated based on geographic location. The three reportable segments operate in the United States (including Asian operations), Canada and Europe. Principal products across all segments are scissors, shears, knives, rulers, pencil sharpeners, first aid safety kits, and related products which are sold primarily to wholesale, contract and retail stationery distributors, office supply super stores, mass market retailers, industrial distributors, school supply distributors, drug store retailers, sporting goods stores, hardware chains and wholesale florists.

2. Accounting Policies

Estimates – The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. The most sensitive and significant accounting estimates relate to customer rebates, valuation allowances for deferred income tax assets, obsolete and slow-moving inventories, potentially uncollectible accounts receivable, pension liability and accruals for income taxes. Actual results could differ from those estimates.

Principles of Consolidation – The consolidated financial statements include the accounts of the Company and its subsidiaries, all of which are wholly owned by the Company. All significant intercompany accounts and transactions are eliminated in consolidation.

Translation of Foreign Currency – For foreign operations whose functional currencies are not U.S. dollars, assets and liabilities are translated at rates in effect at the end of the year; revenues and expenses are translated at average rates in effect during the year. Resulting translation adjustments are made directly to accumulated other comprehensive income. Foreign currency transaction gains and losses are recognized in operating results. Included in other income (expense) were foreign currency transaction gains of $24,404 in 2017 and foreign currency transaction losses of $75,041 in 2016.

Cash Equivalents – Investments with an original maturity of three months or less, as well as time deposits and certificates of deposit that are readily redeemable at the date of purchase, are considered cash equivalents.

Accounts Receivable – Accounts receivable are shown less an allowance for doubtful accounts of $166,907 at December 31, 2017 and $152,357 at December 31, 2016.

Inventories – Inventories are stated at the lower of cost, determined by the first-in, first-out method, or net realizable value.

Property, Plant and Equipment and Depreciation – Property, plant and equipment is recorded at cost. Depreciation is computed by the straight-line method over the estimated useful lives of the assets, which range from 3 to 30 years.

Intangible Assets – Intangible assets with finite useful lives are recorded at cost upon acquisition, and amortized over the term of the related contract or useful life, as applicable. Intangible assets held by the Company with finite useful lives include patents and trademarks. Patents and trademarks are amortized over their estimated useful lives. The weighted average amortization period for intangible assets at December 31, 2017 was 10 years. The Company periodically reviews the values recorded for intangible assets to assess recoverability from future operations whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. At December 31, 2017 and 2016, the Company assessed the recoverability of its long-lived assets and believed that there were no events or circumstances present that would that would require a test of recoverability on those assets. As a result, there was no impairment of the carrying amounts of such assets and no reduction in their estimated useful lives.

Deferred Income Taxes – Deferred income taxes are provided for the differences between the financial statement and tax bases of assets and liabilities, and on operating loss carryovers, using tax rates in effect in years in which the differences are expected to reverse.

Revenue Recognition – Revenue is recognized when the price is fixed, the title and risks and rewards of ownership have passed to the customer, and when collection is reasonably assured. Depending on the contractual terms of each customer, revenue is recognized either at the time of shipment or upon delivery. When revenue is recorded, estimates of returns are made and recorded as a reduction of revenue. Customer rebates and incentives earned based on promotional programs in place, volume of purchases or other factors are also estimated at the time of revenue recognition and recorded as a reduction of that revenue.

Research and Development – Research and development costs ($752,000 in 2017 and $750,000 in 2016) are expensed as incurred.

Shipping Costs – The costs of shipping product to our customers ($6,595,544 in 2017 and $5,388,481 in 2016) are included in selling, general and administrative expenses.

Advertising Costs – The Company expenses the production costs of advertising the first time that the related advertising takes place. Advertising costs ($1,997,113 in 2017 and $1,934,250 in 2016) are included in selling, general and administrative expenses.

Subsequent Events – The Company has evaluated events and transactions subsequent to December 31, 2017 through the date the consolidated financial statements were included in this Form 10-K and filed with the SEC.

Concentration – The Company performs ongoing credit evaluations of its customers and generally does not require collateral for the extension of credit. Allowances for credit losses are provided and have been within management's expectations. In 2017 and 2016, the Company had two customers that individually exceeded 10% of consolidated net sales. Net sales to these customers amounted to approximately 16% and 11%, respectively, in 2017 and approximately 14% and 11%, respectively, for each in 2016.

Recently Issued and Adopted Accounting Standards

In January 2017, the Financial Accounting Standards Board (FASB) issued Auditing Standards Update (ASU) No. 2017-04, *Intangibles – Goodwill and Other* (Topic 350): *Simplifying the Test for Goodwill Impairment*. ASU 2017-04 simplifies the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test. Under the new amendments, an entity should perform its annual or interim goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An entity should recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit’s fair value. We adopted this guidance prospectively at the beginning of first quarter 2017 and it has not had a material impact on our financial statements.

In January 2017, the FASB issued ASU No. 2017-01, *Business Combinations* (Topic 805): *Clarifying the Definition of a Business*. The new guidance clarifies the definition of a business in order to allow for the evaluation of whether transactions should be accounted for as acquisitions or disposals of assets or businesses. The new guidance is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. We do not expect that ASU 2017-01 will have a material impact on our financial statements.

In February 2016, the FASB issued guidance that will change the requirements for accounting for leases. The principal change under the new accounting guidance is that lessees under leases classified as operating leases will recognize a right-of-use asset and a lease liability. Current lease accounting does not require lessees to recognize assets and liabilities arising under operating leases on the balance sheet. Under the new guidance, lessees (including lessees under leases classified as finance leases and operating leases) will recognize a right-to-use asset and a lease liability on the balance sheet, initially measured as the present value of lease payments under the lease. Expense recognition and cash flow presentation guidance will be based upon whether the lease is classified as an operating lease or a finance lease (the classification criteria for distinguishing between finance leases and operating leases is substantially similar to the classification criteria for distinguishing between capital leases and operating leases under current guidance). The standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. Early adoption is permitted. The new standard must be adopted using a modified retrospective transition approach for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements; the guidance provides certain practical expedients. The Company is currently evaluating this guidance to determine its impact on the Company's results of operations, cash flows and financial position.

In March 2016, the FASB issued ASU 2016-09 to improve the accounting for employee share-based payments. This standard simplifies several aspects of the accounting for share-based payment award transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows, as part of FASB's simplification initiative to reduce cost and complexity in accounting standards while maintaining or improving the usefulness of the information provided to the users of financial statements. The new standard was effective for the Company beginning on January 1, 2017. The adoption of the new standard resulted in the recognition of excess tax benefits in the amount of approximately $350,000 in our provision for income taxes within the Consolidated Statement of Operations for the twelve months ended December 31, 2017, rather than additional paid-in capital. Additionally, our Consolidated Statement of Cash Flows now present excess tax benefits as an operating activity included in other accrued liabilities, adjusted prospectively.

In November 2015, the FASB issued ASU 2015-17, *Balance Sheet Classification of Deferred Taxes* (Topic 740), which simplifies the presentation of deferred income taxes. This ASU requires that deferred tax assets and liabilities be classified as non-current in a statement of financial position. ASU 2015-17 may be adopted either prospectively or retrospectively and is effective for reporting periods beginning after December 15, 2016. The Company adopted this ASU retrospectively, resulting in a reclassification of its net current deferred tax asset of $501,708 to the net non-current deferred tax asset on its consolidated balance sheet as of December 31, 2016.

In August 2015, the FASB issued ASU No. 2015-14, which defers the effective date of ASU No. 2014-09, *Revenue from Contracts with Customers* (Topic 606) by one year. ASU 2015-14 is a comprehensive new revenue recognition model requiring a company to recognize revenue to depict the transfer of goods or services to a customer at an amount reflecting the consideration it expects to receive in exchange for those goods or services. As a result, the ASU is now effective for fiscal years, and interim periods within those years, beginning after December 15, 2017, which for us is the first quarter of 2018. The Company has elected to adopt the new guidance using the modified retrospective method. We have completed our analysis of the impact this guidance will have on our consolidated financial statements and related disclosures, and other than an increase in the level of disclosures, we do not expect the impact to be material.

In February 2018, the FASB issued ASU No. 2018-02 *Income Statement — Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income.* ASU No. 2018-02 provides companies with an option to reclassify stranded tax effects within accumulated other comprehensive income ("AOCI") to retained earnings in each period in which the effect of the change in the U.S. federal corporate income tax rate in the Tax Cuts and Jobs Act (or portion thereof) is recorded. ASU No. 2018-02 also requires disclosure of a description of the accounting policy for releasing income tax effects from AOCI and whether an election was made to reclassify the stranded income tax effects from the Tax Cuts and Jobs Act. ASU No. 2018-02 is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption is permitted. Companies can adopt the provisions of ASU No. 2018-02 in either the period of adoption or retrospectively to each period (or periods) in which the effect of the change in the U.S. federal corporate income tax rate in the Tax Cuts and Jobs Act is recognized. The Company is beginning to evaluate the potential impact the adoption of ASU No. 2018-02 will have on the Company's consolidated financial statements.

