

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

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Fiscal Year ended December 30, 2017

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____

Commission File Number 001-35383

THE EASTERN COMPANY

(Exact name of registrant as specified in its charter)

Connecticut

(State or other jurisdiction of
incorporation or organization)

06-0330020

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

112 Bridge Street, Naugatuck, Connecticut

(Address of principal executive offices)

06770

(Zip Code)

Registrant's telephone number, including area code: **(203) 729-2255**

Securities registered pursuant to Section 12(b) of the Act: Common Stock No Par Value The NASDAQ Stock Market LLC
(Title of each class) (Name of each exchange
on which registered)

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

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

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Large accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

Emerging growth company

Accelerated filer

Smaller reporting company

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

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

As of July 1, 2017, the last day of registrant's most recently completed second fiscal quarter, the aggregate market value of the voting stock held by non-affiliates of the registrant was \$155,324,724 (based on the closing sales price of the registrant's common stock on the last trading date prior to that date). Shares of the registrant's common stock held by each officer and director and shares held in trust by the pension plans of the Company have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of February 27, 2018, 6,263,245 shares of the registrant's common stock, no par value per share, were issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Certain information required for Part II of this report is incorporated herein by reference to the proxy statement for the 2018 annual meeting of the Company's shareholders, which will be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after December 30, 2017.

FOR THE FISCAL YEAR ENDED DECEMBER 30, 2017

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SAFE HARBOR STATEMENT UNDER THE PRIVATE SECURITIES
LITIGATION REFORM ACT OF 1995

This Annual Report on Form 10-K (this "Form 10-K") contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements reflect the Company's current expectations regarding its products, its markets and its future financial and operating performance. These statements, however, are subject to risks and uncertainties that may cause the Company's actual results in future periods to differ materially from those expected. Such risks and uncertainties include, but are not limited to, unanticipated slowdowns in the Company's major markets, changing customer preferences, lack of success of new products, loss of customers, competition, increased raw material prices, problems associated with foreign sourcing of parts and products, worldwide conditions and foreign currency fluctuations that may affect results of operations, and other factors discussed in Item 1A of this Form 10-K and, from time to time, in the Company's filings with the Securities and Exchange Commission. The Company undertakes no obligation to update, alter, or otherwise revise any forward-looking statements, whether written or oral, that may be made from time to time, whether as a result of new information, future events, or otherwise.

PART I

ITEM 1 BUSINESS

(a) General Development of Business

The Eastern Company (the "Company," "Eastern," "we," "us," or "our") was incorporated under the laws of the State of Connecticut in October, 1912, succeeding a co-partnership established in October, 1858. The business of the Company is the design, manufacture and sale of industrial hardware, security products and metal products.

Today, the Company maintains sixteen physical locations across North America and Asia.

RECENT DEVELOPMENTS

On April 3, 2017, the Company completed a Securities Purchase Agreement (the "Securities Purchase Agreement") with Velvac Holdings, Inc., a Delaware corporation ("Velvac"), Jeffery R. Porter, W. Greg Bland, John Backovitch, Dave Otto, Bob Otto, Timothy Rintelman, Robert Brester, Dan McGrew, Mark Moeller, and Prospect Partners II, L.P. (collectively, the "Sellers"). Pursuant to the Securities Purchase Agreement, the Company acquired 100% of the issued and outstanding stock of Velvac from the Sellers (the "Velvac Acquisition") for \$39.5 million and an earnout consideration contingent upon Velvac achieving minimum earnings performance levels and based on sales of Velvac's new proprietary Road-iQ product line (the "Earnout Consideration"). The Velvac Acquisition was financed with a \$31 million term loan from People's United Bank, National Association ("People's"), a \$5 million draw down on the Company's \$10 million revolving credit facility with People's and \$3.5 million in cash. In addition, the Company paid a working capital adjustment of \$0.6 million by which working capital exceeded a pre-determined target amount. Please refer to the Company's Current Report on Form 8-K filed on April 7, 2017 and the amendment thereto filed on June 19, 2017 for further details.

(b) Financial Information about Industry Segments

Financial information about industry segments is included in Note 10 to the Company's financial statements, included in Item 8 of this Form 10-K.

(c) Narrative Description of Business

The Eastern Company actively manages niche industrial divisions that focus on the design, manufacture and sale of particular products and industrial services and are leaders in their specific market sector. We believe Eastern's divisions operate in industries with long-term macroeconomic growth opportunities, have positive and stable cash flows, face minimal threats of technological or competitive obsolescence, and have strong management teams largely in place.

Eastern focuses on proactive financial and operational management of its divisions in order to increase earnings and increase long-term shareholder value. Among other things, Eastern regularly monitors financial and operational performance, instilling consistent financial discipline and assisting management in their analysis and pursuit of prudent organic growth strategies.

Eastern also identifies and works with division management to execute attractive external growth and acquisition opportunities. In addition, Eastern recruits and retains talented managers to operate its divisions.

Eastern continuously reviews acquisitions of businesses that have the potential for significant long-term value creation and periodically evaluates the retention and disposition of its existing divisions and investments. We seek to acquire businesses that produce stable and growing earnings and cash flows. Eastern may pursue acquisitions in industries other than those in which its divisions currently operate if an acquisition presents an attractive opportunity.

The Company operates in three business segments: Industrial Hardware, Security Products and Metal Products.

Industrial Hardware

The Industrial Hardware business segment consists of Eberhard Manufacturing, Eberhard Hardware Manufacturing Ltd., Eastern Industrial Ltd, Velvac, Canadian Commercial Vehicles Corporation, Composite Panel Technologies and Sesamee Mexicana, S.A. de C.V. These divisions design, manufacture and market a diverse product line of custom and standard vehicular and industrial hardware, including passenger restraint and vehicular locks, latches, hinges, mirrors, mirror-cameras, light-weight sleeper boxes and truck bodies. These products can be found on tractor-trailer trucks, specialty commercial vehicles, recreational vehicles, fire and rescue vehicles, school buses, military vehicles and other vehicles. In addition, the segment designs and manufactures a wide selection of fasteners and other closure devices used to secure access doors on various types of industrial equipment such as metal cabinets, machinery housings and electronic instruments. The segment sells directly to original equipment manufacturers and to distributors through in-house salesmen and outside sales representatives. Sales, customer engineering and customer service are provided through in-house sales personnel and engineering staff. We believe that in order to service these markets, our divisions offer competitive engineering design, service, quality and price. In addition, we invest in the continued introduction of new or improved product designs and we expand into synergistic product lines in order to maintain and increase market share.

Security Products

The Security Products business segment consists of Illinois Lock Company/CCL Security Products, World Lock Company Ltd., Dongguan Reeworld Security Products Ltd., World Security Industries Ltd., Greenwald Industries ("Greenwald"), and Argo EMS (formerly Argo Transdata). Illinois Lock Company/CCL Security Products designs, manufactures and distributes custom engineered and standard closing and locking systems, including vehicular accessory locks, cabinet locks, cam locks, electric switch locks, tubular key locks and combination padlocks. Some of its products are sold under the names SESAMEE®, PRESTOLOCK® and SEARCHALERT™. These products are sold to original equipment manufacturers, distributors, route operators, and locksmiths through in-house salesmen and outside sales representatives. Greenwald manufactures and markets coin acceptors and other coin security products used primarily in the commercial laundry markets. Greenwald's products include timers, drop meters, coin chutes, money boxes, meter cases, smart cards, value transfer stations, smart card readers, card management software, and access control units. Argo EMS supplies printed circuit boards and other electronic assemblies to original equipment manufacturers in various industries, including measurement systems, semiconductor equipment manufacturing, and industrial controls, medical and military products. The Security Products segment continuously seeks new markets where it can offer competitive engineered solutions that meet manufacturers' security needs.

Metal Products

The Company believes that its Metal Products business segment, based at the Company's Frazer & Jones facility, is the largest and most efficient producer of expansion shells for use in supporting the roofs of underground mines. This segment also manufactures specialty malleable and ductile iron castings.

Typical products include mine roof support anchors, couplers for railroad braking systems, support anchoring for construction and couplers/fittings for utility (oil, water and gas) industries. Mine roof support anchors are sold to bolt manufacturers while specialty castings are sold to original equipment manufacturers or machine houses. Frazer & Jones will not be effected by the new metals tariff since all metals are purchased domestically.

General

The Company obtains materials from domestic, Asian affiliated and nonaffiliated sources. Raw materials and outside services were readily available for all of the Company's segments during 2017 and are expected to be readily available in 2018 and the foreseeable future. In 2017, the Company experienced price increases for many of the raw materials used in producing its products, including: scrap iron, zinc, brass and stainless steel. In 2016, the Company experienced a price decline for many of these same materials. At this time, the Company expects raw material prices to continue to increase as demand for raw materials increases

as the global economy grows. These raw material cost increases could negatively impact the Company's gross margin if raw material prices increase too rapidly for the Company to recover those cost increases through either price increases to our customers or cost reductions in other areas of the business.

Patent and trademark protection for the various product lines within the Company is limited, but believed by the Company to be sufficient to protect the Company's competitive positions. No business segment is dependent on any patent nor would the loss of any patent have any material adverse effect on the Company's business. Foreign sales are not significant.

None of the Company's division segments are seasonal.

Customers for all business segments are broad-based geographically and by markets, and sales are generally not highly concentrated by customer. No one customer exceeded 10% of total consolidated sales in 2017, 2016 or 2015.

The dollar amount of the backlog of orders received by the Company is believed to be firm as of the fiscal year ended December 30, 2017. Such backlogs was \$34,991,000 at December 30, 2017, as compared to \$26,993,000 at December 31, 2016. The primary reasons for the change from 2016 to 2017 were the acquisition of Velvac on April 3, 2017 and the timing of orders received from customers.

The Company encounters competition in all of its business segments. Imports from Asia and Latin America with favorable currency exchange rates and low cost labor have created additional pricing pressure. The Company competes successfully by offering high quality custom engineered products on a timely basis. To compete, the Company deploys internal engineering resources, maintains cost effective manufacturing capabilities through its wholly-owned Asian subsidiaries, expands its product lines through product development and acquisitions, and maintains sufficient inventory for fast turnaround of customer orders.

Research and development expenditures in 2017 were \$3,678,000 and represented 1.8% of gross revenues. In 2016 and 2015, such expenditures were \$1,526,000 and \$1,219,000, respectively. The research and developments costs are primarily attributable to the Velvac and Eberhard Manufacturing divisions. Velvac performs ongoing research, in both the mechanical and electronic product lines, and in RoadIQ. This research is necessary for the Company to remain competitive and to continue to provide technologically advanced electronic systems. Eberhard Manufacturing develops new products for the various markets it serves based on changing customer requirements to remain competitive. Other research projects include the development of various latches and rotaries and various transportation and industrial hardware products.

The Company does not anticipate that compliance with federal, state or local environmental laws or regulations is likely to have a material effect on the Company's capital expenditures, earnings or competitive position.

The average number of employees in 2017 was 1,189.

The Company's ratio of working capital to sales improved in 2017 to 33.7% from 47.1% in 2016 and 41.6% in 2015. The improvement in working capital was the result of a reduction in inventory in the Metal business segment and partially the result of the Velvac acquisition. Working capital includes cash held in various foreign subsidiaries. With the passage of recent tax legislation cash previously held in foreign countries can be repatriated back to the United States and used for other business needs thus reducing working capital further. Other factors affecting working capital include our average days' sales in accounts receivable, inventory turnover ratio and payment of vendor accounts payable. In some cases, the company must hold extra inventory due to extended lead time in receiving products ordered from our foreign subsidiaries to ensure product is available for our customers. The Company continues to monitor its working capital needs with the goal of reducing our ratio of working capital to sales to 25%.

(d) Financial Information about Geographic Areas

The Company includes six operating divisions located within the United States, two wholly-owned Canadian subsidiaries (one located in Tillsonburg, Ontario, Canada, and one in Kelowna, British Columbia, Canada), a wholly-owned Taiwanese subsidiary located in Taipei, Taiwan, a wholly-owned subsidiary located in Hong Kong, two wholly-owned Chinese subsidiaries (one located in Shanghai, China, and one located in Dongguan, China), a wholly-owned subsidiary located in Reynosa, Mexico, and a wholly-owned subsidiary located in Lerma, Mexico.

Individually, the Canadian, Taiwanese, Hong Kong, Chinese and Mexican subsidiaries' revenues and assets are not significant. Substantially all other revenues are derived from customers located in the United States.

Financial information about foreign and domestic operations' revenues and identifiable assets is included in Note 10 to the Company's financial statements, included in Item 8 of this Form 10-K. Information about risks attendant to the Company's foreign operations is set forth in Item 1A of this Form 10-K.

(e) Available Information

The Company makes available, free of charge through its Internet website at <http://www.easterncompany.com>, its annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as soon as reasonably practicable after such material is electronically filed with or furnished to the Securities and Exchange Commission (the "SEC"). The public may read and copy any materials that the Company files with the SEC at the SEC's Public Reference Room, 100 F Street, N.E., Washington, DC 20549 or by calling the SEC at 1-800-SEC-0330. The Company's reports filed with, or furnished to, the SEC are also available on the SEC's website at www.sec.gov.

ITEM 1A RISK FACTORS

In addition to the other information contained in this Form 10-K and the exhibits hereto and the Company's other filings with the SEC, the following risk factors should be considered carefully in evaluating the Company's business. The Company's business, financial condition or results of operation could be materially adversely affected by any of these risks or additional risks not presently known to the Company, or by risks the Company currently deems immaterial, which may also adversely affect its business, financial condition or results of operations, such as: changes in the economy, including changes in inflation, tax rates, interest rates and currency exchange rates; risk associated with possible disruption in the Company's operations due to terrorism, cybersecurity threats and other manmade or natural disasters; future regulatory actions, legal issues or environmental matters; loss of, or changes in, executive management; and changes in accounting standards that are adverse to the Company. Additionally, there can be no assurance that the Company has correctly identified and appropriately assessed all factors affecting its business or that information publicly available with respect to these matters is complete and correct.

The Company's business is subject to risks associated with conducting business overseas.

International operations could be adversely affected by changes in political and economic conditions, trade protection measures, restrictions on repatriation of earnings, differing intellectual property rights and changes in regulatory requirements that restrict the sales of products or increase costs. Changes in exchange rates between the U.S. dollar and foreign currencies could result in increases or decreases in earnings and may adversely affect the value of the Company's assets outside the United States. The Company's operations are also subject to the effects of international trade agreements and regulations. These trade agreements could impose requirements that adversely affect the Company's business, such as, but not limited to, setting quotas on products that may be imported from a particular country into the Company's key markets in North America.

The Company's ability to import products in a timely and cost-effective manner may also be affected by conditions at ports or issues that otherwise affect transportation and warehousing providers, such as port and shipping capacity, labor disputes, severe weather or increased homeland security requirements in the United States or other countries. These issues could delay importation of products or require the Company to locate alternative ports or warehousing providers to avoid disruption to customers. These alternatives may not be available on short notice or could result in higher transit costs, which could have an adverse impact on the Company's business, financial conditions or results of operations.

Indebtedness may affect our business and may restrict our operating flexibility.

As of December 31, 2017, the Company had \$35,225,000 in total consolidated indebtedness. Subject to restrictions contained in our credit facility, the Company may incur additional indebtedness in the future, including indebtedness incurred to finance acquisitions. The level of indebtedness and servicing costs associated with that indebtedness could have important effects on our operation and business strategy. For example, the indebtedness could:

- Place the Company at a competitive disadvantage relative to the Company's competitors, some of which have lower debt service obligations and greater financial resources;
- Limit our ability to borrow additional funds;

- Limit our ability to complete future acquisitions;
- Limit our ability to pay dividends;
- Limit our ability to make capital expenditures; and
- Increase the Company's vulnerability to general adverse economic and industry conditions.

The Company's ability to make scheduled principal payments, to pay interest on, or to refinance our indebtedness and to satisfy other debt obligations will depend upon future operating performance, which may be affected by factors beyond the Company's control. In addition, there can be no assurance that future borrowings or the issuance of equity would be available to the Company on favorable terms for the payment or refinancing of the Company's debt. If the Company is unable to service its indebtedness, the business, financial condition and results of operation would be materially adversely affected.

The Company's credit facility contains covenants requiring the Company to achieve certain financial and operations results and maintain compliance with specified financial ratios. The Company's ability to meet the financial covenants or requirements in its credit facility may be affected by events beyond our control, and the Company may not be able to satisfy such covenants and requirements. A breach of these covenants or the Company's inability to comply with the financial ratios, tests or other restrictions contained in our credit facility could result in an event of default under such credit facility. Upon the occurrence of an event of default under our credit facility and/or the expiration of any grace periods, the lenders could elect to declare all amounts outstanding under our credit facility, together with accrued interest, to be immediately due and payable. If this were to occur, the Company's assets may not be sufficient to fully repay the amounts due under our credit facility or the Company's other indebtedness. See also "ITEM 7A - QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK" of this Form 10-K.

In addition, the Company's growth strategy involves expanding sales of its products into foreign markets. There is no guarantee that the Company's products will be accepted by foreign customers or how long it may take to develop sales of the Company's products in these foreign markets.

Increases in the price or reduced availability of raw materials.

Raw materials needed to manufacture products are obtained from numerous suppliers. Under normal market conditions, these raw materials are readily available on the open market from a variety of producers. However, from time to time, the prices and availability of these raw materials fluctuate, which could impair the Company's ability to procure the required raw materials for its operations or increase the cost of manufacturing its products. If the price of raw materials increases, the Company may be unable to pass these increases on to its customers and could experience reductions to its profit margins. Also, any decrease in the availability of raw materials could impair the Company's ability to meet production requirements in a timely manner.

If tariffs on imported steel and aluminum, such as those recently proposed by the President of the United States, are implemented, our cost of raw materials may increase, which could adversely affect our business, results of operations and financial condition.

The Company obtains raw materials, including stainless steel used in the production of its products from domestic, Asian affiliated and nonaffiliated sources. The President of the United States recently announced a proposal to impose tariffs of 25 percent on imported steel and 10 percent on imported aluminum through the issuance of an executive order. If implemented, such tariffs may cause an increase in costs for all domestic entities, including the Company, that purchase imported steel or aluminum. Because steel are raw materials used in a wide-range of the Company's products, a broad-based cost increase would result in an increase in the Company's cost of goods sold, which may require us to increase prices for some of our products. However, our inability to pass along such price increases to our customers, or an inability of our suppliers to meet our raw material requirements, may have a material adverse impact on our business, results of operations or financial condition.

Changes in competition in the markets that the Company services could impact revenues and earnings.

Any change in competition may result in lost market share or reduced prices, which could result in reduced profits and margins. This may impair the ability to grow or even maintain current levels of revenues and earnings. While the Company has an extensive customer base, loss of certain customers could adversely affect the Company's business, financial condition or results of operations until such business is replaced, and no assurances can be made that the Company would be able to regain or replace any lost customers.

The Company is required to evaluate its internal control over financial reporting under Section 404 of the Sarbanes-Oxley Act of 2002.

The Company is an "accelerated filer" as defined in Rule 12b-2 under the Exchange Act and is thus required to comply with Section 404 of the Sarbanes-Oxley Act of 2002. Section 404 requires the Company to include in its report management's assessment of the effectiveness of the Company's internal control over financial reporting as of the end of the fiscal period for which the Company is filing its Annual Report on Form 10-K. This report must also include disclosure of any material weaknesses in internal control over financial reporting that the Company has identified. Additionally, the Company's independent registered public accounting firm is required to issue a report on the Company's internal control over financial reporting and their evaluation of the operating effectiveness of the Company's internal control over financial reporting. The Company's assessment requires it to make subjective judgments, and the independent registered public accounting firm may not agree with the Company's assessment. If the Company or its independent registered public accounting firm were unable to complete the assessments within the period prescribed by Section 404 and thus be unable to conclude that the internal control over financial reporting is effective, investors could lose confidence in the Company's reported financial information, which could have an adverse effect on the market price of the Company's common stock or impact the Company's borrowing ability. In addition, changes in operating conditions and changes in compliance with policies and procedures currently in place may result in inadequate internal control over financial reporting in the future.

The inability to develop new products could limit growth.

Demand for new products and the inability to develop and introduce new competitive products at favorable profit margins could adversely affect the Company's performance and prospects for future growth, and the Company would not be positioned to maintain current levels of revenues and earnings. The uncertainties associated with developing and introducing new products, such as the market demands and the costs of development and production, may impede the successful development and introduction of new products. Acceptance of the new products may not meet sales expectations due to several factors, such as the Company's potential inability to accurately predict market demand or to resolve technical issues in a timely and cost effective manner. Additionally, the inability to develop new products on a timely basis could result in the loss of business to competitors.

The inability to identify or complete acquisitions could limit growth.

The Company's future growth may partly depend on its ability to acquire and successfully integrate new businesses. The Company intends to seek additional acquisition opportunities, both to expend into new markets and to enhance the Company's position in existing markets. However, there can be no assurances that the Company will be able to successfully identify suitable candidates, negotiate appropriate terms, obtain financing on acceptable terms, complete proposed acquisitions, successfully integrate acquired businesses or expand into new markets. Once acquired, operations may not achieve anticipated levels of revenues or profitability.

Acquisitions involve risk, including difficulties in the integration of the operations, technologies, services and products of the acquired companies and the diversion of management's attention from other business concerns. Although the Company's management will endeavor to evaluate the risks inherent in any particular transaction, there can be no assurances that the Company's management will properly ascertain all such risks. In addition, prior acquisitions have resulted, and future acquisitions could result in the incurrence of substantial debt and other expenses. Future acquisitions may also result in potentially dilutive issuances of equity securities. Difficulties encountered with acquisitions may have a material adverse effect on our business, financial condition and results of operations.

Environmental compliance costs and liabilities could increase the Company's expenses and adversely affect the Company's financial condition.

The Company's operations and properties are subject to laws and regulations relating to environmental protection, including air emissions, water discharges, waste management and workplace safety. These laws and regulations can result in the imposition of substantial fines and sanctions for violations and could require the installation of pollution control equipment or operational changes to limit pollution emissions and/or decrease the likelihood of accidental hazardous substance releases. The Company must conform its operations and properties to these laws and adapt to regulatory requirements in the countries in which the Company's divisions operate as these requirements change.

The Company uses and generates hazardous substances and wastes in its operations and, as a result, could be subject to potentially material liabilities relating to the investigation and clean-up of contaminated properties and to claims alleging personal injury. The Company has experienced, and expects to continue to experience, costs relating to compliance with environmental laws and regulations. In connection with the Company's acquisitions, the Company may assume significant environmental liabilities, some of which it may not be aware of at the time of acquisition. In addition, new laws and regulations, stricter enforcement of existing laws and regulations, the discovery of previously unknown contamination or the imposition of new clean-up requirements could require the Company to incur costs or become the basis for new or increased liabilities that could have a material adverse effect on our business, financial condition and results of operations.

Our technology is important to the Company's success and the failure to protect this technology could put the Company at a competitive disadvantage.

Some of the Company's products rely on proprietary technology; therefore, the Company believes that the development and protection of intellectual property rights through patents, copyrights, trade secrets, trademarks, confidentiality agreements and other contractual provisions are important to the future success of its business. Despite the Company's efforts to protect proprietary rights, unauthorized parties or competitors may copy or otherwise obtain and use the Company's products or technology. Actions to enforce these rights may result in substantial costs and diversion of resources and the Company make no assurances that any such actions will be successful.

The Company relies on information and technology for many of its business operations, which could fail and cause disruption to the Company's business operations.

The Company's business operations are dependent upon information technology networks and systems to securely transmit, process and store electronic information and to communicate among its locations around the world and with clients and vendors. A shut-down of, or inability to access, one or more of the Company's facilities, a power outage or a failure of one or more of the Company's information technology, telecommunications or other systems could significantly impair the Company's ability to perform such functions on a timely basis. Computer viruses, cyberattacks, other external hazards and human error could result in the misappropriation of assets or sensitive information, corruption of data or operational disruption. If sustained or repeated, such a business interruption, system failure, service denial or data loss and damage could result in a deterioration of the Company's ability to write and process orders, provide customer service or perform other necessary business functions.

A breach in the security of the Company's software could harm its reputation, result in a loss of current and potential customers and subject the Company to material claims, which could materially harm our operating results and financial condition.

If the Company's security measures are breached, an unauthorized party may obtain access to the Company's data or users' or customers' data. In addition, cyber-attacks and similar acts could lead to interruptions and delays in customer processing or a loss or breach of a customer's data. Because the techniques used to obtain unauthorized access, disable or degrade service, or sabotage systems change frequently and often are not recognized until launched against a target, the Company may be unable to anticipate these techniques or to implement adequate preventative measures. The risk that these types of events could seriously harm the Company's business is likely to increase as the Company expands the number of web-based products we offer, the services we provide, and our global operations.

Regulatory authorities around the world are considering a number of legislative and regulatory proposals concerning data protection. In addition, the interpretation and application of consumer and data protection laws in the United States and elsewhere are often uncertain and in flux. It is possible that these laws may be interpreted and applied in a manner that is inconsistent with the Company's data practices. If so, in addition to the possibility of fines, this could result in an order requiring that the Company change its data practices, which could have an adverse effect on its business and results of operations.

