PREFORMED LINE PRODUCTS CO
Form 10-K
March 10, 2017
UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C.20549

FORM 10-K

Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended December 31, 2016

Commission file number 0-31164

Preformed Line Products Company

(Exact name of registrant as specified in its charter)

Ohio	34 0676895
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

660 Beta Drive

Mayfield Village, Ohio	44143
(Address of Principal Executive Office)	(Zip Code)

(440) 461 5200
(Registrant's telephone number, including area code)

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

Title of each class	Name of each exchange on which registered
Common Shares, $2 par value per share	NASDAQ

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 Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit 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 the 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 7a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "accelerated filer," "large accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange act.

Large accelerated filer	Accelerated filer
Non-accelerated filer	Smaller Reporting Company

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

The aggregate market value of voting and non-voting common shares held by non-affiliates of the registrant as of June 30, 2016 was $100,136,551 based on the closing price of such common shares, as reported on the NASDAQ National Market System. As of March 06, 2017, there were 5,117,682 common shares of the Company ($2 par value) outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Definitive Proxy Statement for the Annual Meeting of Shareholders to be held May 9, 2017 are incorporated by reference into Part III, Items 10, 11, 12, 13 and 14.

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Forward-Looking Statements

This Form 10-K and other documents we file with the Securities and Exchange Commission ("SEC") contain forward-looking statements regarding Preformed Line Products Company's (the "Company") and management's beliefs and expectations. As a general matter, forward-looking statements are those focused upon future plans, objectives or performance (as opposed to historical items) and include statements of anticipated events or trends and expectations and beliefs relating to matters not historical in nature. Such forward-looking statements are subject to uncertainties and factors relating to the Company's operations and business environment, all of which are difficult to predict and many of which are beyond the Company's control. Such uncertainties and factors could cause the Company's actual results to differ materially from those matters expressed in or implied by such forward-looking statements.

The following factors, among others, could affect the Company's future performance and cause the Company's actual results to differ materially from those expressed or implied by forward-looking statements made in this report:

- The overall demand for cable anchoring and control hardware for electrical transmission and distribution lines on a worldwide basis, which has a slow growth rate in mature markets such as the United States (U.S.), Canada, Australia and Western Europe and may grow slowly or experience prolonged delay in developing regions despite expanding power needs;
    - The potential impact of the global economic condition on the Company's ongoing profitability and future growth opportunities in the Company's markets in the U.S. and other foreign countries where the financial situation is expected to be similar going forward;
- Decrease in infrastructure spending globally as a result of worldwide depressed spending;
- The impact of low oil and other commodity prices on the Company's growth opportunities, particularly with respect to energy projects;
- The ability of the Company's customers to raise funds needed to build the facilities their customers require;
- Technological developments that affect longer-term trends for communication lines, such as wireless communication;
- The decreasing demand for product supporting copper-based infrastructure due to the introduction of products using new technologies or adoption of new industry standards;
- The Company's success at continuing to develop proprietary technology and maintaining high quality products and customer service to meet or exceed new industry performance standards and individual customer expectations;
- The Company's success in strengthening and retaining relationships with the Company's customers, growing sales at targeted accounts and expanding geographically;
- The extent to which the Company is successful at expanding the Company's product line or production facilities into new areas or implementing efficiency measures at existing facilities;
- The effects of fluctuation in currency exchange rates upon the Company's foreign subsidiaries' operations and reported results from international operations, together with non-currency risks of investing in and conducting significant operations in foreign countries, including those relating to political, social, economic and regulatory factors;
- The Company's ability to identify, complete, obtain funding for and integrate acquisitions for profitable growth;
- The potential impact of consolidation, deregulation and bankruptcy among the Company's suppliers, competitors and customers;
- The relative degree of competitive and customer price pressure on the Company's products;
- The cost, availability and quality of raw materials required for the manufacture of products;
- Strikes and other labor disruptions;
- Changes in significant government regulations affecting environmental compliances;
- The telecommunication market's continued deployment of Fiber-to-the-Premises; and
- Those factors described under the heading "Risk Factors" on page 11.

In light of these risks and uncertainties, the Company cautions you not to place undue reliance on these forward-looking statements. Any forward-looking statements that the Company makes in this report speaks only as of the date of such statement, and the Company undertakes no obligation to update any forward-looking statement or to publicly announce the results of any revision to any of those statements to reflect future events or developments. Comparisons of results for current and any prior periods are not intended to express any future trends or indications of future performance, unless specifically expressed as such, and should only be viewed as historical data.

Part I

Item 1. Business

Background

Preformed Line Products Company and its subsidiaries (the "Company") is an international designer and manufacturer of products and systems employed in the construction and maintenance of overhead and underground networks for the energy, telecommunication, cable operators, information (data communication) and other similar industries. The Company's primary products support, protect, connect, terminate and secure cables and wires. The Company also provides solar hardware systems and mounting hardware for a variety of solar power applications. The Company's goal is to continue to achieve profitable growth as a leader in the research, innovation, development, manufacture and marketing of technically advanced products and services related to energy, communications and cable systems and to take advantage of this leadership position to sell additional quality products in familiar markets.

The Company serves a worldwide market through strategically located domestic and international manufacturing facilities. Each of the Company's domestic and international manufacturing facilities have obtained an International Organization of Standardization ("ISO") 9001:2008 Certified Management System Certificate. The ISO 9001:2008 certified management system is a globally recognized certified quality standard for manufacturing and assists the Company in marketing its products throughout the world. The Company's customers include public and private energy utilities and communication companies, cable operators, financial institutions, governmental agencies, contractors and subcontractors, distributors and value-added resellers. The Company is not dependent on a single customer or a few customers. No single customer accounts for more than 10% of the Company's consolidated revenues.

The Company's products include:

- Formed Wire and Related Hardware Products
- Protective Closures
- Plastic Products
- Other Products

Formed Wire Products and Related Hardware Products are used in the energy, communications, cable and special industries (i.e., metal building, tower and antenna industries, the agriculture and arborist industries, and marine systems industry) to support, protect, terminate and secure both power conductor and communication cables and to control cable dynamics (e.g., vibration). Formed wire products are based on the principle of forming a variety of stiff wire materials into a helical (spiral) shape. Advantages of using the Company's helical formed wire products are that they are economical, dependable and easy to use. The Company introduced formed wire products to the power industry 70 years ago and such products enjoy an almost universal acceptance in the Company's markets. Related hardware products include hardware for supporting and protecting transmission conductors, spacers, spacer-dampers, stockbridge dampers, corona suppression devices and various compression fittings for dead-end applications. Formed wire and related hardware products were approximately 65%, 61% and 65% of the Company's revenues in 2016, 2015 and 2014, respectively.

Protective Closures, including splice cases, are used to protect fixed line communication networks, such as copper cable or fiber optic cable, from moisture, environmental hazards and other potential contaminants. Protective closures were approximately 20%, 17% and 18% of the Company's revenues in 2016, 2015 and 2014, respectively.

Plastic Products, including guy markers, tree guards, fiber optic cable markers and pedestal markers, are used in energy, communications, cable and special industries to identify power conductors, communication cables and guy wires. Plastic products were approximately 4% of the Company's revenues each year in 2016, 2015 and 2014.

Other Products include data communication cabinets, hardware assemblies, pole line hardware, resale products, underground connectors, solar hardware systems and urethane products. They are used by energy, renewable energy, communications, cable and special industries for various applications and are defined as products that complement the Company's core line offerings. Other products were approximately 11%, 18% and 13% of the Company's revenues in 2016, 2015 and 2014, respectively.

Corporate History

The Company was incorporated in Ohio in 1947 to manufacture and sell helically shaped “armor rods” which are sets of stiff helically shaped wires applied on an electrical conductor at the point where they are suspended or held. Thomas F. Peterson, the Company’s founder, developed and patented a unique method to manufacture and apply these armor rods to protect electrical conductors on overhead power lines. Over the years, Mr. Peterson and the Company developed, tested, patented, manufactured and marketed a variety of helically shaped products for use by the electrical and telephone industries. Although all of Mr. Peterson’s patents have now expired, those patents served as the nucleus for licensing the Company’s formed wire products abroad.

The success of the Company’s formed wire products in the U.S. led to expansion abroad. The first international license agreement was established in the mid-1950s in Canada. In the late 1950s, the Company’s products were being sold through joint ventures and licensees in Canada, England, Germany, Spain and Australia. Additionally, the Company began export operations and promoted products into other selected offshore markets. The Company continued its expansion program, bought out most of the original licensees, and, by the mid-1990s, had complete ownership of operations in Australia, Brazil, Canada, Great Britain, South Africa and Spain and by 2002, it had complete ownership of operations in Mexico and China. The Company’s international subsidiaries have the necessary infrastructure (i.e. manufacturing, engineering, marketing and general management) to support local business activities. Each is staffed with local personnel to ensure that the Company is well versed in local business practices, cultural constraints, technical requirements and the intricacies of local client relationships.

In 1968, the Company expanded into the underground telecommunications field by its acquisition of the Smith Company located in California. The Smith Company had a patented line of buried closures and pressurized splice cases. These closures and splice cases protect copper cable openings from environmental damage and degradation. The Company continued to build on expertise acquired through the acquisition of the Smith Company and in 1995 introduced the highly successful COYOTE® Closure line of products. Since 1995, 14 domestic and three international patents have been granted to the Company on the COYOTE Closure. The earliest COYOTE Closure patent was filed April 1995 and expired in April 2015.

In 2007, the Company acquired 83.74% of Belos SA (Belos), located in Bielsko-Biala, Poland. Belos is a manufacturer and supplier of fittings for various voltage power networks. This acquisition complemented the Company’s existing line of energy products. From 2008 to 2010, the Company acquired the remaining outstanding shares of Belos.

In 2009, the Company acquired the Dulmison business from Tyco Electronics Group S.A. (Tyco Electronics), which included both the acquisition of equity of certain Tyco Electronics entities and the acquisition of assets from other Tyco Electronics entities. Dulmison was a leader in the supply and manufacturer of electrical transmission and distribution products. Dulmison designed, manufactured and marketed pole line hardware and vibration control products for the global electrical utility industry. Dulmison had operations in Australia, Thailand, Indonesia, Malaysia, Mexico and the United States. The Dulmison business has been fully integrated into the Company’s core businesses.

In 2010, the Company acquired Electropar Limited (Electropar), a New Zealand corporation. Electropar designs, manufactures and markets pole line and substation hardware for the global electrical utility industry. Electropar is based in New Zealand with a subsidiary operation in Australia. The acquisition has strengthened the Company’s position in the power distribution, transmission and substation hardware markets and expanded the Company’s presence in the Asia-Pacific region.

In January 2014, the Company acquired Helix Uniformed Limited (Helix), located in Montreal, Quebec, Canada. Helix designs, manufacturers and markets helical products and spacer dampers for the electrical utility industry. The acquisition has diversified the Company's business in Canada, extended its customers access in Canadian markets, expanded its manufacturing footprint and enhanced its engineering capabilities.

The Company's World headquarters is located at 660 Beta Drive, Mayfield Village, Ohio, U.S.A. 44143.

Business

The demand for the Company's products comes primarily from new, maintenance and repair construction for the energy (including solar), telecommunication, data communication and special industries. The Company's customers use many of the Company's products, including formed wire products, to revitalize the aging outside plant infrastructure. Many of the Company's products are used on a proactive basis by the Company's customers to reduce and prevent lost revenue. A single malfunctioning line could cause the loss of thousands of dollars per hour for a power or communication customer. A malfunctioning fiber cable could also result in substantial revenue loss to the Company's customers. Repair construction by the Company's customers generally occurs in the case of emergencies or natural disasters, such as hurricanes, tornados, earthquakes, floods or ice storms. Under these circumstances, the Company quickly provides the repair products to customers.