3. Inventories

Inventories consisted of:	December 31, 2017		2016	
Finished goods	$	33,110,826	$	33,971,922
Work in process		193,557		187,833
Materials and supplies		6,782,488		3,078,106
	$	40,086,871	$	37,237,861

Inventories are stated net of valuation allowances for slow moving and obsolete inventory of $654,855 as of December 31, 2017 and $677,253 as of December 31, 2016.

4. Intangible Assets and Goodwill

Intangible assets consisted of:	December 31, 2017		2016	
First Aid Only Tradename, Customer List	$	8,910,010	$	8,910,010
DMT Tradename, Customer List		2,756,000		2,756,000
DMT Non-Compete		183,000		183,000
Patents		2,271,980		2,271,980
Trademarks		663,698		663,698
Pac-Kit Tradename, Customer List		1,500,000		1,500,000
Spill Magic Customer List		3,965,000		—
Spill Magic Trademarks		1,034,000		—
Spill Magic Non-Compete		67,111		—
C-Thru Customer List		1,050,000		1,050,000
Subtotal		22,400,799		17,334,688
Accumulated Amortization		4,518,794		3,346,502
Subtotal Intangible assets		17,882,005		13,988,186
Goodwill		4,696,370		3,948,235
	$	22,578,375	$	17,936,421

Amortization expense for patents and trademarks for the years ended December 31, 2017, and 2016 were $1,172,292 and $930,941, respectively. The estimated aggregate amortization expense for each of the next five succeeding years, calculated on a similar basis, is as follows: 2018 - $1,215,549; 2019 - $1,165,086; 2020 - $1,160,466; 2021 - $1,158,641; and 2022 - $1,141,933.

5. Other Accrued Liabilities

Other current and long-term accrued liabilities consisted of:

	December 31, 2017		2016	
Customer rebates	$	3,733,472	$	2,789,003
Pension liability		113,042		205,071
Accrued Compensation		339,474		1,192,822
Dividend Payable		371,207		332,558
Other		1,655,531		1,151,636
	$	6,212,726	$	5,671,090

6. Pension and Profit Sharing

United States employees, hired prior to July 1, 1993, are covered by a funded, defined benefit pension plan. The benefits of this pension plan are based on years of service and the average compensation of the highest three consecutive years during the last ten years of employment. In December 1995, the Company's Board of Directors approved an amendment to the United States pension plan that terminated all future benefit accruals as of February 1, 1996, without terminating the pension plan.

The Company’s funding policy with respect to its qualified plan is to contribute at least the minimum amount required by applicable laws and regulations. In 2017, the Company did not contribute to the plan.

The plan asset weighted average allocation at December 31, 2017 and December 31, 2016, by asset category, were as follows:

Asset Category	**2017**	**2016**
Equity Securities	67%	65%
Fixed Income Securities	32%	32%
Other Securities / Investments	1%	3%
Total	100%	100%

The Company’s investment policy for the pension plan is to minimize risk by balancing investments between equity securities and fixed income securities. Plan funds are invested in long-term obligations with a history of moderate to low risk.

The pension plan asset information included below is presented at fair value. ASC 820 establishes a framework for measuring fair value and requires disclosures about assets and liabilities measured at fair value. The fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value into three levels as follows:

· Level 1 – Inputs to the valuation methodology based on unadjusted quoted market prices in active markets that are accessible at the measurement date.
· Level 2 – Inputs to the valuation methodology that include quoted market prices that are not considered to be active or financial instruments for which all significant inputs are observable, either directly or indirectly.
· Level 3 – Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The following tables present the pension plan assets by level within the fair value hierarchy as of December 31, 2017 and 2016:

2017	Level 1	Level 2	Level 3	Total
Money Market Fund	$ —	$ 10,774	$ —	$ 10,774
Equity Common and Collected Funds	125,451	711,143	—	836,594
Fixed Income Common and Collected Funds	100,430	302,001	—	402,431
Total	$ 225,881	$ 1,023,918	$ —	$ 1,249,799

2016	Level 1	Level 2	Level 3	Total
Money Market Fund	$ 19,327	$ 19,897	$ —	$ 39,224
Equity Common and Collected Funds	131,737	705,523	—	837,260
Fixed Income Common and Collected Funds	104,491	313,752	—	418,243
Total	$ 255,555	$ 1,039,172	$ —	$ 1,294,727

Other disclosures related to the pension plan follow:

	2017	2016
Assumptions used to determine benefit obligation:		
Discount rate	3.14%	3.40%
Changes in benefit obligation:		
Benefit obligation at beginning of year	$ (1,499,798)	$ (1,776,788)
Interest cost	(48,161)	(55,811)
Service cost	(36,000)	(36,000)
Actuarial (loss) gain	(20,289)	99,019
Benefits and plan expenses paid	241,381	269,782
Benefit obligation at end of year	(1,362,867)	(1,499,798)
Changes in plan assets:		
Fair value of plan assets at beginning of year	1,294,727	1,417,572
Actual return on plan assets	196,479	146,937
Employer contribution		
Benefits and plan expenses paid	(241,381)	(269,782)
Fair value of plan assets at end of year	1,249,825	1,294,727
Funded status	$ (113,042)	$ (205,071)
Amounts recognized in Accumulated Other Comprehensive Income:		
Net actuarial loss	$ 913,870	$ 1,128,647
Prior service cost	1,625	2,168
Total	$ 915,495	$ 1,130,815

Accrued benefits costs are included in other accrued liabilities (non-current).

	2017	2016
Assumptions used to determine net periodic benefit cost:		
Discount rate	3.40%	3.50%
Expected return on plan assets	6.00%	6.00%
Components of net benefit expense:		
Interest cost	$ 48,161	$ 55,811
Service cost	36,000	36,000
Expected return on plan assets	(69,465)	(76,138)
Amortization of prior service costs	543	543
Amortization of actuarial loss	108,052	124,854
Net periodic benefit cost	$ 123,291	$ 141,070

The Company employs a building block approach in determining the long-term rate of return for plan assets. Historical markets are studied and long-term historical relationships between equity securities and fixed income securities are preserved consistent with the widely-accepted capital market principle that assets with higher volatility generate higher returns over the long run. Our expected 6% long-term rate of return on plan assets is determined based on long-term historical performance of plan assets, current asset allocation and projected long-term rates of return.

The following table discloses the change recorded in other comprehensive income related to benefit costs:

	2017	2016
Balance at beginning of the year	$ 1,130,815	$ 1,426,030
Change in net loss	(106,725)	(169,818)
Amortization of actuarial loss	(108,052)	(124,854)
Amortization of prior service cost	(543)	(543)
Change recognized in other comprehensive income	(215,320)	(295,215)
Total recognized in other comprehensive income	$ 915,495	$ 1,130,815

The Company anticipates that in 2018, net periodic benefit cost will include approximately $86,000 of net actuarial loss and $1,000 of prior service cost.

The following benefits are expected to be paid:

2018	$ 186,000
2019	169,000
2020	152,000
2021	137,000
2022	122,000
Years 2023 - 2027	439,000

The Company also has a qualified, profit sharing plan covering substantially all of its United States employees. Annual Company contributions to this profit sharing plan are determined by the Company's Compensation Committee. For the years ended December 31, 2017 and 2016, the Company contributed 50% of employee's contributions, up to the first 6% contributed by each employee. Total contribution expense under this profit sharing plan was $236,993 in 2017 and $188,518 in 2016.

7. Income Taxes

The amounts of income tax expense (benefit) reflected in operations is as follows:

	2017	2016
Current:		
Federal	$ 1,263,124	$ 566,361
State	32,737	(5,648)
Foreign	693,297	984,469
	1,989,158	1,545,182
Deferred:		
Federal	431,454	83,290
State	20,206	17,233
	451,660	100,523
	$ 2,440,818	$ 1,645,705

The current state tax provision was comprised of taxes on income, the minimum capital tax and other franchise taxes related to the jurisdictions in which the Company's facilities are located.

A summary of United States and foreign income before income taxes follows:

	2017	2016
United States	$ 2,477,871	$ 2,008,065
Foreign	4,015,426	5,488,638
	$ 6,493,297	$ 7,496,703

As discussed in Note 10 below, for segment reporting, Direct Import sales are included in the United States segment. However, the revenues are earned by our Hong Kong subsidiary and related income taxes are paid in Hong Kong whose rate approximates 16.5%. As such, income of the Asian subsidiary is included in the foreign income before taxes.