Any security breaches for which the Company is, or is perceived to be, responsible, in whole or in part, could subject us to legal claims or legal proceedings, including regulatory investigations, which could harm the Company's reputation and result in significant litigation costs and damage awards or settlement amounts. Any imposition of liability, particularly liability that is not covered by insurance or is in excess of insurance coverage, could materially harm our operating results and financial condition. Security breaches also could cause the Company to lose current and potential customers, which could have an adverse effect on

our business. Moreover, the Company might be required to expend significant financial and other resources to further protect against security breaches or to rectify problems caused by any security breach.

The Company could be subject to litigation, which could have a material impact on the Company's business, financial condition or results of operations.

From time to time, the Company's operations are parties to or targets of lawsuits, claims, investigations and proceedings, including product liability, personal injury, patent and intellectual property, commercial, contract, and environmental and employment matters, which are defended and settled in the ordinary course of business. While the Company is unable to predict the outcome of any of these matters, it does not believe, based upon currently available information, that the resolution of any pending matter will have a material adverse effect on its business, financial condition or results of operations. See "ITEM 3 – LEGAL PROCEEDINGS" in this Form 10-K for a discussion of current litigation.

The Company could be subject to additional tax liabilities.

The Company is subject to income tax laws of the United States, its states and municipalities and those of other foreign jurisdictions in which the Company has business operations. These laws are complex and subject to interpretations by the taxpayer and the relevant governmental taxing authorities. Significant judgment and interpretation is required in determining the Company's worldwide provision for income taxes. In the ordinary course of business, transactions arise where the ultimate tax determination is uncertain. Although the Company believes that our tax estimates are reasonable, the final outcome of tax audits and any related litigation could be materially different from that which is reflected in historical income tax provisions and accruals. Based on the status of a given tax audit or related litigation, a material effect on the Company's income tax provision or net income may result during the period or periods from the initial recognition of a particular matter in the Company's reported financial results to the final closure of that tax audit or settlement of related litigation when the ultimate tax and related cash flow is known with certainty.

The Company's goodwill or indefinite-lived intangible assets may become impaired, which could require a significant charge to earnings to be recognized.

Under accounting principles generally accepted in the United States, goodwill and indefinite-lived intangible assets are not amortized but are reviewed for impairment at least annually. Future operating results used in the assumptions, such as sales or profit forecasts, may not materialize, and the Company could be required to record a significant charge to earnings in the financial statements during the period in which any impairment is determined, resulting in an unfavorable impact on our results of operations. Numerous assumptions are used in the evaluation of impairment, and there is no guarantee that the Company's independent registered public accounting firm would reach the same conclusion as the Company or an independent valuation firm, which could result in a disagreement between management and the Company's independent registered public accounting firm.

The Company may need additional capital in the future, which may not be available on acceptable terms, if at all.

From time-to-time, the Company has historically relied on outside financing to fund expanded operations, capital expenditure programs and acquisitions. The Company may require additional capital in the future to fund operations or strategic opportunities. The Company cannot be assured that additional financing will be available on favorable terms, or at all. In addition, the terms of available financing may place limits on the Company's financial and operating flexibility. If the Company is unable to obtain sufficient capital in the future, the Company may not be able to expand or acquire complementary businesses and may not be able to continue to develop new products or otherwise respond to changing business conditions or competitive pressures.

The Company's stock price may become highly volatile.

The Company's stock price may change dramatically when buyers seeking to purchase shares of the Company's common stock exceed the shares available on the market, or when there are no buyers to purchase shares of the Company's common stock when shareholders are trying to sell their shares.

The Company may not be able to reach acceptable terms for contracts negotiated with its labor unions and be subject to work stoppages or disruption of production.

During 2018, union contracts covering approximately 9% of the Company's total workforce will expire. The Company has been successful in negotiating new contracts over the years, but cannot guarantee that will continue. Failure to negotiate new union contracts could result in the disruption of production, inability to deliver product or a number of unforeseen circumstances, any of which could have an unfavorable material impact on the Company's results of operations or financial condition.

Deterioration in the creditworthiness of several major customers could have a material impact on the Company's business, financial condition or results of operations.

Included as a significant asset on the Company's balance sheet are accounts receivable from our customers. If several large customers become insolvent or are otherwise unable to pay for products, or become unwilling or unable to make payments in a timely manner, it could have an unfavorable material impact on the Company's results of operations or financial condition.

Although the Company is not dependent on any one customer, deterioration in several large customers at the same time could have an unfavorable material impact on the Company's results of operations or financial condition. No one customer exceeded 10% of total accounts receivable for 2017, 2016 or 2015.

The Company's operating results may fluctuate, which makes the results of operations difficult to predict and could cause the results to fall short of expectations.

The Company's operating results may fluctuate as a result of a number of factors, many of which are outside of our control. As a result, comparing the Company's operating results on a period-to-period basis may not be meaningful, and past results should not be relied upon as an indication of future performance. Quarterly, year to date and annual costs and expenses as a percentage of revenues may differ significantly from historical or projected levels. Future operating results may fall below expectations. These types of events could cause the price of the Company's stock to fall.

New or existing U.S. or foreign laws could subject the Company to claims or otherwise impact the Company's business, financial condition or results of operations.

The Company is subject to a variety of laws in both the U.S. and foreign countries that are costly to comply with, can result in negative publicity and diversion of management time and effort and can subject the Company to claims or other remedies.

ITEM 1B UNRESOLVED STAFF COMMENTS

None.

ITEM 2 PROPERTIES

The corporate office of the Company is located in Naugatuck, Connecticut in a two-story, 8,000 square foot administrative building on 3.2 acres of land.

All of the Company's properties are owned or leased and are adequate to satisfy current requirements. All of the Company's properties have the necessary flexibility to cover any long-term expansion requirements.

The Industrial Hardware Group includes the following:

The Eberhard Manufacturing Division in Strongsville, Ohio owns 9.6 acres of land and a building containing 157,580 square feet, located in an industrial park. The building is steel frame, is one-story and has curtain walls of brick, glass and insulated steel panels. The building has two high bays, one of which houses two units of automated warehousing.

Eberhard Hardware Manufacturing, Ltd., a wholly-owned Canadian subsidiary in Tillsonburg, Ontario, owns 4.4 acres of land and a building containing 31,000 square feet in an industrial park. The building is steel frame, is one-story, and has curtain walls of brick, glass and insulated steel panels. It is particularly suited for light fabrication, assembly and warehousing and is adequate for long-term expansion requirements.

Canadian Commercial Vehicles Corporation ("CCV"), a wholly-owned subsidiary in Kelowna, British Columbia, leases 46,385 square feet of building space located in an industrial park. The building is made from brick and concrete, contains approximately 5,400 square feet of office space on two levels and houses a modern paint booth for finishing our products. The building is protected by a F1 rated fire suppression system and alarmed for fire and security. CCV's lease expires on December 31, 2018 and is renewable.

The Composite Panel Technologies Division ("CPT") in Salisbury, North Carolina, leases 70,000 square feet of building space located in an industrial park. The building is made from brick and concrete, contains approximately 6,600 square feet of office space on one level and houses a modern paint booth for finishing our products. The building is protected by a water sprinkler fire suppression system and is alarmed for fire and security. The current lease expires on October 31, 2019 and is renewable.

Eastern Industrial Ltd., a wholly-owned subsidiary in Shanghai, China, leases brick and concrete buildings containing approximately 47,500 square feet of space that are located in both industrial and commercial areas. In 2016, Eastern Industrial, Ltd. entered into a six-year lease, which expires on March 31, 2022 and is renewable.

The Sesamee Mexicana subsidiary leases 42,588 square feet in a facility located in an industrial park in Lerma, Mexico. The current lease expires on November 30, 2020 and is renewable. The building is steel frame with concrete block and glass curtain walls.

Velvac, Inc., a wholly-owned subsidiary in New Berlin, Wisconsin, leases a 98,000 square foot building. The building includes 17,000 square feet of office space and 81,000 square feet of warehousing and distribution operations. The current lease expires on May 31, 2021.

Velvac de Reynosa, S. De R.L De C.V., a maquiladora wholly-owned in Reynosa, Tamaulipas, Mexico, leases 90,000 square feet of building space located in an industrial park identified as Buildings 19, 20 and 21 and on a tract of land with an area of 165,507 square feet. The building is one level and is made from brick and concrete. The building is protected by a 24 hour security system and onsite security. The current lease expires on August 31, 2021.

Velvac, Inc. also leases a 9,300 square foot building in Bellingham, Washington. The premises are used solely for software development and research and development. The current lease expires on September 30, 2021.

The Security Products Group includes the following:

The Greenwald Industries Division in Chester, Connecticut owns 26 acres of land and a building containing 120,000 square feet. The building is steel frame, is one-story, and has brick over concrete blocks.

The Illinois Lock Company/CCL Security Products Division owns 2.5 acres of land and a building containing 44,000 square feet in Wheeling, Illinois. The building is brick and is located in an industrial park.

The Argo EMS Division leases approximately 17,000 square feet of space in a building located in an industrial park in Clinton, Connecticut. The building is a two-story steel frame structure and is situated on 2.9 acres of land. The current lease expires on March 31, 2019.

The World Lock Co. Ltd. subsidiary leases 5,285 square feet of space in a building located in Taipei, Taiwan. The building is made from brick and concrete and is protected by a fire alarm and sprinklers. A two-year lease was signed in 2016, which expires on July 31, 2018 and is renewable.

The Dongguan Reeworld Security Products Company Ltd. subsidiary was established in July 2013 to manufacture locks and hardware and leases 118,000 square feet of space in concrete buildings that are located in an industrial park in Dongguan, China. A five-year lease was signed in 2013, which expires on June 30, 2018 and is renewable.

The Metal Products Group consists of:

The Frazer and Jones Division in Solway, New York owns 17.9 acres of land and buildings containing 205,000 square feet constructed for foundry use. These facilities are well adapted to handle the division's current and future casting requirements.

All owned properties are free and clear of any encumbrances.

ITEM 3 LEGAL PROCEEDINGS

The Company is party to various legal proceedings and claims related to its normal business operations. In the opinion of management, the Company has substantial and meritorious defenses for these claims and proceedings in which it is a defendant, and believes these matters will ultimately be resolved without a material adverse effect on the consolidated financial position, results of operations or liquidity of the Company. The aggregate provision for losses related to contingencies arising in the ordinary course of business was not material to operating results for any year presented.

In 2010, the Company was contacted by the State of Illinois regarding potential ground contamination at its plant in Wheeling, Illinois. The Company entered into a voluntary remediation program in Illinois and has engaged an environmental clean-up company to perform testing and develop a remediation plan. Since 2010, the environmental company has completed a number of tests and the design of a final remediation system is currently being reviewed and is expected to be approved in the first quarter of 2018. The total estimated cost for the proposed remediation system is anticipated to be approximately \$50,000.

In 2016, the Company created a plan to remediate a landfill of spent foundry sand maintained at the Company's Metal Casting facility in New York. This plan was presented to the New York Department of Environmental Conservation (the "DEC") for approval in the first quarter of 2018. The Company is in final negotiations with the DEC, and, based on estimates provided by the Company's environmental engineers, the anticipated cost to remediate and monitor the landfill is \$380,000. The Company accrued for and expensed such estimated cost in the second and third quarters of 2017.

There are no other legal proceedings, other than ordinary routine litigation incidental to the Company's business, to which either the Company or any of its subsidiaries is a party or of which any property of the Company or any subsidiary is the subject.

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 quoted on the NASDAQ Global Market under the symbol "EML". The approximate number of record holders of the Company common stock on December 30, 2017 was 354.

The following table sets forth the high and low per share sales prices of the Company's common stock, and the per share quarterly dividend declared on the Company's common stock, for each quarter of the immediately preceding two years as reported on the NASDAQ Global Market.

Quarter	2017			Quarter	2016		
	Market Price		Dividend		Market Price		Dividend
	High	Low			High	Low	
First	\$ 21.50	\$ 18.85	\$ 0.11	First	\$ 19.04	\$ 15.01	\$ 0.11
Second	31.50	21.06	0.11	Second	17.21	15.74	0.11
Third	31.15	24.35	0.11	Third	20.12	16.39	0.11
Fourth	30.85	25.10	0.11	Fourth	21.50	18.90	0.11

The Company expects to continue its policy of paying regular cash dividends, although there can be no assurance as to future dividends because they are dependent on future earnings, capital requirements and financial condition. The payment of dividends is subject to the restrictions of the Company's loan agreement if such payment would result in an event of default. See Item 7 – Management's Discussion and Analysis of Financial Condition and Results of Operations, and Note 5 to the Company's financial statements included in Item 8 of this Form 10-K.

The following table sets forth information regarding securities authorized for issuance under the Company's equity compensation plans as of December 30, 2017, consisting of the Company's 2010 Executive Stock Incentive Plan (the "2010 Plan").

Equity Compensation Plan Information

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
			(c)
	(a)	(b)	(c)
Equity compensation plans approved by security holders	56,330	20.36	333,500 ¹
Equity compensation plans not approved by security holders	-	-	-
Total	56,330	20.36	333,500

¹ Includes shares available for future issuance under the 2010 Plan.

Each director who is not an employee of the Company ("Outside Director") is paid a director's fee for his services at the annual rate of \$30,000. Effective August 1, 2017, the chairman of the board will receive an annual fee of \$60,000 for his services and all chairs of the varying committees will receive additional compensation. All annual fees paid to non-employee members of the Board of Directors of the Company are paid in common stock of the Company or cash, in accordance with the Directors Fee Program adopted by the shareholders on March 26, 1997 and amended on January 5, 2004. The directors make an annual election, within a reasonable time before their first quarterly payment, to receive their fees in the form of cash, stock or a combination thereof. The election remains in force for one year.

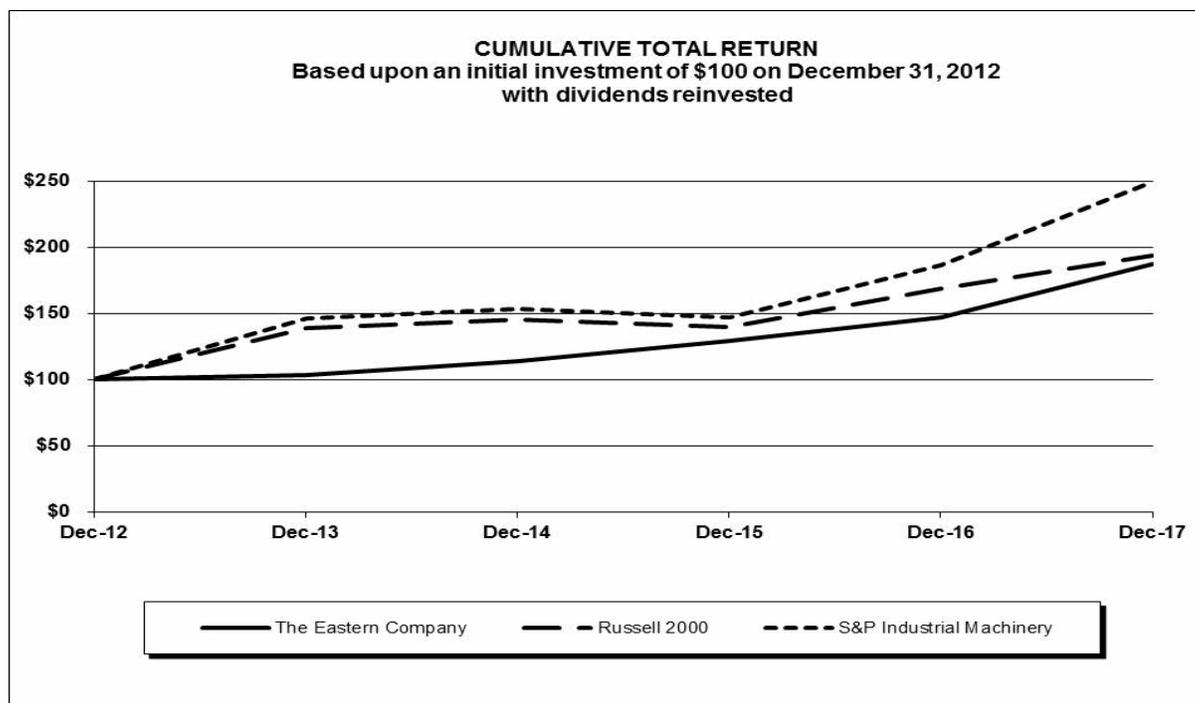
During fiscal years 2017, 2016 or 2015, there were no sales by the Company of its securities that were not registered under the Securities Act of 1933, as amended (the "Securities Act").

The Company did not have any share repurchase plans or programs in effect during fiscal year 2017.

Stock Performance Graph

The following graph sets forth the Company's cumulative total shareholder return based upon an initial \$100 investment made on December 31, 2012 (i.e., stock appreciation plus dividends during the past five fiscal years) compared to the Russell 2000 Index and the S&P Industrial Machinery Index.

The Company manufactures and markets a broad range of locks, latches, fasteners and other security hardware that meets the diverse security and safety needs of industrial and commercial customers. Consequently, while the S&P Industrial Machinery Index used for comparison is the standard index most closely related to the Company, it does not completely represent the Company's products or market applications. The Russell 2000 is a small cap market index of the smallest 2,000 stocks in the Russell 3000 Index.



	Dec. 12	Dec. 13	Dec. 14	Dec. 15	Dec. 16	Dec. 17
The Eastern Company	\$ 100	\$ 103	\$ 114	\$ 129	\$ 147	\$ 187
Russell 2000	\$ 100	\$ 139	\$ 146	\$ 139	\$ 169	\$ 194
S&P Industrial Machinery	\$ 100	\$ 146	\$ 153	\$ 147	\$ 187	\$ 249

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ITEM 6

SELECTED FINANCIAL DATA

	2017	2016	2015	2014	2013
INCOME STATEMENT ITEMS (in thousands)					
Net sales	\$ 204,240	\$ 137,608	\$ 144,568	\$ 140,825	\$ 142,458
Cost of products sold	154,189	103,315	112,187	108,339	112,311
Depreciation and amortization	4,719	3,814	3,921	3,486	3,825
Interest expense	977	122	185	255	323
Income before income taxes	11,455	11,223	8,021	11,529	10,114
Income taxes	6,410	3,438	2,294	3,867	3,212
Net income	5,045	7,785	5,727	7,661	6,902
Dividends #	2,755	2,751	2,811	2,987	2,613
BALANCE SHEET ITEMS (in thousands)					
Inventories	\$ 47,269	\$ 34,030	\$ 36,842	\$ 34,402	\$ 30,658
Working capital	68,751	64,831	60,105	57,845	57,379
Property, plant and equipment, net	29,192	26,166	26,801	28,051	27,392
Total assets	176,458	124,198	121,739	121,271	113,858
Shareholders' equity	86,931	82,468	79,405	74,975	81,505
Capital expenditures	2,763	2,863	2,538	3,633	5,524
Long-term obligations, less current portion	28,675	893	1,786	3,214	4,286
PER SHARE DATA					
Net income per share					
Basic	\$.81	\$ 1.25	\$ 0.92	\$ 1.23	\$ 1.11
Diluted	0.80	1.25	0.92	1.23	1.11
Dividends #	0.44	0.44	0.45	0.48	0.42
Shareholders' equity (Basic)	13.89	13.19	12.71	12.04	13.10
Average shares outstanding:					
Basic	6,259,139	6,251,535	6,245,057	6,225,068	6,220,928
Diluted	6,294,773	6,251,535	6,245,057	6,237,914	6,237,758

- Dividends for 2015 include a \$0.01 per share redemption for the termination of the 2008 Shareholder Rights Agreement. Dividends for 2014 include a one-time extra payment of \$0.04 per share distributed on September 15, 2014.

Critical Accounting Policies and Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States ("U.S. GAAP") requires management to make judgments, estimates and assumptions regarding uncertainties that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities and the reported amounts of revenues and expenses. Areas of uncertainty that require judgments, estimates and assumptions include items such as the accounting for derivatives; environmental matters; the testing of goodwill and other intangible assets for impairment; proceeds on assets to be sold; pensions and other postretirement benefits; and tax matters. Management uses historical experience and all available information to make its estimates and assumptions, but actual results will inevitably differ from the estimates and assumptions that are used to prepare the Company's financial statements at any given time. Despite these inherent limitations, management believes that Management's Discussion and Analysis of Financial Condition and Results of Operations and the financial statements and related footnotes provide a meaningful and fair presentation of the Company.

Management believes that the application of these estimates and assumptions on a consistent basis enables the Company to provide the users of the financial statements with useful and reliable information about the Company's operating results and financial condition.

Allowance for Doubtful Accounts

The Company maintains an allowance for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. The Company reviews the collectability of its receivables on an ongoing basis, taking into account a

combination of factors. The Company reviews potential problems, such as past due accounts, a bankruptcy filing or deterioration in the customer's financial condition, to ensure that the Company has adequately accrued for potential loss. Accounts are considered past due based on when payment was originally due. If a customer's situation changes, such as a bankruptcy or its creditworthiness, or there is a change in the current economic climate, the Company may modify its estimate of the allowance for doubtful accounts. The Company will write off accounts receivable after reasonable collection efforts have been made and the accounts are deemed uncollectible.

Inventory Reserve

Inventories are valued at the lower of cost or market and or net realizable value. Cost is determined by the last-in, first-out ("LIFO") method at the Company's U.S. facilities. Accordingly, a LIFO valuation reserve is calculated using the dollar value link chain method.

We review the net realizable value of inventory in detail on an ongoing basis, giving consideration to deterioration, obsolescence and other factors. Based on these assessments, we provide for an inventory reserve in the period in which an impairment is identified. The reserve fluctuates with market conditions, design cycles and other economic factors.

Goodwill and Other Intangible Assets

Intangible assets with finite useful lives are generally amortized on a straight-line basis over the periods benefited. Goodwill and other intangible assets with indefinite useful lives are not amortized. The Company performed its most recent qualitative assessment as of the end of fiscal 2017 and determined that it is more likely than not that no impairment of goodwill existed at the end of 2017. The Company will perform annual qualitative assessments in subsequent years as of the end of each fiscal year. Additionally, the Company will perform interim analysis whenever conditions warrant.

Pension and Other Postretirement Benefits

The amounts recognized in the consolidated financial statements related to pension and other postretirement benefits are determined from actuarial valuations. Inherent in these valuations are assumptions about such factors as expected return on plan assets, discount rates at which liabilities could be settled, rate of increase in future compensation levels, mortality rates, and trends in health insurance costs. These assumptions are reviewed annually and updated as required. In accordance with GAAP, actual results that differ from the assumptions are accumulated and amortized over future periods and, therefore, affect the expense recognized and obligations recorded in future periods.

The discount rate used is based on a single equivalent discount rate derived with the assistance of our actuaries by matching expected future benefit payments in each year to the corresponding spot rates from the Citigroup Pension Liability Yield Curve, comprised of high quality (rated AA or better) corporate bonds. Effective January 1, 2017, the Company elected to refine its approach for calculating its service and interest costs in future years by applying the specific spot rates along the selected yield curve to the relevant projected cash flows. The Company believes this method more precisely measures its obligations.

The expected long-term rate of return on assets is also developed with input from the Company's actuarial firms. We consider the Company's historical experience with pension fund asset performance, the current and expected allocation of our plan assets and expected long-term rates of return. The long-term rate-of-return assumption used for determining net periodic pension expense was 7.5% for 2017 and 8.0% for 2016. The Company reviews the long-term rate of return each year. Effective January 1, 2017, the Company lowered the long-term rate-of-return assumption to 7.5% to better reflect the expected returns of its current investment portfolio.

Future actual pension income and expense will depend on future investment performance, changes in future discount rates and various other factors related to the population of participants in the Company's pension plans.

The Company expects to make cash contributions of approximately \$510,000 and \$105,000 to our pension plans and other postretirement plan, respectively, in 2018. The Company may contribute \$1,000,000 to \$2,000,000 in 2018 to take advantage of the 34% corporate tax rate that would be applied to its 2017 federal tax return. The Company has until September 15, 2018, or until the Company files its 2017 federal tax return to make that determination and contribution.

In connection with our pension and other postretirement benefits, the Company reported a \$0.6 million, (\$1.1) million, and \$3.5 million gain/(loss) (net of tax) on its Consolidated Statement of Comprehensive Income for Fiscal Years 2017, 2016 and 2015, respectively. While the main factor driving this gain/(loss) was the change in the discount rate during the applicable period, the Company froze the benefits of our salaried pension plan effective May 31, 2016, resulting in an approximate \$2.5 million gain for this significant event.

Assumptions used to determine net periodic pension benefit cost for the fiscal years indicated were as follows:

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Discount rate	4.04% - 4.08%	4.24%-4.28%	3.90%
Expected return on plan assets	7.5%	8.0%	8.0%
Rate of compensation increase	0.0%	3.25%	3.25%

Assumptions used to determine net periodic other postretirement benefit cost are the same as those assumptions used for the pension benefit cost, except that the rate of compensation is not applicable for other postretirement benefit cost.