The Company has adapted the formed wire products' helical technology for use in a wide variety of fiber optic cable applications that have special requirements. The Company's formed wire products are uniquely qualified for these applications due to the gentle gripping over a greater length of the fiber cable. This is an advantage over traditional pole line hardware clamps that compress the cable to the point of possible fatigue and optical signal deterioration.

The Company's protective closures and splice cases are used to protect cable from moisture, environmental hazards and other potential contaminants. The Company's splice cases are easily re-enterable closures that allow utility maintenance workers access to the cables located inside the closure to repair or add communications services. Over the years, the Company has made many significant improvements in splice cases that have greatly increased its versatility and application in the market place. The Company also designs and markets custom splice cases to satisfy specific customer requirements. This has allowed the Company to remain a strong partner with several primary customers and has earned the Company the reputation as a responsive and reliable supplier.

Fiber optic cable was first deployed in the outside plant environment in the early 1980s. Through fiber optic technologies, a much greater amount of both voice and data communication can be transmitted reliably. In addition, this technology solved the cable congestion problem that the large count copper cable was causing in underground, buried and aerial applications. The Company developed and adapted copper closures for use in the emerging fiber optic world. In the late 1980s, the Company developed a series of splice cases designed specifically for fiber optic application. In the mid-1990s, the Company developed its plastic COYOTE® Closure and has since expanded the product line to address Fiber-to-the-Premise (FTTP) applications. The COYOTE Closure is an example of the Company developing a new line of proprietary products to meet the changing needs of its customers.

The Company also designs and manufactures data communication cabinets and enclosures for data communication networks, offering a comprehensive line of copper and fiber optic cross-connect systems. The product line enables reliable, high-speed transmission of data over customers' local area networks.

In 2007, the Company expanded into the renewable energy sector. It provides a comprehensive line of mounting hardware for a variety of solar power applications including residential roof mounting, commercial roofing systems, utility scale ground-mount, top of pole mounting and customized solutions.

Markets

The Company markets its products to the energy, telecommunication, cable, data communication and special industries. While rapid changes in technology have blurred the distinctions between telephone, cable, and data communication, the energy industry is clearly distinct. The Company's role in the energy industry is to supply formed wire products and related hardware used with the electrical conductors, cables and wires that transfer power from the generating facility to the ultimate user of that power. Formed wire products are used to support, protect, terminate and secure both power conductor and communication cables and to control cable dynamics.

Electric Utilities - Transmission. The electric transmission grid is the interconnected network of high voltage aluminum conductors used to transport large blocks of electric power from generating facilities to distribution networks. Currently, there are three major power grids in the U.S.: the Eastern Interconnect, the Western Interconnect and the Texas Interconnect. Virtually all electrical energy utilities are connected with at least one other utility by one of these major grids. The Company believes that transmission grids have been neglected throughout much of the U.S. With demand for power now exceeding supply in some areas, the need for the movement of bulk power from the energy-rich areas to the energy-deficient areas means that new transmission lines will likely be built and many existing lines will likely be refurbished. Connecting renewable energy sources to the grid should also continue to attract new investment to fund transmission infrastructure projects in the future. The Company believes that this may generate opportunities for the Company's products in this market over at least the next several years. In addition, increased construction of international transmission grids is occurring in many regions of the world. However, consolidations in the markets that the Company services with increased global competition, as well as stagnant economic conditions, limited government funding and lower energy prices, may also have an adverse impact on the Company's sales.

Electric Utilities - Distribution. The distribution market includes those utilities that distribute power from a substation where voltage is reduced to levels appropriate for the consumer. Unlike the transmission market, distribution is still handled primarily by local electric utilities. These utilities are motivated to reduce cost in order to maintain and enhance their profitability. The Company believes that its growth in the distribution market will be achieved primarily as a result of incremental gains in market share driven by emphasizing the Company's quality products and service over price. Internationally, particularly in the developing regions, there is increasing political pressure to extend the availability of electricity to additional populations. Through its global network of factories and sales offices, the Company is prepared to take advantage of this new growth in construction.

Renewable Energy. The renewable energy market includes residential consumers, commercial businesses, off-grid operators, and utility companies that have an interest in alternative energy sources. Environmental concerns along with federal, state and local utility incentives have fueled demand for renewable energy systems including solar, wind and biofuel. While low prices of traditional energy sources have slowed or stalled demand in some areas, the industry continues to grow as advancements in technology lead to greater efficiencies which drive down overall system costs. The Company currently provides hardware solutions and system design for solar power applications. The Company markets and sells these products and services to end-users, distributors, installers and integrators.

Communication and Cable. Major developments, including growing competition between the cable and communications industries and increasing overall demand for high-speed communication services, have led to a changing regulatory and competitive environment in many markets throughout the world. The deployment of new access networks and improvements to existing networks for advanced applications continues to gain momentum.

Cable operators, local communication operators and power utilities are building, rebuilding or upgrading signal delivery networks in developed countries. These networks are designed to deliver video and voice transmissions and provide Internet connectivity to individual residences and businesses. Operators deploy a variety of network technologies and architectures to carry broadband and narrowband signals. These architectures are constructed of electronic hardware connected via coaxial cables, copper wires or optical fibers. The Company manufactures closures that these industries use to securely connect and protect these vital networks.

As critical components of the outdoor infrastructure, closures provide protection against weather and vandalism, and permit technicians who maintain and manage the system ready access to the devices. Cable operators and local telephone network operators place great reliance on manufacturers of protective closures because any material damage to the signal delivery networks is likely to disrupt communication services. In addition to closures, the Company supplies the communication and cable industry with its formed wire products to hold, support, protect and terminate the copper wires and cables and the fiber optic cables used by that industry to transfer voice, video or data signals.

The industry has developed technological methods to increase the usage of copper-based products through high-speed digital subscriber lines (DSLs). The popularity of these services, the regulatory environment and the increasingly fierce competition between communications and cable operators has driven the move toward building out the “last mile” in fiber optic networks. FTTP technology supports the next wave in broadband innovation by carrying fiber optic technology into homes and businesses. The Company has been actively developing products that address this market.

Data Communication. The data communication market is driven by the continual demand for increased bandwidth. Growing Internet Service Providers (ISPs), construction in Wide Area Networks (WANs) and demand for products in the workplace are all key elements to the increased demand for the racking and cabinet products offered by the Company. The Company’s products are sold to a number of categories of customers including, (i) ISPs, (ii) large companies and organizations which have their own local area network for data communication, and (iii) distributors of structured cabling systems and components for use in the above markets.

Special Industries. The Company’s formed wire products are also used in other industries which require a method of securing or terminating cables, including the metal building, tower and antenna industries, the agriculture and arborist industries, and various applications within the marine systems industry. Products other than formed wire products are also marketed to other industries. For example, the Company’s urethane capabilities allow it to market products to the light rail industry. The Company continues to explore new and innovative uses of its manufacturing capabilities; however, these markets remain a small portion of overall consolidated sales.

International Operations

The international operations of the Company are essentially the same as its domestic (PLP-USA) business. The Company manufactures similar types of products in its international plants as are sold domestically, sells to similar types of customers and faces similar types of competition (and in some cases, the same competitors). Sources of supply of raw materials are not significantly different internationally. See Note L in the Notes to Consolidated Financial Statements for information and financial data relating to the Company’s international operations that represent reportable segments.

While a number of the Company’s international plants are in developed countries, the Company believes it has strong market opportunities in developing countries where the need for the transmission and distribution of electrical power is significant, although the pace of this development may remain slow. In addition, as the need arises, the Company is prepared to establish new manufacturing facilities abroad.

Sales and Marketing

Domestically and internationally, the Company markets its products through a direct sales force and manufacturing representatives. The direct sales force is employed by the Company and works with the manufacturer's representatives, as well as key direct accounts and distributors who also buy and resell the Company's products. The manufacturer's representatives are independent organizations that represent the Company as well as other complimentary product lines. These organizations are paid a commission based on the sales amount they generate.

Research and Development

The Company is committed to providing technical leadership through scientific research and product development in order to continue to expand the Company's position as a supplier to the communications and power industries. Research is conducted on a continuous basis using internal experience in conjunction with outside professional expertise to develop state-of-the-art materials for several of the Company's products. These products capitalize on cost-efficiency while offering exacting mechanical performance that meets or exceeds industry standards. The Company's research and development activities have resulted in numerous patents being issued to the Company (see "Patents and Trademarks" below).

Early in its history, the Company recognized the need to understand the performance of its products and the needs of its customers. To that end, the Company developed a 29,000 square foot Research and Engineering Center located at its corporate headquarters in Mayfield Village, Ohio. In 2013, the Company expanded its Research and Engineering Center by an additional 8,000 square feet. Using the Research and Engineering Center, engineers and technicians simulate a wide range of external conditions encountered by the Company's products to ensure quality, durability and performance. The work performed in the Research and Engineering Center includes advanced studies and experimentation with various forms of vibration and environmental changes. This work has contributed significantly to the collective knowledge base of the industries the Company serves and is the subject matter of many papers and seminars presented to these industries.

The Company believes that its Research and Engineering Center is one of the most sophisticated in the world in its specialized field. The Research and Engineering Center also has an advanced prototyping technology machine on-site to develop models of new designs where intricate part details are studied prior to the construction of expensive production tooling. Today, the Company's reputation for vibration testing, tensile testing, fiber optic cable testing, environmental testing, field vibration monitoring and third-party contract testing is a competitive advantage. In addition to testing, the work performed at the Company's Research and Development Center continues to fuel product development efforts. For example, the Company estimates that approximately 19.9% of 2016 revenues were attributed to products developed by the Company in the past five years. In addition, the Company's position in the industry is further reinforced by its long-standing leadership role in many key international technical organizations which are charged with the responsibility of establishing industry-wide specifications and performance criteria, including IEEE (Institute of Electrical and Electronics Engineers), CIGRE (Counsiel Internationale des Grands Reseaux Electriques a Haute Tension), and IEC (International Electromechanical Commission). Research and development costs are expensed as incurred. Research and development costs for new products were $2.7 million in 2016, $2.9 million in 2015 and $2.7 million in 2014.

Patents and Trademarks

The Company applies for patents in the U.S. and other countries, as appropriate, to protect its significant patentable developments. As of December 31, 2016, the Company had in force 33 U.S. patents and 108 international patents in 21 countries and had 12 pending U.S. patent applications and 29 pending international applications. While such domestic and international patents expire from time to time, the Company continues to apply for and obtain patent protection on a regular basis. Patents held by the Company in the aggregate are of material importance in the operation of the Company's business. The Company, however, does not believe that any single patent, or group of related patents, is essential to the Company's business as a whole or to any of its businesses. Additionally, the Company owns and uses a substantial body of proprietary information and numerous trademarks. The Company relies on nondisclosure agreements to protect trade secrets and other proprietary data and technology. As of December 31, 2016, the Company had obtained U.S. registration on 38 trademarks and no trademark applications remained pending. International registrations amounted to 237 registrations in 36 countries, with five pending international registrations.

U.S. patents are issued for terms of 20 years beginning with the date of filing of the patent application. Patents issued by international countries generally expire 20 years after filing. U.S. and international patents are not renewable after expiration of their initial term. U.S. and international trademarks are generally perpetual, renewable in 10-year increments upon a showing of continued use. To the knowledge of management, the Company is not subject to any significant allegation or charges of infringement of intellectual property rights by any organization.

In the normal course of business, the Company occasionally makes and receives inquiries with regard to possible patent and trademark infringement. The extent of such inquiries from third parties has been limited generally to verbal remarks to Company representatives. The Company believes that it is unlikely that the outcome of these inquiries will have a material adverse effect on the Company's financial position.

Competition

All of the markets that the Company serves are highly competitive. In each market, the principal methods of competition are price, performance, and service. The Company believes, however, that several factors (described below) provide the Company with a competitive advantage.