The following schedule reconciles the amounts of income taxes computed at the United States statutory rates to the actual amounts reported in operations:

	2017	2016
Federal income taxes at 34% statutory rate	$ 2,322,741	$ 2,496,270
State and local taxes, net of federal income tax effect	39,783	18,998
Permanent items	(370,978)	(25,077)
Transition tax on deemed repatriation of foreign earnings	1,169,263	—
Effect of federal rate change on deferred taxes	74,462	—
Foreign tax rate difference	(699,047)	(919,038)
Change in deferred income tax valuation allowance	(95,406)	74,552
Provision for income taxes	$ 2,440,818	$ 1,645,705

The following summarizes deferred income tax assets and liabilities:

	2017	2016
Deferred income tax liabilities:		
Plant, property and equipment	$ 563,289	$ 604,271
	563,289	604,271
Deferred income tax assets:		
Asset valuations	506,993	720,189
Operating loss carryforwards and credits	(95,406)	121,658
Pension	96,098	227,681
Foreign tax credit	—	186,504
Other	469,844	593,140
	977,529	1,849,172
Net deferred income tax asset before valuation allowance	414,240	1,244,901
Valuation allowance	95,406	(74,552)
Net deferred income tax asset	$ 509,646	$ 1,170,349

The Tax Cuts and Jobs Act (the “Tax Act”) was signed into law in December 2017 and includes a broad range of tax reforms, certain of which were required by GAAP to be recognized upon enactment. The U.S. Securities and Exchange Commission has issued Staff Accounting Bulletin 118 (SAB 118), which provides guidance on accounting for the tax effects of the Act. SAB 118 provides a measurement period that should not extend beyond one year from the enactment date for companies to complete the accounting under ASC 740. In accordance with SAB 118, a company must reflect the income tax effects of those aspects of the Act for which the accounting under ASC 740 is complete. To the extent that a company’s accounting for certain income tax effects of the Act is incomplete but it is able to determine a reasonable estimate, it must record a provisional estimate in the financial statements. If a company cannot determine a provisional estimate to be included in the financial statements, it should continue to apply ASC 740 on the basis of the provisions of the tax laws that were in effect immediately before the enactment of the Act.

The Act introduced provisions that fundamentally change the U.S. approach to taxation of foreign earnings. Under the Act, qualified dividends of foreign subsidiaries are no longer subject to U.S. tax. Under the previously-existing tax rules, dividends from foreign operations were subjected to U.S. tax, and if not considered permanently reinvested, we had recognized expense and recorded a liability for the tax expected to be incurred upon receipt of the dividend of these foreign earnings. Although the Act excludes dividends of foreign subsidiaries from taxation, it includes provisions for a mandatory deemed dividend of undistributed foreign earnings at tax rates of 15.5% or 8% ("transition tax") depending on the nature of the foreign operations' assets. Companies may utilize tax attributes (including net operating losses and tax credits) to offset the transition tax. The estimated provisional net effect of applying the provisions of the Act on our 2017 results of operations was a non-cash charge to tax expense of $1,170,000. This provisional amount could be revised as additional guidance and interpretations are issued and as we continue to examine the details of the Act and the related tax attributes.

Based on our historical financial performance in the U.S., at December 31, 2017, we have a significant net deferred tax asset position. As such, with the Act's reduction of the corporate tax rate from 35% to 21%, we re-measured our net deferred tax assets at the lower corporate rate of 21% and recognized a $75,000 tax expense to adjust net deferred tax assets to the reduced value.

The total effect in 2017 of applying the U.S. tax reform provisions of the Act was tax expense of $1,245,000 increasing the effective rate for 2017 by 128%.

In 2017, the Company evaluated its tax positions for years which remain subject to examination by major tax jurisdictions, in accordance with the requirements of ASC 740 and as a result, concluded no adjustment was necessary. The Company files income tax returns in the U.S. federal jurisdiction, and various state and foreign jurisdictions. The Company’s evaluation of uncertain tax positions was performed for the tax years ended December 31, 2013 and forward, the tax years which remain subject to examination by major tax jurisdictions as of December 31, 2017.

In accordance with the Company’s accounting policies, any interest and penalties related to uncertain tax positions are recognized as a component of income tax expense.

Due to the uncertain nature of the realization of the Company's deferred income tax assets based on past performance of its German subsidiary and carry forward expiration dates, the Company has recorded a valuation allowance for the amount of deferred income tax assets which are not expected to be realized. This valuation allowance, all of which is related to deferred tax assets resulting from net operating losses of the Company’s German subsidiary, is subject to periodic review, and, if the allowance is reduced, the tax benefit will be recorded in future operations as a reduction of the Company's tax expense.

8. Long-Term Debt and Shareholders’ Equity

On May 6, 2016, the Company amended its revolving credit loan agreement with HSBC Bank, N.A. The amended facility provides for borrowings of up to an aggregate of $50 million at an interest rate of LIBOR plus 2.0%.

On January 27, 2017, the Company amended its revolving credit loan agreement with HSBC Bank, N.A. on a temporary basis in order to provide for the funding of the Company's acquisition of the assets of Spill Magic, Inc. as described in Note 17. The amended facility provided for an increase in borrowings from $50 million to $55 million for the period commencing April 1, 2017 and ending on September 30, 2017. Commencing October 1, 2017, the maximum amount outstanding at any time under the facility returned to $50 million. The interest rate on borrowings remains unchanged at a rate of LIBOR plus 2.0%. In addition, the Company must pay a facility fee, payable quarterly, in an amount equal to two tenths of one percent (.20%) per annum of the average daily unused portion of the revolving credit line. All principal amounts outstanding under the agreement are required to be repaid in a single amount on May 6, 2019, the date the agreement expires; interest is payable monthly. Funds borrowed under the agreement may be used for working capital, acquisitions, general operating expenses, share repurchases and certain other purposes.

Under the revolving loan agreement, the Company is required to maintain specific amounts of tangible net worth, a specified total liabilities to net worth ratio, and a fixed charge coverage ratio, and must have annual net income greater than $0, measured as of the end of each fiscal year. Specifically, under the loan agreement, the Company was required to maintain a ratio of total liabilities to tangible net worth of not more than 2.25 to 1, calculated as at December 31, 2017. However, at December 31, 2017, the Company's ratio was 2.37 to 1, or 5% higher than the maximum permitted ratio. The Company was not in compliance with the covenant at that date due solely to the impact on the Company of the Tax Cuts and Jobs Act which was enacted into law in December 2017, as a result of which the Company incurred a one-time, non-cash charge of $1,170,000 in the fourth quarter of 2017 relating to taxation of the Company's foreign earnings. The Company and HSBC Bank, N.A. subsequently agreed to amend the loan agreement to increase the permitted ratio of total liabilities to tangible net worth from 2.25 to 1 to 2.50 to 1, effective for the quarter ended December 31, 2017. All other covenants remain unchanged. Accordingly, as of December 31, 2017, the Company was in compliance with the covenants of the loan agreement as so amended.

Long term debt consists of borrowings under the Company's revolving loan agreement with HSBC Bank, N.A. As of December 31, 2017, $43,450,000 was outstanding and $6,550,000 was available for borrowing under the Company's revolving loan agreement.

On October 26, 2017, the Company exercised its option to purchase its First Aid Only manufacturing and distribution center in Vancouver, WA for $4.0 million. The property consists of 53,000 square feet of office, manufacturing, and warehouse space on 2.86 acres. The purchase was financed by a variable rate mortgage with HSBC Bank, N.A. at an interest rate of LIBOR plus 2.5%. Commencing December 1, 2017, principal payments of $22,222 are due monthly, with all amounts outstanding due on maturity on October 31, 2024. Minimum annual mortgage payments are due as follows: 2018 - $266,664; 2019 - $266,664; 2020 - $266,664; 2021 - $266,664; 2022 - $266,664 and thereafter - $2,644,458.

During the twelve months ended December 31, 2017, the Company did not repurchase any shares of its Common Stock. As of December 31, 2017, 41,227 shares may be purchased in the future under the repurchase program announced in 2010.

9. Commitments and Contingencies

The Company leases certain office, manufacturing and warehouse facilities and various equipment under non-cancelable operating leases. Total rent expense was $1,432,677 and $1,227,341 in 2017 and 2016, respectively. Minimum annual rental commitments under non-cancelable leases with remaining terms of one year or more as of December 31, 2017 are as follows: 2018 - $992,665; 2019 - $627,467; 2020 - $530,454; 2021 – $285,499; 2022 - $18,000 and thereafter - $0.

There are no pending material legal proceedings to which the Company is a party or, to the actual knowledge of the Company, contemplated by any governmental authority.

10. Segment Information

The Company reports financial information based on the organizational structure used by management for making operating and investment decisions and for assessing performance. The Company's reportable business segments include (1) United States; (2) Canada and (3) Europe. The financial results for the Company's Asian operations have been aggregated with the results of its United States operations to form one reportable segment called the "United States segment". Sales in the United States segment include both domestic sales as well as direct import sales. Each reportable segment derives its revenue from the sales of cutting devices, measuring instruments and first aid products for school, home, office, hardware, sporting goods and industrial use.