The changes in assumptions had the following effect on the net periodic pension and other postretirement costs recorded in Other Comprehensive Income as follows:

	<u>Year ended</u>		
	<u>December 30</u> <u>2017</u>	<u>December 31</u> <u>2016</u>	<u>January 2</u> <u>2016</u>
Discount rate	\$ (6,382,182)	\$ (2,394,216)	\$ 4,208,918
Mortality table	--	--	--
Additional recognition due to significant event	(496,899)	2,534,589	--
Asset gain or loss	6,043,672	(4,358,254)	(577,892)
Amortization of:			
Unrecognized gain or loss	1,153,885	1,610,942	1,947,102
Unrecognized prior service cost	157,430	176,678	194,696
Other	140,969	776,658	(415,479)
Comprehensive income, before tax	616,875	(1,653,603)	5,357,345
Income tax	62,632	(543,297)	1,899,285
Comprehensive income, net of tax	<u>\$ 554,243</u>	<u>\$ (1,110,306)</u>	<u>\$ 3,458,060</u>

The Plan has been investing a portion of the assets in long-term bonds in an effort to better match the impact of changes in interest rates on its assets and liabilities and thus reduce some of the volatility in Other Comprehensive Income. Please refer to Note 9 – *Retirement Benefit Plans* in Item 8 of this Form 10-K for additional disclosures concerning the Company's pension and other postretirement benefit plans.

Software Development Costs

Software development costs, including costs to develop software sold, leased, or otherwise marketed, that are incurred subsequent to the establishment of technological feasibility are capitalized if significant. Costs incurred during the application development stage for internal-use software are capitalized if significant. Capitalized software development costs are amortized using the straight-line amortization method over the estimated useful life of the applicable software. Such software development costs required to be capitalized have not been material to date.

Items Impacting Earnings

To supplement our consolidated financial statements presented in accordance with GAAP, we disclose certain non-GAAP financial measures, including adjusted net income and adjusted earnings per diluted share. Adjusted net income and adjusted earnings per diluted share exclude transaction-related expenses, a charge to costs of goods sold as a result of the impact of purchase accounting and environmental remediation costs. In addition, reported growth in the Industrial Hardware business segment excludes the results of the Velvac division, which was acquired on April 3, 2017. Furthermore, we show the impact of the one-time charge related to the Tax Cuts and Jobs Act of 2017. These measures are not in accordance with GAAP.

Management uses such measures to evaluate performance period over period, to analyze the underlying trends in our business, including our business segments, to assess our performance relative to our competitors and to establish operational goals and

forecasts that are used in allocating resources. These financial measures should not be considered in isolation from, or as a replacement for, GAAP financial measures.

We believe that presenting non-GAAP financial measures in addition to GAAP financial measures provides investors greater transparency to the information used by our management for its financial and operational decision-making. We further believe that providing this information better enables our investors to understand our operating performance and to evaluate the methodology used by management to evaluate and measure such performance.

Reconciliation of expenses from GAAP to Non-GAAP financial measures
For the Three and Twelve Months ended December 30, 2017

	Three Months Ended December 30, 2017	Twelve Months Ended December 30, 2017
Net Income as reported per generally accepted accounting principles (GAAP)	\$ (168,769)	\$ 5,045,255
Earnings Per Share as reported under generally accepted accounting principles (GAAP):		
Basic	\$ (0.03)	\$ 0.81
Diluted	\$ (0.03)	\$ 0.80
<u>Adjustments for one-time expenses</u>		
Charge to cost of goods sold relating to purchase accounting for the Velvac acquisition.	\$ 0	\$ 1,187,668
Transaction expenses related to the Velvac acquisition	\$ 0	\$ 869,000
Environmental remediation expense related to the Metal Products Segment	\$ 0	\$ 380,000
Personnel expenses related to the Security Products Segment	\$ 0	\$ 205,000
	\$ 0	\$ 2,641,668
Income Taxes Related to Expense Adjustment	\$ 0	\$ 887,600
Income Taxes Related to Tax Cuts and Jobs Act	\$ 2,565,375	\$ 2,565,372
Adjustment to Net Income (related to expenses and Tax Cuts and Jobs Act); (Non-GAAP)	<u>\$ 2,396,606</u>	<u>\$ 9,364,695</u>
Adjustment to Earnings per share (related to expenses and Tax Cuts and Jobs Act); (Non-GAAP)		
Basic	\$ 0.38	\$ 1.50
Diluted	\$ 0.38	\$ 1.49

Reconciliation of Industrial Hardware Segment net sales from GAAP to Non-GAAP financial measurer

For the Three and Twelve Months ended December 30, 2017 and December 31, 2016

	Three Months Ended December 30, 2017	Three Months Ended December 31, 2016	Twelve Months Ended December 30, 2017	Twelve Months Ended December 30, 2016
Net sales Industrial Hardware Segment (GAAP)	\$ 31,772,577	\$ 15,369,767	\$ 115,273,233	\$ 61,058,871
Percent change (GAAP)	107%		89%	
Net sales Velvac	\$ 15,487,191	\$ 0	\$ 47,313,216	\$ 0
Net sales Industrial Hardware Segment (excluding Velvac); (Non-GAAP)	\$ 16,285,386	\$ 15,369,767	\$ 67,960,017	\$ 61,058,871
Percent change (excluding Velvac); (Non-GAAP)	6%		11%	

Use of Non-GAAP Financial Measures

ITEM 7 MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Summary

Sales for fiscal year 2017 were \$204.2 million compared to \$137.6 million for fiscal year 2016. Net income for fiscal year 2017 was \$5.0 million, or \$0.80 per diluted share, compared to \$7.8 million, or \$1.25 per diluted share, for fiscal year 2016. Sales for the fourth quarter of 2017 were \$54.1 million compared to \$34.1 million for the same period in 2016. Net income for the fourth quarter of 2017 was (\$0.2) million, or (\$0.03) per diluted share compared to \$2.6 million, or \$0.42 per diluted share, for the comparable 2016 period.

The Company anticipates solid growth in sales and earnings in fiscal 2018 as a result of the acquisition of Velvac and our investments in Illinois Lock and new product development. We expect to start seeing returns on our investments in Road-iQ in the second half of the year. We believe that sales and earnings will also benefit from strong demand in several of our core markets, including Class 8 trucks and recreational vehicles. A reduction in the Company's taxes will also contribute to earnings growth.

Fourth Quarter 2017 Compared to Fourth Quarter 2016

The following table shows, for the fourth quarter of 2017 and 2016, selected line items from the consolidated statements of income as a percentage of net sales, by segment.

	2017 Fourth Quarter			
	Industrial Hardware	Security Products	Metal Products	Total
Net sales	100.0%	100.0%	100.0%	100.0%
Cost of products sold	73.2%	67.3%	93.2%	74.4%
Gross margin	26.8%	32.7%	6.8%	25.6%
Engineering expense	3.1%	3.1%	-%	2.7%
Selling and administrative expense	16.6%	17.3%	7.8%	15.5%
Operating profit	7.1%	12.3%	-1.0%	7.4%

	2016 Fourth Quarter			
	Industrial Hardware	Security Products	Metal Products	Total
Net sales	100.0%	100.0%	100.0%	100.0%
Cost of products sold	67.3%	66.2%	76.0%	68.2%
Gross margin	32.7%	33.8%	24.0%	31.8%
Engineering expense	0.9%	3.2%	-%	1.7%
Selling and administrative expense	19.3%	22.1%	9.8%	19.0%
Operating profit	12.5%	8.5%	14.2%	11.1%

The following table shows the amount of change from the fourth quarter of 2016 to the fourth quarter of 2017 in sales, cost of products sold, gross margin, selling and administrative expenses and operating profit, by segment (dollars in thousands).

	Industrial Hardware		Security Products		Metal Products		Total	
Net sales	\$	16,403	\$	1,212	\$	2,383	\$	19,998
Volume		101.5%		6.6%		30.2%		53.0%
Prices		-0.7%		0.3%		2.4%		0.2%
New Products		5.9%		2.0%		12.9%		5.4%
		106.7%		8.9%		45.5%		58.6%
Cost of products sold	\$	12,918	\$	969	\$	3,127	\$	17,014
		124.8%		10.8%		78.5%		73.1%
Gross margin	\$	3,485	\$	243	\$	(744)	\$	2,984
		69.4%		5.3%		-59.0%		27.5%
Engineering expense	\$	863	\$	20	\$	--	\$	883
		654.2%		4.5%		%		153.1%
Selling and administrative expenses	\$	2,287	\$	(448)	\$	81	\$	1,920
		77.0%		-15.0%		16.1%		29.6%
Operating profit	\$	335	\$	671	\$	(825)	\$	181
		17.5%		58.9%		-110.4%		4.7%

Net sales in the fourth quarter of 2017 increased 59% to \$54.1 million from \$34.1 million a year earlier. Sales growth reflects the acquisition of Velvac, which closed on April 3, 2017, as well as organic growth of approximately 13% in the fourth quarter of 2017, compared to the same period in 2016. Sales increased in the Industrial Hardware business segment by 107% and, excluding Velvac, increased 6% as compared to the fourth quarter sales in 2016 a result of strong sales growth to Class 8 Trucks, service bodies and bus customers. Sales of new products contributed 6% and included tumbler paddles, handle assemblies, latch brackets and lightweight composite panels for the class 8 trucking, off highway and industrial customers. Sales for the Security Products business segment for the fourth quarter of 2017 increased by 9% compared to the fourth quarter of 2016 as the result of increased sales volume from our investment in growth in Illinois Lock and Argo EMS. Sales for the Metal Products business segment increased 45% from sales in the fourth quarter of 2016 as a result of a resurgence in sales to mining customers and diversification to other industrial casting markets.

Cost of products sold in the fourth quarter increased \$17.0 million or 73% from 2016 to 2017. The increase in the cost of products sold in the four quarter of 2017 when compared to the respective corresponding prior year period primarily reflects cost of products sold attributable to the Velvac Acquisition.

The most significant factors resulting in changes in cost of products sold in the fourth quarter of 2017 compared to 2016 fourth quarter included:

- an increase of \$9.0 million or 68% in costs for raw materials, with Velvac representing the increase;
- an increase of \$3.6 million or 54% in payroll and payroll related costs, with Velvac representing \$1.7 million of the increase;
- an increase of \$2.8 million in freight expenses, with Velvac representing the total increase;
- an increase of \$0.9 million or 100% in supplies and tools costs;
- an increase of \$0.6 million in rent expense, with Velvac representing the total increase;
- and an increase of \$0.4 million or 107% in maintenance and repair costs.

Gross margin as a percentage of net sales for the fourth quarter of 2017 was 26% compared to 32% in the fourth quarter of 2016. The decrease is primarily the result of product mix, material cost increases and the Velvac Acquisition noted above.

Engineering expenses as a percentage of sales increased in the fourth quarter of 2017 to 3% from 2% in the fourth quarter of 2016. This increase was primarily the result of the Velvac Acquisition.

Selling and administrative expenses for the fourth quarter of 2017 increased \$1.9 million or 30% compared to the prior year quarter. The most significant factor resulting in changes in selling and administrative expenses in the fourth quarter of 2017 compared to 2016 fourth quarter was:

- an increase of \$1.5 million or 31% in costs for payroll and payroll related charges;
- an increase of \$0.2 million or 99% in business travel costs;
- and a decrease of \$0.2 million or 108% in commissions and royalties.

Net income (loss) for the fourth quarter of 2017 decreased to (\$0.2) million or (\$0.03) per diluted share from \$2.6 million or \$.42 per diluted share for the comparable period in 2016. In the fourth quarter of 2017, we incurred an incremental one-time charge of \$2.5 million, or \$0.41 per fully diluted share, consisting of a \$2.0 million charge on undistributed earnings of foreign subsidiaries as well as a charge of \$0.5 million related to the impact of the tax reform on our deferred tax asset.

RESULTS OF OPERATIONS

Fiscal Year 2017 Compared to Fiscal Year 2016

The following table shows, for fiscal year 2017 and fiscal year 2016, selected line items from the consolidated statements of income as a percentage of net sales, by segment.

	Industrial Hardware	Security Products	Metal Products	Total
Fiscal Year 2017				
Net sales	100.0%	100.0%	100.0%	100.0%
Cost of products sold	76.0%	69.2%	87.1%	75.5%
Gross margin	24.0%	30.8%	12.9%	24.5%
Engineering	3.3%	3.0%	-%	2.8%
Selling and administrative expense	16.3%	17.8%	9.1%	15.7%
Operating profit	4.4%	10.0%	3.8%	6.0%
Fiscal Year 2016				
Net sales	100.0%	100.0%	100.0%	100.0%
Cost of products sold	72.8%	68.5%	91.4%	73.6%
Gross margin	27.2%	31.5%	8.6%	26.4%
Engineering	0.8%	3.6%	-%	1.9%
Selling and administrative expense	17.1%	18.0%	9.8%	16.4%
Operating profit	9.3%	9.9%	-1.2%	8.1%

The following table shows the amount of change from fiscal year 2016 to fiscal year 2017 in sales, cost of products sold, gross margin, selling and administrative expenses, and operating profit, by segment (dollars in thousands):

	Industrial Hardware	Security Products	Metal Products	Total
Net sales	\$ 54,214	\$ 3,722	\$ 8,695	\$ 66,631
Volume	83.5%	4.8%	29.8%	43.2%
Prices	-0.4%	-%	2.7%	0.2%
New Products	5.7%	1.7%	12.6%	5.1%
	88.8%	6.5%	45.1%	48.5%
Cost of products sold	\$ 43,183	\$ 2,975	\$ 6,749	\$ 52,907
	97.1%	7.6%	38.3%	52.2%
Gross margin	\$ 11,031	\$ 747	\$ 1,946	\$ 13,724
	66.5%	4.1%	116.7%	37.8%
Engineering expenses	\$ 3,264	\$ (209)	\$ --	\$ 3,055
	633.9%	-10.2%	%	118.9%
Selling and administrative expenses	\$ 8,325	\$ 514	\$ 670	\$ 9,509
	80.0%	5.0%	35.4%	42.0%
Operating profit	\$ (558)	\$ 442	\$ 1,276	\$ 1,160
	-9.8%	7.8%	566.8%	10.4%

Summary

Net sales for 2017 increased 48% to \$204.2 million from \$137.6 million in 2016. Sales growth reflects the acquisition of Velvac, which closed on April 3, 2017, as well as organic growth of approximately 14% in 2017. Net sales in the Industrial Hardware segment increased approximately 89% in 2017, and excluding Velvac, sales increased 11% as compared to the same period in 2016. Sales of existing products increased 83% in 2017 primarily as the result of the Velvac Acquisition, as well as strong sales growth from our existing Class 8 truck, service bodies and bus customers. Net sales in the Security Products segment increased approximately 7% in 2017 primary a result of increased sales volume from our investment in growth at our Illinois Lock and Argo EMS divisions. The Metal Products business segment's net sales increased approximately 45% in 2017 compared to the prior year period. Sales volume increased 34% in mine roof products sold to our customers as a result of a resurgence in the coal mining industry due to higher natural gas prices and an easing of regulatory restriction in the coal mining industry. Net sales also increased 127% in industrial casting products through our continued efforts to diversify away from mining products. Net income for 2017 decreased 35% to \$5.0 million, or \$0.80 per diluted share, from \$7.8 million, or \$1.25 per diluted share, in 2016. The decrease in net income was primarily the result of the recognition of one-time charges of \$2.5 million related to the enactment of the Tax Cuts and Jobs Act in 2017 and \$1.8 million, net of tax expenses, related to the Velvac Acquisition, environmental remediation expenses and personnel related expenses. Excluding these one-time charges, we generated adjusted earnings of \$1.49 per fully diluted share in 2017. Adjusted earnings per share is a non-GAAP measure.

Industrial Hardware Business Segment

Net sales in the Industrial Hardware business segment increased 89% in 2017 from the 2016 level. Sales of existing products increased 83% in 2017 as the result of the Velvac Acquisition. Excluding Velvac, the Industrial Hardware business segment had strong organic sales growth in Class 8 trucks, service bodies and bus customers, which contributed 11% in increased sales volume in 2017, whereas new product sales of tumbler paddles, handle assemblies, latch brackets and composite panels contributed 6% in 2017, each as compared to 2016. From the date on which the acquisition of Velvac closed, April 3, 2017, to December 30, 2017, Velvac sales were \$ 47.3 million and earnings were \$(0.1) million.

Cost of products sold for the Industrial Hardware segment increased \$43.2 million or 97% from 2016 to 2017. The increase in the cost of products sold in the annual period of 2017 when compared to the annual period of 2016 primarily reflects cost of products sold attributable to the Velvac Acquisition.

The most significant factors resulting in changes in cost of products sold in 2017 compared to 2016 included:

- an increase of \$30.6 million or 119% in raw materials, with Velvac representing \$26.0 million of such increase;
- an increase of \$4.8 million or 38% in costs for payroll and payroll related charges, with Velvac representing \$4.3 million of such increase;
- an increase of \$4.3 million in freight costs, with Velvac representing the total increase;
- an increase of \$0.9 million or 183% in rent expense, with Velvac representing the total increase;
- an increase of \$0.5 million or 205% in foreign currency translation costs;
- an increase of \$0.3 million or 127% in scrap costs, with Velvac representing the total increase;
- an increase of \$0.3 million or 29% in depreciation charges, with Velvac representing the total increase;
- an increase of \$0.3 million or 38% in supplies and tools expense, with Velvac representing \$0.2 million of the increase;
- an increase of \$0.2 million or 53% for repairs and maintenance;
- an increase of \$0.2 million or 42% in utilities expenses, with Velvac representing the total increase;
- an increase of \$0.2 million in freight on supplies, with Velvac representing the total increase; and
- an increase of \$0.6 million in other expenses.

Gross margin as a percentage of sales in the Industrial Hardware business segment decreased to 24% in 2017 from 27% in 2016. The decrease reflects the mix of products produced and the changes in cost of products sold. Also affecting gross margin in fiscal 2017 was a one-time change to cost of goods sold, for \$1.2 million, as a result of the impact of the purchase accounting in connection with the Velvac acquisition. In addition, rising prices in raw material such as stainless steel, cold roll steel, hot rolled steel and zinc increased from 10% on stainless steel to 37% on zinc materials used in our products during 2017. As a result of these cost increases, our margins were negatively affected and could not be fully recovered in price increases to customers or offset through operational improvements.

Engineering expenses as a percentage of sales increased in 2017 to 3% from 0.8% in 2016. This increase was primarily the result of the Velvac Acquisition.

Selling and administrative expenses in the Industrial Hardware business segment increased \$8.3 million or 80% in 2017 from the 2016 level. The increase in selling and administrative expenses in the annual period of 2017 when compared to the prior year primarily reflects expenses attributable to the Velvac Acquisition.

The most significant factors resulting in changes in selling and administrative expenses in the Industrial Hardware business segment in 2017 compared to 2016 included:

- an increase of \$5.8 million or 74% in payroll and payroll related charges, with Velvac representing \$3.4 million of the increase;
- an increase of \$1.0 million in commissions and royalty costs, with Velvac representing the total increase;
- an increase of \$0.6 million or 154% in business travel costs, with Velvac representing the total increase;
- an increase of \$0.7 million in depreciation and amortization expenses, with Velvac representing \$0.4 million of the increase; and
- an increase of \$0.2 million in advertising expenses, with Velvac representing the total increase.

Security Products Business Segment

Net sales in the Security Products business segment increased 7% in 2017 from the 2016 level. The increase in sales in 2017 in the Security Products segment compared to the prior year period was a result of our investment in growth in Illinois Lock and Argo EMS. New product sales included a zinc branded puck lock, a spring return lock, a push button lock and a mini cam lock.

Cost of products sold for the Security Products business segment increased \$3.0 million or 8% from 2016 to 2017. The most significant factors resulting in changes in cost of products sold in 2017 compared to 2016 included:

- an increase of \$1.7 million or 7% in raw materials;
- an increase of \$0.4 million or 4% in payroll and payroll related charges;
- an increase of \$0.5 million in foreign exchange costs;
- an increase of \$0.2 million or 12% in other shipping expenses; and
- an increase of \$0.1 million or 11% in supplies and tools.

Gross margin as a percentage of sales in the Security Products business segment increased to 31% in 2017 from 28% in 2016. The increase reflects the mix of products sold and higher utilization of fixed charges on increased volume. Our margins were negatively impacted by higher material costs, primarily in zinc, which was up 37%, and brass, which was up 23%, from the prior year.

Engineering expenses as a percentage of sales decreased to 3% in 2017 from 4% in 2016.

Selling and administrative expenses in the Security Products business segment increased by \$0.5 million or 5% in 2017 from the 2016 level. The most significant factors resulting in changes in selling and administrative expenses in the Security Products segment in 2017 compared to 2016 included:

- an increase of \$0.3 million or 4% in payroll and payroll related charges; and
- an increase of \$0.2 million or 12% in other administration expenses.

Metal Products Business Segment

Net sales in the Metal Products business segment increased 45% in 2017 compared to the prior year period. Sales volume increased 34% in mine roof products sold to our customers a result of a resurgence in the coal mining industry due to higher natural gas prices and an easing of regulatory restriction in the coal mining industry. Net sales also increased 127% in industrial casting products through our continued efforts to diversify away from mining products.

Cost of products sold for the Metal Products segment increased \$6.8 million or 38% from 2016 to 2017. The most significant factors resulting in changes in cost of products sold in 2017 compared to 2016 included:

- an increase of \$2.1 million or 33% in costs for payroll and payroll related charges;
- an increase of \$1.5 million or 29% in raw materials;
- an increase of \$1.8 million or 103% for supplies and tools;

- an increase of \$0.5 million or 44% for utility costs;
- an increase of \$0.2 million in other expenses; and
- an increase of \$0.1 million or 41% in other shipping expenses.

Gross margin as a percentage of sales in the Metal Products business segment increased to 13% in 2017 from 9% in 2016. The increase reflects the mix of products produced and the utilization of productive capacity. Our margins were negatively impacted by a 48% increase in raw material scrap iron prices. Not all increases in the prices of raw materials could be recovered from price increases to customers.

Selling and administrative expenses in the Metal Products segment increased \$0.7 million or 35% from 2016 to 2017. The most significant factors, resulting in changes in selling and administrative expenses in the Metal Products business segment in 2017 compared to 2016 were:

- an increase of \$0.5 million or 38% in payroll and payroll related charges; and
- a \$0.4 million environmental charge.

Other Items

The following table shows the amount of change from 2016 to 2017 in other items (dollars in thousands):

	Amount	%
Interest expense	\$ 855	704%
Other income	\$ (54)	-26%
Income taxes	\$ 2,972	86%

Interest expense increased from 2016 in 2017 due to the increased level of debt in 2017 that was incurred in connection with the Velvac Acquisition.

Other income in 2017 decreased from the 2016 level. Other income in 2017 included the recognition of a gain on marketable securities of \$72,658. In 2016, other income included \$144,231 as a result of Argo EMS not meeting the sales goals for the second year earn-out period.

The effective tax rate for 2017 was 56% compared to the 2016 effective tax rate, which was 31%. The effective tax rate for 2017 was higher than the prior year period due to the enactment of the Tax Cuts and Jobs Act (the "Jobs Act") in 2017 and its impact on foreign repatriation tax.

Total income taxes paid were \$4,104,701 in 2017, \$3,493,558 in 2016 and \$2,348,865 in 2015.

The Jobs Act resulted in significant changes to U.S. corporate income tax laws by, among other provisions, reducing the maximum U.S. corporate income tax rate from 35% to 21% starting in 2018, and creating a territorial tax system with a one-time mandatory tax on previously deferred foreign earnings of U.S. subsidiaries. During the year ending December 30, 2017, the Company recognized deferred income tax expense of \$531,307 as a result of the re-measurement of deferred tax assets and liabilities to the new lower statutory rate of 21%.

Due to the passage of the Act, U.S. income taxes have been provided on the undistributed earnings of foreign subsidiaries (\$17,153,163 at December 30, 2017), as well as the associated withholding taxes from the foreign countries. The amount of taxes associated with the changes to the provisions of the tax law regarding foreign earnings is \$2,034,065. Foreign subsidiaries that were previously treated as corporations for U.S. income tax purposes will generally no longer be taxed on their foreign source income by the U.S. federal government. Of the \$2,034,065 in taxes associated with the new treatment of foreign earnings under the Jobs Act, \$861,964 are associated with the withholding taxes assessed by the foreign countries, net of the applicable U.S. tax credits, and \$1,172,101 are associated with the deemed repatriation of earnings held in foreign corporations. The Company has made an election to pay the \$1,172,101 in taxes on an installment basis over eight years with payments of \$93,768 becoming due in each of the years 2018 to 2022; one payment of \$175,815 becoming due in 2023; one payment of \$234,420 becoming due in 2024; and a final payment of \$293,026 becoming due in 2025.

Fiscal Year 2016 Compared to Fiscal Year 2015

The following table shows, for fiscal year 2016 and fiscal year 2015, selected line items from the consolidated statements of income as a percentage of net sales, by business segment.