- The Company has a strong and stable workforce. This consistent and continuous knowledge base has afforded the Company the ability to provide superior service to the Company's customers and representatives.
- The Company's Research and Engineering Center in Mayfield Village, Ohio and the engineering departments at the Company's subsidiary operations around the world maintain a strong technical support function to develop unique solutions to customer problems.
- The Company is vertically integrated both in manufacturing and distribution and is continually upgrading equipment and processes.
- The Company is sensitive to the marketplace and provides an extra measure of service in cases of emergency, storm damage and other rush situations. This high level of customer service and customer responsiveness is a hallmark of the Company.
- The Company's 26 sales and manufacturing locations ensure close support and proximity to customers worldwide.

Domestically, there are several competitors for formed wire products. Although it has other competitors in many of the countries where it has plants, the Company has leveraged its expertise and is very strong in the global market. The Company believes that it is the world's largest manufacturer of formed wire products for energy and communications markets. However, the Company's formed wire products compete against other pole line hardware products manufactured by other companies.

The Company's primary domestic competitor for pressurized copper closures is the 3M Company ("3M"). Based on its experience in the industry, the Company believes it maintains a strong market share position.

The fiber optic closure market is one of the most competitive product areas for the Company, with the Company competing against, among others, Tyco Electronics, 3M and Corning Cable Systems. There are a number of primary competitors and several smaller niche competitors that compete at all levels in the marketplace. The Company believes that it is one of four leading suppliers of fiber optic closures.

Sources and Availability of Raw Materials

The principal raw materials used by the Company are galvanized wire, stainless steel, aluminum covered steel wire, aluminum rod, plastic resins, glass-filled plastic compounds, neoprene rubbers and aluminum castings. The Company also uses certain other materials such as fasteners, packaging materials and communications cable. The Company believes that it has adequate sources of supply for the raw materials used in its manufacturing processes and it regularly attempts to develop and maintain sources of supply in order to extend availability and encourage competitive pricing of these products.

Most plastic resins are purchased under contracts to stabilize costs and improve delivery performance and are available from a number of reliable suppliers. Wire and aluminum rods are purchased in standard stock diameters and coils under contracts from a number of reliable suppliers. Contracts have firm prices except for fluctuations of base metals and petroleum prices, which result in surcharges when global demand is greater than the available supply.

The Company also relies on certain other manufacturers to supply products that complement the Company's product lines, such as aluminum and ferrous castings, fiber optic cable and connectors and various metal racks and cabinets. The Company believes there are multiple sources of supply for these products.

The Company relies on sole source manufacturers for certain raw materials used in production. The current state of economic uncertainty presents a risk that existing suppliers could go out of business. However, there are other potential sources available for these materials, and the Company could relocate the tooling and processes to other manufacturers if necessary.

Raw material costs were flat for the beginning of 2016 and trended down toward the end of 2016. The Company expects stable prices with a potential upward trend in the beginning of 2017.

Backlog Orders

The Company's backlog was approximately $75.3 million at the end of 2016 and $53.0 million at the end of 2015. All customer orders entered are firm at the time of entry. Substantially all orders are shipped within a two to four week period unless the customer requests an alternative date.

Seasonality

The Company markets products that are used by utility maintenance and construction crews worldwide. The products are marketed through distributors and directly to end users, who maintain stock to ensure adequate supply for their customers or construction crews. As a result, the Company does not have a wide variation in sales from quarter to quarter.

Environmental

The Company is subject to extensive and changing federal, state, and local environmental laws, including laws and regulations that (i) relate to air and water quality, (ii) impose limitations on the discharge of pollutants into the environment, (iii) establish standards for the treatment, storage and disposal of toxic and hazardous waste, and (iv) require proper storage, handling, packaging, labeling, and transporting of products and components classified as hazardous materials. Stringent fines and penalties may be imposed for noncompliance with these environmental laws. In addition, environmental laws could impose liability for costs associated with investigating and remediating contamination at the Company's facilities or at third-party facilities at which the Company has arranged for the disposal treatment of hazardous materials.

The Company believes it is in compliance in all material respects, with all applicable environmental laws and the Company is not aware of any noncompliance or obligation to investigate or remediate contamination that could reasonably be expected to result in a material liability. The Company does not expect to make any material capital expenditure during 2017 for environmental control facilities. The environmental laws continue to be amended and revised to impose stricter obligations, and compliance with future additional environmental requirements could necessitate capital outlays. However, the Company does not believe that these expenditures will ultimately result in a material adverse effect on its financial position or results of operations. The Company cannot predict the precise effect such future requirements, if enacted, would have on the Company. The Company believes that such regulations would be enacted over time and would affect the industry as a whole.

Employees

At December 31, 2016, the Company had 2,579 employees. Approximately 26% of the Company's employees are located in the U.S.

Available Information

The Company maintains an Internet site at http://www.preformed.com, on which the Company makes available, free of charge, the annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to those reports, as soon as reasonably practicable after the Company electronically files such material with, or furnishes it to, the SEC. The Company's SEC reports can be accessed through the investor relations section of its Internet site. The information found on the Company's Internet site is not part of this or any other report that is filed or furnished to the SEC.

The public may read and copy any materials the Company files with or furnishes to the SEC at the SEC's Public Reference Room at 100 F. Street, NE., Washington, DC 20549. Information on the operation of the Public Reference Room is available by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an Internet site that contains reports, proxy and information statements, and other information filed with the SEC by electronic filers. The SEC's Internet site is http://www.sec.gov. The Company also has a link from its Internet site to the SEC's Internet site. This link can be found on the investor relations page of the Company's Internet site.

Item 1A. Risk Factors

Due to the Company's dependency on the energy and telecommunication industries, the Company is susceptible to negative trends relating to those industries that could adversely affect the Company's operating results.

The Company's sales to the energy and telecommunication industries represent a substantial portion of the Company's historical sales. The concentration of revenue in such industries is expected to continue into the foreseeable future. Demand for products to these industries depends primarily on capital spending by customers for constructing, rebuilding, maintaining or upgrading their systems. The amount of capital spending and, therefore, the Company's sales and profitability are affected by a variety of factors, including general economic conditions, access by customers to financing, government regulation, demand for energy and cable services, energy prices and technological factors. As a result, some customers may significantly reduce their spending or may not continue as going concerns, which could have a material adverse effect on the Company's business, operating results and financial condition. In addition, the Company may incur exit-related costs and impairments of goodwill, definite and indefinite-lived intangible assets and property, fixtures and equipment as the Company makes corresponding changes to its business to reflect these changes and uncertainties in the Company's industries and customer demand, and these costs and impairments could have a significant negative impact on the Company's results for the period in which they are incurred. Consolidation presents an additional risk to the Company in that merged customers will rely on relationships with a source other than the Company. Consolidation may also increase the pressure on suppliers, such as the Company, to sell product at lower prices.

The Company's business will suffer if the Company fails to develop and successfully introduce new and enhanced products that meet the changing needs of the Company's customers.

The Company's ability to anticipate changes in technology and industry standards and to successfully develop and introduce new products on a timely basis is a significant factor in the Company's ability to grow and remain competitive. New product development often requires long-term forecasting of market trends, development and implementation of new designs and processes and a substantial capital commitment. The trend toward consolidation of the energy, telecommunication and data communication industries may require the Company to quickly adapt to rapidly changing market conditions and customer requirements. Any failure by the Company to anticipate or respond in a cost-effective and timely manner to technological developments or changes in industry standards or customer requirements, or any significant delays in product development or introduction or any failure of new products to be widely accepted by the Company's customers, could have a material adverse effect on the Company's business, operating results and financial condition as a result of reduced net sales.

The intense competition in the Company's markets, particularly telecommunication, may lead to a reduction in sales and earnings.

The markets in which the Company operates are highly competitive. The level of intensity of competition may increase in the foreseeable future due to anticipated growth in the telecommunication and data communication industries. The Company's competitors in the telecommunication and data communication markets are larger companies with significant influence over the distribution network. The Company may not be able to compete successfully against its competitors, many of which may have access to greater financial resources than the Company. In addition, the pace of technological development in the telecommunication market is rapid and these advances (i.e., wireless, fiber optic network infrastructure, etc.) may adversely affect the Company's ability to compete in this market.

Competitors' introduction of products embodying new technologies or the emergence of new industry standards can render existing products or products under development obsolete or unmarketable and result in lost sales.

The energy and telecommunication industries are characterized by rapid technological change. Satellite, wireless and other communication technologies currently being deployed may represent a threat to copper, coaxial and fiber optic-based systems by reducing the need for wire-line networks. Future advances or further development of these or other new technologies may have a material adverse effect on the Company's business, operating results and financial condition as a result of lost sales.

Price increases or decreased availability of raw materials could result in lower earnings.

The Company's cost of sales may be materially adversely affected by increases in the market prices of the raw materials used in the Company's manufacturing processes. The Company may not be able to pass on price increases in raw materials to the Company's customers through increases in product prices. As a result, the Company's operating results could be adversely affected. In addition, any decrease or delay in the availability of these materials could slow production and delivery to the Company's customers.

The Company's international operations subject the Company to additional business risks that may have a material adverse effect on the Company's business, operating results and financial condition.

International sales account for a substantial portion of the Company's net sales (60%, 60% and 61% in 2016, 2015 and 2014, respectively) and the Company expects these sales could increase as a percentage of net sales in the future. Due to its international sales, the Company is subject to the risks of conducting business internationally, including unexpected changes in, or impositions of, legislative or regulatory requirements, which could materially adversely affect U.S. dollar sales or operating expenses, tariffs and other barriers and restrictions, potentially longer payment cycles, greater difficulty in accounts receivable collection, reduced or limited protection of intellectual property rights, potentially adverse taxes and the burdens of complying with a variety of international laws and communications standards. The Company is subject to foreign currency volatility which could materially impact the Company's results. The Company is also subject to general geopolitical risks, such as political and economic instability, social unrest, terrorism and changes in diplomatic and trade relationships, in connection with its international operations. These risks of conducting business internationally may have a material adverse effect on the Company's business, operating results and financial condition.

The Company may not be able to successfully integrate businesses that it may acquire in the future or complete acquisitions on satisfactory terms, which could have a material adverse effect on the Company's business, operating results and financial condition.

A portion of the Company's growth in sales and earnings has been generated from acquisitions. The Company expects to continue a strategy of identifying and acquiring businesses with complementary products. In connection with this strategy, the Company faces certain risks and uncertainties relating to acquisitions. The factors affecting this exposure are in addition to the risks faced in the Company's day-to-day operations. Acquisitions involve a number of special risks, including the risks pertaining to integrating acquired businesses, realizing the benefits of acquired technology and utilizing new personnel. In addition, the Company may incur debt to finance future acquisitions, and the Company may issue securities in connection with future acquisitions that may dilute the holdings of current and future shareholders. Covenant restrictions relating to additional indebtedness could restrict the Company's ability to pay dividends, fund capital expenditures, consummate additional acquisitions and significantly increase the Company's interest expense. Any failure to successfully complete acquisitions or to successfully integrate such strategic acquisitions could have a material adverse effect on the Company's business, operating results and financial condition.

The Company may have interruptions in or lose business due to the uncertainty of the global economy, specifically related to the lack of available funding for the Company's customers.

The demand for the Company's products is significantly affected by the amount of discretionary business and consumer spending, each of which is impacted by the uncertainty of the global economy. The liquidity and financial position of the Company's customers could also impact their ability to pay in full and/or on a timely basis. This lack of funding could have a negative impact on the Company's results of operations and financial condition.

The Company may be adversely impacted by laws, regulation, and litigation.

The Company is subject to various laws and regulation. For example, extensive environmental regulations related to air and water quality, the discharge of pollutants, the handling of toxic waste and the handling and transport of products and components classified as hazardous impact its daily operations. The introduction of new laws or regulations, or changes in existing laws or regulations, could increase the costs of doing business. At any given time, we may also be subject to litigation or claims related to our products, suppliers, customers, employees, shareholders, distributors, sales representatives, intellectual property or acquisitions, among other things, the disposition of which may have an adverse effect upon our business, financial condition, or results of operation. The outcome of litigation is difficult to assess or quantify. Lawsuits can result in the payment of substantial damages by defendants. If we are required to pay substantial damages and expenses as a result of these or other types of lawsuits our business and results of operations would be adversely affected. Regardless of whether any claims against us are valid or whether we are liable, claims may be expensive to defend and may divert time and money away from our operations. Insurance may not be available at all or in sufficient amounts to cover any liabilities with respect to these or other matters. A judgment or other liability in excess of our insurance coverage for any claims could adversely affect our business and the results of our operations.