Domestic sales orders are filled from the Company's distribution centers in North Carolina, Washington and Massachusetts. The Company is responsible for the costs of shipping, insurance, customs clearance, duties, storage and distribution related to such products. Orders filled from the Company's inventory are generally for less than container-sized lots.

Direct Import sales are products sold by the Company's Asian subsidiary, directly to major U.S. retailers who take ownership of the products in Asia. These sales are completed by delivering product to the customers' common carriers at the shipping points in Asia. Direct Import sales are made in larger quantities than domestic sales, typically full containers. Direct Import sales represented approximately 11% and 17% of the Company's total net sales in 2017 and 2016, respectively.

The Chief Operating Decision Maker evaluates the performance of each operating segment based on segment revenues and operating income. Segment revenues are defined as total revenues, including both external customer revenue and inter-segment revenue. Segment operating earnings are defined as segment revenues, less cost of goods sold and operating expenses. Identifiable assets by segment are those assets used in the respective reportable segment's operations. Inter-segment amounts are eliminated to arrive at consolidated financial results.

The following table sets forth certain financial data by segment for the fiscal years ended December 31, 2017 and 2016:

Financial data by segment:

Year Ended December 31, 2017				
(000's omitted)	**United States**	**Canada**	**Europe**	**Consolidated**
Net sales	115,407	6,935	8,208	130,550
Operating income	6,701	775	320	7,796
Assets	104,431	4,926	5,373	114,730
Additions to property, plant and equipment	7,014	19	113	7,146
Depreciation and amortization	2,845	8	42	2,895
Year Ended December 31, 2016				
Net sales	$ 110,793	$ 6,824	$ 6,957	$ 124,574
Operating income	7,769	568	105	8,442
Assets	84,104	3,882	4,080	92,066
Additions to property, plant and equipment	1,737	7	44	1,789
Depreciation and amortization	2,362	8	23	2,393

The following is a reconciliation of segment operating income to consolidated income before taxes:

	2017	2016
Total operating income	$ 7,796	$ 8,842
Interest expense, net	1,327	869
Other (income) expense, net	(24)	77
Consolidated income before taxes	$ 6,493	$ 7,497
Net Income	$ 4,052	$ 5,851

The table below presents revenue by geographic area. Revenues are attributed to countries based on location of the customer.

Revenues	2017	2016
United States	$ 114,231	$ 109,823
International:		
Canada	6,935	6,824
Europe	8,208	6,957
Other	1,176	970
Total International	$ 16,319	$ 14,751
Total Revenues	$ 130,550	$ 124,574

11. Stock Option Plans

The Company grants stock options under the 2012 Employee Stock Option Plan (the “2012 Employee Plan”) and under the 2017 Non-Salaried Director Stock Option Plan (the “2017 Director Plan”). The Company also has two plans under which the Company no longer grants options but under which certain options remain outstanding: the 2002 Employee stock Option Plan and the 2005 Non-Salaried Director Stock Option Plan (the “2005 Director Plan”).

The 2012 Employee Plan, which became effective April 23, 2012, provides for the issuance of incentive and nonqualified stock options at an exercise price equal to the fair market value of the Common Stock on the date the option is granted. The terms of the options granted are subject to the provisions of the 2012 Employee Plan. Options granted under the 2012 Employee Plan vest 25% one day after the first anniversary of the grant date and 25% one day after each of the next three anniversaries. As of December 31, 2017, the number of shares available for grant under the 2012 Employee Plan was 22,700. Under the terms of the Employee Plan, no option may be granted under that plan after the tenth anniversary of the adoption of the plan. Options outstanding under the Company’s 2002 Employee Stock Option Plan have the same vesting schedule as the 2012 Employee Plan.

The 2017 Director Plan provides for the issuance of stock options for up to a total of 60,000 shares of the Company's common stock to non-salaried directors. Under the Director Plan, Directors elected after the effective date and at subsequent Annual Meetings who have not received any prior grant under this or previous plans shall receive an initial grant of an option to purchase 5,000 shares of Common Stock (the “Initial Option”). Each year, each elected Director not receiving an Initial Option will receive an option to purchase 5,000 shares of Common Stock (the “Annual Option”). The Initial Option vests 25% on the date of grant and 25% on the anniversary of the grant date in each of the following 3 years. Each Annual Option becomes fully exercisable one day after the date of grant. The exercise price of each option granted equals the fair market value of the Common Stock on the date the option is granted, and expires ten (10) years from the date of grant. As provided in the Director Plan, no options may be granted under the Director Plan after the tenth anniversary of the adoption of the Plan, i.e., after April 24, 2017. As of December 31, 2017, the number of shares available for grant under the 2017 Director Plan was 40,000.

The 2005 Director Plan, as amended, provided for the issuance of stock options for up to a total of 180,000 shares of the Company's common stock to non-salaried directors. Under the Director Plan, Directors elected on April 25, 2005 and at subsequent Annual Meetings who have not received any prior grant under this or previous plans received an initial grant of an option to purchase 5,000 shares of Common Stock (the "Initial Option"). Each year, each elected Director not receiving an Initial Option received a 5,000 share option (the "Annual Option"). The Initial Option vests 25% on the date of grant and 25% on the anniversary of the grant date in each of the following 3 years. Each Annual Option becomes fully exercisable one day after the date of grant. The exercise price of each option granted equals the fair market value of the Common Stock on the date the option is granted, and expires ten (10) years from the date of grant. As provided in the Director Plan, no options may be granted under the Director Plan after the tenth anniversary of the adoption of the Plan, i.e., after April 25, 2015.

The Company has amended certain of its stock option plans for both employees and directors to permit options to be exercised on a net basis and receive either cash or shares of the Company's Common Stock. Specifically, optionees may, at the time of exercise of an option and subject to the consent of the Company, elect either (i) to receive from the Company cash in an amount equal to the number of shares of Common Stock subject to the option (or portion thereof) that is being exercised multiplied by the excess of (a) the fair market value per share over (b) the exercise price per share of the option (a "net cash settlement"); or (ii) to make payment of the exercise price of the option by reduction in the number of shares of Common Stock otherwise deliverable upon exercise of such option by the number of shares having an aggregate fair market value equal to the total exercise price of the option (or portion thereof). In 2017, the Company paid a total of approximately $823,530 to optionees who had elected a net cash settlement of their respective options.

A summary of changes in options issued under the Company's stock option plans follows:

	2017	2016
Options outstanding at the beginning of the year	1,088,278	1,267,802
Options granted	313,900	171,000
Options forfeited	(4,000)	(33,825)
Options exercised	(109,098)	(316,699)
Options outstanding at the end of the year	1,289,080	1,088,278
Options exercisable at the end of the year	814,180	769,403
Common stock available for future grants at the end of the year	62,700	66,850
Weighted average exercise price per share:		
Granted	$ 24.87	$ 21.41
Forfeited	19.12	15.03
Exercised	13.13	10.99
Outstanding	16.87	14.18
Exercisable	13.38	12.29

A summary of options outstanding at December 31, 2017 is as follows:

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	Number Outstanding	Weighted-Average Remaining Contractual Life (Years)	Weighted-Average Exercise Price	Number Exercisable	Weighted-Average Exercise Price
$7.30 to $10.38	234,180	3	$ 9.57	234,180	$ 9.57
$10.39 to $13.68	218,250	4	11.40	218,250	11.40
$13.69 to $16.98	308,250	6	15.44	268,000	15.26
$16.99 to $24.43	313,500	9	21.91	72,750	20.36
$24.44 to $28.20	214,900	9	25.31	21,000	28.16
	1,289,080			814,180	

The weighted average remaining contractual life of all outstanding stock options is 6 years.

Stock Based Compensation

Stock-based compensation cost is measured at the grant date based on the fair value of the award and is recognized as expense over the requisite service period, which is generally the vesting period. The Company uses the Black-Scholes option pricing model to determine the fair value of employee and non-employee director stock options. The determination of the fair value of stock-based payment awards on the date of grant, using an option-pricing model, is affected by the Company's stock price as well as assumptions regarding a number of complex and subjective variables. These assumptions include estimating the length of time employees will retain their vested stock options before exercising them ("expected term"), the estimated volatility of the Company's Common Stock price over the expected term ("volatility") and the number of options that will not fully vest in accordance with applicable vesting requirements ("forfeitures").

The Company estimates the expected term of options granted by evaluating various factors, including the vesting period, historical employee information, as well as current and historical stock prices and market conditions. The Company estimates the volatility of its common stock by calculating historical volatility based on the closing stock price on the last day of each of the 60 months leading up to the month the option was granted. The risk-free interest rate that the Company uses in the option valuation model is the interest rate on U.S. Treasury zero-coupon bond issues with remaining terms similar to the expected term of the options granted. Historical information was the basis for calculating the dividend yield. The Company is required to estimate forfeitures at the time of grant and to revise those estimates in subsequent periods if actual forfeitures differ from those estimates. The Company used a mix of historical data and future assumptions to estimate pre-vesting option forfeitures and to record stock-based compensation expense only for those awards that are expected to vest. All stock-based payment awards are amortized over the requisite service periods of the awards, which are generally the vesting periods.