	<u>Industrial Hardware</u>	<u>Security Products</u>	<u>Metal Products</u>	<u>Total</u>
Fiscal Year 2016				
Net sales	100.0%	100.0%	100.0%	100.0%
Cost of products sold	72.8%	72.0%	91.4%	75.1%
Gross margin	27.2%	28.0%	8.6%	24.9%
Selling and administrative expense	17.9%	18.1%	9.8%	16.8%
Operating profit	9.3%	9.9%	-1.2%	8.1%
Fiscal Year 2015				
Net sales	100.0%	100.0%	100.0%	100.0%
Cost of products sold	74.8%	74.4%	90.8%	77.6%
Gross margin	25.2%	25.6%	9.2%	22.4%
Selling and administrative expense	18.2%	18.9%	9.5%	16.8%
Operating profit	7.0%	6.7%	-0.3%	5.6%

The following table shows the amount of change from 2015 to 2016 in sales, cost of products sold, gross margin, selling and administrative expenses, and operating profit, by segment (dollars in thousands):

	<u>Industrial Hardware</u>	<u>Security Products</u>	<u>Metal Products</u>	<u>Total</u>
Net sales	\$ (280)	\$ 657	\$ (7,336)	\$ (6,959)
Volume	-8.1%	0.4%	-28.5%	-8.5%
Prices	-0.6%	-0.4%	0.0%	-0.4%
New Products	8.2%	1.1%	0.9%	4.1%
	-0.5%	1.2%	-27.5%	-4.8%
Cost of products sold	\$ (1,422)	\$ (899)	\$ (6,550)	\$ (8,871)
	-3.1%	-2.1%	-27.1%	-7.9%
Gross margin	\$ 1,142	\$ 1,556	\$ (786)	\$ 1,912
Selling and administrative expenses	\$ (228)	\$ (323)	\$ (645)	\$ (1,196)
	2.0%	-3.0%	-25.4%	-4.9%
Operating profit	\$ 1,370	\$ 1,879	\$ (141)	\$ 3,108
	31.7%	49.5%	-166.3%	38.7%

Industrial Hardware Business Segment

Net sales in the Industrial Hardware business segment decreased less than 1% in 2016 from the 2015 level. Sales of existing product decreased 8% in 2016 as a result of a decrease in sales of our lightweight composite material for the Class 8 truck market. This decrease was offset by an 8% increase in the new product sales of lightweight composite panels for electronic smartboards.

Cost of products sold for the Industrial Hardware business segment decreased \$1.4 million or 3% from 2015 to 2016. The most significant factors resulting in changes in cost of products sold in 2016 compared to 2015 included:

- a decrease of \$0.9 million or 4% in raw materials;
- a decrease of \$0.6 million or 4% in costs for payroll and payroll related charges;
- a decrease of \$0.1 million or 9% for supplies and tools;
- a decrease of \$0.1 million or 8% in depreciation charges;
- a decrease of \$0.2 million or 94% in miscellaneous income; and
- an increase of \$0.2 million or 46% in foreign exchange costs.

Gross margin of 27% for 2016 increased as compared to 25% in the 2015 period for the Industrial Hardware business segment. The increase reflects the mix of products produced, the changes in cost of products sold discussed above and lower utilization of our production facilities in both Kelowna, British Columbia, Canada and North Carolina.

Selling and administrative expenses in the Industrial Hardware segment decreased \$0.2 million or 2% from 2015 to 2016. The most significant factors resulting in changes in selling and administrative expenses in the Industrial Hardware segment in 2016 compared to 2015 included:

- a decrease of \$0.3 million or 4% in payroll and payroll related charges; and
- an increase of \$0.1 million or 12% in administrative charges.

Security Products Business Segment

Net sales in the Security Products business segment increased 1% in 2016 from the 2015 level. The increase in sales in 2016 in the Security Products business segment when compared to the prior year period was primarily due to a combination of volume sales and new product sales in the laundry industry (which was partially offset by a decrease in the vehicle lock industry). Sales volume increased in the smart card and flash cash products sold in the international laundry market. New products included high security equipment for add value card systems in the laundry industry and new product sales in the storage, locksmith and industrial distribution and electronic locking enclosures industries. New product sales included a zinc branded puck lock, a spring return lock, a push button lock and a mini cam lock.

Cost of products sold for the Security Products segment decreased \$0.9 million or 2% from 2015 to 2016. The most significant factors resulting in changes in cost of products sold in 2016 compared to 2015 included:

- a decrease of \$0.4 million or 2% in raw materials;
- a decrease of \$0.9 million or 11% in payroll and payroll related charges;
- an increase of \$0.2 million or 57% in foreign exchange gains;
- an increase of \$0.1 million or 12% in engineering costs;
- an increase of \$0.1 million or 8% in supplies and tools; and
- an increase of \$0.1 million or 30% in insurance costs.

Gross margin as a percentage of sales in the Security Products business segment increased to 28% in 2016 from 26% in 2015. The increase reflects the mix of products produced and the changes in cost of products sold, as discussed above.

Selling and administrative expenses in the Security Products segment decreased \$0.3 million or 3% from 2015 to 2016. The most significant factors resulting in changes in selling and administrative expenses in the Security Products segment in 2016 compared to 2015 included:

- a decrease of \$0.3 million or 4% in payroll and payroll related charges;
- a decrease of \$0.1 million or 278% in bad debt charges;
- a decrease of \$0.1 million or 21% in commissions and royalty expenses; and
- an increase of \$0.3 million or 27% in other administrative expenses.

Metal Products Business Segment

Net sales in the Metal Products business segment decreased 28% in 2016 from the 2015 level. Sales of mine products decreased 26% and industrial casting products decreased 41% in 2016 compared to 2015. The decrease in sales of mining products was driven by lower demand for existing products compared to the prior year period primarily in the U.S. mining market where lower oil and natural gas prices, coupled with excessive coal inventories, have reduced demand for our products. Our new products, consisting of tie plates for the rail industry and pipe fittings for the water, oil and gas industries, resulted in an increase in sales of 1%. The Company is actively developing new customers in the industrial casting business and is close to producing several new products for the gas, water and energy industries.

Cost of products sold for the Metal Products business segment decreased \$6.6 million or 27% from 2015 to 2016. The most significant factors resulting in changes in cost of products sold in 2016 compared to 2015 included:

- a decrease of \$3.8 million or 39% in payroll and payroll related charges;
- a decrease of \$2.1 million or 61% for supplies and tools;
- a decrease of \$0.9 million or 53% in costs for maintenance and repair;
- a decrease of \$0.6 million or 34% for utility costs;

- an increase of \$0.8 million or 18% in raw materials; and

- an increase of \$0.2 million or 299% in tools and jigs costs.

Gross margin as a percentage of sales in the Metal Products business segment was approximately the same at 9% in both 2016 and 2015.

Selling and administrative expenses in the Metal Products segment decreased \$0.6 million or 25% from 2015 to 2016. The most significant factors resulting in changes in selling and administrative expenses in the Metal Products business segment in 2016 compared to 2015 were:

- a decrease of \$0.5 million or 29% in payroll and payroll related charges; and
- a decrease of \$0.1 million or 72% in commissions and royalty charges.

Other Items

The following table shows the amount of change from 2015 to 2016 in other items (dollars in thousands):

	Amount	%
Interest expense	\$ (64)	-35%
Other income	\$ 30	17%
Income taxes	\$ 1,114	50%

Interest expense decreased from 2015 to 2016 due to the decreased level of debt in 2016.

Other income, which is not material to the financial statements, increased from 2015 to 2016 due to the Company recognizing \$144,231 in income as a result of Argo EMS not meeting the sales goals for the second year earn-out period.

The effective tax rate was 31% for 2016 compared to the 2015 rate, which was 29%. The effective tax rate for 2016 was higher than the prior year period due to the ratio of earnings in the United States being higher than earnings from foreign entities with lower tax rates.

Liquidity and Sources of Capital

The Company's financial position strengthened in 2017. The primary source of the Company's cash is earnings from operating activities adjusted for cash generated from or used for net working capital and the term loan from People's Bank. The most significant recurring non-cash items included in net income are depreciation and amortization expense. Changes in working

capital fluctuate with the changes in operating activities. As sales increase, there generally is an increased need for working capital. Since increases in working capital reduce the Company's cash, management attempts to keep the Company's investment in net working capital at a reasonable level by closely monitoring inventory levels and matching production to expected market demand, keeping tight control over the collection of receivables and optimizing payment terms on its trade and other payables.

The Company is dependent on continued demand for our products and subsequent collection of accounts receivable from our customers. The Company serves a broad base of customers and industries with a variety of products. As a result, any fluctuations in demand or payment from a particular industry or customer should not have a material impact on the Company's sales and collection of receivables. Management expects that the Company's foreseeable cash needs for operations, capital expenditures, debt service and dividend payments will continue to be met by the Company's operating cash flows and available credit facility.

The following table shows key financial ratios at the end of each year:

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Current ratio	3.2	6.0	5.0
Average days' sales in accounts receivable	46	49	47
Inventory turnover	3.4	3.0	3.0
Ratio of working capital to sales	33.7%	47.1%	41.6%
Total debt to shareholders' equity	40.5%	2.2%	4.0%

The following table shows important liquidity measures as of the fiscal year-end balance sheet date for each of the preceding three years (in millions):

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Cash and cash equivalents			
- Held in the United States	\$ 7.9	\$ 11.2	\$ 6.9
- Held by foreign subsidiary	14.4	11.5	10.9
	<u>22.3</u>	<u>22.7</u>	<u>17.8</u>
Working capital	68.8	64.8	60.1
Net cash provided by operating activities	11.2	12.4	9.1
Change in working capital impact on net cash (used)/provided by operating activities	2.4	(0.5)	(2.0)
Net cash used in investing activities	(44.7)	(2.9)	(2.5)
Net cash (used in)/provided by financing activities	30.7	(4.2)	(3.9)

The Jobs Act resulted in significant changes U.S. corporate income tax laws by, among other provisions, reducing the maximum U.S. corporate income tax rate from 35% to 21%, starting in 2018 and creating a territorial tax system with a one-time mandatory tax on previously deferred foreign earnings of U.S. subsidiaries. During the year ending December 30, 2017, the Company recognized deferred income tax expense of \$531,000 as a result of the re-measurement of deferred tax assets and liabilities to the new lower statutory rate of 21%.

Due to the enactment of the Act, U.S. income taxes have been provided on the undistributed earnings of foreign subsidiaries (\$17,153,163 at December 30, 2017), as well as the associated withholding taxes from the foreign countries. The amount of taxes associated with the changes to the provisions of the tax law regarding foreign earnings is \$2,034,000. Foreign divisions that were previously treated as corporations for U.S. income tax purposes will generally no longer be taxed on their foreign source income by the U.S. federal government. Of the \$2,034,000 in taxes associated with the new treatment of foreign earnings under the Jobs Act, \$862,000 are associated with the withholding of taxes assessed by foreign countries, net of the applicable U.S. tax credits, and \$1,172,000 in taxes are associated with the deemed repatriation of earnings held in foreign corporations. See Note 7 – Income Taxes for additional information.

All cash held by foreign subsidiaries is readily convertible into other currencies, including the U.S. dollar.

Net cash provided by operating activities was \$13.1 million in 2017 compared to \$12.4 million in 2016 and \$9.1 million in 2015. In 2017 and 2016, the Company was not required to, and did not, contribute anything into its salaried retirement plan. Due to

improved benefits of the Company's 401(k) plan in 2015 and 2016 the contribution required by the Company increased by \$595,000 for 2017 over the amount contributed for 2016. See Note 9 – Retirement Benefit Plans for details of the Plan changes.

The Company, across all of its business segments, has increased its emphasis on sales and customer service by fulfilling the rapid delivery requirements of our customers. As a result, investments in additional inventories are made on a selective basis.

In fiscal year 2017 the impact on cash from the net change in working capital was \$0.2 million, which was primarily due to an increase in accounts receivable derived from increased sales activity at the end of the year. In fiscal year 2016, inventory declined \$2.5 million primarily due to inventory reduction in the Metal Products business segment in response to the slowdown in the mining industry in 2015 and 2016. This change was offset by an increase in accounts receivable of \$1.1 million due to increased sales late in the fiscal year and a reduction of accounts payable related to the previously mentioned inventory reduction. In fiscal year 2015, cash from the net change in working capital declined by approximately \$2.0 million, primarily as a result of increased inventory and accounts receivable, which were partially offset by declines in accounts payable, prepaid expenses and recoverable taxes.

The Company used \$44.7 million, \$2.9 million and \$2.5 million for investing activities in 2017, 2016 and 2015, respectively. Included in the 2017 figure is approximately \$42.1 million used for the acquisition of the assets of Velvac. This transaction is more fully discussed in Note 3 of the 2017 Audited Financial Statements located in Item 8 of this Form 10-K. Almost all of the cash used in investing activities in fiscal years 2016 and 2015, and the balance of \$2.6 million in fiscal year 2017, was used to purchase fixed assets. Capital expenditures in fiscal year 2018 are expected to be in the range of \$3 million.

In fiscal year 2017, the Company received approximately \$30.7 million in cash from financing activities. The Company received proceeds of \$37.6 million from the issuance of new debt and used approximately \$4.1 million for debt repayments and \$2.8 million for the payment of dividends. See Note 3 – Debt for additional details on the debt that was issued.

In fiscal year 2016, the Company used approximately \$4.2 million in cash for financing activities. Approximately \$1.4 million was used for debt repayments and \$2.8 million was paid in dividends.

In fiscal year 2015, the Company used approximately \$3.9 million in cash for financing activities. Approximately \$1.1 million was used for debt repayments and \$2.8 million was paid in dividends.

The Company leases certain equipment and buildings under cancelable and non-cancelable operating leases that expire at various dates up to five years. Rent expense amounted to approximately \$2.2 million in 2017; \$1.3 million in 2016; and \$1.3 million in 2015.

On January 29, 2010, the Company signed a secured Loan Agreement (the "Loan Agreement") with People's United Bank ("People's"), which included a \$5,000,000 term portion (the "Original Term Loan") and a \$10,000,000 revolving credit portion. On January 25, 2012, the Company amended the Loan Agreement by taking an additional \$5,000,000 term loan (the "2012 Term Loan"). Interest on the Original Term Loan portion of the Loan Agreement is fixed at 4.98%. Interest on the 2012 Term Loan is fixed at 3.90%. The interest rate on the revolving credit portion of the Loan Agreement varied based on the LIBOR rate or People's Prime rate plus a margin spread of 2.25%, with a floor interest rate of 3.25% and a maturity date of January 31, 2014. On January 23, 2014, the Company signed an amendment to the Loan Agreement with People's that extended the maturity date of the \$10,000,000 revolving credit portion of the Loan Agreement to July 1, 2016 and changed the interest rate to LIBOR plus 2.25%, eliminating the floor interest rate previously in place. On June 9, 2016, the Company signed a third amendment to its Loan Agreement, which extended the maturity date of the \$10,000,000 revolving credit portion of the Loan Agreement to July 1, 2018.

On April 3, 2017, the Company signed an amended and restated loan agreement (the "Restated Loan Agreement") with People's that included a \$31,000,000 term portion and a \$10,000,000 revolving credit portion. Proceeds of the loan were used to repay the remaining outstanding term loan of the Company (approximately \$1,429,000) and to acquire 100% of the common stock of Velvac Holdings, Inc. (see Footnote 3). The term portion of the Restated Loan Agreement requires quarterly principal payments of \$387,500 for a two-year period beginning July 3, 2017. The repayment amount then increases to \$775,000 per quarter beginning July 1, 2019. The term portion of the Restated Loan Agreement is a five-year loan with any remaining outstanding balance due on March 1, 2022. The revolving credit portion has a quarterly commitment fee ranging from 0.2% to 0.375% based on operating results. Under the terms of the Restated Loan Agreement, this quarterly commitment fee will be 0.25% for the first six months. The revolving credit portion has a maturity date of April 1, 2022. On April 3, 2017, the Company borrowed approximately \$6.6 million on the revolving credit facility. The Company subsequently paid off \$1.6 million on the revolving credit portion of the Restated Loan Agreement, leaving a balance on the revolving credit portion of the Restated Loan Agreement of \$5 million as of December 30, 2017.

The interest rates on the term and revolving credit portion of the Restated Loan Agreement vary. The interest rates may vary based on the LIBOR rate plus a margin spread of 1.75% to 2.50%. The margin spread is based on operating results calculated on a rolling-four-quarter basis. The Company may also borrow funds at the lender's Prime rate. On December 30, 2017, the interest rate for one half (\$15.1 million) of the term portion was 3.11%, using a one-month LIBOR rate and 3.33% on the remaining balance (\$15.1 million) of the term portion based on a three-month LIBOR rate. The interest rate on the \$5,000,000 balance on the revolving credit portion was 3.11%.

On April 4, 2017, the Company entered into an interest rate swap contract with People's with an original notional amount of \$15,500,000, which is equal to 50% of the outstanding balance of the term portion of the Restated Loan Agreement on that date. The notional amount will decrease on a quarterly basis beginning July 3, 2017 following the principal repayment schedule of the term portion of the Restated Loan Agreement. The Company has a fixed interest rate of 1.92% on the swap contract and will pay the difference between the fixed rate and the LIBOR rate when the LIBOR rate is below 1.92% and will receive interest when the LIBOR rate exceeds 1.92%.

The quarterly payment dates as listed in the Loan Agreement and the Restated Loan Agreement are the first business day of the calendar quarter. As a result, there were only three payment dates in fiscal year 2015. In fiscal years 2016 and 2017, there were four scheduled payment dates.

Tabular Disclosure of Contractual Obligations

The Company's known contractual obligations as of December 30, 2017 are shown below (in thousands):

	Total	Payments due by period			
		Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Long-term debt obligations	\$ 30,225	\$ 1,550	\$ 5,425	\$ 23,250	\$ --
Estimated interest on long-term debt	5,028	1,133	2,151	1,744	--
Operating lease obligations	5,818	2,178	2,732	908	--
Estimated contributions to pension plans	26,423	528	4,985	6,612	14,298
Estimated other postretirement benefits other than pensions	1,106	105	213	219	569
Total	<u>\$ 68,600</u>	<u>\$ 5,494</u>	<u>\$ 15,506</u>	<u>\$ 32,733</u>	<u>\$ 14,867</u>

The amounts shown in the above table for estimated contributions to pension plans and for estimated postretirement benefits other than pensions are based on the assumptions set forth in Note 9 to the consolidated financial statements, as well as the assumption that participant counts will remain stable.

The Company does not have any non-cancellable open purchase obligations.

The Company believes it has sufficient cash on hand and credit resources available to it to sustain itself through the next fiscal year.

ITEM 7A QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The Company's foreign manufacturing facilities account for approximately 13% of total sales and 13% of total assets. Our U.S. operations buy from and sell to these foreign affiliates and make limited sales (approximately 13% of total sales) to nonaffiliated foreign customers. This trade activity could be affected by fluctuations in foreign currency exchange or by weak economic conditions. The Company's currency exposure is concentrated in the Canadian dollar, Mexican peso, New Taiwan dollar, Chinese RMB and Hong Kong dollar. Because of the Company's limited exposure to any single foreign market, any exchange gains or losses have not been material and are not expected to be material in the future. Had the exchange rate as of December 30, 2017 for all of the listed currencies changed by 1%, the total change in reported earnings would have been approximately \$34,000. As a result, the Company does not attempt to mitigate its foreign currency exposure through the acquisition of any speculative or leveraged financial instruments. In 2017, a 10% increase/decrease in exchange rates would have resulted in a translation increase/decrease of approximately \$2.4 million to sales and approximately \$949,000 to equity.

The Company has been able to recover cost increases in raw materials through either price increases to our customers or cost reductions in other areas of the business. Therefore, the Company has not entered into any contracts to address commodity price risk.

The Company's exposure to the risk of changes in market interest rates relates primarily to the Company's debt, which bears interest at variable rates based on the LIBOR rate plus a margin spread of 1.75% to 2.50%. The Company had an interest rate swap with a notional amount of \$15,112,500 on December 30, 2017 to convert the termportion of the Restated Loan Agreement from variable to fixed rates. The valuation of this swap is determined using the three month LIBOR rate index and mitigates the Company's exposure to interest rate risk.

The Eastern Company

Consolidated Balance Sheets

	December 30	December 31
	2017	2016
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 22,275,477	\$ 22,725,376
Accounts receivable, less allowances of \$470,000 in 2017 and \$430,000 in 2016	27,119,910	18,135,792
Inventories:		
Raw materials and component parts	14,331,915	8,829,236
Work in process	7,718,379	7,118,149
Finished goods	25,218,463	18,082,901
	<u>47,268,757</u>	<u>34,030,286</u>
Prepaid expenses and other assets	3,401,456	1,858,471
Deferred income taxes	—	947,001
Total Current Assets	100,065,600	77,696,926
Property, Plant and Equipment		
Land	1,160,298	1,159,901
Buildings	16,426,977	16,303,521
Machinery and equipment	52,680,240	47,447,649
Accumulated depreciation	<u>(41,075,121)</u>	<u>(38,745,557)</u>
	29,192,394	26,165,514
Other Assets		
Goodwill	32,228,891	14,819,835
Trademarks	3,686,063	166,312
Patents, technology and other intangibles net of accumulated amortization	9,275,158	1,764,449
Deferred income taxes	<u>2,010,291</u>	<u>3,585,360</u>
	<u>47,200,403</u>	<u>20,335,956</u>
TOTAL ASSETS	\$ 176,458,397	\$ 124,198,396

Consolidated Balance Sheets

	December 30 2017	December 31 2016
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current Liabilities		
Accounts payable	\$ 14,712,414	\$ 7,048,174
Accrued compensation	4,376,211	3,112,404
Other accrued expenses	3,606,057	1,812,647
Contingent Liability	2,070,000	
Current portion of long-term debt	<u>6,550,000</u>	<u>892,857</u>
Total Current Liabilities	31,314,682	12,866,082
Deferred income taxes	1,723,543	—
Other long-term liabilities	358,982	288,805
Long-term debt, less current portion	28,675,000	892,857
Accrued other postretirement benefits	1,032,171	1,051,700
Accrued pension cost	26,423,429	26,631,438
Commitments and contingencies (See Note 4)		
Shareholders' Equity		
Voting Preferred Stock, no par value:		
Authorized and unissued: 1,000,000 shares		
Nonvoting Preferred Stock, no par value:		
Authorized and unissued: 1,000,000 shares		
Common Stock, no par value:		
Authorized: 50,000,000 shares		
Issued: 8,957,974 shares in 2017 and 8,950,827 shares in 2016		
Outstanding: 6,263,245 shares in 2017 and 6,256,098 shares in 2016	29,501,123	29,146,622
Treasury Stock: 2,694,729 shares in 2017 and 2016	(19,105,723)	(19,105,723)
Retained earnings	97,921,903	95,631,216
Accumulated other comprehensive income (loss):		
Foreign currency translation	(943,193)	(2,165,081)
Unrealized gain on interest rate swap, net of tax	41,757	—
Unrecognized net pension and other postretirement benefit costs, net of taxes	(20,485,277)	(21,039,520)
Accumulated other comprehensive loss	(21,386,713)	(23,204,601)
Total Shareholders' Equity	86,930,590	82,467,514
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$ 176,458,397	\$ 124,198,396

See accompanying notes.

Consolidated Statements of Income

	Year ended		
	December 30 2017	December 31 2016	January 2 2016
Net sales	\$ 204,239,613	\$ 137,608,258	\$ 144,567,951
Cost of products sold	(154,188,794)	(101,262,048)	(110,318,320)
Gross margin	50,050,819	36,346,210	34,249,631
Engineering Expenses	(5,622,829)	(2,568,307)	(2,459,062)
Selling and administrative expenses	(32,151,289)	(22,642,031)	(23,762,841)
Operating profit	12,276,701	11,135,872	8,027,728
Interest expense	(976,512)	(121,500)	(185,475)
Other income	154,753	209,043	178,722
Income before income taxes	11,454,942	11,223,415	8,020,975
Income taxes	6,409,687	3,438,092	2,293,932
Net income	\$ 5,045,255	\$ 7,785,323	\$ 5,727,043
Earnings per Share:			
Basic	\$.81	\$ 1.25	\$.92
Diluted	\$.80	\$ 1.25	\$.92

See accompanying notes.

Consolidated Statements of Comprehensive Income

	Year ended		
	December 30 2017	December 31 2016	January 2 2016
Net income	\$ 5,045,255	\$ 7,785,323	\$ 5,727,043
Other comprehensive income/(loss) -			
Change in foreign currency translation	1,221,888	(1,010,983)	(2,009,277)
Change in fair value of interest rate swap, net of tax benefit of: \$7,310.	41,757	—	—
Change in pension and other postretirement benefit costs, net of income taxes (expense)/benefit of: \$62,632 in 2017, (\$543,297) in 2016 and \$1,899,285 in 2015	554,243	(1,110,306)	3,458,060
Total other comprehensive income/(loss)	1,817,888	(931,548)	1,448,783
Comprehensive income/(loss)	\$ 6,863,143	\$ 5,664,034	\$ 7,175,826

See accompanying notes.

Consolidated Statements of Shareholders' Equity

	<u>Common Shares</u>	<u>Common Stock</u>	<u>Treasury Shares</u>	<u>Treasury Stock</u>	<u>Retained Earnings</u>	<u>Accumulated Other Comprehensive Income (Loss)</u>	<u>Shareholders' Equity</u>
Balances at							
January 3, 2015	8,938,742	\$ 28,932,058	(2,694,729)	\$(19,105,723)	\$ 87,680,667	\$ (22,532,095)	\$ 74,974,907
Net income					5,727,043		5,727,043
Cash dividends declared, \$.45 per share					(2,810,669)		(2,810,669)
Currency translation adjustment						(2,009,277)	(2,009,277)
Change in pension and other postretirement benefit costs, net of tax						3,458,060	3,458,060
Issuance of Common Stock for directors' fees	3,719	64,992					64,992
Balances at							
January 2, 2016	8,942,461	28,997,050	(2,694,729)	(19,105,723)	90,597,041	(21,083,312)	79,405,056
Net income					7,785,323		7,785,323
Cash dividends declared, \$.44 per share					(2,751,148)		(2,751,148)
Currency translation adjustment						(1,010,983)	(1,010,983)
Change in pension and other postretirement benefit costs, net of tax						(1,110,306)	(1,110,306)
Issuance of Common Stock for directors' fees	8,366	149,572					149,572
Balances at							
December 31, 2016	<u>8,950,827</u>	<u>29,146,622</u>	<u>(2,694,729)</u>	<u>(19,105,723)</u>	<u>95,631,216</u>	<u>(23,204,601)</u>	<u>82,467,514</u>
Net income					5,045,255		5,045,255
Cash dividends declared, \$.44 per share					(2,754,568)		(2,754,568)
Currency translation adjustment						1,221,888	1,221,888
Change in fair value of interest rate swap						41,757	41,757
Change in pension and other postretirement benefit costs, net of tax						554,243	554,243

Issuance of SARS		172,806					172,806
Issuance of Common Stock for directors' fees	7,147	181,695					181,695
Balances at December 30, 2017	<u>8,957,974</u>	<u>\$ 29,501,123</u>	<u>(2,694,729)</u>	<u>\$(19,105,723)</u>	<u>\$ 97,921,903</u>	<u>\$ (21,386,713)</u>	<u>\$ 86,930,590</u>

See accompanying notes.