The Company may not be able to successfully manage its intellectual property and may be subject to infringement claims.

The Company relies on a combination of contractual rights and patent, trademark, copyright and trade secret laws to establish and protect its proprietary technology. Third parties may challenge, invalidate, circumvent, infringe or misappropriate the Company’s intellectual property, or such intellectual property may not be sufficient to permit the Company to take advantage of current market trends or otherwise to provide competitive advantages, which could result in costly redesign efforts, discontinuance of certain product offerings or other competitive harm. Others, including its competitors may independently develop similar technology, duplicate or design around the Company's intellectual property, and in such cases it could not assert its intellectual property rights against such parties. The Company may also be subject to costly litigation in the event its technology infringes upon or otherwise violate a third party's proprietary rights. Any claim from third parties may result in a limitation on its ability to use the intellectual property subject to these claims. The Company may be forced to litigate to enforce or determine the scope and enforceability of its intellectual property rights, trade secrets and know-how, which is expensive, could cause a diversion of resources and may not prove successful, especially in countries where such rights are more difficult to enforce. The loss of intellectual property protection or the inability to obtain third party intellectual property could harm its business and ability to compete.

Tax matters, including changes in tax rates, disagreements with taxing authorities and imposition of new taxes could impact the Company's results of operations and financial condition.

A significant percentage of the Company's profit is earned outside the U.S. and taxed at lower rates than the U.S. federal statutory rate. Historically, the cash the Company generates outside the U.S. has principally been used to fund the Company's international development. However, if cash generated by the Company's U.S. operations is not sufficient to meet its need for cash in the U.S., the Company may need to repatriate a significant portion of its international earnings to the U.S. in the future. The Company is required to record U.S. income tax expense in its financial statements at the point in time when its management determines that such funds are not permanently invested outside the U.S. This could cause the Company's worldwide effective tax rate to increase materially.

As a multinational corporation, the Company is subject to income taxes as well as non-income based taxes, such as payroll, sales, use, value-added, net worth, property, withholding and franchise taxes in both the U.S. and various foreign jurisdictions. The Company is also subject to regular reviews, examinations and audits by the Internal Revenue Service and other taxing authorities with respect to such income and non-income based taxes inside and outside the U.S. The reviews could include challenges of the Company's methodologies for transfer pricing. To date, the Company has been audited in several taxing jurisdictions with no significant impact on its financial condition, results of operations or cash flows. While the Company believes it has complied with all applicable income tax and non-income based tax laws, there can be no assurance that the Internal Revenue Service or other taxing authority will not have a different interpretation of the law and assess us with an additional tax liability, including interest and penalties that could have a material impact on the Company's results of operations and financial positions.

In addition, the Company is directly and indirectly affected by new tax legislation and regulation and the interpretation of tax laws and regulations worldwide. Changes in such legislation, regulation or interpretation could increase the Company's tax liability and have an adverse effect on its operating results and financial condition.

The Company employs information technology systems to support its business, and any material breach, interruption or failure may adversely impact the Company's business.

The Company employs information technology systems to support its business. Security breaches and other disruptions to the Company's information technology infrastructure could interfere with the Company's operations, and compromise information belonging to the Company and its customers, suppliers and employees, exposing the Company to liability which could adversely impact the Company's business and reputation. In the ordinary course of business, the Company relies on information technology networks and systems, some of which are managed by third parties, to process, transmit and store electronic information, and to manage or support a variety of business processes and activities. Additionally, the Company collects and stores certain data, including proprietary business information, and may have access to confidential or personal information in certain of its businesses that is subject to privacy and security laws, regulations and customer-imposed controls. Despite the Company's cybersecurity measures, which are continuously reviewed and upgraded, the Company's information technology networks and infrastructure may still be vulnerable to damage, disruptions or shutdowns due to attack by hackers or breaches, employee error or malfeasance, power outages, computer viruses, telecommunication or utility failures, systems failures, service providers including cloud services, natural disasters or other catastrophic events. It is possible for such vulnerabilities to remain undetected for an extended period, up to and including several years. Any such events could result in legal claims or proceedings, liability or penalties under privacy laws, disruption in operations, and damage to the Company's reputation, which could adversely affect the Company's business.

Item 1B. Unresolved Staff Comments

The Company does not have any unresolved staff comments.

Item 2. Properties

The Company currently owns or leases 28 facilities, which together contain approximately 2.1 million square feet of manufacturing, warehouse, research and development, sales and office space worldwide. Most of the Company's international facilities contain space for offices, research and engineering (R&E), warehousing and manufacturing with manufacturing using a majority of the space. The following table provides information regarding the Company's principal facilities:

		Number of Facilities				Total Approximate Square Feet	
Segment	Location	Manufacturing	Warehouse	R&E	Office	Owned	Leased
United States	United States	2	2	1	4	704,900	3,000
Americas	Brazil	1	1	1	1	167,600	26,400
	Canada	2	2	1	2	124,400	
	Mexico	1	1		2	113,000	1,100
Asia-Pac	Australia	1	2	1	4	122,900	2,200
	China	1	1	1	1	132,100	
	Indonesia	2	1	1	2	60,100	
	Malaysia	1	1	1			18,600
	Thailand	1	1		1	129,500	
	New Zealand	1	3	1	2		39,600
EMEA	Great Britain	1	1	1	1	89,400	
	South Africa	1	1	1	1	68,850	
	Spain	1	1	1	1	63,250	10,800
	Poland	1	1	1	1	174,400	

Item 3. Legal Proceedings

The Company and its subsidiaries, Helix Uniformed Ltd. ("Helix") and Preformed Line Products (Canada) Limited ("PLPC Canada"), were each named, jointly and severally, with each of SNC-Lavalin ATP, Inc. ("SNC ATP"), HD Supply Canada Inc., by its trade names HD Supply Power Solutions and HD Supply Utilities ("HD Supply"), and Anixter Power Solutions Canada Inc. (the corporate successor to HD Supply, "Anixter" and, together with the Company, PLPC Canada, Helix, SNC ATP and HD Supply, the "Defendants") in a complaint filed by Altalink, L.P. (the "Plaintiff") in the Court of Queen's Bench of Alberta in Alberta, Canada in November 2016 (the "Complaint").

The Complaint states that Plaintiff engaged SNC ATP to design, engineer, procure and construct numerous power distribution and transmission facilities in Alberta (the "Projects") and that through SNC ATP and HD Supply (now Anixter), space dampers manufactured by Helix were procured and installed in the Projects. The Complaint alleges that the space dampers have and may continue to become loose, open and detach from the conductors, resulting in damage and potential injury and a failure to perform the intended function of providing spacing and damping to the Project. The Plaintiffs are seeking an estimated $56 million in damages jointly and severally from the Defendants, representing the costs of monitoring and replacing the space dampers and remediating property damage, due to alleged defects in the design and construction of, and supply of materials for, the Projects by SNC ATP and HD Supply/Anixter and in the design of the space dampers by Helix.

The lawsuit is in its very early stages, but the Company believes the claims against it are without merit and intends to vigorously defend against such claims. However, we are unable to predict the outcome of this case and, if determined adversely to the Company, it could have a material effect on our financial results.

From time to time, the Company may be subject to litigation incidental to its business. The Company is not a party to any other pending legal proceedings that the Company believes would, individually or in the aggregate, have a material adverse effect on its financial condition, results of operations or cash flows.

Item 4. Mine Safety Disclosures

Not applicable

Item 4A. Executive Officers of the Registrant

Each executive officer is elected by the Board of Directors, serves at its pleasure and holds office until a successor is appointed, or until the earliest of death, resignation or removal.

Name	Age	Position
Robert G. Ruhlman	60	Chairman, President and Chief Executive Officer
Eric R. Graef	64	Chief Financial Officer, Vice President - Finance and Treasurer
William H. Haag	53	Vice President - International Operations
J. Cecil Curlee Jr.	60	Vice President - Human Resources
Dennis F. McKenna	50	Executive Vice President - Global Business Development
David C. Sunkle	58	Vice President - Research and Engineering and Manufacturing
Caroline S. Vaccariello	50	General Counsel and Corporate Secretary
John M. Hofstetter	52	Vice President - Sales and Global Communications Markets
J. Ryan Ruhlman	33	Vice President - Marketing and Business Development

The following sets forth the name and recent business experience for each person who is an executive officer of the Company at March 1, 2017:

Robert G. Ruhlman was elected Chairman in July 2004. Mr. Ruhlman has served as Chief Executive Officer since July 2000 and as President since 1995 (positions he continues to hold). Mr. Ruhlman is the father of J. Ryan Ruhlman, Vice-President – Marketing and Business Development and a Director of the Company and of Maegan A. Ruhlman, also a Director of the Company.

Eric R. Graef was elected Vice President—Finance and Treasurer in December 1999 and Chief Financial Officer in December 2007. Mr. Graef has announced his plans to retire from such positions with the Company on May 31, 2017.

William H. Haag was elected Vice President—International Operations in April 1999.

J. Cecil Curlee Jr. was elected Vice President—Human Resources in January 2003.

Dennis F. McKenna was elected Executive Vice President Global Business Development in January 2015 and expanded his role to include worldwide marketing and business development strategies. Prior to that, he was elected Vice President—Marketing and Global Business Development in April 2004.

David C. Sunkle was elected Vice President-Research and Engineering in January 2007. In addition, Mr. Sunkle has taken on the role of Vice President – Manufacturing since July 2008.

Caroline S. Vaccariello was elected General Counsel and Corporate Secretary in January 2007.

John M. Hofstetter was elected Vice President – Sales and Global Communications Markets and Business Development in April 2012.

J. Ryan Ruhlman was elected to the Company’s Board of Directors in July 2015 and as Vice President – Marketing and Business Development in December 2015, which expanded his role to include new acquisition and market opportunities. Prior to that, he was promoted to Director Marketing and Business Development in January 2015 including responsibilities for Special Industries, Distribution and Transmission Markets, as well as Marketing Communications. He has served a variety of positions in Research and Engineering, International and Marketing and Sales departments since 2002, including Laboratory Technician, International Operations Project Specialist, Business Development Specialist and Manager of New Business Development and Marketing Communications. Mr. Ruhlman is the son of Robert G. Ruhlman, the Chief Executive Officer and Chairman of the Company, and the brother of Maegan A. Ruhlman, a Director of the Company.

Part II

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

The Company's common shares are traded on NASDAQ under the trading symbol "PLPC". As of March 6, 2017, the Company had approximately 1,400 shareholders of record. The following table sets forth for the periods indicated (i) the high and low closing sale prices per share of the Company's common shares as reported by the NASDAQ and (ii) the amount per share of cash dividends paid by the Company.

	Year ended December 31					
	2016			2015		
Quarter	High	Low	Dividend	High	Low	Dividend
First	$43.70	$31.70	$ 0.20	$52.47	$42.13	$ 0.20
Second	43.95	35.67	0.20	45.40	37.72	0.20
Third	48.98	36.13	0.20	37.96	30.30	0.20
Fourth	60.19	41.45	0.20	45.77	38.24	0.20

While the Company expects to continue to pay dividends of a comparable amount in the near term, the declaration and payment of future dividends will be made at the discretion of the Company's Board of Directors in light of the current needs of the Company. Therefore, there can be no assurance that the Company will continue to make such dividend payments in the future.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (1)	Weighted-average exercise price of outstanding options, warrants and rights (1)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column a) (2)
Equity compensation plans approved by security holders	204,442	$ 42.72	323,398
Equity compensation plans not approved by security holders	0	$ 0.00	0
Total	204,442		323,398

(1) Of these shares, 146,142 were issued in the form of restricted stock units, which have no exercise price. Accordingly, such shares were not included in the weighted average exercise price.