The assumptions used to value option grants for the twelve months ended December 31, 2017 and December 31, 2016 were as follows:

	2017	**2016**
Expected life in years	5	5
Interest rate	1.82 – 1.95%	1.07 – 1.24%
Volatility	.259-.277	.236-.258
Dividend yield	1.5% - 1.6%	1.6% - 2.0%

Total stock-based compensation recognized in the Company's consolidated statements of operations for the years ended December 31, 2017 and 2016 was $684,351 and $440,536, respectively. At December 31, 2017, there was approximately $1,809,742 of unrecognized compensation cost, adjusted for estimated forfeitures, related to non-vested stock-based payments granted to the Company's employees. As of December 31, 2017, the remaining unamortized expense is expected to be recognized over a weighted average period of 3 years.

The weighted average fair value at the date of grant for options granted during 2017 and 2016 was $4.83 and $4.05 per option, respectively. The aggregate intrinsic value of outstanding options was $8,841,377 at December 31, 2017. The aggregate intrinsic value of exercisable options was $8,260,579 at December 31, 2017**.** The aggregate intrinsic value of options exercised during 2017 was $1,553,894.

12. Earnings Per Share

The calculation of earnings per share follows:

	2017	2016
Numerator:		
Net income	$ 4,052,479	$ 5,850,998
Denominator:		
Denominator for basic earnings per share:		
Weighted average shares outstanding	3,356,383	3,327,867
Effect of dilutive employee stock options	368,220	249,956
Denominator for dilutive earnings per share	3,724,603	3,577,823
Basic earnings per share	$ 1.21	$ 1.76
Dilutive earnings per share	$ 1.09	$ 1.64

For 2017 and 2016, respectively, 205,500 and 203,000 stock options were excluded from diluted earnings per share calculations because they would have been anti-dilutive.

13. Accumulated Other Comprehensive (Loss) Income

The components of accumulated other comprehensive (loss) income follow:

	Foreign currency translation adjustment	Net prior service credit and actuarial losses	Total
Balances, December 31, 2015	$ (1,582,632)	$ (948,157)	$ (2,530,790)
Change in net prior service credit and actuarial losses, net of tax		284,145	284,145
Translation adjustment	(89,556)		(89,556)
Balances, December 31, 2016	$ (1,672,188)	$ (664,012)	$ (2,336,201)
Change in net prior service credit and actuarial losses, net of tax		87,461	87,461
Translation adjustment	614,741		614,741
Balances, December 31, 2017	$ (1,057,447)	$ (576,551)	$ (1,633,999)

14. Financial Instruments

The carrying value of the Company's bank debt is a reasonable estimate of fair value because of the nature of its payment terms and maturity.

15. Quarterly Data (unaudited)

Quarters (000's omitted, except per share data)

2017	First	Second	Third	Fourth	Total
Net sales	$ 27,745	$ 38,849	$ 33,785	$ 30,171	$ 130,550
Cost of goods sold	17,181	24,366	21,559	19,545	82,651
Gross profit	10,564	14,483	12,226	10,626	47,899
Net income	659	2,846	1,202	(655)	4,052
Basic earnings per share	$ 0.20	$ 0.85	$ 0.36	$ (0.20)	$ 1.21
Diluted earnings per share	$ 0.18	$ 0.75	$ 0.32	$ (0.16)	$ 1.09
Dividends per share	$ 0.10	$ 0.11	$ 0.11	$ 0.11	$ 0.43

2016	First	Second	Third	Fourth	Total
Net sales	$ 25,288	$ 40,997	$ 31,913	$ 26,377	$ 124,574
Cost of goods sold	16,103	26,302	20,050	16,564	79,019
Gross profit	9,185	14,695	11,863	9,813	45,555
Net income	565	3,267	1,473	545	5,851
Basic earnings per share	$ 0.17	$ 0.98	$ 0.44	$ 0.16	$ 1.76
Diluted earnings per share	$ 0.16	$ 0.91	$ 0.40	$ 0.15	$ 1.64
Dividends per share	$ 0.10	$ 0.10	$ 0.10	$ 0.10	$ 0.40

Earnings per share were computed independently for each of the quarters presented. Therefore, the sum of the four quarterly earnings per share amounts may not necessarily equal the earnings per share for the year.

16. Purchase of Property

On October 26, 2017, the Company exercised its option to purchase its First Aid Only manufacturing and distribution center in Vancouver, WA for $4.0 million. The property consists of 53,000 square feet of office, manufacturing, and warehouse space on 2.86 acres. The purchase was financed by a variable rate mortgage with HSBC Bank, N.A. at an interest rate of LIBOR plus 2.5%.

17. Business Combinations

A) Acquisition of the assets of Spill Magic, Inc.

On February 1, 2017, the Company purchased the assets of Spill Magic, Inc., located in Santa Ana, CA and Smyrna, TN for $7.2 million in cash. The Spill Magic products are leaders in absorbents that encapsulate spills into dry powders that can be safely disposed. Many large retail chains use its products to remove liquids from broken glass containers, oil and gas spills, bodily fluids and solvents.

The purchase price was allocated to assets acquired as follows (in thousands):

Assets:		
Accounts Receivable	$	684
Inventory		453
Equipment		296
Intangible Assets		5,066
Goodwill		748
Total assets	$	7,247

Assuming Spill Magic assets were acquired on January 1, 2017, unaudited pro forma combined net sales for the twelve months ended December 31, 2017 for the Company would have been approximately $131.0 million. Unaudited pro forma combined net income for the twelve months ended December 31, 2017 for the Company would have been approximately $3.9 million.

Net sales for the twelve months ended December 31, 2017 attributable to Spill Magic products were approximately $6.5 million. Net income for the twelve months ended December 31, 2017 attributable to Spill Magic products was approximately $0.8 million.

Assuming Spill Magic assets were acquired on January 1, 2016, unaudited proforma combined net sales for the twelve months ended December 31, 2016, for the Company would have been approximately $130.9 million. Unaudited proforma combined net income for the twelve months ended December 31, 2016 for the Company would have been approximately $5.5 million.

B) Acquisition of the assets of Vogel Capital, Inc

On February 1, 2016, the Company acquired the assets of Vogel Capital, Inc., d/b/a Diamond Machining Technology (DMT) for $6.97 million in cash. DMT products are leaders in sharpening tools for knives, scissors, chisels, and other cutting tools. The DMT products use finely dispersed diamonds on the surfaces of sharpeners. The acquired assets include over 50 patents and trademarks.

The purchase price was allocated to assets acquired and liabilities assumed as follows (in thousands):

Assets:		
Accounts Receivable	$	1,145
Inventory		280
Equipment		262
Prepaid expenses		176
Intangible Assets		2,939
Goodwill		2,542
Total assets	$	7,344

Liabilities		
Accounts Payable	$	192
Accrued Expense		181
Total liabilities	$	373

Assuming DMT was acquired on January 1, 2016, unaudited proforma combined net sales for the twelve months ended December 31, 2016 for the Company would have been approximately $125.2 million. Unaudited proforma combined net income for the twelve months ended December 31, 2016 for the Company would have been approximately $5.9 million.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of
Acme United Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Acme United Corporation and Subsidiaries (the "Company") as of December 31, 2017 and 2016, the related consolidated statements of operations, comprehensive income**,** changes in stockholders' equity and cash flows for each of the two years in the period ended December 31, 2017, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2017, based on the criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in 2013 and our report dated March 15, 2018, expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

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

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

/s/ Marcum LLP

We have served as the Company's auditor since 2008, such date takes into account the acquisition of a portion of UHY LLP by Marcum LLP in April 2010.

MARCUM LLP
NEW HAVEN, CONNECTICUT
MARCH 15, 2018

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON INTERNAL CONTROL OVER FINANCIAL REPORTING

To the Audit Committee of the
Board of Directors and Shareholders of
Acme United Corporation

Opinion on Internal Control over Financial Reporting

We have audited Acme United Corporation and Subsidiaries' (the "Company") internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheets as of December 31, 2017 and 2016 and the related consolidated statements of operations, comprehensive income, stockholders' equity, and cash flows for the years then ended of the Company and our report dated March 15, 2018 expressed an unqualified opinion on those financial statements.

Basis for Opinion

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

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

Definition and Limitations of Internal Control over Financial Reporting

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

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

/s/ Marcum LLP
MARCUM LLP
NEW HAVEN, CONNECTICUT
MARCH 15, 2018

Item 9. Changes In and Disagreements with Accountants on Accounting and Financial Disclosure

There have been no disagreements with accountants related to accounting and financial disclosures in 2017.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures.