Consolidated Statements of Cash Flows

	Year ended		
	December 30 2017	December 31 2016	January 2 2016
Operating Activities			
Net income	\$ 5,045,255	\$ 7,785,323	\$ 5,727,043
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	4,719,185	3,814,393	3,921,438
Unrecognized pension & other postretirement benefits	326,706	931,554	1,384,605
Loss on sale of equipment and other assets	(369,128)	73,309	49,796
Provision for doubtful accounts	55,284	120,252	9,459
Deferred Taxes	1,198,020	(403,002)	(240,071)
Issuance of Stock Compensation	354,501	149,572	64,992
Changes in operating assets and liabilities:			
Accounts receivable	(2,574,823)	(1,062,654)	(852,168)
Inventories	152,130	2,514,371	(3,095,801)
Prepaid expenses	(1,709,241)	217,389	483,178
Recoverable tax receivables	—	—	380,000
Other assets	709,757	(84,626)	(106,081)
Accounts payable	892,439	(1,755,159)	1,182,124
Accrued compensation	911,572	261,231	28,426
Other accrued expenses	1,468,525	(146,713)	196,489
Net cash provided by operating activities	11,180,182	12,415,240	9,133,429
Investing Activities			
Purchases of property, plant and equipment	(2,762,949)	(2,863,470)	(2,538,236)
Proceeds from sale of equipment and other assets	44,100	8,350	25,000
Business acquisitions	(40,078,000)	—	—
Net cash used in investing activities	(42,796,849)	(2,855,120)	(2,513,236)
Financing Activities			
Principal payments on long-term debt	(2,560,714)	(1,428,571)	(1,071,428)
Proceeds from issuance of long-term debt and note	31,000,000	—	—
Proceeds from short-term borrowing (Revolver)	6,614,611	—	—
Payments on Revolving Credit Note	(1,614,611)	—	—
Dividends paid	(2,754,568)	(2,751,148)	(2,810,669)
Net cash used in financing activities	30,684,718	(4,179,719)	(3,882,097)
Effect of exchange rate changes on cash	482,049	(470,011)	(757,554)
Net change in cash and cash equivalents	(449,899)	4,910,390	1,980,542
Cash and cash equivalents at beginning of year	22,725,376	17,814,986	15,834,444
Cash and cash equivalents at end of year	\$ 22,275,477	\$ 22,725,376	\$ 17,814,986

See accompanying notes.

1. Description of Business

The Eastern Company (the "Company") includes eight separate operating divisions located within the United States, two wholly-owned Canadian subsidiaries (one located in Tillsonburg, Ontario, Canada, and one in Kelowna, British Columbia, Canada), a wholly-owned Taiwanese subsidiary located in Taipei, Taiwan, a wholly-owned subsidiary in Hong Kong, two wholly-owned Chinese subsidiaries (one located in Shanghai, China, and one located in Dongguan, China) and two wholly-owned subsidiaries in Mexico (one located in Lerma, Mexico and one located in Reynosa, Mexico).

The operations of the Company consist of three business segments: industrial hardware, security products, and metal products.

The Industrial Hardware segment consists of Eberhard Manufacturing, Eberhard Hardware Manufacturing Ltd., Eastern Industrial Ltd, Velvac Holdings Inc., Canadian Commercial Vehicles Corporation, Composite Panel Technologies, and Sesamee Mexicana, S.A. de C.V. These businesses design, manufacture and market a diverse product line of custom and standard vehicular and industrial hardware, including passenger restraint and vehicular locks, latches, hinges, mirrors, mirror-cameras, light weight sleeper boxes and truck bodies. The segment's products can be found on tractor-trailer trucks, specialty commercial vehicles, recreational vehicles, fire and rescue vehicles, school buses, military vehicles and other vehicles. In addition, the segment designs and manufactures a wide selection of fasteners and other closure devices used to secure access doors on various types of industrial equipment such as metal cabinets, machinery housings and electronic instruments.

The Security Products segment, Illinois Lock Company/CCL Security Products, World Lock Company Ltd., Dongguan Reeworld Security Products Ltd. and World Security Industries Ltd., Greenwald Industries, Argo EMS (formerly Argo Transdata). Illinois Lock Company/CCL Security Products design, manufactures and distributes custom engineered and many standard closing and locking systems, including vehicular accessory locks, cabinet locks, cam locks, electric switch locks, tubular key locks and combination padlocks. Greenwald manufactures and markets coin acceptors and other coin security products used primarily in the commercial laundry markets. Greenwald's products include timers, drop meters, coin chutes, money boxes, meter cases, smart cards, value transfer stations, smart card readers, card management software, access control units. Argo EMS supplies printed circuit boards and other electronic assemblies.

The Metal Products segment produces anchoring devices used in supporting the roofs of underground coal mines and specialty products which serve the construction, automotive, railroad and electrical industries.

Sales are made to customers primarily in North America.

2. Accounting Policies

Use of 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, as well as the reported amounts of revenues and expenses during the reporting period. On an ongoing basis the Company evaluates its estimates, including those related to product returns, bad debts, carrying value of inventories, intangible and other long-lived assets, income taxes, pensions and other postretirement benefits. Actual results could differ from those estimates.

Fiscal Year

The Company's year ends on the Saturday nearest to December 31. Fiscal 2017 was a 52 week year, 2016 was a 52 week year and 2015 was a 52 week year.

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its subsidiaries, all of which are wholly-owned. All intercompany accounts and transactions are eliminated.

Cash Equivalents

Highly liquid investments purchased with a maturity of three months or less are considered cash equivalents. The Company has deposits that exceed amounts insured by the Federal Deposit Insurance Corporation (FDIC) up to \$250,000, but the Company does not consider this a significant concentration of credit risk based on the strength of the financial institution. Approximately 64% of available cash is located outside of the United States in our foreign subsidiaries.

Reclassification

Commencing with the third quarter of 2017, engineering expenses have been separately identified for all periods presented. These expenses have been reclassified from cost of products sold to selling and administrative expenses. Engineering expense is not necessarily a cost of product sold. Rather, these expenses are related to product development.

2. Accounting Policies (continued)

Foreign Currency

For foreign operations balance sheet accounts are translated at the current year-end exchange rate; income statement accounts are translated at the average exchange rate for the year. Resulting translation adjustments are made directly to a separate component of shareholders' equity – "Accumulated other comprehensive income (loss) – Foreign currency translation". Foreign currency exchange transaction gains and losses are not material in any year.

Recognition of Sales

Sales are recognized when persuasive evidence of an arrangement exists, the price is fixed and determinable, delivery has occurred, and there is a reasonable assurance of collection of the sales proceeds. The Company obtains written purchase authorizations from its customers for a specified amount of product at a specified price and delivery occurs at the time of shipment. Credit is extended based on an evaluation of each customer's financial condition; collateral is not required. Sales are recorded net of returns and allowances. Accounts receivable are recorded net of applicable allowances. No one customer accounted for 10% of net sales during 2017, 2016 or 2015. No one customer exceeded 10% of total accounts receivable at year end 2017 for 2016.

Accounts Receivable

Accounts receivable are stated at their net realizable value. The Company maintains an allowance for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. The Company reviews the collectability of its receivables on an ongoing basis taking into account a combination of factors. The Company reviews potential problems, such as past due accounts, a bankruptcy filing or deterioration in the customer's financial condition, to ensure the Company is adequately accrued for potential loss. Accounts are considered past due based on when payment was originally due. If a customer's situation changes, such as a bankruptcy or creditworthiness, or there is a change in the current economic climate, the Company may modify its estimate of the allowance for doubtful accounts. The Company will write off accounts receivable after reasonable collection efforts have been made and the accounts are deemed uncollectible.

Inventories

Inventories are valued at the lower of cost or market or net realizable value. Cost is determined by the last-in, first-out (LIFO) method in the U.S. (\$26,280,620 for U.S. inventories at December 30, 2017 excluding Velvac) and by the first-in, first-out (FIFO) method for inventories outside the U.S. (\$8,034,924 for inventories outside the U.S. at December 30, 2017). Cost exceeds the LIFO carrying value by approximately \$6,476,073 at December 30, 2017 and \$6,121,286 at December 31, 2016. There was no material LIFO quantity liquidation in 2017, 2016 and 2015. In addition, as of the balance sheet dates, the Company has recorded reserves for excess/obsolete inventory.

2. Accounting Policies (continued)**Property, Plant and Equipment and Related Depreciation**

Property, plant and equipment (including equipment under capital lease) are stated at cost. Depreciation (\$3,948,728 in 2017, \$3,371,694 in 2016, \$3,460,516 in 2015) is computed generally using the straight-line method based on the following estimated useful lives of the assets: Buildings 10 to 39.5 years; Machinery and equipment 3 to 10 years.

Goodwill, Intangibles and Impairment of Long-Lived Assets

Patents are recorded at cost and are amortized using the straight-line method over the lives of the patents. Technology and licenses are recorded at cost and are generally amortized on a straight-line basis over periods ranging from 5 to 17 years. Non-compete agreements and customer relationships are being amortized using the straight-line method over a period of 5 years. Amortization expense in 2017, 2016 and 2015 was \$770,457, \$442,699 and \$460,922, respectively. Total amortization expense for each of the

next five years is estimated to be as follows: 2018 - \$1,228,000; 2019 - \$1,228,000; 2020 - \$995,000; 2021 - \$995,000 and 2022 - \$853,000. Trademarks are not amortized as their lives are deemed to be indefinite.

	Industrial Hardware Segment	Security Products Segment	Metal Products Segment	Total	Weighted- Average Amortization Period (Years)
2017 Gross Amount					
Patents and developed technology	\$ 7,074,456	\$ 1,021,918	\$ —	\$ 8,096,374	12.3
Customer relationships	3,650,000	449,706	—	4,099,706	9.5
Non-compete agreements	—	407,000	—	407,000	5.0
Intellectual property	—	307,370	—	307,370	5.0
Total Gross Intangibles	<u>\$ 10,724,456</u>	<u>\$ 2,185,994</u>	<u>\$ —</u>	<u>\$ 12,910,450</u>	<u>10.8</u>
2017 Accumulated Amortization					
Patents and developed technology	\$ 2,007,418	\$ 630,784	\$ —	\$ 2,638,202	
Customer relationships	298,645	269,823	—	568,468	
Non-compete agreements	—	244,200	—	244,200	
Intellectual property	—	184,422	—	184,422	
Accumulated Amortization	<u>\$ 2,306,063</u>	<u>\$ 1,329,229</u>	<u>\$ —</u>	<u>\$ 3,635,292</u>	
Net 2017 per Balance Sheet	<u>\$ 8,418,393</u>	<u>\$ 856,765</u>	<u>\$ —</u>	<u>\$ 9,275,158</u>	
2016 Gross Amount					
Patents and developed technology	\$ 2,159,060	\$ 1,035,374	\$ —	\$ 3,194,434	15.6
Customer relationships	—	449,706	—	449,706	5.0
Non-compete agreements	—	407,000	—	407,000	5.0
Intellectual property	—	307,370	—	307,370	5.0
Total Gross Intangibles	<u>\$ 2,159,060</u>	<u>\$ 2,199,450</u>	<u>\$ —</u>	<u>\$ 4,358,510</u>	<u>12.3</u>

	Industrial Hardware Segment	Security Products Segment	Metal Products Segment	Total	Weighted-Average Amortization Period (Years)
2016 Accumulated Amortization					
Patents and developed technology	\$ 1,529,675	\$ 598,756	\$ —	\$ 2,128,431	
Customer relationships	—	179,882	—	179,882	
Non-compete agreements	—	162,800	—	162,800	
Intellectual property	—	122,948	—	122,948	
Accumulated Amortization	<u>\$ 1,529,675</u>	<u>\$ 1,064,386</u>	<u>\$ —</u>	<u>\$ 2,594,061</u>	
Net 2016 per Balance Sheet	<u>\$ 629,385</u>	<u>\$ 1,135,064</u>	<u>\$ —</u>	<u>\$ 1,764,449</u>	

In the event that facts and circumstances indicate that the carrying value of long-lived assets, including definite life intangible assets, may be impaired, an evaluation is performed to determine if a write-down is required. No events or changes in circumstances have occurred to indicate that the carrying amount of such long-lived assets held and used may not be recovered.

The Company performed qualitative assessments as of the end of fiscal 2017 and fiscal 2016 and determined it is more likely than not that no impairment of goodwill existed at the end of 2017 or 2016. The Company will perform annual qualitative assessments in subsequent years as of the end of each fiscal year. Additionally, the Company will perform interim analysis whenever conditions warrant.

Goodwill or trademarks would be considered impaired whenever the historical carrying amount exceeds the fair value. Pursuant to the qualitative assessment performed, goodwill and trademarks were not impaired in 2017, 2016 or 2015. Should we reach a different conclusion in the future, additional work would be performed to determine the amount of the non-cash impairment charge to be recognized. The maximum future impairment of goodwill or trademarks that could occur is the amount recognized on our balance sheet.

The following is a roll-forward of goodwill for 2017 and 2016:

	Industrial Hardware Segment	Security Products Segment	Metal Products Segment	Total
2017				
Beginning balance	\$ 1,760,793	\$ 13,059,042	\$ —	\$ 14,819,835
Investment in Velvac	17,340,946	—	—	17,340,946
Foreign exchange	68,110	—	—	68,110
Ending balance	<u>\$ 19,169,849</u>	<u>\$ 13,059,042</u>	<u>\$ —</u>	<u>\$ 32,228,891</u>
2016				
Beginning balance	\$ 1,731,751	\$ 13,059,042	\$ —	\$ 14,790,793
Foreign exchange	29,042	—	—	29,042
Ending balance	<u>\$ 1,760,793</u>	<u>\$ 13,059,042</u>	<u>\$ —</u>	<u>\$ 14,819,835</u>

2. Accounting Policies (continued)

Cost of Goods Sold

Cost of goods sold reflects the cost of purchasing, manufacturing and preparing a product for sale. These costs generally represent the expenses to acquire or manufacture products for sale (including an allocation of depreciation and amortization) and are primarily comprised of direct materials, direct labor, and overhead, which includes indirect labor, facility and equipment costs, inbound freight, receiving, inspection, purchasing, warehousing and any other costs related to the purchasing, manufacturing or preparation of a product for sale.

Shipping and Handling Costs

Shipping and handling costs are included in cost of goods sold.

Engineering Costs

Engineering costs, charged to expense as incurred, were \$5,622,829 in 2017, \$2,568,307 in 2016 and \$2,459,062 in 2015.

Selling, General and Administrative Expenses

Selling, general and administrative expenses include all operating costs of the Company that are not directly related to the cost of purchasing, manufacturing and preparing a product for sale. These expenses generally represent the cost of selling or distributing the product once it is available for sale, as well as administrative expenses for support functions and related overhead.

Research & Development Costs

Research & development costs, charged to expense as incurred, were \$3,678,481 in 2017, \$1,525,650 in 2016 and \$1,218,948 in 2015.

Advertising Costs

The Company expenses advertising costs as incurred. Advertising costs were \$526,651 in 2017, \$441,853 in 2016 and \$496,066 in 2015.

Software Development Costs

Software development costs, including costs to develop software sold, leased, or otherwise marketed, that are incurred subsequent to the establishment of technological feasibility are capitalized if significant. Costs incurred during the application development stage for internal-use software are capitalized if significant. Capitalized software development costs are amortized using the straight-line amortization method over the estimated useful life of the applicable software. Such software development costs required to be capitalized have not been material to date.

Income Taxes

The Company accounts for uncertain tax positions pursuant to the provisions of FASB Accounting Standards Codification ("ASC") 740 which clarifies the accounting for uncertainty in income taxes recognized in a company's financial statements. These provisions detail how companies should recognize, measure, present and disclose uncertain tax positions that have or are expected to be taken. As such, the financial statements will reflect expected future tax consequences of uncertain tax positions presuming the taxing authorities' full knowledge of the position and all relevant facts. See Note 7 Income Taxes.

The Company and its U.S. subsidiaries file a consolidated federal income tax return.

Deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse.

2. Accounting Policies (continued)

On December, 22, 2017, SAB 118 was issued due to the complexities involved in accounting for the recently enacted Tax Act. SAB 118 requires the company to include in its financial statements a reasonable estimate of the impact of the Tax Act on earnings to the extent such estimate has been determined. Accordingly, the U.S. provision for income tax for 2017 is based on the reasonable estimate guidance provided by SAB 118. The company is continuing to assess the impact from the Tax Act and will record adjustments in 2018. The final impact on the company from the Tax Act's transition tax legislation may differ from the reasonable estimate due to the complexity of calculating and supporting with primary evidence such U.S. tax attributes as accumulated foreign earnings and profits, foreign tax paid, and other tax components involved in foreign tax credit calculations for prior years back to 1986. Such differences could be material, due to, among other things, changes in interpretations of the Tax Act, future legislative action to address questions that arise because of the Tax Act, changes in accounting standards for income taxes or related interpretations in response to the Tax Act, or any updates or changes to estimates the company has utilized to calculate the transition tax's reasonable estimate.

Earnings per Share

The denominators used in the earnings per share computations follow:

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Basic:			
Weighted average shares outstanding	<u>6,259,139</u>	<u>6,251,535</u>	<u>6,245,057</u>
Diluted:			
Weighted average shares outstanding	<u>6,259,139</u>	<u>6,251,535</u>	<u>6,245,057</u>
Dilutive stock options	<u>35,634</u>	<u>—</u>	<u>—</u>
Denominator for diluted earnings per share	<u>6,294,773</u>	<u>6,251,535</u>	<u>6,245,057</u>

There were no anti-dilutive stock equivalents in 2017, 2016 or 2015.

Stock Based Compensation

The Company accounts for stock based compensation pursuant to the fair value recognition provisions of ASC 718. For the year ended December 30, 2017, there were 174,500 SARs and options of common stock granted under the 2010 Plan. No stock options were granted in 2016 or 2015, and, since all outstanding options in those years were fully vested in each year presented, there was no impact on the financial statements.

Under the terms of the Director's Fee Program, the directors can elect to receive their Director's fees in cash or in common shares of the Company. This election is made at the beginning of each fiscal year and remains in effect for the entire year.

The Eastern Company

Fair Value of Financial Instruments

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The company utilizes a fair value hierarchy, which maximizes the use of observable inputs and minimizes the use of unobservable inputs when measuring fair value. The fair value hierarchy has three levels of inputs that may be used to measure fair value:

- Level 1 Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.
- Level 2 Quoted prices in markets that are not active; or other inputs that are observable, either directly or indirectly, for substantially the full term of the asset or liability.

2. Accounting Policies (continued)

Level 3 Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable.

The carrying amounts of other financial instruments (cash and cash equivalents, accounts receivable, accounts payable and debt) as of December 30, 2017 and December 31, 2016, approximate fair value. Fair value was based on expected cash flows and current market conditions.

The Company's interest rate swap is not an exchange-traded instrument. However, it is valued based on observable inputs for similar liabilities and accordingly is classified as Level 2. The amount of the interest rate swap is included in other accrued liabilities.

3. Business Acquisitions

On April 3, 2017, the Company completed the Velvac Acquisition for \$39.5 million and earnout consideration contingent upon Velvac achieving minimum earning performance levels with the amount of any such earnout consideration based on a specified percentage (7.5% or 15%) of sales of Velvac's new proprietary Road-iQ product line (the "Earnout Consideration") measured over annual calculation periods through April 2022, as set forth in the Securities Purchase Agreement, subject to certain customary post-closing adjustments. Velvac is a premier designer and manufacturer of proprietary vision technology for original equipment manufacturers serving the heavy-duty and medium-duty truck, motorhome, and bus markets.

The adjusted goodwill of \$17,341,000 arising from the Velvac Acquisition consists of the difference between the consideration paid and the fair value of the assets and liabilities acquired. None of the goodwill recognized is expected to be deductible for income tax purposes. The following table summarizes the consideration paid for Velvac and the amounts of the assets acquired and liabilities assumed recognized at the acquisition date, as well as the fair value at the acquisition date.

At April 3, 2017:

Consideration	
Cash	\$ 4,078,000
Debt	36,000,000
Contingent consideration arrangement	2,070,000
	<u>\$ 42,148,000</u>
Recognized amounts of identifiable assets acquired and liabilities assumed	
at fair value	
Accounts receivable	\$ 6,063,429
Inventory	12,992,377
Prepaid and other assets	494,617
Property plant and equipment	3,911,767
Other noncurrent assets	366,401
Other intangible assets	11,560,000
Current liabilities	(7,720,591)
Deferred tax liabilities	(2,860,946)
Total identifiable net assets	<u>24,807,054</u>
Goodwill	17,340,946
	<u>\$ 42,148,000</u>

3. Business Acquisitions (continued)

The Company determined the acquisition date fair value of the contingent consideration obligation using the Income Approach method which is a valuation technique that provides an estimate of the fair value of an asset based on the market participant expectations of the cash flows that an asset would generate over a period of time. The contingent consideration obligation was based on weighted projected cash flows discounted back to present value equivalents at a risk adjusted discount rate. The Velvac earnout is contingent upon the ability of Velvac to reach certain EBITDA targets over the course of the next five years. At each annual period, the Company will revalue the contingent consideration obligation to estimated fair value and record changes in fair value as income or expense in the Company's consolidated statement of operations.

Accounts Receivable

Acquired receivables are amounts due from customers.

Inventories

The estimated fair value of inventories acquired included a purchase price adjustment of \$1,187,668 above the seller's original cost basis of \$11,804,709. The entire amount was charged to cost of sales in the second quarter of 2017.

Intangible Assets

The estimated fair value of identifiable intangible assets was determined primarily using the Income Approach method which is a valuation technique that provides an estimate of the fair value of an asset based on the market participant's expectations of the cash flows that an asset would generate over its remaining useful life. Some of the more significant assumption inherent in the development of the identifiable intangible assets valuation, from the perspective of a market participant, include the estimate net cash flows for each year for each project or product, the appropriate discount rate to select in order to measure the risk inherent in each future cash flow stream, the assessment of each asset's life cycle, competitive trends impacting the asset and each cash flow stream as well as other factors.

Acquisition Related Expenses

Included in general and administrative expenses in the consolidated statements of operations for year ended December 30, 2017 was \$863,000 for acquisition expenses.

4. Contingencies

The Company is party to various legal proceedings and claims related to its normal business operations. In the opinion of management, the Company has substantial and meritorious defenses for these claims and proceedings in which it is a defendant, and believes these matters will ultimately be resolved without a material adverse effect on the consolidated financial position,

results of operations or liquidity of the Company. The aggregate provision for losses related to contingencies arising in the ordinary course of business was not material to operating results for any year presented.

During 2010, the Company was contacted by the State of Illinois regarding potential ground contamination at its plant in Wheeling, Illinois. The Company entered into a voluntary remediation program in Illinois and has engaged an environmental clean-up company to perform testing and develop a remediation plan. Since 2010, the environmental company has completed a number of tests and the design of a final remediation system is currently being reviewed and is expected to be approved in the first quarter of 2018. The total estimated cost for the proposed remediation system is anticipated to be approximately \$50,000.

During 2016, the Company created a plan to remediate a landfill of spent foundry sand maintained at the Company's Metal Casting facility in Syracuse, New York. This plan was presented to the New York Department of Environmental Conservation

4. CONTINGENCIES (continued)

(the "DEC") for approval in the first quarter of 2018. The Company is in final negotiations with the DEC, and based on estimates provided by the Company's environmental engineers, the cost to remediate and monitor the landfill was \$380,000 which the Company expensed in the second and third quarters of 2017.

There are no other legal proceedings, other than ordinary routine litigation incidental to the Company's business, to which either the Company or any of its subsidiaries is a party or of which any of property of the Company or any subsidiary is the subject.

Approximately 31% of the total workforce is subject to negotiated union contracts, and approximately 9% of the total workforce is covered by such agreements that expire during 2018.

5. Debt

On January 29, 2010, the Company signed a secured Loan Agreement (the "Loan Agreement") with People's United Bank ("People's") which included a \$5,000,000 term portion (the "Original Term Loan") and a \$10,000,000 revolving credit portion. On January 25, 2012, the Company amended the loan agreement by taking an additional \$5,000,000 term loan (the "2012 Term Loan"). Interest on the Original Term Loan portion of the Loan Agreement is fixed at 4.98%. Interest on the 2012 Term Loan is fixed at 3.90%. The interest rate on the revolving credit portion of the Loan Agreement varied based on the LIBOR rate or People's Prime rate plus a margin spread of 2.25%, with a floor rate of 3.25% and a maturity date of January 31, 2014. On January 23, 2014, the Company signed an amendment to its secured Loan Agreement with People's which extended the maturity date of the \$10,000,000 revolver portion of the Loan Agreement to July 1, 2016 and changed the interest rate to LIBOR plus 2.25%, eliminating the floor previously in place. On June 9, 2016, the Company signed a third amendment to its secured Loan Agreement which extended the maturity date of the \$10,000,000 revolver portion of the Loan Agreement to July 1, 2018.