(2) The Company's Long-Term Incentive Plan of 2008 was replaced in May 2016 by the 2016 Incentive Plan. Up to 900,000 shares may be issued in the form of restricted shares or units under the new plan. See Note H in the Notes to Consolidated Financial Statements for information relating to the Company's 2016 Incentive Plan.

Performance Graph

Set forth below is a line graph comparing the cumulative total return of a hypothetical investment in the Company's common shares with the cumulative total return of hypothetical investments in the NASDAQ Composite Index and the Peer Group Index based on the respective market price of each investment at December 31, 2011, December 31, 2012, December 31, 2013, December 31, 2014, December 31, 2015, and December 31, 2016, assuming in each case an initial investment of $100 on December 31, 2011, and reinvestment of dividends.

	2011	2012	2013	2014	2015	2016
PREFORMED LINE PRODUCTS CO	100.00	101.27	125.74	95.21	74.85	105.25
NASDAQ MARKET INDEX	100.00	116.41	165.47	188.69	200.32	216.54
PEER GROUP INDEX	100.00	123.52	171.83	166.65	159.06	196.74

Purchases of Equity Securities

On February 3, 2016, the Board of Directors authorized a plan to repurchase up to an additional 214,620 of Preformed Line Products Company common shares, resulting in a total of 250,000 shares available for repurchase with no expiration date. The following table includes repurchases for the three months ended December 31, 2016:

Period (2016)	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that may yet be Purchased under the Plans or Programs
October	5,661	$ 42.71	99,098	150,902
November	2,414	$ 43.30	101,512	148,488
December (1)	5,000	$ 56.38	106,512	143,488
Total	13,075			

(1) Includes an aggregate of 5,000 shares repurchased from an executive officer of the Company that was not part of the repurchase program and was separately authorized by the Board.

Item 6. Selected Financial Data

	2016	2015	2014	2013	2012
	(Thousands of dollars, except per share data)				
Net Sales and Income					
Net sales	$336,634	$354,666	$388,185	$409,776	$439,192
Operating income	21,479	12,349	21,238	31,148	44,122
Income before income taxes	20,953	11,706	21,410	31,794	44,827
Net income	15,255	6,675	12,861	20,587	29,286
Per Share Amounts					
Net income - basic	$2.95	$1.25	$2.39	$3.84	$5.50
Net income - diluted	2.95	1.24	2.39	3.77	5.45
Dividends declared	0.80	0.80	0.80	0.60	1.00
Shareholders' equity	43.68	41.94	45.01	46.81	44.83
Other Financial Information					
Current assets	$189,107	$188,497	$200,663	$185,734	$194,101
Total assets	340,937	324,573	353,967	332,406	333,064
Current liabilities	55,455	51,891	55,327	52,215	58,243
Long-term debt (including current portion)	44,391	31,864	31,865	13,249	9,573
Capital leases	236	268	173	310	504

Shareholders' equity	223,543	218,984	242,925	252,330	241,069

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

This Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) is intended to help the readers of our financial statements better understand our results of operations, financial condition and present business environment. The MD&A is provided as a supplement to, and should be read in conjunction with, our audited consolidated financial statements and related notes included elsewhere in this report.

The MD&A is organized as follows:

Overview
Recent Developments
Market Overview
Preface
Results of Operations
Working Capital, Liquidity and Capital Resources

OVERVIEW

Preformed Line Products Company (the "Company", "PLPC", "we", "us", or "our") was incorporated in Ohio in 1947. We are an international designer and manufacturer of products and systems employed in the construction and maintenance of overhead and underground networks for the energy, telecommunication, cable operators, information (data communication), and other similar industries. Our primary products support, protect, connect, terminate, and secure cables and wires. We also provide solar hardware systems, mounting hardware for a variety of solar power applications, and fiber optic and copper splice closures. PLPC is respected around the world for quality, dependability and market-leading customer service. Our goal is to continue to achieve profitable growth as a leader in the research, innovation, development, manufacture, and marketing of technically advanced products and services related to energy, communications and cable systems and to take advantage of this leadership position to sell additional quality products in familiar markets. We have 26 sales and manufacturing operations in 17 different countries.

We report our segments in four geographic regions: PLP-USA (including corporate), The Americas (includes operations in North and South America without PLP-USA), EMEA (Europe, Middle East & Africa) and Asia-Pacific in accordance with accounting standards codified in Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 280, Segment Reporting. Each segment distributes a full range of our primary products. Our PLP-USA segment is comprised of our U.S. operations manufacturing our traditional products primarily supporting our domestic energy, telecommunications and solar products. Our other three segments, The Americas, EMEA and Asia-Pacific, support our energy, telecommunications, data communication and solar products in each respective geographical region.

The segment managers responsible for each region report directly to the Company's Chief Executive Officer, who is the chief operating decision maker, and are accountable for the financial results and performance of their entire segment for which they are responsible. The business components within each segment are managed to maximize the results of the entire operating segment and the Company rather than the results of any individual business component of the segment.

We evaluate segment performance and allocate resources based on several factors primarily based on sales and net income.

RECENT DEVELOPMENTS

In the fourth quarter of 2015, we reconfigured a product line in The Americas segment and consolidated its manufacturing processes into the PLP-USA segment operations. This action has reduced infrastructure and manufacturing costs for the product line. As a result, certain reclassifications have been made to the 2014 financial results to be comparable to the 2015 financial results for The Americas and PLP-USA reporting segments.

On January 31, 2014, we acquired Helix Uniformed Limited (Helix), located in Montreal, Quebec, Canada. The acquisition of Helix diversified our business in Canada and The Americas segment in total, expanded our manufacturing footprint and enhanced our engineering capabilities locally.

MARKET OVERVIEW

Our business continues to be highly concentrated in the energy and communications markets. During the past several years, industry consolidation continued as distributor and service provider consolidations occurred in our major markets. The devaluation of foreign currencies, particularly commodity-based currencies, coupled with the sluggish global economy and retraction of manufacturing in some of the regions that we serve has led to a challenging environment to sustain sales levels and achieve sales growth. There has been a lack of commitment by developed countries to upgrade and strengthen their electrical grids and communication networks, despite the growing need. Low oil and commodity prices have continued to affect construction projects worldwide and negatively impacted growth opportunities in our core markets in the U.S., Canada and the Asia-Pacific region where the financial situation is expected to be challenging going forward.

In 2016, sales in the energy market continued to decline due to a slowdown in the number and scale of transmission projects in North America. Additionally, there was a continued decline and pull-back in solar products in the Asia-Pacific region. We continue to expect ongoing uncertainty in global markets. We believe that our leadership position in the market and ability to deliver reliable products quickly will enable us to take advantage of prospects for continued growth as transmission grids are enhanced and extended.

Our international business is more concentrated in the energy markets where we experienced our most significant top line growth in 2016, in contrast to prior year growth attributable to solar products, which have seen a decline primarily in our Asia-Pacific region. Historically, our international sales were primarily related to the medium voltage distribution segment of the energy market but have grown through acquisition and new product development to include a significant contribution from the transmission and telecommunications markets. We believe that we are well positioned to supply the needs of the world's diverse energy market requirements as a result of our strategically located operations and array of product designs and technologies.

When economic conditions improve, we believe our efforts internationally will lead to growth in our communications business from opportunities where deployment of fixed line and wireless telecommunications services and broadband penetration rates remain low as a percentage of the total population.

PREFACE

Our consolidated financial statements are prepared in conformity with U.S. generally accepted accounting principles (GAAP). Our discussions of the financial results include non-GAAP measures (e.g., foreign currency impact) to provide additional information concerning our financial results and provide information that we believe is useful to the readers of our financial statements in the assessment of our performance and operating trends. The 2016, 2015 and 2014 financial results reflect the integration of its solar operations from The Americas segment to PLP-USA reporting segment.

Our financial statements are subject to fluctuations in the exchange rates of foreign currencies in relation to the U.S. dollar. As foreign currencies weaken against the U.S. dollar, our sales and costs decrease as the foreign currency-denominated financial statements translate into fewer U.S. dollars. On average, foreign currencies weakened against the U.S. dollar in 2016, however, they did not weaken as significantly as in 2015. The fluctuations of foreign currencies during the year ended December 31, 2016 had an unfavorable impact on net sales of $12.0 million as compared to 2015. On a reportable segment basis, the unfavorable impact of foreign currency translation on net sales and net income for the years ended December 31, 2016 and 2015 was as follows:

	Foreign Currency Translation Impact			
	Net Sales		Net Income (Loss)	
(Thousands of dollars)	2016	2015	2016	2015
The Americas	$(5,892)	$(15,987)	$(811)	$(858)
EMEA	(4,314)	(8,425)	(752)	(378)
Asia-Pacific	(1,800)	(12,462)	41	1,176
Total	$(12,006)	$(36,874)	$(1,522)	$(60)

The effect of currency translation had a negative impact on net income in the years ended December 31, 2016 and 2015 of $1.5 million and less than $.1 million, respectively. There was an incremental $2.0 million in losses on foreign currency translation on operating income for year ended December 31, 2016. This negative impact was slightly offset by a transaction gain of $1.3 million in the year ended December 31, 2016 as compared to a transaction loss for the year ended December 31, 2015 of $7.4 million as summarized in the following table:

	Foreign Currency Translation Impact	
	Year Ended December 31	
(Thousands of dollars)	2016	2015
Operating income	$ 21,479	$ 12,349
Translation loss	2,037	0
Transaction (gain) loss	(1,292)	7,413
Operating income excluding currency impact	$ 22,224	$ 19,762

Despite the current global economy, we believe our business fundamentals and our financial position are sound and strategically well-positioned. We remain focused on assessing our global facilities and overall capacity in conjunction with the requirements of local manufacturing in the markets that we serve. If necessary, we will utilize our global manufacturing network to manage costs, while driving sales and delivering value to our customers. We have continued to invest in the business to improve efficiency, develop new products, increase our capacity and become an even stronger supplier to our customers. We currently have a bank debt to equity ratio of 20.4% and can borrow needed funds at a competitive interest rate under our credit facility. Debt increased $13.4 million as of December 31, 2016, driving the increase in our bank debt to equity ratio, compared to 14.7% at December 31, 2015. See Note G in the Notes to Consolidated Financial Statements for more information.

The following table sets forth a summary of the Company's consolidated income statements and the percentage of net sales for the years ended December 31, 2016 and 2015. The Company's past operating results are not necessarily indicative of future operating results.

	Year Ended December 31				
(Thousands of dollars)	2016		2015		Change
Net sales	$336,634	100.0 %	$354,666	100.0 %	$(18,032)
Cost of products sold	227,220	67.5	251,214	70.8	(23,994)
GROSS PROFIT	109,414	32.5	103,452	29.2	5,962
Costs and expenses	87,935	26.1	91,103	25.7	(3,168)
OPERATING INCOME	21,479	6.4	12,349	3.5	9,130
Other expense	(526)	(0.2)	(643)	(0.2)	(117)
INCOME BEFORE INCOME TAXES	20,953	6.2	11,706	3.3	9,247
Income taxes	5,698	1.7	5,031	1.4	667
NET INCOME	$15,255	4.5 %	$6,675	1.9 %	$8,580

2016 RESULTS OF OPERATIONS COMPARED TO 2015

Net sales. In 2016, net sales were $336.6 million, a decrease of $18.0 million, or 5.1%, compared to 2015. Excluding the unfavorable effect of currency translation, net sales decreased 2% as summarized in the following table:

(Thousands of dollars)	Year Ended December 31 2016	2015	Change	Change Due to Currency Translation	Change Excluding Currency Translation	% Change
Net sales						
PLP-USA	$135,260	$142,470	$(7,210)	$ 0	$ (7,210)	(5)%
The Americas	60,049	59,290	759	(5,892)	6,651	11
EMEA	56,411	53,778	2,633	(4,314)	6,947	13
Asia-Pacific	84,914	99,128	(14,214)	(1,800)	(12,414)	(13)
Consolidated	$336,634	$354,666	$(18,032)	$ (12,006)	$ (6,026)	(2)%

The decrease in PLP-USA net sales of $7.2 million, or 5%, was primarily due to a volume reduction in solar products. International net sales for the year ended December 31, 2016 were unfavorably affected by $12.0 million when local currencies were converted to U.S. dollars. The following discussion of changes in net sales excludes the effect of currency translation. The Americas net sales of $60.0 million increased $6.7 million, or 11%, primarily due to higher volume in energy and telecommunication sales. EMEA net sales of $56.4 million increased $6.9 million, or 13%, primarily due to volume increases in energy products along with geographic expansion in the region. The Asia-Pacific net sales of $84.9 million decreased $12.4 million, or 13%, compared to 2015. The reduction in net sales is primarily related to a significant decrease in solar sales.