An evaluation was performed under the supervision and with the participation of our management, including the Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934) as of December 31, 2017. Based on and as of the time of such evaluation, our management, including the Chief Executive Officer and Chief Financial Officer, concluded that our disclosure controls and procedures were effective as of the end of the period covered by this report to ensure that information required to be disclosed by us in the reports that we file or submit is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act of 1934 is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Management's Report on Internal Control Over Financial Reporting.

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2017, based on the framework in Internal Control -Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that evaluation our management concluded that our internal control over financial reporting was effective as of December 31, 2017. The effectiveness of our internal control over financial reporting as of December 31, 2017 has been audited by Marcum, LLP, an independent registered public accounting firm, as stated in its attestation report, which is included in Item 8 and is incorporated into this Item 9A by reference.

Changes in Internal Control Over Financial Reporting.

No changes in our internal control over financial reporting were identified as having occurred during the quarter ended December 31, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information
None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The following table sets forth certain information with respect to the directors and executive officers of the Company. All directors of the Company hold office until the next annual meeting of the shareholders or until their successors have been elected and qualified. Executive officers are elected by the Board of Directors to hold office until their successors are elected and qualified.

Name	Age	Position Held with Company
Walter C. Johnsen	67	Chairman of the Board and Chief Executive Officer
Brian S. Olschan	61	President, Chief Operating Officer and Director
Paul G. Driscoll	57	Vice President, Chief Financial Officer, Secretary and Treasurer
Rex L. Davidson	68	Director
Richmond Y. Holden, Jr.	64	Director
Susan H. Murphy	66	Director
Stevenson E. Ward III	72	Director

Walter C. Johnsen has served as Chairman of the Board and Chief Executive Officer of the Company since January 1, 2007; President and Chief Executive Officer of the Company from November 30, 1995 to December 31, 2006. Mr. Johnsen previously served as Vice Chairman and a principal of Marshall Products, Inc., a medical supply distributor. Mr. Johnsen has served on the Board of TOMI Environmental Solutions, Inc., a publicly traded company, since February 1, 2016. Mr. Johnsen's qualifications to serve on the Board of the Company include the in-depth knowledge of all facets of the Company's business which he has gained during his more than twenty-one years of service as the Company's Chief Executive Officer.

Brian S. Olschan has served as President and Chief Operating Officer of the Company since January 1, 2007; Executive Vice President and Chief Operating Officer of the Company from January 1999 to December 31, 2006; Senior Vice President - Sales and Marketing of the Company from September 1996 to January 1999; Mr. Olschan previously served as Vice President and General Manager of the Cordset and Assembly Business of General Cable Corporation, an electrical wire and cable manufacturer. Mr. Olschan's qualifications to serve on the Board include his detailed knowledge of the Company's operations which he has gained in his capacity as a member of senior management for more than eleven years, including as Chief Operating Officer since January 1999 and President since January 2007.

Paul G. Driscoll has served as Vice President and Chief Financial Officer, Secretary and Treasurer since October 2, 2002. Mr. Driscoll joined Acme as Director of International Finance on March 19, 2001. From 1997 to 2001, he was employed by Ernest and Julio Gallo Winery, including as Director of Finance and Operations in Japan. Prior to Gallo he served in several increasingly responsible finance positions in Sterling Drug Inc. in New York City and Sanofi S.A. in France.

Rex L. Davidson has served as Director since 2006. Executive Director of the Helms Fund since 2013. The Helms Fund provides "gap financing" to socially responsible business ventures for capital expenditures. Additionally, since 2009, Mr. Davidson has served as President of Rex Davidson Associates, LLC, a management consulting service, and Executive Director of Las Cumbres Community Services, which provides developmental disability and mental health services to children, adults and families in Northern New Mexico. From 1982 to 2009, he served as President and Chief Executive Officer of Goodwill Industries of Greater New York and Northern New Jersey, Inc., and President of Goodwill Industries Housing Corporation. Mr. Davidson's qualifications to serve on the Board include significant management experience at the highest level, having been responsible for the management of Goodwill Industries, an organization with over 2,000 employees and revenues in excess of $100 million. Mr. Davidson's experience in the areas of compensation of personnel at all levels, his experience relating to retail matters, such as retail trends and pricing, and diversity policies are of significant benefit to the Company.

Richmond Y. Holden, Jr. has served as Director since 1998. Mr. Holden served as President and CEO of INgageHub, a cloud based Marketing SaaS platform, from January 2015 through early 2016; he continues to serve as a senior advisor to the company. From 2007 through 2014, Mr. Holden served in senior executive positions at, School Specialty, Inc., a distributor of school supplies, equipment and curriculum products. He last served as Executive Vice President of School Specialty, Inc., and President of the Curriculum Group, a division of School Specialty Inc., from 2013 to December 2014. He was President of Educational Resources, a division of School Specialty, Inc., from 2010 to 2013. He served as Chairman and Chief Executive Officer of J.L. Hammett Co., a reseller of educational, curriculum, equipment, and products from 1992 to 2006. Mr. Holden served on the Board of Directors of Software Secure, Incorporated, a privately-held company headquartered in Newton, MA, which focused on secure online educational testing technology, from 2007 until its sale in late 2016. He has served on the Board of Directors of Codman Academy Charter Public School in Boston MA since 2012. The qualifications of Mr. Holden to serve on the Board of the Company include his substantial senior executive management experience of large complex companies in the educational markets. In particular, as a result of his experience with School Specialty Inc., then a $650 million publicly held reseller of educational products, Mr. Holden has broad knowledge of educational markets and operational matters relating to developmental strategy, finance, marketing, sales, technology, sourcing, pricing and distribution.

Susan H. Murphy has served as Director since 2003. Vice President Emerita, Cornell University, from which Dr. Murphy retired in 2016 after a 38-year career, commencing in 1978. She served as Dean of Admissions and Financial Aid from 1985 to 1994; Vice President of Student and Academic Services from 1994 to June 2015, and thereafter she worked in Alumni Affairs and Development until her retirement. In 2013, Dr. Murphy became a member of the Board of Trustees of Adelphi University, and, since July 2016, has served as Vice Chair of its Board of Trustees. She also serves on the Board of Directors for Kendal at Ithaca, a not-for-profit continuing care retirement community (since April 2014); Tompkins County Community Foundation (since January 2015 and Chair of the Board of Directors commencing in 2018); and Let’s Get Ready, an organization which provides low-income high school students with support services to help them gain admission to and graduate from college (since September 2016). Dr. Murphy received a Ph.D. in Educational Administration from Cornell University. Dr. Murphy has broad senior management level experience in a large, complex organization. In particular, her experience in employee compensation matters and the development and implementation of diversity policies is helpful to the Company.

Stevenson E. Ward III has served as Director since 2001. Mr. Ward served as Vice President and Chief Financial Officer of Triton Thalassic Technologies, Inc. from 2000 until his retirement in 2014. Triton’s technology controls and inactivates pathogens in the healthcare and industrial industries. From 1998 through 2000, Mr. Ward served as Senior Vice President-Administration of Sanofi-Synthelabo, Inc., a major multinational pharmaceutical company. He served as Executive Vice President (1996-1998), responsible for legal, tax, treasury, employee benefits and other functions, and Chief Financial Officer (1994-1996) of Sanofi, Inc., the North American holding company for Sanofi. He also served as Vice President-Finance and Administration, Pharmaceutical Group, Sterling Winthrop, Inc. (1992-1994). Prior to joining Sterling, he was employed by General Electric Company in management positions in Purchasing, Corporate Audit and Finance. Mr. Ward’s qualifications for service on the Board include his extensive experience in senior executive level positions in finance, corporate audit and administration at two Fortune 100 multinational corporations. He also holds a Masters in Business Administration (MBA) degree.

Code of Conduct

The Company has adopted a Code of Conduct that is applicable to its employees, including the Chief Executive Officer, Chief Financial Officer and Controller. The Code of Conduct is available in the investor relations section on the Company’s website at www.acmeunited.com

If the Company makes any substantive amendments to the Code of Conduct which apply to its Chief Executive Officer, Chief Financial Officer or Controller, or grants any waiver, including any implicit waiver, from a provision of the Code of Conduct to the Company’s executive officers, the Company will disclose the nature of the amendment or waiver on its website.

Information regarding compliance with Section 16(a) beneficial ownership reporting requirements and certain corporate governance matters is incorporated herein by reference to the sections entitled (i) “Compliance with Section 16(a) of the Securities Exchange Act of 1934”, (ii) “Nominations for Directors”, and (iii) “Audit Committee” contained in the Company’s Proxy Statement to be filed with the Securities and Exchange Commission in connection with its 2017 Annual Meeting of Shareholders.

Item 11. Executive Compensation

Information with respect to executive compensation is incorporated herein by reference to the section entitled “Executive Compensation” contained in the Company’s Proxy Statement to be filed with the SEC in connection with the Company’s 2018 Annual Meeting of Shareholders.