On April 3, 2017, the Company signed an amended and restated loan agreement (the "Restated Loan Agreement") with People's United Bank that included a \$31 million term portion and a \$10 million revolving credit portion. Proceeds of the loan were used to repay the remaining outstanding term loan of the Company (approximately \$1,429,000) and to acquire 100% of the common stock of Velvac Holdings, Inc. (see Footnote 3). The term portion of the loan requires quarterly principal payments of \$387,500 for a two-year period beginning July 3, 2017. The repayment amount then increases to \$775,000 per quarter beginning July 1, 2019. The term loan is a five-year loan with any remaining outstanding balance due on March 1, 2022. The revolving credit portion has a quarterly commitment fee ranging from 0.2% to 0.375% based on operating results. Under the terms of the Restated Loan Agreement, this quarterly commitment fee will be 0.25% for the first six months. The revolving credit portion has a maturity date of April 1, 2022. On April 3, 2017, the Company borrowed approximately \$6.6 million on the revolving credit facility. The

Company subsequently paid off \$1.6 million on the revolving credit facility leaving a balance on the credit facility of \$5 million as of December 30, 2017.

The interest rates on the term and revolving credit portion of the Restated Loan Agreement vary. The interest rates may vary based on the LIBOR rate plus a margin spread of 1.75% to 2.50%. The margin spread is based on operating results calculated on a rolling-four-quarter basis. The Company may also borrow funds at the lender's prime rate. On December 30, 2017, the interest rate for one half (\$15.1 million) of the term portion was 3.11%, using a 1 month LIBOR rate and 3.33% on the remaining balance (\$15.1 million) of the term loan based on a 3 month LIBOR rate. The interest rate on the \$5 million of the revolving credit portion was 3.11%.

On April 4, 2017, the Company entered into an interest rate swap contract with the lender with an original notional amount of \$15,500,000, which is equal to 50% of the outstanding balance of the term loan on that date. The notional amount will decrease on a quarterly basis beginning July 3, 2017 following the principal repayment schedule of the term loan. The Company has a fixed interest rate of 1.92% on the swap contract and will pay the difference between the fixed rate and the LIBOR rate when the LIBOR rate is below 1.92% and will receive interest when the LIBOR rate exceeds 1.92%.

5. DEBT (continued)

Debt consists of:

	<u>2017</u>	<u>2016</u>
Term loans	\$ 30,225,000	\$ 1,785,714
Revolving credit loan	5,000,000	—
	<u>35,225,000</u>	<u>1,785,714</u>
Less current portion	6,550,000	892,857
	<u>\$ 28,675,000</u>	<u>\$ 892,857</u>

The Company paid interest of \$977,399 in 2017, \$127,735 in 2016, and \$174,558 in 2015.

The Company's loan covenants under the Restated Loan Agreement require the Company to maintain a consolidated minimum debt service coverage ratio of at least 1.1 to 1 for periods through December 31, 2018 and 1.2 to 1 thereafter, which is to be tested quarterly on a twelve-month trailing basis. In addition, the Company will be required to show a maximum total leverage ratio of 4.0x for periods through December 31, 2018, 3.5x for the periods from January 1, 2019 through December 31, 2019, 3.25x for the periods from January 1, 2020 through December 31, 2020 and 3.0x thereafter. The Company was in compliance with all

covenants for the three month period ended December 30, 2017. In addition, the Company has restrictions on, among other things, new capital leases, purchases or redemptions of its capital stock, mergers and divestitures, and new borrowing. The Company was in compliance with all covenants in 2016 and 2017.

As of December 30, 2017, scheduled annual principal maturities of long-term debt for each of the next five years follow:

2018	\$ 1,550,000
2019	2,325,000
2020	3,100,000
2021	3,100,000
2022	20,150,000
Thereafter	—
	<u>\$ 30,225,000</u>

6. Stock Options and Awards

Stock Options

The Company accounts for its stock based awards in accordance with Accounting Standards Codification subtopic 718-10, Compensation ("ASC 718-10"), which requires a fair value measurement and recognition of compensation expense for all share-based payment awards made to its employees and Directors, including employee stock options and restricted stock awards. The Company estimates the fair value of granted stock options using the Black-Scholes valuation model. This model requires the Company to make estimates and assumptions including, without limitation, estimates regarding the length of time an employee

6. STOCK OPTIONS AND AWARDS (continued)

will retain vested stock options before exercising them, the estimated volatility of the Company's common stock price and the number of options that will be forfeited prior to vesting. The fair value is then amortized on a straight-line basis over the requisite service periods of the awards, which is generally the vesting period. Changes in these estimates and assumptions can materially affect the determination of the fair value of stock-based compensation and consequently, the related amount recognized in the Company's consolidated statements of operations. The Company used several assumptions which included an expected term of 3.5 years, volatility deviation of 22.6% and a risk free rate of 1.47%.

As of December 30, 2017, the Company had one stock option plan, The Eastern Company 2010 Executive Stock Incentive Plan (the "2010 Plan"), for officers, other key employees, and non-employee Directors. Incentive stock options granted under the 2010 Plan must have exercise prices that are not less than 100% of the fair market value of the Company's common stock on the dates the stock options are granted. Restricted stock awards may also be granted to participants under the 2010 Plan with restrictions determined by the Compensation Committee of the Company's Board of Directors. Under the 2010 Plan, non-qualified stock options granted to participants will have exercise prices determined by the Compensation Committee of the Company's Board of Directors. During 2017, 25,000 shares were granted but not issued and during the year of 2016, no stock options or restricted stock were granted that were subject to the meeting of performance measurements.

The 2010 Plan also permits the issuance of Stock Appreciation Rights ("SARs"). The SARs are in the form of an option with a cashless exercise price equal to the difference between the fair value of the Company's common stock at the date of grant and the fair value as of the exercise date resulting in the issuance of the Company's common stock. During 2017, the Company issued 149,500 SARs and during 2016 no SARs were issued.

Stock-based compensation expense in connection with SARs granted to employees during fiscal year 2017 was approximately \$172,806.

As of December 30, 2017, there were 333,500 shares of common stock reserved and available for future grant under the above noted 2010 Plan.

6. Stock Options and Awards (continued)

The following tables set forth the outstanding SARs for the period specified:

	Year Ended December 30, 2017		Year Ended December 31, 2016	
	Units	Weighted - Average Exercise Price	Units	Weighted - Average Exercise Price
Outstanding at beginning of period	—	\$ —	—	\$ —
Issued	149,500	20.39	—	—
Forfeited	(8,000)	21.10	—	—
Outstanding at end of period	<u>141,500</u>	<u>20.36</u>	<u>—</u>	<u>—</u>

SARs Outstanding and Exercisable

Range of Exercise Prices	Outstanding as of December 30, 2017	Weighted- Average Remaining Contractual Life	Weighted- Average Exercise Price	Exercisable as of December 30, 2017	Weighted- Average Remaining Contractual Life	Weighted- Average Exercise Price
\$ 19.10-21.10	<u>141,500</u>	4.2	\$ 20.36	<u>—</u>	—	—

The following tables set forth the outstanding stock grants for the period specified:

	Year Ended December 30, 2017		Year Ended December 31, 2016	
	Shares	Weighted - Average Exercise Price	Shares	Weighted - Average Exercise Price
Outstanding at beginning of period	—	\$ —	—	\$ —
Issued	25,000	—	—	—
Forfeited	—	—	—	—
Outstanding at end of period	<u>25,000</u>	<u>—</u>	<u>—</u>	<u>—</u>

Stock Grants Outstanding and Exercisable

Range of Exercise Prices	Outstanding as of December 30, 2017	Weighted- Average Remaining Contractual Life	Weighted- Average Exercise Price	Exercisable as of December 30, 2017	Weighted- Average Remaining Contractual Life	Weighted- Average Exercise Price
\$ 0.00	<u>25,000</u>	5.0	—	<u>—</u>	—	—

As of December 30, 2017, outstanding SARs and options had an intrinsic value of \$1,484,375.

7. Income Taxes

Deferred income taxes are provided on temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and those for income tax reporting purposes. Deferred income tax (assets) liabilities relate to:

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Property, plant and equipment	\$ 3,853,837	\$ 6,515,129	\$ 6,694,885
Intangible assets	2,620,791	—	—
Other	64,905	119,618	99,989
Foreign Withholding Tax	861,964	—	—
Total deferred income tax liabilities	<u>7,401,497</u>	<u>6,634,747</u>	<u>6,794,874</u>
Other postretirement benefits	(235,510)	(371,460)	(281,154)
Inventories	(792,724)	(806,680)	(807,061)
Allowance for doubtful accounts	(97,570)	(124,329)	(124,351)
Intangible assets	—	(224,609)	(299,137)
Accrued compensation	(83,829)	(233,806)	(252,297)
Pensions	(6,029,034)	(9,406,224)	(8,616,582)
Foreign Tax Credit	(449,578)	—	—
Total deferred income tax assets	<u>(7,688,245)</u>	<u>(11,167,108)</u>	<u>(10,380,582)</u>
Net deferred income tax (assets) liabilities	<u>\$ (286,748)</u>	<u>\$ (4,532,361)</u>	<u>\$ (3,585,708)</u>

Income before income taxes consists of:

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Domestic	\$ 7,513,348	\$ 7,276,239	\$ 4,308,809
Foreign	3,941,594	3,947,176	3,712,166
	<u>\$ 11,454,942</u>	<u>\$ 11,223,415</u>	<u>\$ 8,020,975</u>

The provision for income taxes follows:

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Current:			
Federal	\$ 3,713,975	\$ 2,554,341	\$ 1,337,417
Foreign	1,084,353	1,091,952	1,054,694
State	319,439	194,514	140,139
Deferred:			
Federal	(47,241)	(339,412)	(223,530)
Foreign	1,301,972	—	—
State	37,189	(63,303)	(14,788)
	<u>\$ 6,409,687</u>	<u>\$ 3,438,092</u>	<u>\$ 2,293,932</u>

7. Income Taxes (continued)

A reconciliation of income taxes computed using the U.S. federal statutory rate to that reflected in operations follows:

	2017		2016		2015	
	Amount	Percent	Amount	Percent	Amount	Percent
Income taxes using U.S. federal statutory rate	\$ 3,894,680	34%	\$ 3,815,962	34%	\$ 2,727,131	34%
State income taxes, net of federal benefit	264,205	2	87,061	1	82,987	1
Impact on Foreign Repatriation Tax Reform	2,034,065	18	—	—	—	—
Impact of foreign subsidiaries on effective tax rate	(364,569)	(3)	(365,528)	(3)	(388,132)	(5)
Impact on New Tax Law	531,307	5	—	—	—	—
Impact of manufacturers deduction on effective tax rate	(123,554)	(1)	(140,690)	(1)	(91,018)	(1)
Other—net	173,553	1	41,287	—	(37,036)	—
	6,409,687	56%	\$ 3,438,092	31%	\$ 2,293,932	29%

Total income taxes paid were \$4,104,701 in 2017, \$3,493,558 in 2016 and \$2,348,865 in 2015.

On December 22, 2017, the United States enacted the Tax Cuts and Jobs Act (the "Act"). The Act, which is also commonly referred to as "U.S. tax reform," significantly changes U.S. corporate income tax laws by, among other provisions, reducing the maximum U.S. corporate income tax rate from 35% to 21% starting in 2018, and creating a territorial tax system with a one-time mandatory tax on previously deferred foreign earnings of U.S. subsidiaries. During the year ending December 30, 2017, the Company recognized deferred income tax expense of \$531,307 as a result of the re-measurement of deferred tax assets and liabilities to the new lower statutory rate of 21%.

Due to the passage of the Tax Cut and Jobs Act, United States income taxes have been provided on the undistributed earnings of foreign subsidiaries (\$17,153,163, at December 30, 2017) as well as the associated withholding taxes from the foreign countries. The amount of taxes associated with the current tax law change on the foreign earnings is \$2,034,065. Foreign divisions that were previously treated as corporations for U.S. income tax purposes will generally no longer be taxed on their foreign source income by the U.S. federal government. The resulting taxes from the Tax Cut and Jobs Act of \$2,034,065; \$861,964 are associated with the withholding taxes assessed by the foreign countries, net of the applicable U.S. tax credits; and \$1,172,101 in taxes are associated with the deemed repatriation of earnings held in foreign corporations. The Company has made an election to pay the \$1,172,101 taxes in installments over 8 years with the payments due in the years 2018 to 2022 in the amount of \$93,768; in the year 2023 a payment of \$175,815; in the year 2024 a payment of \$234,420; and the final payment in the year 2025 of \$293,026.

The final impact on the company from the Tax Act's transition tax legislation may differ from the aforementioned reasonable estimate due to the complexity of calculating and supporting with primary evidence such U.S. tax attributes as accumulated foreign earnings and profits, foreign tax paid, and other tax components involved in foreign tax credit calculations for prior years back to 1986. Such differences could be material, due to, among other things, changes in interpretations of the Tax Act, future legislative action to address questions that arise because of the Tax Act, changes in accounting standards for income taxes or related interpretations in response to the Tax Act, or any updates or changes to estimates the company has utilized to calculate the transition tax's reasonable estimate.

Pursuant to the SAB118, the company is allowed a measurement period of up to one year after the enactment date of the Tax Act to finalize the recording of the related tax impacts.

7. Income Taxes (continued)

A reconciliation of the beginning and ending amount of unrecognized tax benefits are as follows:

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Balance at beginning of year	\$ 251,839	\$ 249,782	\$ 248,645
Increases for positions taken during the current period	53,013	44,172	27,947
Decreases resulting from the expiration of the statute of limitations	(5,118)	(42,115)	(26,810)
Balance at end of year	<u>\$ 299,734</u>	<u>\$ 251,839</u>	<u>\$ 249,782</u>

The Company files income tax returns in the U.S. federal jurisdiction, and various states and foreign jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal, state and local income tax examinations by tax authorities for years before 2013 and non-U.S. income tax examinations by tax authorities prior to 2011.

Included in the balance at December 30, 2017, are \$236,789 of unrecognized tax benefits that would affect the annual effective tax rate. In 2017, the Company recognized accrued interest related to unrecognized tax benefits in income tax expense. The Company had approximately \$59,316 of accrued interest at December 30, 2017.

The total amount of unrecognized tax benefits could increase or decrease within the next twelve months for a number of reasons, including the closure of federal, state and foreign tax years by expiration of the statute of limitations and the recognition and measurement considerations under ASC 740. The Company believes that the total amount of unrecognized tax benefits will not increase or decrease significantly over the next twelve months.

8. Leases

The Company leases certain equipment and buildings under operating lease arrangements. Most leases are for a fixed term and for a fixed amount; additionally, the Company leases certain buildings under operating leases on a month-to-month basis. The Company is not a party to any leases that have step rent provisions, escalation clauses, capital improvement funding or payment increases based on any index or rate.

Future minimum payments under non-cancelable operating leases with initial or remaining terms in excess of one year during each of the next five years follow:

2018	\$ 2,178,480
2019	1,538,397
2020	1,193,329
2021	704,929
2022	202,943
	<u>\$ 5,818,078</u>

Rent expense for all operating leases was \$2,166,755 in 2017, \$1,293,271 in 2016, and \$1,324,365 in 2015. The Company expects future rent expense, including non-cancelable operating leases, leases that are expected to be renewed and buildings leased on a month-to-month basis, for each of the next five years to be in the range of \$2,200,000 to \$2,500,000.

9. Retirement Benefit Plans

The Company has non-contributory defined benefit pension plans covering most U.S. employees. Plan benefits are generally based upon age at retirement, years of service and, for its salaried plan, the level of compensation. The Company also sponsors unfunded non-qualified supplemental retirement plans that provide certain former officers with benefits in excess of limits imposed by federal tax law.

The Company also provides health care and life insurance for retired salaried employees in the United States who meet specific eligibility requirements.

Effective for January 1, 2018, as a result of the collective bargaining agreement between the Illinois Lock Company and the Service Employees International Union Local, 1 C.L.C. pension accruals for the covered employees have been frozen. Under ASC 715, the Company is required to rereasure plan assets and obligations during an interim period whenever a significant event occurs that results in a material change in the net periodic pension cost. The determination of significance is based on judgment and consideration of events and circumstances affecting the pension costs. After consulting with our actuary, the freezing of benefits under the Illinois Lock Plan was considered a significant event pursuant to such standard. As a result, the Company expensed the previously unrecognized Prior Service Cost. The Eastern Company increased the expense by \$14,928. The freezing of benefit accruals did not impact the pension benefit obligation. The additional recognition occurred as of the end of the fiscal year; thus, a rereasurement was not necessary.

Effective for September 1, 2017, as a result of the collective bargaining agreement between the Eberhard Manufacturing Company and the International Association of Machinists and Aerospace Workers AFL-CIO District # 54 Local #439, the following changes were made:

- The pension for the covered employees has been frozen for any new employees who would have entered the plan after September 1, 2017. Under ASC 715, the Company is required to rereasure plan assets and obligations during an interim period whenever a significant event occurs that results in a material change in the net periodic pension cost. The determination of significance is based on judgment and consideration of events and circumstances affecting the pension costs. After consulting with our actuary the partial freezing of benefits under the Eberhard Hourly Union Plan was not considered a significant event pursuant to such standard. The benefit formula multiplier was modified by increasing it by \$.50 on September 1, 2017 and by another \$.50 on each subsequent anniversary for the lifetime of the contract. The benefit multiplier will equal \$45.00 at the end of the current contract (August 31, 2022).

On April 5, 2016, the Board of Directors passed a resolution freezing the benefits of The Salaried Employees Retirement Plan of The Eastern Company (the "Salaried Plan") effective as of May 31, 2016. Under ASC 715, the Company is required to rereasure plan assets and obligations during an interim period whenever a significant event occurs that results in a material change in the net periodic pension cost. The determination of significance is based on judgment and consideration of events and circumstances affecting the pension costs. After consulting with our actuary the freezing of benefits under the Salaried Plan was considered a significant event pursuant to such standard. of events and circumstances affecting the pension costs. After consulting with our actuary the freezing of benefits under the Salaried Plan was considered a significant event pursuant to such standard.

Components of the net periodic benefit cost of the Company's pension benefit plans for the fiscal year indicated were as follows:

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Service cost	\$ 1,276,608	\$ 1,977,295	\$ 3,770,191
Interest cost	3,170,194	3,486,982	3,472,870
Expected return on plan assets	(4,783,531)	(4,995,858)	(5,151,654)
Amortization of prior service cost	178,874	200,568	218,585
Amortization of the net loss	1,231,486	1,704,863	1,928,298
Net periodic benefit cost	<u>\$ 1,073,631</u>	<u>\$ 2,373,850</u>	<u>\$ 4,238,290</u>

9. Retirement Benefit Plans (continued)

As a result of the freezing of the benefits of the Salaried Plan, 2016 pension expense was reduced by \$2,447,000.

Assumptions used to determine net periodic benefit cost for the Company's pension benefit plans for the fiscal year indicated were as follows:

	<u>2017</u>	<u>2016</u>	<u>2015</u>
<i>Discount rate</i>			
- Pension plans	4.04% - 4.08%	4.24% - 4.28%	3.90%
- Supplemental pension plans	3.03%	3.53%	3.90%
Expected return on plan assets	7.5%	8.0%	8.0%
Rate of compensation increase	0%	3.25%	3.25%

Components of the net periodic benefit cost of the Company's other postretirement benefit plan were as follows:

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Service cost	\$ 27,389	\$ 29,300	\$ 217,570
Interest cost	80,827	94,872	154,915
Expected return on plan assets	(51,494)	(47,532)	(91,936)
Amortization of prior service cost	(21,444)	(23,890)	(23,889)
Amortization of the net loss	(77,601)	(93,921)	18,804
Net periodic benefit cost	<u>\$ (42,323)</u>	<u>\$ (41,171)</u>	<u>\$ 275,464</u>

Assumptions used to determine net periodic benefit cost for the Company's other postretirement plan for the fiscal year indicated were as follows:

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Discount rate	4.12%	4.23%	3.90%
Expected return on plan assets	4.0%	8.0%	8.0%

As of December 30, 2017 and December 31, 2016, the status of the Company's pension benefit plans and other postretirement benefit plan was as follows:

	<u>Pension Benefit</u>		<u>Other Postretirement Benefit</u>	
	<u>2017</u>	<u>2016</u>	<u>2017</u>	<u>2016</u>
Benefit obligation at beginning of year	\$ 92,258,937	\$ 87,427,769	\$ 2,339,050	\$ 1,981,344
Change due to availability of final actual assets and census data	—	—	—	317,440
Discount rate	6,200,491	2,359,745	181,691	34,471
Service cost	1,276,608	1,977,295	27,389	29,300
Interest cost	3,170,194	3,486,982	80,827	94,872
Actuarial (gain)/loss	(1,495,135)	2,940,154	(65,601)	33,022
Benefits paid	(3,385,793)	(3,398,419)	(139,946)	(151,399)
Plan Amendment	496,899	—	—	—
Additional recognition due to significant event	—	(2,534,589)	—	—
Benefit obligation at end of year	<u>\$ 98,522,201</u>	<u>\$ 92,258,937</u>	<u>\$ 2,423,410</u>	<u>\$ 2,339,050</u>

The Eastern Company

Notes to Consolidated Financial Statements (continued)

9. Retirement Benefit Plans (continued)

	Pension Benefit		Other Postretirement Benefit	
	2017	2016	2017	2016
Fair value of plan assets at beginning of year	\$ 65,627,499	\$ 63,122,843	\$ 1,287,350	\$ 1,188,289
Actual return on plan assets	9,315,225	4,653,349	103,889	99,061
Employer contributions	541,841	1,249,726	139,946	151,399
Benefits paid	(3,385,793)	(3,398,419)	(139,946)	(151,399)
Fair value of plan assets at end of year	\$ 72,098,772	\$ 65,627,499	\$ 1,391,239	\$ 1,287,350

The Eastern Company

Notes to Consolidated Financial Statements (continued)

Funded Status	Pension Benefit		Other Postretirement Benefit	
	2017	2016	2017	2016
Net amount recognized in the balance sheet	\$ (26,423,429)	\$ (26,631,438)	\$ (1,032,171)	\$ (1,051,700)

Amounts recognized in accumulated other comprehensive income consist of:

	Pension Benefit		Other Postretirement Benefit	
	2017	2016	2017	2016
Net (loss)/gain	\$ (32,565,614)	\$ (33,623,438)	\$ 1,089,785	\$ 1,231,081
Prior service (cost) credit	(494,142)	(176,117)	18,397	39,841
	\$ (33,059,756)	\$ (33,799,555)	\$ 1,108,182	\$ 1,270,922

Change in the components of accumulated other comprehensive income consist of:

	Pension Benefit		Other Postretirement Benefit	
	2017	2016	2017	2016
Balance at beginning of period	\$ (33,799,555)	\$ (32,597,167)	\$ 1,270,922	\$ 1,722,137
Change due to availability of final actual assets and census data	—	—	—	(317,440)
Charged to net periodic benefit cost				
Prior service cost	178,874	200,568	(21,444)	(23,890)
Net loss (gain)	1,231,486	1,704,863	(77,601)	(93,921)
Liability (gains)/losses				
Discount rate	(6,200,491)	(2,359,745)	(181,691)	(34,471)
Asset (gains)/losses deferred	5,978,071	(4,325,232)	52,395	51,529
Additional recognition due to plan amendment	(496,899)	2,534,589	—	—
Other	48,758	1,042,569	65,601	(33,022)
Balance at end of period	\$ (33,059,756)	\$ (33,799,555)	\$ 1,108,182	\$ 1,270,922

In 2017, the net periodic pension benefit cost included \$1,118,370 of net loss and \$120,968 of prior service cost and the net periodic other postretirement benefit cost included \$65,591 of net gain and \$5,072 of prior service credit.

9. Retirement Benefit Plans (continued)

Assumptions used to determine the projected benefit obligations for the Company's pension benefit plans and other postretirement benefit plan for the fiscal year indicated were as follows:

	<u>2017</u>	<u>2016</u>
Discount rate		
- Pension plans	3.54% - 3.57%	4.04% - 4.08%
- Supplemental pension plans	3.10%	3.03%
- Other postretirement plan	3.60%	4.12%

At December 30, 2017 and December 31, 2016, the accumulated benefit obligation for all qualified and nonqualified defined benefit pension plans was \$98,522,201 and \$92,258,937, respectively.

Information for the under-funded pension plans with a projected benefit obligation and an accumulated benefit obligation in excess of plan assets:

	<u>2017</u>	<u>2016</u>
Number of plans	6	6
Projected benefit obligation	\$ 98,522,201	\$ 92,258,937
Accumulated benefit obligation	98,522,201	92,258,937
Fair value of plan assets	72,098,722	65,627,499
Net amount recognized in accrued benefit liability	(26,423,429)	(26,631,438)

Estimated future benefit payments to participants of the Company's pension plans are \$3.8 million in 2018, \$4.1 million in 2019, \$4.3 million in 2020, \$4.6 million in 2021, \$4.8 million in 2022 and a total of \$26.8 million from 2023 through 2027.