Gross Profit. Gross profit of $109.4 million for 2016 increased $6.0 million, or 5.8%, compared to 2015. Excluding the unfavorable effect of currency translation, gross profit increased $10.8 million, or 10%, as summarized in the following table:

(Thousands of dollars)	Year Ended December 31					
	2016	2015	Change	Change Due to Currency Translation	Change Excluding Currency Translation	% Change
Gross profit						
PLP-USA	$47,294	$47,752	$(458)	$ 0	$ (458)	(1)%
The Americas	20,863	17,754	3,109	(2,458)	5,567	31
EMEA	20,368	19,052	1,316	(1,828)	3,144	17
Asia-Pacific	20,889	18,894	1,995	(523)	2,518	13
Consolidated	$109,414	$103,452	$5,962	$ (4,809)	$ 10,771	10 %

PLP-USA gross profit of $47.3 million decreased slightly compared to 2015. PLP-USA's $.5 million decrease in gross profit was predominantly related to the reduction in sales volume, mostly offset by a shift in sales mix toward higher margin products.

International gross profit for the year ended December 31, 2016 was unfavorably impacted by $4.8 million when local currencies were translated to U.S. dollars. The following discussion of gross profit changes excludes the effects of currency translation. The Americas gross profit increase of $5.6 million was primarily the result of product margin improvement in the region due to a favorable shift in sales mix toward higher margin products and current year cost savings initiatives combined with the $6.7 million improvement in sales. Higher personnel costs throughout the region were a slight offset to the margin improvement. The EMEA gross profit increased $3.1 million primarily as a result of the $6.9 million increase in sales in the region primarily in the energy markets. Although sales decreased $12.4 million, Asia-Pacific's gross profit increased $2.5 million as mix shifted to higher margin products along with current year cost savings associated with the reconfiguration of the operations of one location in the segment during 2015.

Costs and expenses. Costs and expenses of $87.9 million for the year ended December 31, 2016 decreased $3.2 million, or 3.5%, compared to 2015. Excluding the effect of currency translation, costs and expenses were essentially flat as summarized in the following table:

(Thousands of dollars)	Year Ended December 31 2016	2015	Change	Change Due to Currency Translation	Change Excluding Currency Translation	% Change
Costs and expenses						
PLP-USA	$42,770	$42,946	$(176)	$ 0	$ (176)	0 %
The Americas	12,720	13,451	(731)	(1,305)	574	4
EMEA	12,476	12,739	(263)	(866)	603	5
Asia-Pacific	19,969	21,967	(1,998)	(596)	(1,402)	(6)
Consolidated	$87,935	$91,103	$(3,168)	$ (2,767)	$ (401)	0 %

PLP-USA costs and expenses decreased $.2 million. Higher personnel related expenses of $5.3 million were offset by a $5.3 million improvement in net foreign currency transaction exchange effect combined with other minor favorable variances. The foreign currency exchange gains were primarily related to translating into U.S. dollars its foreign currency denominated loans, trade receivables and royalty receivables from its foreign subsidiaries at the December 2016 year-end exchange rates. International costs and expenses for the year ended December 31, 2016 were unfavorably impacted by $2.8 million when local currencies were translated to U.S. dollars. The following discussions of costs and expenses exclude the effect of currency translation. The Americas costs and expenses increase of $.6 million was primarily due to increased personnel related costs throughout the region, partially offset by favorable currency transaction exchange impact year over year. EMEA costs and expenses increased $.6 million due primarily to higher personnel related costs predominantly from continued infrastructure expansion. Asia-Pacific costs and expenses decreased $1.4 million primarily due to savings in personnel costs from staffing modifications implemented in the prior year along with overall tighter expense management.

Other income (expense). Other expense for the year ended December 31, 2016 of $.5 million decreased $.1 million compared to 2015.

Income taxes Income taxes for the years ended December 31, 2016 and 2015 were $5.7 million and $5.0 million, respectively, based on pre-tax income of $21.0 million and $11.7 million, respectively. The effective tax rate for the years ended December 31, 2016 and 2015 was 27.2% and 43.0%, respectively, compared to the U.S. federal statutory rate of 35%. Our effective tax rate is affected by recurring items, such as tax rates in foreign jurisdictions, which differ from the U.S. federal statutory income tax rate, and the relative amount of income earned in those jurisdictions where such earnings are permanently reinvested. It is also affected by discrete items that may occur in any given period but are not consistent from year to year. The following items had the most significant impact on the difference between our statutory U.S. federal income tax rate of 35% and our effective tax rate:

2016

1. $.4 million, or 2.0%, decrease resulting from losses in certain jurisdictions where no tax benefit was previously recognized.
2. $.5 million, or 2.2%, increase resulting primarily from incremental tax from the repatriation of foreign earnings, partially offset by other U.S. permanent items and state and local income taxes.
3. $.2 million, or 0.9%, decrease of unrecognized tax benefits due to expiration of statutes of limitations.
4. $1.5 million, or 7.1%, decrease resulting from earnings in jurisdictions with lower tax rates than the U.S. federal statutory rate where such earnings are permanently reinvested.

2015

1. $1.8 million, or 15.0%, increase resulting from losses in certain jurisdictions where no tax benefit is recognized.
2. $.6 million, or 5.4%, increase resulting primarily from incremental tax from the repatriation of foreign earnings, partially offset by other U.S. permanent items and state and local income taxes.
3. $.8 million, or 6.6%, decrease of unrecognized tax benefits resulting primarily from a favorable resolution of a foreign audit in our Asia Pacific segment for which a larger tax liability had previously been accrued.
4. $.7 million, or 5.8%, decrease resulting from earnings in jurisdictions with lower tax rates than the U.S. federal statutory rate where such earnings are permanently reinvested.

Net income. As a result of the preceding items, net income for the year ended December 31, 2016 was $15.3 million, compared to $6.7 million for 2015. Excluding the effect of currency translation, net income increased $10.1 million as summarized in the following table:

(Thousands of dollars)	Year Ended December 31 2016	2015	Change	Change Due to Currency Translation	Change Excluding Currency Translation	% Change
Net income (loss)						
PLP-USA	$2,007	$2,031	$(24)	$0	$(24)	(1)%
The Americas	5,881	3,178	2,703	(811)	3,514	111
EMEA	6,243	4,881	1,362	(752)	2,114	43
Asia-Pacific	1,124	(3,415)	4,539	41	4,498	132
Consolidated	$15,255	$6,675	$8,580	$(1,522)	$10,102	151 %

PLP-USA net income of $2.0 million was flat year over year. International net income for the year ended December 31, 2016 was unfavorably affected by $1.5 million when local currencies were converted to U.S. dollars. The following discussion of net income excludes the effect of currency translation. The Americas net income increased $3.5 million as a result of a $5.0 million increase in operating income, offset by an income tax expense increase of $1.5 million. EMEA net income increased $2.1 million as a result of a $2.5 million increase in operating income offset by an increase in income taxes of $.4 million. Asia-Pacific net (loss) income improved $4.5 million mainly as a result of a $3.9 million increase in operating income, combined with the non-recurrence of a prior year receivable settlement of $.8 million, offset by a lower year-over-year net tax benefit for the region, which was $.2 million lower.

2015 RESULTS OF OPERATIONS COMPARED TO 2014

The following table sets forth a summary of the Company’s consolidated income statements and the percentage of net sales for the years ended December 31, 2015 and 2014.

(Thousands of dollars)	Year Ended December 31 2015		2014		Change
Net sales	$354,666	100.0 %	$388,185	100.0 %	$(33,519)
Cost of products sold	251,214	70.8	267,237	68.8	(16,023)
GROSS PROFIT	103,452	29.2	120,948	31.2	(17,496)

Costs and expenses	91,103	25.7	99,710	25.7	(8,607)
OPERATING INCOME	12,349	3.5	21,238	5.5	(8,889)
Other income (expense)	(643)	(0.2)	172	0.0	(815)
INCOME BEFORE INCOME TAXES	11,706	3.3	21,410	5.5	(9,704)
Income taxes	5,031	1.4	8,549	2.2	(3,518)
NET INCOME	$6,675	1.9 %	$12,861	3.3 %	$(6,186)

Net sales. In 2015, net sales were $354.7 million, a decrease of $33.5 million, or 9%, compared to 2014. Excluding the unfavorable effect of currency translation, net sales increased 1% as summarized in the following table:

(Thousands of dollars)	Year Ended December 31 2015	2014	Change	Change Due to Currency Translation	Change Excluding Currency Translation	% Change
Net sales						
PLP-USA	$142,470	$152,567	$(10,097)	$ 0	$ (10,097)	(7)%
The Americas	59,290	75,868	(16,578)	(15,987)	(591)	(1)
EMEA	53,778	65,446	(11,668)	(8,425)	(3,243)	(5)
Asia-Pacific	99,128	94,304	4,824	(12,462)	17,286	18
Consolidated	$354,666	$388,185	$(33,519)	$ (36,874)	$ 3,355	1 %

The decrease in PLP-USA net sales of $10.1 million, or 7%, was primarily due to a reduction in transmission sales as a result of fewer projects in the United States along with a decline in domestic solar sales. International net sales for the year ended December 31, 2015 were unfavorably affected by $36.9 million when local currencies were converted to U.S. dollars. The following discussion of changes in net sales excludes the effect of currency translation. The Americas net sales of $59.3 million decreased $.6 million, or 1%, primarily due to a net $2.2 million decline in transmission sales volume partially offset by an increase in distribution sales volume. EMEA net sales of $53.8 million decreased $3.2 million, or 5%, primarily due to volume decreases in telecommunications and distribution products. The Asia-Pacific net sales of $99.1 million increased $17.3 million, or 18%, compared to 2014. The increase in net sales is primarily related to a significant increase in solar sales.

Gross Profit. Gross profit of $103.5 million for 2015 decreased $17.5 million, or 14%, compared to 2014. Excluding the unfavorable effect of currency translation, gross profit decreased $8.2 million, or 7%, as summarized in the following table:

(Thousands of dollars)	Year Ended December 31 2015	2014	Change	Change Due to Currency Translation	Change Excluding Currency Translation	% Change
Gross profit						
PLP-USA	$47,752	$52,807	$(5,055)	$ 0	$ (5,055)	(10)%
The Americas	17,754	19,998	(2,244)	(4,850)	2,606	13
EMEA	19,052	22,776	(3,724)	(2,737)	(987)	(4)
Asia-Pacific	18,894	25,367	(6,473)	(1,720)	(4,753)	(19)
Consolidated	$103,452	$120,948	$(17,496)	$ (9,307)	$ (8,189)	(7)%

PLP-USA gross profit of $47.8 million decreased $5.1 million compared to 2014. PLP-USA's $5.1 million decrease in gross profit was predominantly related to the reduction in sales volume along with $1.0 million of restructuring charges. International gross profit for the year ended December 31, 2015 was unfavorably impacted by $9.3 million when local currencies were translated to U.S. dollars. The following discussion of gross profit changes excludes the effects of currency translation. The Americas gross profit increase of $2.6 million was primarily the result of product margin improvement in the region. With the acquisition of Helix in 2014, inventories were adjusted to fair value on the acquisition date and the subsequent sale of that inventory garnered a lower product margin in 2014 as The Americas recognized $1.9 million of the acquired inventories fair value adjustment in Cost of products sold. The remaining increase in gross profit was due to product margin expansion achieved on 2015 sales. The EMEA gross profit decreased $1.0 million primarily as a result of the decline in sales in the region. Asia-Pacific gross profit decreased $4.8 million primarily due to a shift in the product sales mix to lower margin products along with $.7 million in net costs associated with the continued reconfiguration of the operations of one location in the segment.