Item 12. Security Ownership of Certain Beneficial Owners and Management

Information regarding security ownership of certain beneficial owners, directors and executive officers is incorporated herein by reference to the information in the section entitled “Security Ownership of Directors and Officers” contained in the Company’s Proxy Statement to be filed with the SEC in connection with its 2018 Annual Meeting of Shareholders.

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

Information regarding certain relationships and related transactions is incorporated herein by reference to the information in the section entitled “Certain Relationships and Related Transactions” contained in the Company’s Proxy Statement to be filed with the SEC in connection with its 2018 Annual Meeting of Shareholders.

Information regarding director independence is incorporated herein by reference to the section entitled “Independence Determinations” contained in the Company’s Proxy Statement to be filed with the Securities and Exchange Commission in connection with the Company’s 2018 Annual Meeting of Shareholders.

Item 14. Principal Accounting Fees and Services

Information regarding principal accountant fees and services is incorporated herein by reference to the section entitled “Fees to Auditors” contained in the Company’s Proxy Statement to be filed with the SEC in connection with its 2018 Annual Meeting of Shareholders.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a)(1) Financial Statements.

- Consolidated Balance Sheets
- Consolidated Statements of Operations
- Consolidated Statements of Changes in Stockholders’ Equity
- Consolidated Statements of Cash Flows
- Notes to Consolidated Financial Statements
- Report of Independent Registered Public Accounting Firm

(a)(2) Financial Statement Schedules

- Schedules other than those listed above have been omitted because of the absence of conditions under which they are required or because the required information is presented in the Financial Statements or Notes thereto.

(a)(3) The exhibits listed under Item 15(b) are filed or incorporated by reference herein.

(b) Exhibits.

The exhibits listed below are filed as part of this Annual Report on Form 10-K. Certain of the exhibits, as indicated, have been previously filed and are incorporated herein by reference.

Exhibit No.	**Identification of Exhibit**
2	Asset Purchase Agreement with First Aid Only, Inc. dated as of June 2, 2014(1)
3(i)	Certificate of Organization of the Company (2)
	Amendment to Certificate of Organization of Registrant dated September 24, 1968 (2)
	Amendment to Certificate of Incorporation of the Company dated April 27, 1971 (3)
	Amendment to Certificate of Incorporation of the Company dated June 29, 1971 (3)
3(ii)	Bylaws (11)
4	Specimen of Common Stock certificate (3)
10.3	2002 Acme United Employee Stock Option Plan as amended (12)
10.4	Severance Pay Plan dated September 28, 2004* (15)
10.5(a)	Salary Continuation Plan dated September 28, 2004, as amended (14)*
10.6(a)	2005 Non-Salaried Director Stock Option Plan, amended (6)
10.6(b)	Amendment to the 2005 Non-Salaried Director Stock Option Plan (12)
10.7	2017 Non-Salaried Director Stock Option Plan (9)
10.8	Deferred Compensation Plan dated October 2, 2007* (16)
10.9(a)	2012 Acme United Employee Stock Option Plan (11)
10.9(b)	Amendment to the 2012 Acme United Employee Stock Option Plan* (12)
10.10(a)	Revolving Loan Agreement with HSBC, dated April 5, 2012(13)
10.10(b)	Amendment No. 1 to Revolving Loan Agreement with HSBC dated as of April 25, 2013 (14)
10.10(c)	Amended and restated secured revolving note (14)

10.10(d)	Amendment No. 2 to Revolving Loan Agreement with HSBC dated October 2013 (15)
10.10(e)	Amendment No. 4 to Revolving Loan Agreement with HSBC dated May 6, 2016 (12)
10.10(f)	Second amended and restated secured revolving note (12)
10.10(g)	Amendment No. 5 to Revolving Loan Agreement with HSBC dated January 2017 (16)
10.10(h)	Amendment No. 6 to Revolving Loan Agreement with HSBC dated March 14, 2018
10.11	Change in Control Plan effective as of December 31, 2010, as amended* (17)
21	Subsidiaries of the Registrant
23.1	Consent of MARCUM LLP, Independent Registered Public Accounting Firm
31.1	Certification of Walter Johnsen pursuant to Rule 13a-14(a) and 15d-14(a) and Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Paul Driscoll pursuant to Rule 13a-14(a) and 15d-14(a) and Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Walter Johnsen pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Paul Driscoll pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

* Indicates a management contract or a compensatory plan or arrangement

(1) Previously filed as an Exhibit to the Company's Form 8-K/A filed on August 19, 2014.

(2) Previously filed in S-1 Registration Statement No. 230682 filed with the Commission on November 7, 1968 and amended by Amendment No. 1 on December 31, 1968 and by Amendment No. 2 on January 31, 1969.

(3) Previously filed as an exhibit to the Company's Form 10-K filed in 1971.

(4) Previously filed in the Company's Form 8-K filed on March 3, 2006.

(5) Previously filed in the Company's Form 10-K filed on March 18, 2005.

(6) Previously filed in the Company's Proxy Statement filed on March 29, 2005. This plan expired in 2015.

(7) Previously filed in the Company's Form 10-K filed on March 18, 2005.

(8) Previously filed as an exhibit to the Company's Form 10-K filed on March 18, 2005.

(9) Previously filed as an exhibit to the Company's Proxy Statement filed on March 22, 2017.

(10) Previously filed as an exhibit to the Company's Form 10-K filed on March 12, 2008.

(11) Previously filed as an exhibit to the Company's Form 10-Q filed on August 14, 2012.

(12) Previously filed as an exhibit to the Company's Form 10-Q filed on May 13, 2016.

(13) Previously filed as an exhibit to the Company's Form 10-Q filed on May 14, 2012.

(14) Previously filed as an exhibit to the Company's Form 10-Q filed on May 10, 2013.

(15) Previously filed as an exhibit to the Company's Form 10-K filed on March 6, 2014.

(16) Previously filed as an exhibit to the Company's Form 10-Q filed on August 4, 2017.

(17) Previously filed as an exhibit to the Company's Form 10-K filed on March 11, 2011.

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on March 15, 2018.

ACME UNITED CORPORATION
(Registrant)

Signatures:	**Titles:**
/s/ Walter C. Johnsen Walter C. Johnsen	Chairman and Chief Executive Officer
/s/ Brian S. Olschan Brian S. Olschan	President, Chief Operating Officer and Director
/s/ Paul G. Driscoll Paul G. Driscoll	Vice President, Chief Financial Officer, Secretary and Treasurer
/s/ Rex Davidson Rex Davidson	Director
/s/ Richmond Y. Holden, Jr. Richmond Y. Holden, Jr.	Director
/s/ Susan H. Murphy Susan H. Murphy	Director
/s/ Stevenson E. Ward III Stevenson E. Ward III	Director

EXHIBIT 10.10(h)

SIXTH AMENDMENT TO
LOAN AND SECURITY AGREEMENT

This SIXTH AMENDMENT TO LOAN AND SECURITY AGREEMENT (the "Amendment") is entered into as of March 14, 2018 between ACME UNITED CORPORATION, a Connecticut corporation (the "Borrower") and HSBC BANK USA, NATIONAL ASSOCIATION (the "Lender").

RECITALS

The Borrower and the Lender are parties to a Loan and Security Agreement dated as of April 5, 2012, as amended (collectively, the "Loan Agreement"). Capitalized terms used herein shall have the meanings given to them in the Loan Agreement unless otherwise specified.

The Borrower has requested that the Lender amend certain terms and conditions of the Loan Agreement, pursuant to the terms of this Amendment.

NOW, THEREFORE, in consideration of the promises, covenants and understandings set forth in this Amendment and the benefits to be received from the performance of such promises, covenants and understandings, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Amendment to Loan Agreement. Subject to satisfaction of the conditions precedent set forth in Section 3 below, the table appearing in Section 6.7(a) of the Loan Agreement is hereby amended, for the fiscal quarter ended December 31, 2017, as follows:

Quarterly Period Ending on	Debt/Net Worth Ratio
December 31, 2017	**2.50** to 1.0

2. No Other Changes. Except as explicitly amended by this Amendment, all of the terms and conditions of the Loan Agreement shall remain in full force and effect.

3. Conditions Precedent. This Amendment shall be effective (the "Sixth Amendment Closing Date") when the Lender shall have received a copy hereof executed by the Borrower.

4. Representations and Warranties. The Borrower hereby represents and warrants to the Lender as follows:

(a) The Borrower has all requisite power and authority to execute this Amendment and to perform all of the obligations hereunder and thereunder, and this Amendment has been duly executed and delivered by the Borrower and constitutes the legal, valid and binding obligation of the Borrower, enforceable in accordance with its terms.

(b) The execution, delivery and performance by the Borrower of this Amendment has been duly authorized by all necessary corporate action and does not (i) require any authorization, consent or approval by any governmental department, commission, board, bureau, agency or instrumentality, domestic or foreign, (ii) violate any provision of any law, rule or regulation or of any order, writ, injunction or decree presently in effect, having applicability to the Borrower, or the articles of incorporation or by-laws of the Borrower, or (iii) result in a breach of or constitute a default under any indenture or loan or loan agreement or any other agreement, lease or instrument to which the Borrower is a party or by which it or its properties may be bound or affected.