Estimated future benefit payments to participants of the Company's other postretirement plan are \$105,000 in 2018, \$106,000 in 2019, \$107,000 in 2020, \$109,000 in 2021, \$110,000 in 2022 and a total of \$569,000 from 2023 through 2027.

The Company expects to make cash contributions to its qualified pension plans of approximately \$510,000 and to its other postretirement plan of approximately \$105,000 in 2018.

We consider a number of factors in determining and selecting assumptions for the overall expected long-term rate of return on plan assets. We consider the historical long-term return experience of our assets, the current and expected allocation of our plan assets, and expected long-term rates of return. We derive these expected long-term rates of return with the assistance of our investment advisors and generally base these rates on a 10-year horizon for various asset classes and consider the expected positive impact of active investment management. We base our expected allocation of plan assets on a diversified portfolio consisting of domestic and international equity securities and fixed income securities.

We consider a variety of factors in determining and selecting our assumptions for the discount rate at the end of the year. In 2017, as in 2016, we developed each plan's discount rate with the assistance of our actuaries by matching expected future benefit payments in each year to the corresponding spot rates from the Citigroup Pension Liability Yield Curve, comprised of high quality (rated AA or better) corporate bonds.

During 2016, as a result of a legal separation of the Russell Indexes from Russell Investments into different companies with different ownership, the name of our Trustee changed from Russell Trust Company to Russell Investment Trust Company ("RITC").

9. Retirement Benefit Plans (continued)

The fair values of the company's pension plans assets at December 30, 2017 and December 31, 2016, utilizing the fair value hierarchy discussed in Note 2, follow:

	December 30, 2017			
	Level 1	Level 2	Level 3	Total
<u>Cash and Equivalents:</u>				
Common/collective trust funds	\$ —	\$ 278,016	\$ —	\$ 278,016
<u>Equities:</u>				
The Eastern Company Common Stock	5,675,021		—	5,675,021
<u>Common/collective trust funds</u>				
Russell Multi Asset Core Plus Fund (a)	—	31,642,837	—	31,642,837
<u>Fixed Income:</u>				
<u>Common/collective trust funds</u>				
<u>Target Duration LDI Fixed Income Funds (b)</u>				
• Russell 8 Year LDI Fixed Income Fund	—	6,033,648	—	6,033,648
• Russell 14 Year LDI Fixed Income Fund	—	18,083,206	—	18,083,206
<u>STRIPS Fixed Income Funds (c)</u>				
• Russell 15 Year STRIPS Fixed Income Fund	—	1,905,068	—	1,905,068
• Russell 10 Year STRIPS Fixed Income Fund	—	3,570,427	—	3,570,427
• Russell 28 to 29 Year STRIPS Fixed Income Fund	—	2,144,581	—	2,144,581
Insurance contracts	—	2,765,967	—	2,765,967
Total	\$ 5,675,021	\$ 66,423,750	\$ —	\$ 72,098,771

9. Retirement Benefit Plans (continued)

	December 31, 2016			
	Level 1	Level 2	Level 3	Total
Cash and Equivalents:				
Common/collective trust funds	\$ —	\$ 276,129	\$ —	\$ 276,129
Equities:				
The Eastern Company Common Stock	4,535,676	—	—	4,535,676
Common/collective trust funds				
RITC Large Cap Defensive Equity Fund (a)	—	7,131,589	—	7,131,589
RITC Equity II Fund (b)	—	4,875,234	—	4,875,234
RITC Large Cap U.S. Equity Fund (c)	—	5,984,636	—	5,984,636
RITC International Fund with Active Currency	—	8,178,635	—	8,178,635
RITC Emerging Markets Fund	—	3,373,089	—	3,373,089
Fixed Income:				
Common/collective trust funds				
RITC Fixed Income I Fund	—	8,700,175	—	8,700,175
Target Duration LDI Fixed Income Funds				
• RITC 8 Year LDI Fixed Income Fund	—	1,499,390	—	1,499,390
• RITC 10 Year LDI Fixed Income Fund	—	1,851,317	—	1,851,317
• RITC 12 Year LDI Fixed Income Fund	—	2,122,411	—	2,122,411
• RITC 14 Year LDI Fixed Income Fund	—	3,790,209	—	3,790,209
• RITC 16 Year LDI Fixed Income Fund	—	5,650,440	—	5,650,440
STRIPS Fixed Income Funds				
• RITC 15 Year STRIPS Fixed Income Fund	—	2,504,395	—	2,504,395
• RITC 10 Year STRIPS Fixed Income Fund	—	1,407,518	—	1,407,518
• RITC 28 to 29 Year STRIPS Fixed Income Fund	—	464,106	—	464,106
Insurance contracts	—	3,282,552	—	3,282,552
Total	\$ 4,535,676	\$ 61,091,825	\$ —	\$ 65,627,501

Equity common funds primarily hold publicly traded common stock of both U.S. and international companies selected for purposes of total return and to maintain equity exposure consistent with policy allocations. The Level 1 investment is made up of shares of The Eastern Company Common Stock and is valued at market price. Level 2 investments include commingled funds valued at unit values provided by the investment managers, which are based on the fair value of the underlying publicly traded securities.

9. Retirement Benefit Plans (continued)

- (a) The investment objective of the RITC (formerly Russell) Multi-Asset Core Plus Fund seeks to provide long-term growth of capital over a market cycle by offering a diversified portfolio of funds and separate accounts investing in global stock, return seeking fixed income, commodities, global real estate and opportunistic investments. They hold a dynamic mix of underlying Russell Investments funds and/or separate accounts. Russell Investments is a strong proponent of disciplined strategic asset allocation and rebalancing strategies, and believes that unstable movements in the market have the potential to create opportunities. By identifying short-term mispricing, and making small tactical adjustments to the Multi-Asset Core Plus Fund, they believe there is potential to enhance returns while continuing to manage risks.
- (b) The Target Duration LDI Fixed Income Funds seek to outperform their respective Barclays-Russell LDI Indexes over a full market cycle. These Funds invest primarily in investment grade corporate bonds that closely match those found in discount curves used to value U.S. pension liabilities. They seek to provide additional incremental return through modest interest rate timing, security selection and tactical use of non-credit sectors. Generally for use in combination with other bond funds to gain additional credit exposure, with the goal of reducing the mismatch between a plan's assets and liabilities.
- (c) The STRIPS (Separate Trading of Registered Interest and Principal of Securities) Funds seek to provide duration and Treasury exposure by investing in an optimized subset of the STRIPS universe with a similar duration profile as the Barclays U.S. Treasury STRIPS 10-11 year, 16-16 year or 28-29 year Index. These passively managed funds are generally used with other bond funds to add additional duration to the asset portfolio. This will help reduce the mismatch between a plan's assets and liabilities.

The investment portfolio contains a diversified blend of common stocks, bonds, cash equivalents, and other investments, which may reflect varying rates of return. The investments are further diversified within each asset classification. The portfolio diversification provides protection against a single security or class of securities having a disproportionate impact on aggregate performance. The Company has elected to change its investment strategy to better match the assets with the underlying plan liabilities. Currently, the long-term target allocations for plan assets are 50% in equities and 50% in fixed income although the actual plan asset allocations may be within a range around these targets. The actual asset allocations are reviewed and rebalanced on a periodic basis to maintain the target allocations. It is expected that, as the funded status of the plans improves, more assets will be invested in long-duration fixed income instruments.

The plans' assets include 217,018 shares of the common stock of the Company having a market value of \$5,675,021 and \$4,535,676 at December 30, 2017 and December 31, 2016, respectively. No shares were purchased in 2017 or 2016 nor were and shares sold in either period. Dividends received during 2017 and 2016 on the common stock of the Company were \$95,488 and \$95,488 respectively.

U.S. salaried and non-union hourly employees and most employees of the Company's Canadian subsidiaries are covered by defined contribution plans.

The Company has a contributory savings plan under Section 401(k) of the Internal Revenue Code covering substantially all U.S. non-union employees. This plan allows participants to make voluntary contributions of up to 100% of their annual compensation on a pretax basis, subject to IRS limitations. The plan provides for contributions by the Company at its discretion.

9. Retirement Benefit Plans (continued)

The Company amended the Eastern Company Savings and Investment Plan ("401(k) Plan Amendment") effective June 1, 2016. The 401(k) Plan Amendment increased this match to 50% of the first 6% of contributions for the remainder of Fiscal 2016. The 401(k) Plan Amendment also provided for an additional non-discretionary contribution (the "transitional credit") for certain non-union U.S. employees who were eligible to participate in the Salaried Plan. The amount of this non-discretionary contribution ranges from 0% to 4% of wages, based on the age of the individual on June 1, 2016. The 401(k) Plan Amendment increased the non-discretionary safe harbor contribution to 3%, and changed the eligibility to all non-union U.S. employees.

The Company made contributions to the plan as follows:

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Regular matching contributions	\$ 465,671	\$ 328,144	\$ 232,399
Transitional credit contributions	385,578	231,847	—
Non-discretionary contributions	355,747	51,470	—
Total contributions made for the period	<u>\$ 1,206,996</u>	<u>\$ 611,461</u>	<u>\$ 232,399</u>

At December 30, 2017, the Company had accrued \$502,618 for the non-discretionary contribution this amount was expensed in 2017 and was contributed to the plan in January 2018. At December 31, 2016, the Company had accrued \$307,568 for the non-discretionary contribution. This amount was contributed to the Plan in January 2017 and is included in the 2017 figure. The non-discretionary contribution for \$51,470 was expensed in Fiscal 2015 and contributed to the Plan in Fiscal 2016.

10. Reportable Segments

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Sales:			
Sales to unaffiliated customers:			
Industrial Hardware	\$ 115,273,233	\$ 61,058,871	\$ 61,338,812
Security Products	60,976,998	57,255,101	56,598,487
Metal Products	27,989,382	19,294,286	26,630,652
	<u>\$ 204,239,613</u>	<u>\$ 137,608,258</u>	<u>\$ 144,567,951</u>
Inter-segment Sales:			
Industrial Hardware	\$ 524,536	\$ 637,405	\$ 595,596
Security Products	2,935,797	2,716,802	2,813,576
Metal Products	21,431	—	16,804
	<u>\$ 3,481,764</u>	<u>\$ 3,354,207</u>	<u>\$ 3,425,976</u>
Income Before Income Taxes:			
Industrial Hardware	\$ 5,126,128	\$ 5,683,730	\$ 4,314,149
Security Products	6,099,777	5,677,264	3,798,115
Metal Products	1,050,796	(225,122)	(84,536)
Operating Profit	12,276,701	11,135,872	8,027,728
Interest expense	(976,512)	(121,500)	(185,475)
Other income	154,753	209,043	178,722
	<u>\$ 11,454,942</u>	<u>\$ 11,223,415</u>	<u>\$ 8,020,975</u>
Geographic Information:			
Net Sales:			
United States	\$ 178,124,818	\$ 117,679,860	\$ 126,115,036
Foreign	26,114,795	19,928,398	18,452,915
	<u>\$ 204,239,613</u>	<u>\$ 137,608,258</u>	<u>\$ 144,567,951</u>
Foreign sales are primarily to customers in North America.			
Identifiable Assets:			
United States	\$ 153,712,643	\$ 107,031,435	\$ 106,662,743
Foreign	22,745,754	17,166,961	15,075,816
	<u>\$ 176,458,397</u>	<u>\$ 124,198,396</u>	<u>\$ 121,738,559</u>
Industrial Hardware	\$ 44,828,458	\$ 32,278,281	\$ 30,425,348
Security Products	53,724,837	49,520,708	52,688,497
Metal Products	18,126,395	18,447,526	20,931,863
	116,679,690	100,246,515	104,045,708
General corporate	59,778,707	23,951,881	17,692,851
	<u>\$ 176,458,397</u>	<u>\$ 124,198,396</u>	<u>\$ 121,738,559</u>

10. Reportable Segments (continued)

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Depreciation and Amortization:			
Industrial Hardware	\$ 2,526,460	\$ 1,468,904	\$ 1,580,741
Security Products	964,873	980,048	1,010,262
Metal Products	1,227,852	1,365,441	1,330,435
	<u>\$ 4,719,185</u>	<u>\$ 3,814,393</u>	<u>\$ 3,921,438</u>
Capital Expenditures:			
Industrial Hardware	\$ 1,151,868	\$ 648,516	\$ 1,479,984
Security Products	705,178	1,018,371	388,377
Metal Products	899,663	1,153,872	632,016
	<u>2,756,709</u>	<u>2,820,759</u>	<u>2,500,377</u>
Currency translation adjustment	6,240	(8,889)	25,020
General corporate	—	51,600	12,839
	<u>\$ 2,762,949</u>	<u>\$ 2,863,470</u>	<u>\$ 2,538,236</u>

11. Recent Accounting Pronouncements

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers. ASU No. 2014-09 provides authoritative guidance which impacts virtually all aspects of an entity's revenue recognition. The core principle of the new standard is that revenue should be recognized to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard is effective for annual reporting periods beginning after December 15, 2017.

In August 2015, the FASB issued ASU No. 2015-14, Revenue from Contracts with Customers - Deferral of the Effective Date. ASU No. 2015-14 defers the adoption date of ASU 2014-09, Revenue from Contracts with Customers in which both the FASB and IASB in a joint project will clarify the principles for recognizing revenue and to develop a common revenue standard. The guidance is to be applied using a retrospective approach at the beginning of the earliest comparative period in the financial statements and is effective for years beginning after December 15, 2017.

In July 2015, the FASB issued ASU 2015-11, Inventory: Simplifying the Measurement of Inventory. ASU No. 2015-11 provides authoritative guidance which requires a company to change its valuation method of inventory from the lower of cost or market (market being replacement cost, net realizable value or net realizable value less an approximate profit margin) to the lower of cost or net realizable value. The amendment is effective for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. The amendment should be applied prospectively with earlier application permitted as of the beginning of an interim or annual reporting period. The adoption of this amendment did not have a material impact on the consolidated financial statements of the Company.

In September 2015, the FASB issued ASU No. 2015-16, Business Combinations. ASU 2015-16 provides authoritative guidance which will simplify the accounting for adjustments made to provisional amounts recognized in a business combination. U.S. GAAP currently requires that during the measurement period, the acquirer retrospectively adjust the provisional amounts recognized at the acquisition date with a corresponding adjustment to goodwill. The amendments require that the acquirer recognize adjustments to provisional amounts that are identified during the measurement period in the reporting period in which the adjustment amounts are determined. The guidance is effective for fiscal years beginning after December 15, 2015. The amendments should be applied prospectively to adjustments to provisional amounts that occur after the effective date with earlier application permitted for financial statements that have not yet been issued. The adoption of this amendment did not have a material impact on the consolidated financial statements of the Company.

11. Recent Accounting Pronouncements (continued)

In November 2015, the FASB issued accounting standards update 2015-07 which simplifies the balance sheet classification of deferred taxes. This standard requires that all deferred tax assets and liabilities be classified as non-current in the classified balance sheet, rather than separating such deferred taxes into current and non-current amounts, as is required under current guidance. The standard is effective for annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period with early application permitted. The adoption of this amendment did not have a material impact on the consolidated financial statements of the Company.

In February 2016, the FASB issued ASU No. 2016-02, Leases. ASU 2016-02 requires leases to present right-of-use assets and lease liabilities on the balance sheet for all leases with terms longer than 12 months. The guidance is to be applied using a modified retrospective approach at the beginning of the earliest comparative period in the financial statements and is effective for years beginning after December 15, 2018. Early adoption is permitted. The Company is evaluating the impact of the new guidance.

In March 2016, the Financial Accounting Standards Board ("FASB") issued accounting standards update 2016-09 which simplifies employee share-based payment accounting. This standard will simplify the income tax consequences, accounting for forfeitures and classification on the statement of cash flows. This standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2016, with early adoption permitted. The Company did not early adopt ASU 2016-09. The adoption of this amendment did not have a material impact on the consolidated financial statements of the Company.

In January 2017, the FASB issued ASU No. 2017-01, Business Combinations – Clarifying the Definition of a business. ASU 2017-01 provides guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions or dispositions of assets or businesses. The amendment is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. The amendment should be applied prospectively with earlier application permitted as of the beginning of an interim or annual reporting period. The guidance is not expected to have a material impact in the consolidated financial results.

In January 2017, the FASB issued ASU No. 2017-04, Intangibles – Goodwill and Other: Simplifying the test for Goodwill Impairment. ASU 2017-04 provides guidance to simplify the subsequent measure of goodwill by eliminating Step 2 from the goodwill impairment test. The amendment is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. The amendment should be applied prospectively with earlier application permitted as of the beginning of an interim or annual reporting period after January 1, 2017. The guidance is not expected to have a material impact in the consolidated financial results.

In February 2017, the FASB issued ASU No. 2017-06, Plan Accounting: Defined Benefit Pension Plans (Topic 960); Defined Contribution Pension Plans (Topic 962); Health and Welfare Benefit Plans (Topic 965); Employee Benefit Plan Master Trust Reporting. ASU 2017-06 provides guidance for reporting by an employee benefit plan for its interest in a master trust. The amendment is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years.

The amendment should be applied retrospectively with earlier application permitted as of the beginning of an interim or annual reporting period after December 15, 2018. The Company is still in the process of determining the effect that the adoption of ASU 2017-06 will have on the accompanying financial statements.

12. Financial Instruments and Fair Value Measurements

Financial Risk Management Objectives and Policies

In March 2017, the FASB issued ASU No. 2017-07, Compensation — Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost. ASU 2017-07 provides guidance to update and primarily improve the presentation of net periodic pension cost and net periodic postretirement benefit cost reporting. The amendment is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. The amendment should be applied retrospectively with earlier application permitted as of the beginning of an interim or annual reporting period after December 15, 2017. The Company is still in the process of determining the effect that the adoption of ASU 2017-07 will have on the accompanying financial statements.

12. FINANCIAL INSTRUMENTS AND FAIR VALUE MEASUREMENTS (continued)

The Company has implemented all new accounting pronouncements that are in effect and that could impact its consolidated financial statements and does not believe that there are any other new accounting pronouncements that have been issued, but are not yet effective, that might have a material impact on the consolidated financial statements of the Company.

The Company is exposed primarily to credit, interest rate and currency exchange rate risks which arise in the normal course of business.

Credit Risk

Credit risk is the potential financial loss resulting from the failure of a customer or counterparty to settle its financial and contractual obligations to the Company, as and when they become due. The primary credit risk for the Company is its accounts receivable due from customers. The Company has established credit limits for customers and monitors their balances to mitigate the risk of loss. As of December 30, 2017 and December 31, 2016, there were no significant concentrations of credit risk. No single customer represented more than 10% of the Company's net accounts receivable as of December 30, 2017 or at December 31, 2016. The maximum exposure to credit risk is primarily represented by the carrying amount of the Company's accounts receivable.

Interest Rate Risk

The Company's exposure to the risk of changes in market interest rates relates primarily to the Company's debt, which bears interest at variable rates based on the LIBOR rate plus a margin spread of 1.75% to 2.50%. The Company has an interest rate swap with a notional amount of \$15,112,500 on December 30, 2017 to convert a portion of its 2017 Term Loan from variable to fixed rates. The valuation of this swap is determined using the three month LIBOR rate index and mitigates the Company's exposure to interest rate risk.

Currency Exchange Rate Risk

The Company's currency exposure is concentrated in the Canadian dollar, Mexican peso, New Taiwan dollar, Chinese RMB and the Hong Kong dollar. Because of the Company's limited exposure to any single foreign market, any exchange gains or losses have not been material and are not expected to be material in the future. As a result, the Company does not attempt to mitigate its foreign currency exposure through the acquisition of any speculative or leveraged financial instruments.

Fair Value Measurements

Assets and liabilities that require fair value measurement are recorded at fair value using market and income valuation approaches and considering the Company's and counterparty's credit risk. The Company uses the market approach and the income approach to value assets and liabilities as appropriate. The assets or liabilities requiring fair value measurements on December 30, 2017 are as follows:

	<u>Fair Value</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
Financial Receivable				
Interest rate swap	\$ 67,350	\$ —	\$ 67,350	\$ —
Total assets	<u>\$ 67,350</u>	<u>\$ —</u>	<u>\$ 67,350</u>	<u>\$ —</u>

The Company's interest rate swap is not an exchange-traded instrument. However, it is valued based on observable inputs for similar liabilities and accordingly is classified as Level 2. The amount of the interest rate swap is included in other accrued assets.

13. Selected Quarterly Financial Information (Unaudited)

Selected quarterly financial information (unaudited) follows:

	2017				
	First	Second	Third	Fourth	Year
Net sales	\$ 36,043,295	\$ 58,044,743	\$ 56,007,937	\$ 54,143,638	\$ 204,239,613
Gross margin	8,744,579	15,513,994	11,949,531	13,842,715	50,050,819
Engineering expenses	630,411	1,682,887	1,848,861	1,460,670	5,622,829
Selling and administrative expenses	5,877,968	11,344,223	6,527,029	8,402,069	32,151,289
Net (loss)/income	1,517,141	1,466,402	2,230,481	(168,769)	5,045,255
Net (loss)/income per share:					
Basic	\$.24	\$.23	\$.36	\$ (.03)	\$.81
Diluted	\$.24	\$.23	\$.35	\$ (.03)	\$.80
Weighted average shares outstanding:					
Basic	6,256,496	6,258,467	6,259,872	6,261,737	6,259,139
Diluted	6,256,496	6,285,339	6,296,551	6,297,371	6,294,773
	2016				
	First	Second	Third	Fourth	Year
Net sales	\$ 33,101,657	\$ 36,883,312	\$ 33,478,347	\$ 34,144,942	\$ 137,608,258
Gross margin	6,908,308	9,202,180	9,372,742	10,862,980	36,346,210
Engineering expenses	594,538	733,009	663,704	577,056	2,568,307
Selling and administrative expenses	5,352,906	5,363,303	5,444,924	6,480,898	22,642,031
Net income	648,073	2,087,837	2,400,064	2,649,349	7,785,323
Net income per share:					
Basic	\$.10	\$.33	\$.38	\$.42	\$ 1.25
Diluted	\$.10	\$.33	\$.38	\$.42	\$ 1.25
Weighted average shares outstanding:					
Basic	6,248,222	6,250,610	6,252,681	6,254,605	6,251,535
Diluted	6,248,222	6,250,610	6,252,681	6,254,605	6,251,535

Fiscal 2017 and 2016 consisted of four 13 week quarters totaling 52 weeks for the year.

14. Revenue Recognition

In 2014, the FASB issued guidance on revenue recognition, with final amendments issued in 2016. The guidance provides for a five-step model to determine the revenue recognized for the transfer of goods or services to customers that reflects the expected entitled consideration in exchange for those goods or services. It also provides clarification for principal versus agent considerations and identifying performance obligations. In addition, the FASB introduced practical expedients related to disclosures of remaining performance obligations, as well as other amendments related to guidance on collectability, non-cash consideration and the presentation of sales and other similar taxes. Financial statement disclosures required under the guidance will enable users to understand the nature, amount, timing, judgments and uncertainty of revenue and cash flows relating to customer contracts.

14. REVENUE RECOGNITION (continued)

The two permitted transition methods under the guidance are the full retrospective approach or a cumulative effect adjustment to the opening retained earnings in the year of adoption (cumulative effect approach). We will adopt the guidance using the cumulative effect approach when it becomes effective in the first quarter of 2018.

We are utilizing a comprehensive approach to assess the impact of the guidance on our contract portfolio by reviewing our current accounting policies and practices to identify potential differences that would result from applying the new requirements to our revenue contracts. We are substantially complete with our contract and business process reviews and implemented changes to our controls to support recognition and disclosures under the new guidance. Based on the foregoing, we currently do not expect this guidance to have a material impact on our financial statements or disclosures.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of
The Eastern Company
Naugatuck, Connecticut

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of The Eastern Company (the Company) as of December 30, 2017 and December 31, 2016, and the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 30, 2017, and the related notes and schedules (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 30, 2017 and December 31, 2016, and the results of its operations and its cash flows for each of the years in the three-year period ended December 30, 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 30, 2017, based on criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated March 15, 2018 expressed an unqualified opinion.

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/ Fiondella, Milone & LaSaracina LLC
Fiondella, Milone & LaSaracina LLC

We have served as the Company's auditor since 2009.

Glastonbury, Connecticut
March 15, 2018

ITEM 9 CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As of the end of the fiscal year ended December 30, 2017, the Company carried out an evaluation, under the supervision and with the participation of the Company's management, including the Chief Executive Officer (the "CEO") and Chief Financial Officer (the "CFO"), of the effectiveness of the design and operation of the Company's disclosure controls and procedures pursuant to Exchange Act Rule 240.13a-15. As defined in Exchange Act Rules 240.13a-15(e) and 240.15d-15(e), "the term disclosure controls and procedures means controls and other procedures of an issuer that are designed to ensure that information required to be disclosed by the issuer in the reports that it files or submits under the Exchange Act (15 U.S.C. 78a et seq.) is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Exchange Act is accumulated and communicated to the issuer's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure." Based upon that evaluation, the CEO and CFO concluded that the Company's current disclosure controls and procedures were effective as of the December 30, 2017 evaluation date.

The Company believes that a controls system, no matter how well designed and operated, cannot provide absolute assurance that the objectives of the controls system are met, and no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within a company have been detected. The Company's disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives, and the CEO and CFO have concluded that these controls and procedures are effective at the "reasonable assurance" level.