Costs and expenses. Costs and expenses of $91.1 million for the year ended December 31, 2015 decreased $8.6 million, or 9%, compared to 2014. Excluding the effect of currency translation, costs and expenses were essentially flat as summarized in the following table:

(Thousands of dollars)	Year Ended December 31 2015	2014	Change	Change Due to Currency Translation	Change Excluding Currency Translation	% Change
Costs and expenses						
PLP-USA	$42,946	$40,668	$2,278	$ 0	$ 2,278	6 %
The Americas	13,451	16,535	(3,084)	(3,636)	552	3
EMEA	12,739	14,752	(2,013)	(2,186)	173	1
Asia-Pacific	21,967	27,755	(5,788)	(2,850)	(2,938)	(11)
Consolidated	$91,103	$99,710	$(8,607)	$ (8,672)	$ 65	0 %

PLP-USA costs and expenses increased $2.3 million primarily due to $2.8 million increase in net foreign currency exchange losses and a decrease in intercompany royalty income of $1.8 million. The foreign currency exchange losses were primarily related to translating into U.S. dollars its foreign denominated loans, trade receivables and royalty receivables from its foreign subsidiaries at the December 2015 year-end exchange rates. These increases in cost and expenses were partially mitigated with a reduction in personnel costs and tighter expense controls reducing expense by $2.3 million. International costs and expenses for the year ended December 31, 2015 were favorably impacted by $8.7 million when local currencies were translated to U.S. dollars. The following discussions of costs and expenses exclude the effect of currency translation. The Americas costs and expenses increase of $.6 million was primarily due to foreign currency exchange losses of $1.5 million, partially offset by the non-recurrence of a $.7 million charge recorded in 2014 for the write-down of interest and inflation related to a tax refund along with an additional $.2 million value added tax recovery in 2015. The foreign currency exchange losses were principally related to intercompany purchases. EMEA costs and expenses increased $.2 million due primarily to the start-up expenses for additional offices in the region of $1.0 million predominantly offset by a reduction in personnel costs and overall tightened expense management. Asia-Pacific costs and expenses decreased $2.9 million primarily due to savings in personnel costs from staffing modifications implemented in 2014 along with overall tighter expense management.

Other income (expense). Other expense for the year ended December 31, 2015 of $.6 million increased $.8 million compared to 2014. This increase was due to the reversal of a receivable recorded at the opening balance sheet date of a previous acquisition. The receivable represented the indemnification by the prior owner for unrecognized tax benefits. The resolution of a foreign income tax audit resulted in a tax liability for less than the previously recorded accrual. The difference was recorded as a tax benefit in income tax expense and the reduction to the corresponding receivable was recognized as other expense, after receipt of the indemnified tax related amount from the prior owner.

Income taxes. Income taxes for the years ended December 31, 2015 and 2014 were $5.0 million and $8.5 million, respectively, based on pre-tax income of $11.7 million and $21.4 million, respectively. The effective tax rate for the years ended December 31, 2015 and 2014 was 43.0% and 39.9%, respectively, compared to the U.S. federal statutory rate of 35%. Our effective tax rate is affected by recurring items, such as tax rates in foreign jurisdictions, which differ from the U.S. federal statutory income tax rate, and the relative amount of income earned in those jurisdictions. It is also affected by discrete items that may occur in any given period but are not consistent from year to year. The following items had the most significant impact on the difference between our statutory U.S. federal income tax rate of 35% and our effective tax rate:

2015

1. $1.8 million, or 15.0%, increase resulting from losses in certain jurisdictions where no tax benefit is recognized.
2. $.6 million, or 5.4%, increase resulting primarily from incremental tax from the repatriation of foreign earnings and partially offset by other U.S. permanent items and state and local income taxes.
3. $.8 million, or 6.6%, decrease of unrecognized tax benefits resulting primarily from a favorable resolution of a foreign audit in our Asia Pacific segment for which a larger tax liability had previously been accrued.
4. $.7 million, or 5.8%, decrease resulting from earnings in jurisdictions with lower tax rates than the U.S. federal statutory rate where such earnings are permanently reinvested.

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2014

1. $1.9 million, or 9.0%, increase resulting from losses in certain jurisdictions where no tax benefit is recognized.
2. $.3 million, or 1.1%, increase resulting from U.S. permanent items, primarily related to the repatriation of foreign earnings and state and local income taxes.
3. $1.3 million, or 6.1%, decrease resulting from earnings in jurisdictions with lower tax rates than the U.S. federal statutory rate where such earnings are permanently reinvested.
4. $.2 million, or .9%, increase resulting from the recognition of previously unrecognized tax benefits.

Net income. As a result of the preceding items, net income for the year ended December 31, 2015 was $6.7 million, compared to $12.9 million for 2014. Excluding the effect of currency translation, net income decreased $6.1 million as summarized in the following table:

(Thousands of dollars)	Year Ended December 31					
	2015	2014	Change	Change Due to Currency Translation	Change Excluding Currency Translation	% Change
Net income (loss)						
PLP-USA	$2,031	$7,233	$(5,202)	$ 0	$ (5,202)	(72)%
The Americas	3,178	2,647	531	(858)	1,389	52
EMEA	4,881	6,192	(1,311)	(378)	(933)	(15)
Asia-Pacific	(3,415)	(3,211)	(204)	1,176	(1,380)	(43)
Consolidated	$6,675	$12,861	$(6,186)	$ (60)	$ (6,126)	(48)%

PLP-USA net income decreased $5.2 million due to a $7.4 million decrease in operating income partially offset by lower income taxes of $2.2 million. International net income for the year ended December 31, 2015 was unfavorably affected by $.1 million when local currencies were converted to U.S. dollars. The following discussion of net income excludes the effect of currency translation. The Americas net income increased $1.4 million as a result of a $2.1 million increase in operating income and a $.2 million decrease in interest expense as a portion of loan balances were repaid. These improvements were partially offset with an increase in income taxes of $.9 million. EMEA net income decreased $.9 million as a result of a $1.2 million decrease in operating income partially offset by a decrease in income taxes of $.3 million. Asia-Pacific net loss increased $1.4 million as a result of a $1.8 million decrease in operating income offset by the net tax benefit for the region, which was $.4 million inclusive of the previously mentioned tax indemnification receivable reduction.

WORKING CAPITAL, LIQUIDITY AND CAPITAL RESOURCES

Management Assessment of Liquidity

We measure liquidity on the basis of our ability to meet short-term and long-term operating needs, fund additional investments, including acquisitions, and make dividend payments to shareholders. Significant factors affecting the management of liquidity are cash flows from operating activities, capital expenditures, cash dividends, business acquisitions and access to bank lines of credit.

Our investments include expenditures required for equipment and facilities as well as expenditures in support of our strategic initiatives. In 2016, we used cash of $24.7 million for capital expenditures. We ended 2016 with $30.7 million of cash and cash equivalents. Our cash and cash equivalents are held in various locations throughout the world. At December 31, 2016, the majority of our cash and cash equivalents are held outside the U.S.

We expect the majority of accumulated non-U.S. cash balances will remain outside of the U.S. and that we will meet U.S. liquidity needs through future cash flows, use of U.S. cash balances, external borrowings, or some combination of these sources.

We complete comprehensive reviews of our significant customers and their creditworthiness by analyzing financial statements for customers where we have identified a measure of increased risk. We closely monitor payments and developments which may signal possible customer credit issues. We currently have not identified any potential material impact on our liquidity from customer credit issues.

Our financial position remains strong and our current ratio at December 31, 2016 and 2015 was 3.4 to 1 and 3.6 to 1, respectively. Total debt at December 31, 2016 was $45.7 million. At December 31, 2016, our unused availability under our line of credit was $34.5 million and our bank debt to equity percentage was 20.4%. On August 22, 2016, we increased our borrowing capacity under our credit facility from $50 million to $65 million and extended the term to June 30, 2019. All other terms remain the same, including the interest rate at LIBOR plus 1.125% unless our funded debt to Earnings before Interest, Taxes and Depreciation ratio exceeds 2.25 to 1, then the LIBOR spread increases to 1.500%. The line of credit agreement contains, among other provisions, requirements for maintaining levels of net worth and funded debt-to-earnings before interest, taxes, depreciation and amortization along with an interest coverage ratio. On June 27, 2016, we entered into a promissory note with PNC Bank, NA, pursuant to which we borrowed $14.5 million at a fixed rate of 2.71%, due July 1, 2026, which was used to purchase a corporate aircraft to replace the expiring lease of the previous aircraft. The loan is secured by the aircraft. The net worth and profitability requirements are calculated based on the line of credit agreement. At December 31, 2016 and December 31, 2015, we were in compliance with these covenants.

We expect that our major source of funding for 2017 and beyond will be our operating cash flows, our existing cash and cash equivalents as well as our line of credit agreement. We earn a significant amount of our operating income outside the United States, which, except for current earnings in certain jurisdictions, is deemed to be indefinitely reinvested in foreign jurisdictions. We currently do not intend nor foresee a need to repatriate these funds. We believe our future operating cash flows will be more than sufficient to cover debt repayments, other contractual obligations, capital expenditures and dividends for the next 12 months and thereafter for the foreseeable future. In addition, we believe our borrowing capacity provides substantial financial resources, if needed, to supplement funding of capital expenditures and/or acquisitions. We also believe that we can expand our borrowing capacity, if necessary, however, we do not believe we would increase our debt to a level that would have a material adverse impact upon results of operations or financial condition.

Sources and Uses of Cash

Cash increased $.3 million for the year ended December 31, 2016. Net cash provided by operating activities was $26.0 million. The major investing and financing uses of cash were capital expenditures of $24.7 million, common share repurchases of $5.1 million and dividends of $4.2 million. Currency had a negative $1.6 million impact on cash and cash equivalents when translating foreign denominated financial statements to U.S. dollars.

Net cash provided by operating activities increased $5.7 million compared to 2015 primarily as a result of increased net income of $8.6 million, an increase in cash provided by non-cash items of $6.3 million, partially offset by an increase in cash used for operating assets (net of operating liabilities) of $9.2 million. Net cash used for investing activities of $28.5 million for the year ended December 31, 2016 represents an increase of $17.6 million when compared to cash used in investing activities for the year ended December 31, 2015. The increase is primarily related to higher capital expenditures of $14.0 million primarily related to the purchase of a corporate aircraft which replaced the expiring lease of the previous aircraft.

Cash provided by financing activities for the year ended December 31, 2016 was $4.4 million compared to cash used of $12.7 million in 2015. The $17.0 million increase was primarily a result of an increase in net debt borrowings in 2016 compared to 2015 of $14.2 million and a decrease in cash used in capital stock transactions of $2.7 million, combined with other small movements within financing activities.

We have commitments under operating leases primarily for office and manufacturing space, transportation equipment, office and computer equipment and capital leases primarily for equipment. One such lease was for our aircraft with a lease commitment which was set to expire in February 2017. The Company terminated the lease in July of 2016, incurring approximately $1.0 million of charges related to the expiring lease. There are no future lease obligations. All required charges for the lease termination were recorded in the year ended December 31, 2016. The Company did not incur any obligation for contingent rent under the lease.