(c) All of the representations and warranties contained in Section 5 of the Loan Agreement are correct on and as of the date hereof as though made on and as of such date, except to the extent that such representations and warranties relate solely to an earlier date.

(d) No Default or Event of Default has occurred and is continuing or will result from Borrower entering into this Amendment.

5. References. All references in the Loan Agreement to "this Agreement" shall be deemed to refer to the Loan Agreement as amended hereby; and any and all references in the Loan Documents to the Loan Agreement shall be deemed to refer to the Loan Agreement as amended hereby.

6. No Other Waiver. The execution of this Amendment and acceptance of any documents related hereto shall not be deemed to be a waiver of any Default or Event of Default under the Loan Agreement, or breach, default or event of default under any Loan Documents or other document held by the Lender, whether or not known to the Lender and whether or not existing on the date of this Amendment.

7. Costs and Expenses. The Borrower hereby reaffirms its agreement under the Loan Agreement to pay or reimburse the Lender on demand for all reasonable costs and expenses incurred by the Lender in connection with the Loan Documents, including without limitation all reasonable fees and disbursements of legal counsel. Without limiting the generality of the foregoing, the Borrower specifically agrees to pay all reasonable fees and disbursements of counsel to the Lender for the services performed by such counsel in connection with the preparation of this Amendment and the documents and instruments incidental hereto.

8. Miscellaneous. This Amendment may be executed in any number of counterparts, each of which when so executed and delivered shall be deemed an original and all of which counterparts, taken together, shall constitute one and the same instrument.

9. Reaffirmation. The Borrower as debtor, grantor, pledgor, assignor, or in any other similar capacity in which the Borrower grants liens or security interests in its property hereby (i) ratifies and reaffirms all of its payment and performance obligations, contingent or otherwise, under the Loan Agreement and each of the other Loan Documents to which it is a party (after giving effect hereto) and (ii) ratifies and reaffirms the liens on or security interests in any of its property granted pursuant to the Loan Agreement and any such other Loan Document as security for the Obligations under or with respect to the Loan Agreement or the other Loan Documents, and confirms and agrees that such security interests and liens hereafter secure all of the Obligations as amended hereby. The Borrower acknowledges that the Loan Agreement and each of the other Loan Documents remains in full force and effect and are hereby ratified and reaffirmed. The execution of this Amendment shall not operate as a waiver of any right, power or remedy of the Lender (except as expressly provided for herein), constitute a waiver of any provision of any of the Loan Agreement or any of the other Loan Documents (except as expressly provided for herein) or serve to effect a novation of the Obligations.

10. Release.

(a) Borrower hereby releases and forever discharges Lender and its parents, subsidiaries and affiliates, past or present, and each of them, as well as their respective directors, officers, agents, servants, employees, shareholders, representatives, attorneys, administrators, executors, heirs, assigns, predecessors and successors in interest, and all other persons, firms or corporations with whom any of the former have been, are now, or may hereafter be affiliated, and each of them (collectively, the "Releasees"), from and against any and all claims, demands, liens, agreements, contracts, covenants, actions, suits, causes of action in law or equity, obligations, controversies, debts, costs, expenses, damages, judgments, orders and liabilities of whatever kind or nature in law, equity or otherwise, whether known or unknown, fixed or contingent, suspected or unsuspected by Borrower, and whether concealed or hidden (collectively, "Claims"), which Borrower now owns or holds or has at any time heretofore owned or held, which are based upon or arise out of or in connection with any matter, cause or thing existing at any time prior to the date hereof or anything done, omitted or suffered to be done or omitted at any time prior to the date hereof in connection with the Loan Agreement or the other Loan Documents (collectively the "Released Matters").

(b) Borrower represents, warrants and agrees, that in executing and entering into this release, it is not relying and have not relied upon any representation, promise or statement made by anyone which is not recited, contained or embodied in this Amendment, the Loan Agreement or the other Loan Documents. Borrower has reviewed this release with Borrower's legal counsel, and understands and acknowledges the significance and consequence of this release and of the specific waiver thereof contained herein. Borrower understands and expressly assumes the risk that any fact not recited, contained or embodied therein may turn out hereafter to be other than, different from, or contrary to the facts now known to Borrower or believed by Borrower to be true. Nevertheless, Borrower intends by this release to release fully, finally and forever all Released Matters and agrees that this release shall be effective in all respects notwithstanding any such difference in facts, and shall not be subject to termination, modification or rescission by reason of any such difference in facts.

(c) Borrower, on behalf of itself and its successors, assigns, and other legal representatives, hereby absolutely, unconditionally and irrevocably, covenants and agrees with each Releasee that it will not sue (at law, in equity, in any regulatory proceeding or otherwise) any Releasee on the basis of any Claims released, remised and discharged by Borrower pursuant to this Section 10. If Borrower violates the foregoing covenant, Borrower agrees to pay, in addition to such other damages as any Releasee may sustain as a result of such violation, all attorneys' fees and costs incurred by any Releasee as a result of such violation.

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IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed as of the date first written above.

HSBC BANK USA, NATIONAL ASSOCIATION

By: /s/ Bradly Reiner
Name: Bradly Reiner
Title Global Relationship Manager

ACME UNITED CORPORATION

By: /s/ Paul Driscoll
Name: Paul Driscoll
Title Vice President and CFO

[SIGNATURE PAGE TO SIXTH AMENDMENT TO
LOAN AND SECURITY AGREEMENT]

EXHIBIT 21

PARENTS AND SUBSIDIARIES

The Company was organized as a partnership in 1867 and incorporated in 1882 under the laws of the State of Connecticut as The Acme Shear Company. The corporate name was changed to Acme United Corporation in 1971.

There is no parent of the registrant.

Registrant has the following subsidiaries, all of which are wholly owned by the registrant:

Name	**Country of Incorporation**
Acme United Limited	Canada
Acme United Europe GmbH	Germany
Acme United (Asia Pacific) Limited	Hong Kong
Acme United China Limited	China
Acme United Netherlands Cooperatie U.A.	Netherlands

All subsidiaries are active and included in the Company’s consolidated financial statements included in this Form 10-K.

EXHIBIT 23.1

Consent of Marcum LLP, Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statements of Acme United Corporation on Form S-8 (File Nos. 333-220282, 333-206440, 333-198220, 333-190623, 333-183351, 333-176314, 333-168801, 333-161392, 333-145516, 333-126478, 333-70348, 333-70346, 333-84505, 333-84509, 333-84499, 333-26739, and 333-26737) of our report dated March 15, 2018, with respect to our audits of the consolidated financial statements of Acme United Corporation and Subsidiaries as of December 31, 2017 and 2016 and for the years then ended and our report dated March 15, 2018 with respect to our audit of the effectiveness of internal control over financial reporting of Acme United Corporation and Subsidiaries as of December 31, 2017, which reports are included in this Annual Report on Form 10-K of Acme United Corporation for the year ended December 31, 2017.

/s/ Marcum LLP

Marcum LLP
New Haven, Connecticut
March 15, 2018

Exhibit 31.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

The undersigned officer of Acme United Corporation (the “Company”) hereby certifies to my knowledge that the Company’s annual report on Form 10-K for the annual period ended December 31, 2017 (the “Report”), as filed with the Securities and Exchange Commission on the date hereof, fully complies with the requirements of section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended, and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company. This certification is provided solely pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed to be a part of the Report or “filed” for any purpose whatsoever.

By /s/ Walter C. Johnsen

Walter C. Johnsen
Chairman and
Chief Executive Officer

Dated: March 15, 2018

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Acme United Corporation and will be retained by Acme United Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 31.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

The undersigned officer of Acme United Corporation (the “Company”) hereby certifies to my knowledge that the Company’s annual report on Form 10-K for the annual period ended December 31, 2017 (the “Report”), as filed with the Securities and Exchange Commission on the date hereof, fully complies with the requirements of section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended, and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company. This certification is provided solely pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed to be a part of the Report or “filed” for any purpose whatsoever.

By /s/ PAUL G. DRISCOLL

Paul G. Driscoll
Vice President and
Chief Financial Officer

Dated: March 15, 2018

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Acme United Corporation and will be retained by Acme United Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, WALTER C. JOHNSEN, certify that:

1. I have reviewed this annual report on Form 10-K of Acme United Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By /s/ WALTER C. JOHNSEN
Walter C. Johnsen
Chairman and
Chief Executive Officer

Dated: March 15, 2018

Exhibit 32.2

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, PAUL G. DRISCOLL, certify that:

1. I have reviewed this Annual Report on Form 10-K of Acme United Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By /s/ PAUL G. DRISCOLL
Paul G. Driscoll
Vice President and
Chief Financial Officer

Dated: March 15, 2018