Management's Report on Internal Control over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 240.13a-15(f) and 240.15d-15(f). Under the supervision and with the participation of our management, including our CEO and CFO, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control – Integrated Framework* issued in 2013 by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under this framework, our management concluded that our control over financial reporting was effective as of December 30, 2017.

Changes in Internal Control over Financial Reporting

During the fourth quarter of 2017, there were no significant changes in the Company's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

To the Board of Directors and Shareholders of
The Eastern Company
Naugatuck, Connecticut

Opinion on Internal Control over Financial Reporting

We have audited The Eastern Company's (the Company's) internal control over financial reporting as of December 30, 2017, based on criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 30, 2017, based on criteria established in Internal Control—Integrated Framework (2013) issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets and the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows of the Company, and our report dated March 15, 2018, expressed an unqualified opinion.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting under Item 9A. 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 its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Fiondella, Milone & LaSarcina LLC
Fiondella, Milone & LaSarcina LLC

Glastonbury, Connecticut
March 15, 2018

ITEM 9B OTHER INFORMATION

None.

PART III

ITEM 10 DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The Company's definitive proxy statement ("Proxy Statement") for the 2018 Annual Meeting of Shareholders, which is incorporated herein by reference, will be filed with the SEC pursuant to Regulation 14A not later than 120 days after December 30, 2017.

The information concerning directors is incorporated herein by reference to the Company's Proxy Statement under the captions "Item No. 1 – Election of Directors" and "Director Compensation in Fiscal Year 2017".

The information concerning the Company's executive officers is incorporated herein by reference to the Company's Proxy Statement under the captions "Compensation Discussion and Analysis", "Compensation Committee Report", "Compensation Committee Interlocks and Insider Participation", "Executive Compensation", "Stock Options", "Options Exercised in Fiscal 2017", "Outstanding Equity Awards at Fiscal 2017 Year-End", and "Termination of Employment and Change in Control Arrangements". The Company's only Named Executive Officers are August M. Vlak, President and Chief Executive Officer, John L. Sullivan III, Vice President and Chief Financial Officer and Angelo M. Labbadia, Vice President and Group Vice President. Our executive officers, as such term is defined in Rule 3b-7 of the Exchange Act, consist of August M. Vlak, , President and Chief Executive Officer, John L. Sullivan III, Vice President and Chief Financial Officer and Angelo M. Labbadia, Vice President and Group Vice President.

The information concerning the Company's Audit Committee is incorporated herein by reference to the Company's Proxy Statement under the captions "Audit Committee Financial Expert", "Report of the Audit Committee" and "The Board of Directors and Committees". The Audit Committee Charter is also available on the Company's website at <http://www.eastemcompany.com> by clicking on Corporate Governance.

The information concerning compliance with Section 16(a) of the Exchange Act is incorporated herein by reference to our Proxy Statement under the caption "Section 16(a) Beneficial Ownership Reporting Compliance".

The Company's Board of Directors has adopted a Code of Business Conduct and Ethics that applies to the Company's Chief Executive Officer, Chief Financial Officer and the Company's other financial professionals. The Code of Business Conduct and Ethics is available on the Company's website at <http://www.eastemcompany.com> by clicking on Corporate Governance.

ITEM 11 EXECUTIVE COMPENSATION

Information concerning director and executive compensation is incorporated herein by reference to portions of the Company's Proxy Statement to be filed with the SEC pursuant to Regulation 14A not later than 120 days after December 30, 2017 under the captions "Director Compensation in Fiscal Year 2017", "Compensation Discussion and Analysis", "Compensation Committee Report", "Compensation Committee Interlocks and Insider Participation", "Executive Compensation", "Stock Options", "Options Exercised in Fiscal Year 2017", "Outstanding Equity Awards at Fiscal 2017 Year-End", "Termination of Employment and Change in Control Arrangements", and "Risk Assessment of Compensation Policies and Practices". The Compensation Committee of the Board of Directors operates under the Compensation Committee Charter, which can be found on the Company's website at <http://www.eastemcompany.com> by clicking on Corporate Governance.

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

Security ownership of certain beneficial owners and management:

- (a) Information concerning security ownership of certain beneficial owners is incorporated herein by reference to the Company's Proxy Statement to be filed with the SEC pursuant to Regulation 14A not later than 120 days after December 30, 2017 under the caption "Security Ownership of Certain Beneficial Shareholders".
- (b) Information concerning security ownership of management is incorporated herein by reference to the Company's Proxy Statement to be filed with the SEC pursuant to Regulation 14A not later than 120 days after December 30, 2017 under the captions "Item No. 1 – Election of Directors", "Security Ownership of Certain Beneficial Shareholders", "Executive Compensation", "Stock Options", "Options Exercised in Fiscal 2017", and "Outstanding Equity Awards at Fiscal 2017 Year-End". See also the equity compensation plan information in Item 5 of this Form 10-K.
- (c) Changes in Control
None.

ITEM 13 CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information regarding certain relationships and related transactions is incorporated herein by reference to the Company's Proxy Statement to be filed with the SEC pursuant to Regulation 14A not later than 120 days after December 30, 2017 under the caption "Policies and Procedures Concerning Related Persons Transactions".

Information regarding director independence is incorporated herein by reference to the Company's Proxy Statement to be filed with the SEC pursuant to Regulation 14A not later than 120 days after December 30, 2017 under the captions "Item No.1 – Election of Directors" and "The Board of Directors and Committees".

ITEM 14 PRINCIPAL ACCOUNTING FEES AND SERVICES

Information concerning principal accountant fees and services is incorporated herein by reference to the Company's Proxy Statement to be filed with the SEC pursuant to Regulation 14A not later than 120 days after December 30, 2017 under the caption "Item No. 3 – Ratification of Appointment of Independent Registered Public Accounting Firm".

PART IV

ITEM 15 EXHIBITS, FINANCIAL STATEMENT SCHEDULE

- (a) Documents filed as part of this Form 10-K:

(1)Financial statements	
Consolidated Balance Sheets — December 30, 2017 and December 31, 2016.....	28.
Consolidated Statements of Income — Fiscal years ended December 30, 2017, December 31, 2016 and January 2, 2016.....	30.
Consolidated Statements of Comprehensive Income — Fiscal years ended December 30, 2017, December 31, 2016 and January 2, 2016.....	30.
Consolidated Statements of Shareholders' Equity — Fiscal years ended December 30, 2017, December 31, 2016 and January 2, 2016.....	31.
Consolidated Statements of Cash Flows — Fiscal years ended December 30, 2017, December 31, 2016 and January 2, 2016.....	32.
Notes to Consolidated Financial Statements.....	33.
Report of Independent Registered Public Accounting Firm.....	57.

(2) Financial Statement Schedules

Schedule II — Valuation and qualifying accounts begins on page [64] of this Form 10-K. Schedules other than that listed above have been omitted because the required information is contained in the financial statements and notes thereto, or because such schedules are not required or applicable.

Exhibit Index

Exhibit No.	Description
2.1	Securities Purchase Agreement, dated April 3, 2017, by and among the Company, Velvac Holdings, Inc. and Security holders of Velvac Holdings, Inc. (incorporated herein by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K (SEC File No. 001-35383) filed on April 7, 2017).
3.1	Restated Certificate of Incorporation, dated August 4, 1991 (filed herewith).
3.2	Certificate of Amendment to the Company's Restated Certificate of Incorporation, dated April 29, 2016 (incorporated herein by reference to Exhibit 3(i) to the Company's Current Report on Form 8-K (SEC File No. 001-35383) filed on April 29, 2016).
3.4	Amendment to the Company's Amended and Restated By-Laws, dated April 27, 2016 (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (SEC File No. 001-35383) filed on April 29, 2016).
10.1*	Change in Control Agreement, dated as of January 1, 2015, between the Company and Angelo M. Labbadia (incorporated by reference to Exhibit 10.F to the Company's Annual Report on Form 10-K (SEC File No. 001-35383), filed on March 15, 2016).
10.2*	Change in Control Agreement, dated as of January 1, 2015, between the Company and John L. Sullivan III (incorporated herein by reference to Exhibit 99 to the Company's Current Report on Form 8-K (SEC File No. 001-35383), filed on March 3, 2015).
10.3*	Amended and Restated Employment Agreement, dated as of January 1, 2018, between the Company and August M. Vlak (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (SEC File No. 001-35383), filed January 22, 2018).
10.4*	The Company's Directors' Fee Program, effective as of October 1, 1996 (incorporated herein by reference to the Company's Registration Statement on Form S-8, as amended (SEC File No. 333-21351) filed on February 7, 1997).
10.5*	The Company's 2010 Executive Stock Incentive Plan, effective July 20, 2010 (incorporated herein by reference to Exhibit 4a to the Company's Registration Statement on Form S-8 (SEC File No. 333-169169), filed on September 2, 2010).
23	Consent of Fiondella, Milone & LaSaracina LLP (filed herewith).
31	Rule 13a-14(a) Certification of Chief Executive Officer and Chief Financial Officer of the Company in accordance with Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith).
32	Section 1350 Certification of Chief Executive Officer and Chief Financial Officer of the Company in accordance with Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith).

Exhibit No.	Description
99	Letter to our shareholders from the Annual Report 2017 (filed herewith).
101	The following materials from the Company's Annual Report on Form 10-K for the year ended December 30, 2017, formatted in Extensible Business Reporting Language (XBRL): (i) the Consolidated Balance Sheets as of December 30, 2017 and December 31, 2016; (ii) the Consolidated Statements of Income for the fiscal years ended December 30, 2017, December 31, 2016 and January 2, 2016; (iii) the Consolidated Statements of Comprehensive Income for the fiscal years ended December 30, 2017, December 31, 2016 and January 2, 2016; (iv) the Consolidated Statements of Shareholders' Equity for the fiscal years ended December 30, 2017, December 31, 2016 and January 2, 2016; (v) the Consolidated Statements of Cash Flows for the fiscal years ended December 30, 2017, December 31, 2016 and January 2, 2016; and (vi) the Notes to the Consolidated Financial Statements (filed herewith).

* Management contract, compensatory plan or arrangement.

** Exhibits to this Form 10-K listed but not included herein will be provided upon written request sent to the Company's executive offices.

The Eastern Company and Subsidiaries

Schedule II – Valuation and Qualifying accounts

COL. A	COL. B	COL. C		COL. D	COL. E
Description	Balance at Beginning of Period	(1) Charged to Costs and Expenses	(2) Charged to Other Accounts-Describe	Deductions – Describe	Balance at End of Period
ADDITIONS					
Fiscal year ended December 30, 2017:					
Deducted from asset accounts:					
Allowance for doubtful accounts	\$430,000	\$ 87,000	\$ 64,000	\$ 111,000 (a)	\$470,000
Fiscal year ended December 31, 2016:					
Deducted from asset accounts:					
Allowance for doubtful accounts	\$450,000	\$ 0		\$ 20,000 (a)	\$430,000
Fiscal year ended January 2, 2016:					
Deducted from asset accounts:					
Allowance for doubtful accounts	\$414,000	\$ 52,000		\$ 16,000 (a)	\$450,000

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

SIGNATURES

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

Dated: March 15, 2018

THE EASTERN COMPANY

By /s/ John L. Sullivan III
John L. Sullivan III
Vice President and Chief Financial Officer

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

/s/ August M. Vlak March 15, 2018
August M. Vlak
President and Chief Executive Officer

/s/ John L. Sullivan III March 15, 2018
John L. Sullivan III
Vice President and Chief Financial Officer

/s/ James A. Mitarotonda March 15, 2018
James A. Mitarotonda
Chairman of the Board

/s/ Fredrick D. DiSanto March 15, 2018
Fredrick D. DiSanto
Director

/s/ John W. Everets March 15, 2018
John W. Everets
Director

/s/ Charles W. Henry March 15, 2018
Charles W. Henry
Director

/s/ Michael A. McManus March 15, 2018
Michael A. McManus
Director

RESTATED CERTIFICATE OF INCORPORATION
OF
THE EASTERN COMPANY
AUGUST 14, 1991

FIRST: That the name of the corporation is The Eastern Company.

SECOND: That said corporation is to be located in the Town of Naugatuck, in the State of Connecticut.

THIRD: That the nature of the business to be transacted and the purposes to be promoted or carried out by the said corporation are as follows:

To manufacture, cast, alter, mold, or otherwise employ malleable or other iron, steel, manganese, nickel, copper, brass, or other composition metal, coke, and all or any articles consisting or partly consisting, of malleable or other iron, steel, manganese, nickel, copper, brass or other composition metal, wood, and all or any products thereof, either in this state or in any other state, territory or country; to buy, sell, manufacture, and deal in minerals, plant, machinery, implements, and things capable of being used in connection with metallurgical operations, or required by workmen and others employed by the company in such operations, either in this state or in any other state, territory or country; to own, acquire, construct, enlarge, improve, operate and carry on works for smelting, parting, refining, or working any such metals, or the products thereof, either in this state or in any other state, territory or country; to acquire by contracts, purchase, subscription, or otherwise, and to sell or hold as an investment any bonds or other securities or evidence of indebtedness of any other corporation or corporations, association, or associations, either of this state or of any other state, territory or country; and in furtherance of such business and purposes it shall have the power to do all and everything necessary, suitable, convenient or proper for the accomplishment of any of the purposes, or the attainment of one or more of the objects herein enumerated, or incidental to the powers herein named, or which shall at any time appear conducive or expedient for the protection or benefit of the corporation.

FOURTH: The authorized capital stock of the corporation shall consist of twenty-five million (25,000,000) shares of common stock, having no par value, one million (1,000,000) shares of a single class of voting preferred stock having no par value, and one million (1,000,000) shares of a single class of non-voting preferred stock having no par value.

FIFTH: The terms, limitations and relative rights and preferences of each class of shares and series thereof are as follows:

- (a) Subject to the rights of the preferred stock, dividends may be paid upon the common stock as and when declared by the Board of Directors out of funds legally available for payment of dividends. In the event of any liquidation, dissolution or winding-up of the corporation, whether voluntary or involuntary, subject to the rights of the preferred stock, the remainder of the assets of the corporation shall be distributed pro rata to the holders of the common stock. Each outstanding share of common stock shall be entitled to one vote on each matter submitted to a vote at all meetings of shareholders.
- (b) Shares of the class of voting preferred stock may be divided into and issued in series. Shares of the class of voting preferred stock, or any series thereof, may be convertible into the same or a different number of authorized shares of common stock or of non-voting preferred stock or any combination thereof. The Board of Directors is authorized to fix and determine the terms, limitations and relative rights and preferences, including conversion rights, if any, of the class of voting preferred stock and to establish series within such class and to fix and determine the variations as among series. Each outstanding share of voting preferred stock shall be entitled to one vote on each matter submitted to a vote at all meetings of shareholders.
- (c) Shares of the class of non-voting preferred stock may be divided into and issued in series. Shares of the class of non-voting preferred stock, or any series thereof, may be convertible into the same or a different number of authorized shares of common stock or of voting preferred stock or any combination thereof. The Board of Directors is authorized to fix and determine the terms, limitations and relative rights and preferences, including conversion rights, if any, of the class of non-voting preferred stock and to establish series within such class and to fix and determine the variations as among series. The shares of said class of non-voting preferred stock shall not be entitled to vote except when required under the General Statutes of the State of Connecticut.

SIXTH: That the amount of capital stock with which this corporation shall commence business is Ten Million Dollars (\$10,000,000)

SEVENTH: That the duration of said corporation is unlimited

EIGHTH: No stockholder of the corporation shall by reason of his holding shares of capital stock of the corporation have any pre-emptive or preferential rights to purchase or subscribe to any shares of any class of stock of the corporation, now or hereafter to be authorized, or to any notes, debentures, bonds or other securities (whether or not convertible into or carrying options or warrants to purchase shares of any class of capital stock) now or hereafter to be authorized, excepting only such pre-emptive or preferential rights, warrants or options as the Board of Directors in its discretion may grant from time to time.

NINTH: The Board of Directors of the corporation shall be divided into three classes with the term of office of one class expiring each year.

- (a) At the annual meeting of stockholders in 1975, three (3) directors of the first class shall be elected to hold office for a term expiring at the next succeeding annual meeting; three (3) directors of the second class shall be elected to hold office for a term expiring at the second succeeding annual meeting; and four (4) directors of the third class shall be elected to hold office for a term expiring at the third succeeding annual meeting.
- (b) At each annual meeting held after 1975, directors shall be elected for a three-year term to succeed those whose terms expire at that meeting.
- (c) When the number of directors is changed as provided in the by-laws, any newly created directorships or any decrease in directorships shall be so apportioned among the classes as to make all classes as nearly equal in number as possible.
- (d) Any director elected to fill a vacancy shall hold office for the unexpired portion of the term of the director whose place he has been elected to fill, even though that term may extend beyond the next annual meeting of stockholders.

TENTH: To the extent permitted by Section 33-290(c)(2) of the Connecticut General Statutes and as the same may be amended or supplemented from time to time, the personal liability of the directors to the corporation or its shareholders for monetary damages for breach of duty as a director shall be limited to an amount equal to the compensation received by the director for serving the corporation during the year of the violation.

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in this Annual Report on Form 10-K of The Eastern Company for the year ended December 30, 2017 of our reports dated March 15, 2018 included in its Registration Statement on Form S-8 (Nos. 333-21349, 333-21351, 333-45315, 333-62196, 333-115109 and 333-169169) relating to the financial statements and financial statement schedules and internal controls for the three years ended December 30, 2017 listed in the accompanying index.

/s/ Fiondella, Milone & LaSaracina LLC
Fiondella, Milone & LaSaracina LLC

Glastonbury, Connecticut
March 15, 2018

CERTIFICATIONS

I, August M. Vlak, certify that:

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

Dated: March 15, 2018

/s/ August M. Vlak
August M. Vlak
CEO

CERTIFICATIONS

I, John L. Sullivan III, certify that:

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

Dated: March 15, 2018

/s/ John L. Sullivan III
John L. Sullivan III
CFO

**CERTIFICATIONS OF CHIEF EXECUTIVE OFFICER AND
CHIEF FINANCIAL OFFICER
Pursuant to 18 United States Code § 1350,
as adopted pursuant to Section 906 of The Sarbanes-Oxley Act of 2002**

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, August M. Vlak, the Chief Executive Officer of The Eastern Company (the "Company"), Angelo Labbadia, the Chief Operating Officer of the Company and John L. Sullivan III, the Chief Financial Officer of the Company, hereby certify that, to the best of their knowledge:

- 1) The Company's Annual Report on Form 10-K for the period ended December 30, 2017, and to which this certification is attached as Exhibit 32 (the "Periodic Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and
- 2) The information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

In Witness Whereof, the undersigned have set their hands hereto as of the 15th day of March, 2018.

/s/ August M. Vlak
August M. Vlak
CEO

/s/ John L. Sullivan III
John L. Sullivan III
CFO

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

This certification "accompanies" the Form 10-K to which it relates, is not deemed filed with the SEC and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-K, irrespective of any general incorporation language contained in such filing.)

2018 Letter to shareholders

Dear Fellow Eastern Shareholders:

We made significant progress on our commitment to creating long-term value for our shareholders in 2017.

Eastern generated a total return to shareholders of 27% in 2017, outperforming the Russell 2000 Index[®] by 12 percentage points. After paying of \$2.8 million in dividends to our shareholders, Eastern's book value reached \$86.9 million at the end of the year. This was a new high and an increase of 5% over the prior year. Our progress was highlighted by Eastern's addition to the Russell 3000[®] Index on June 23, 2017.

Our strategy for creating long-term shareholder value includes strengthening our portfolio of businesses, maximizing the performance of our best businesses and using our balance sheet to drive growth. In 2017, we were successful in each of those areas.

On April 3, 2017, we acquired Velvac Holdings, Inc., a Tier 1 supplier of mirrors and camera-enabled vision systems to leading heavy truck, recreational and specialty vehicle OEMs. Velvac works closely with its customers to provide uniquely engineered products that meet their design and product specifications. Velvac also sells aftermarket components and vision systems through its dealer channels and OEM parts distributors. We believe that the acquisition of Velvac strengthens our portfolio of businesses by building scale in attractive end markets and increasing access to new markets for some of our other businesses.

At the same time, we invested in the long-term growth of our best businesses by, for example, adding new sales and engineering capabilities at Illinois Lock to expand our market and product coverage. We also invested in new-technology vision products at Road-iQ, a division of Velvac. Road-iQ provides connected vehicle technology that offers both active and passive safety to drivers of recreational vehicles, trucks and other specialty vehicles.

We also took advantage of our strong cash flow and a strong balance sheet to add leverage, borrowing \$36.0 million to finance the acquisition of Velvac. While we used \$4.1 million of cash for the acquisition, we still ended 2017 with \$22.3 million in cash, close to the \$22.7 million in cash with which we started the year.

We are fortunate to work with an outstanding team of associates and business leaders at Eastern who share a passion for results. Our team includes both leaders who have a long history with Eastern and those who are new to the Company. The senior leaders at each of our largest businesses, Eberhard, Illinois Lock and now Velvac, all joined Eastern in 2017. Together, they delivered a solid performance in 2017 and are building for a strong future.

2017 Results

Sales for 2017 totaled \$204.2 million, an increase of 48% from \$137.6 million in 2016. This sales growth reflects the acquisition of Velvac as well as organic growth of 13% in 2017.

All three of our business segments recorded higher sales than in 2016. Our Industrial Hardware segment benefitted from strong growth in sales to heavy duty truck and truck service body customers. According to ACT Research, sales of trucks in the heaviest, Class 8 weight segment climbed 59% to 296,440 vehicles in 2017. In our Security Products segment, sales grew as a result of our investments at Illinois Lock and Argo EMS. In both segments, we improved execution and margins by more closely integrating our domestic sales and engineering teams with our China-based manufacturing operations.

Our Metal Products segment's 2017 sales were up 45% over 2016. This segment continues to benefit from a resurgence in sales to mining customers and diversification to other industrial markets, including infrastructure. According to the U.S. Energy Information Administration (EIA), coal production in 2017 rose 6% in 2017 to 773 million standard tons, primarily as a result of higher natural gas prices and greater electricity generation. However, the EIA projects that coal production in the United States through 2040 could range from staying flat to resuming a decline.

Net income for 2017 was \$5.0 million compared to \$7.8 million for 2016. The change in earnings was largely attributable to the acquisition of Velvac and one-time charges related to the new Tax Cuts and Jobs Act, which was enacted in December 2017. In the fourth quarter of 2017, we incurred an incremental one-time tax charge of \$2.5 million, which consisted of a \$2.0 million charge on undistributed earnings of foreign subsidiaries and a charge of \$0.5 million related to the impact of the tax legislation on our deferred tax asset. Excluding total one-time charges of \$4.3 million, we generated adjusted net earnings of \$9.3 million. Adjusted net earnings is a non-GAAP measure. A reconciliation of this non-GAAP measure to net income is provided on page 20 of Form 10-K.

We returned 9.3% on invested capital,¹ adjusting for one-time expenses associated with the Velvac acquisition and the Tax Cuts and Jobs Act.

2018 Outlook

We anticipate solid growth in sales and earnings in 2018 as a result of the acquisition of Velvac and our investments in Illinois Lock and new product development. We expect to start seeing returns on our investments in Road-iQ in the second half of the year. We believe that sales and earnings will also benefit from strong demand in several of our core markets, including Class 8 trucks and recreational vehicles. A reduction in the Company's taxes will contribute to net earnings growth as well.

We intend to fund the growth of our highest-return businesses by investing in new product development at Eberhard and Illinois Lock and by making targeted acquisitions. We will again look for acquisition opportunities that have strong economics and help us build scale and create differentiation in attractive end markets.

As a result of the Tax Cuts and Jobs Act, we intend to repatriate approximately \$6.0–\$8.0 million in cash from foreign operations. We expect to use this cash to pay down debt and fund our pension and retirement plan obligations.

We are proud of our company's 160-year history and are confident that our focus on allocating capital in a disciplined, patient manner and growing the cash flows of our subsidiary companies will create meaningful long-term value for our shareholders.

/s/August M. Vlak

August M. Vlak
President and Chief Executive Officer

/s/James A. Mitarotonda

James A. Mitarotonda
Chairman of the Board

Cautionary Language Concerning Forward-Looking Statements

Statements in this document about The Eastern Company's future expectations, beliefs, goals, plans or prospects constitute forward-looking statements within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and the rules, regulations and releases of the Securities and Exchange Commission. Any statements that are not statements of historical fact, including statements containing the words "believes," "intends," "continues," "reflects," "plans," "anticipates," "expects," and similar expressions, should also be considered to be forward-looking statements. Readers should not place undue reliance on these forward-looking statements, which are based upon the current beliefs and expectations of the management of The Eastern Company. These forward-looking statements are subject to risks and uncertainties, and actual results might differ materially from those discussed in, or implied by, the forward-looking statements. Among the risks and uncertainties that could cause actual results or events to differ materially from those indicated by such forward-looking statements include, but are not limited to changing customer preferences, lack of success of new products, loss of customers and increased prices for raw materials. There are important, additional factors that could cause actual results or events to differ materially from those indicated by such forward-looking statements, including those set forth in The Eastern Company's reports and filings with the Securities and Exchange Commission. The Eastern Company undertakes no obligation to update, alter, or otherwise revise any forward-looking statements, whether written or oral, that may be made from time to time, whether as a result of new information, future events, or otherwise.

¹ We define return on invested capital as [tax adjusted EBIT] / [fixed assets + intangible assets + current assets – current liabilities – cash]