Contractual obligations and other commercial commitments are summarized in the following tables:

	Payments Due by Period				
Contractual Obligations	Total	Less than 1 year	1-3 years	4-5 years	After 5 years
(Thousands of dollars)					
Notes payable to bank (A)	$1,315	$1,315	$0	$0	$0
Long-term debt (B)	44,391	1,448	34,854	2,896	5,193
Capital leases	178	55	115	8	0
Operating leases	15,533	1,652	4,304	2,335	7,242
Purchase commitments	3,782	3,782	0	0	0
Pension contribution and other retirement plans (C)	13,688	956	3,343	1,290	8,099

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	Amount of Commitment Expiration by Period				
Other Commercial Commitments	Total	Less than 1 year	1-3 years	4-5 years	After 5 years
(Thousands of dollars)					
Letters of credit	$1,610	$1,610	$-	$ -	$0
Guarantees	5,779	3,438	1,474	40	827

(A) Interest on short-term debt is included in the table at an interest rate of 4.00% in effect at December 31, 2016.

(B) Interest on long-term debt is included in the table at interest rates from 1.90% to 2.75% based on the variable interest rates in effect at December 31, 2016.

(C) The Company does not expect to make contributions to the Company's defined benefit pension plan in 2017. Future expected amounts beyond one year have not been disclosed as such amounts are subject to change based on performance of the assets in the plan as well as the discount rate used to determine the obligation. At December 31, 2016, our unfunded contractual obligation was $10.4 million. Our Supplemental Profit Sharing Plan accrued liability at December 31, 2016 was $4.3 million.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our discussion and analysis of our financial condition and results of operations are based upon the consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amount of assets and liabilities, revenues and expenses and related disclosure of contingent assets and liabilities at the date of the consolidated financial statements. Actual results may differ from these estimates under different assumptions or conditions.

Critical accounting policies are defined as those that are reflective of significant judgment and uncertainties, and potentially may result in materially different outcomes under different assumptions and conditions.

Revenue Recognition

Our revenue recognition policy is in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 605, Revenue Recognition. We recognize sales when title passes to the customer either when goods are shipped or when they are delivered and based on the terms of the sale, there is persuasive evidence of an agreement, the price is fixed or determinable and collectability is reasonably assured. Revenue related to shipping and handling costs billed-to customers are included in net sales and the related shipping and handling costs are included in cost of products sold.

Receivable Allowances

We maintain an allowance for doubtful accounts for estimated losses resulting from the inability of our customers to make required payments. We record estimated allowances for uncollectible accounts receivable based upon the number of days the accounts are past due, the current business environment, and specific information such as bankruptcy or liquidity issues of customers. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required. During 2016, we recorded a provision for doubtful accounts of $1.8 million. The allowance for doubtful accounts represents approximately

4.2% and 2.8% of our trade receivables balance at December 31, 2016 and 2015, respectively.

Excess and Obsolescence Reserves

We provide excess and obsolescence reserves to state inventories at the lower of cost or estimated market value. We identify inventory items which have had no usage or are in excess of the usages over the historical 12 to 24 months. A management team with representatives from marketing, manufacturing, engineering and finance reviews these inventory items, determines the disposition of the inventory and assesses the estimated market value based on their knowledge of the product and market conditions. These conditions include, among other things, future demand for product, product utility, unique customer order patterns or unique raw material purchase patterns, changes in customer and quality issues. The allowance for excess and obsolete inventory was 14.0% and 12.9% of gross inventory at December 31, 2016 and December 31, 2015, respectively. If the impact of market conditions deteriorates from those projected by management, additional inventory reserves may be necessary.

Impairment of Long-Lived Assets

We record impairment losses on long-lived assets used in operations when events and circumstances indicate that the assets are impaired and the discounted cash flows estimated to be generated by those assets are less than the carrying value of those items. Our cash flows are based on historical results adjusted to reflect the best estimate of future market and operating conditions. The net carrying value of assets not recoverable is then reduced to fair value. The estimates of fair value represent the best estimate based on industry trends and reference to market rates and transactions.

Goodwill

We perform our annual impairment test for goodwill utilizing a discounted cash flow methodology, market comparables, and an overall market capitalization reasonableness test in computing fair value by reporting unit. We then compare the fair value of the reporting unit with its carrying value to assess if goodwill has been impaired. Based on the assumptions as to growth, discount rates and the weighting used for each respective valuation methodology, results of the valuations could be significantly changed. However, we believe that the methodologies and weightings used are reasonable and result in appropriate fair values of the reporting units.

Our measurement date for our annual impairment test is October 1 of each year. We performed our annual impairment tests for goodwill as of October 1, 2016. We did not have any impairment for goodwill or other intangibles for the year ended December 31, 2016. See Note J for additional information.

Deferred Tax Assets

Deferred taxes are recognized at currently enacted tax rates for temporary differences between the financial reporting and income tax basis of assets and liabilities and operating loss and tax credit carryforwards. We establish a valuation allowance to record our deferred tax assets at an amount that is more-likely-than-not to be realized. In the event we were to determine that we would be able to realize our deferred tax assets in the future in excess of their recorded amount, an adjustment to the valuation allowance would increase income in the period such determination was made. Likewise, should we determine that we would not be able to realize all or part of our net deferred tax assets in the future, an adjustment to the valuation allowance would be charged to expense in the period such determination was made.

Uncertain Tax Positions

We identify tax positions taken on the federal, state, local and foreign income tax returns filed or to be filed. A tax position can include: a reduction in taxable income reported in a previously filed tax return or expected to be reported on a future tax return that impacts the measurement of current or deferred income tax assets or liabilities in the period being reported; a decision not to file a tax return; an allocation or a shift of income between jurisdictions; the characterization of income or a decision to exclude reporting taxable income in a tax return; or a decision to classify a transaction, entity or other position in a tax return as tax exempt. We determine whether a tax position is an uncertain or a routine business transaction tax position that is more-likely-than-not to be sustained at the full amount upon examination.

Under FASB ASC 740, tax benefits from uncertain tax positions that reduce our current or future income tax liability, are reported in our financial statements only to the extent that each benefit is recognized and measured under a two-step approach. The first step requires us to assess whether each tax position based on its technical merits and facts and circumstances as of the reporting date, is more-likely-than-not to be sustained upon examination. The second step measures the amount of tax benefit that we would recognize in the financial statements based on a cumulative probability approach. A tax position that meets the more-likely-than-not threshold that is not highly certain is measured based on the largest amount of benefit that is greater than 50% likely of being realized upon ultimate settlement with the tax authority, assuming that the tax authority has examined the position and has full knowledge of all relevant information.

ASC 740 requires subjectivity to identify outcomes and to assign probability in order to estimate the settlement amount. We provide estimates in order to determine settlement amounts. During the year ended December 31, 2016, we recorded a reduction in the liability of $.2 million for uncertain tax positions. At December 31, 2016, there was no reserve requirement for uncertain tax positions.

Pensions

We record obligations and expenses related to pension benefit plans based on actuarial valuations, which include key assumptions on discount rates, expected returns on plan assets and compensation increases. These actuarial assumptions are reviewed annually and modified as appropriate. The effect of modifications is generally recorded or amortized over future periods. The discount rate of 4.25% at December 31, 2016 reflects an analysis of yield curves as of the end of the year and the schedule of expected cash needs of the plan. The expected long-term return on plan assets of 8.0% reflects the plan's historical returns and represents our best estimate of the likely future returns on the plan's asset mix. We believe the assumptions used in recording obligations under the plans are reasonable based on prior experience, market conditions and the advice of plan actuaries. However, an increase in the discount rate would decrease the plan obligations and the net periodic benefit cost, while a decrease in the discount rate would increase the plan obligations and the net periodic benefit cost. In addition, an increase in the expected long-term return on plan assets would decrease the net periodic pension cost, while a decrease in expected long-term return on plan assets would increase the net periodic pension cost.

RECENTLY ADOPTED ACCOUNTING PRONOUNCEMENTS

Recently Adopted Accounting Pronouncements

In November 2015, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2015-17, "Income Taxes - Balance Sheet Classification of Deferred Taxes" which requires that deferred tax liabilities and assets be classified as noncurrent in a classified balance sheet. Prior to the issuance of the standard, deferred tax liabilities and assets were required to be separately classified into a current amount and a noncurrent amount in the balance sheet. The new accounting guidance represents a change in accounting principle and the standard is required to be adopted in annual periods beginning after December 15, 2016. Early adoption is permitted and the Company elected to early adopt this guidance as of March 31, 2016 and to apply the guidance retrospectively to all periods presented. Accordingly, as of December 31, 2015, the Company reclassified the prior period amount of $8.6 million related to its deferred tax assets and $.2 million related to its deferred tax liabilities from current to noncurrent, resulting in an increase of $7.4 million to its noncurrent deferred tax assets and a decrease of $1.0 million to its noncurrent deferred income tax liabilities. Because the application of this guidance affects classification only, such reclassifications did not have a material effect on the Company's consolidated financial position or results of its operations.

In January 2015, the FASB issued ASU 2015-01, "Income Statement-Extraordinary and Unusual Items (Subtopic 225-20): Simplifying Income Statement Presentation by Eliminating the Concept of Extraordinary Items." This Update eliminates from GAAP the concept of extraordinary items. A material event or transaction that an entity considers to be of an unusual nature or of a type that indicates infrequency of occurrence or both shall be reported as a separate component of income from continuing operations. The nature and financial effects of each event or transaction shall be presented as a separate component of income from continuing operations or, alternatively, disclosed in notes to financial statements. The amendments in this Update are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2015. The adoption of ASU 2015-1 had no impact to the presentation of the Company's consolidated financial statements for the twelve months ended December 31, 2016.

In April 2015, the FASB issued ASU 2015-04, "Compensation – Retirement Benefits (Topic 715): Practical Expedient for the Measurement Date of an Employer's Defined Benefit Obligation and Plan Assets." For an entity that has a significant event in an interim period that calls for a re-measurement of defined benefit plan assets and obligations, the amendments in this Update provide a practical expedient that permits the entity to re-measure defined benefit plan assets and obligations using the month-end that is closest to the date of the significant event. The amendments in this Update are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2015. Earlier application is permitted. Amendments in this Update should be applied prospectively. The adoption of ASU 2015-04 had no impact to the presentation of the Company's consolidated financial statementsfor the twelve months ended December 31, 2016.

In April 2015, the FASB issued ASU 2015-05, “Intangibles – Goodwill and Other – Internal-Use Software (Topic 350-40): Customer’s Accounting for Fees Paid in a Cloud Computing Arrangement.” The amendments in this Update provide guidance to customers about whether a cloud computing arrangement includes a software license. If a cloud computing arrangement includes a software license, then the customer should account for the software license element of the arrangement consistent with the acquisition of other software licenses. If a cloud computing arrangement does not include a software license, the customer should account for the arrangement as a service contract. The amendments in this Update are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2015. The adoption of ASU 2015-5 had no impact to the presentation of the Company’s consolidated financial statements for the twelve months ended December 31, 2016 as the Company is currently not engaged in a cloud computing arrangement.

In September 2015, the FASB issued ASU No. 2015-16, “Business Combinations (Topic 805): Simplifying the Accounting for Measurement-Period Adjustments.” This Update requires an acquiring entity to recognize adjustments to provisional amounts that are identified during the measurement period in the reporting period in which the adjustment amounts are determined. The amendments also require an entity to record the effect on earnings of changes in depreciation, amortization, or other income effects, if any, as a result of the change to the provisional amounts, calculated as if the accounting had been completed at the acquisition date. An entity must present separately on the face of the statement of operations or disclose in the notes the portion of the amount recorded in current-period earnings by line item that would have been recorded in previous reporting periods if the adjustment to the provisional amounts had been recognized as of the acquisition date. The amendments should be applied prospectively. The adoption of ASU 2015-16 had no impact to the presentation