ROGERS CORP
Form 10-K
February 23, 2016

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10 K
(Mark One)

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

For the fiscal year ended December 31, 2015
OR

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

For the transition period from to
Commission File No. 1-4347

ROGERS CORPORATION
(Exact name of Registrant as specified in its charter)

Massachusetts	06 0513860
(State or other jurisdiction of incorporation or organization)	(I. R. S. Employer Identification No.)

P.O. Box 188, One Technology Drive, Rogers, Connecticut 06263-0188 (Address of principal executive offices)
Registrant's telephone number, including area code: (860) 774-9605

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

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, $1 Par Value	New York Stock Exchange
Rights to Purchase Capital Stock	

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 ý 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 ý
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 ý 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 ý No ¨
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form

10-K. ¨

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

Large accelerated filer ý Accelerated filer ¨ Non-accelerated filer ¨ Smaller reporting company ¨
(Do not check if a smaller reporting company)

Indicate by checkmark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act) Yes ¨ No ý

The aggregate market value of the voting common equity held by non-affiliates as of June 30, 2015, the last business day of the registrant's most recently completed second fiscal quarter, was approximately $1,221,463,930. Rogers has no non-voting common equity.

The number of shares outstanding of common stock as of February 4, 2016 was 17,969,554.

Documents Incorporated by Reference:

Portions of Rogers' Definitive Proxy Statement for its 2016 Annual Meeting of Shareholders, currently scheduled for May 6, 2016, are incorporated by reference into Part III of this Form 10-K.

ROGERS CORPORATION
FORM 10-K

December 31, 2015

TABLE OF CONTENTS

Part I

Item 1. Business

In this Report, we use the terms “Company,” “Rogers,” “we,” “us,” and “our” unless otherwise indicated or the context otherw
requires, to refer to Rogers Corporation and its consolidated subsidiaries.
Forward-Looking Statements
This Annual Report on Form 10-K includes “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Such statements are generally accompanied by words such as “anticipate,” “assume,” “believe,” “could,” “estimate,” “expect,” “fore
“goal,” “intend,” “may,” “might,” “plan,” “potential,” “predict,” “project,” “should,” “seek,” “target” or similar expressions th
uncertainty as to future events or outcomes. Forward-looking statements are based on assumptions and beliefs that we believe to be reasonable; however, assumed facts almost always vary from actual results, and the differences between assumed facts and actual results could be material depending upon the circumstances. Where we express an expectation or belief as to future results, that expectation or belief is expressed in good faith and based on assumptions believed to have a reasonable basis. We cannot assure you, however, that the stated expectation or belief will occur or be achieved or accomplished. Among the factors that could cause our results to differ materially from those indicated by forward-looking statements are risks and uncertainties inherent in our business including, without limitation:

- volatility within the Internet Connectivity, Clean Energy, and Safety and Protection megatrends on which our business is focused, as well as specific market and industry trends within these megatrends;
- business, economic and political conditions in the United States and abroad, particularly in China, South Korea, Germany, Hungary and Belgium, where we maintain significant manufacturing, sales or administrative operations;
- fluctuations in foreign currency exchange rates;
- our ability to develop innovative products and have them incorporated into end-user products and systems;
- the extent to which end-user products and systems incorporating our products achieve commercial success;
- the ability of our sole or limited source suppliers to deliver certain key raw materials to us in a timely manner;
- intense global competition affecting both our existing products and products currently under development;
- failure to realize, or delays in the realization of, anticipated benefits of acquisitions and divestitures due to, among other things, the existence of unknown liabilities or difficulty integrating acquired businesses;
- our ability to attract and retain management and skilled technical personnel;
- our ability to protect our proprietary technology from infringement by third parties and/or allegations that our technology infringes third party rights;
- changes in effective tax rates or tax laws and regulations in the jurisdictions in which we operate;
- financial and restrictive covenants in our credit agreement, which could limit our operational and financial flexibility;
- the outcome of ongoing and future litigation, including our asbestos-related product liability litigation;
- changes in environmental laws and regulations applicable to our business;
- disruptions in, or breaches of, our information technology systems;
- asset impairment and restructuring charges; and
- changes in accounting standards promulgated by the Financial Accounting Standards Board (FASB) and the Securities and Exchange Commission (SEC).

Our forward-looking statements are expressly qualified by these cautionary statements, which you should consider carefully, along with the risks discussed under the heading “Item 1A Risk Factors” and “Item 7 Management’s Discussion and Analysis of Financial Condition and Results of Operations” and elsewhere in this report, that could cause actual results to differ materially from historical results or anticipated results. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, unless required by law.
Overview

Rogers Corporation (NYSE: ROG) designs, develops, manufactures and sells high-quality and high-reliability engineered materials and components for mission critical applications. We operate principally three strategic business segments-Advanced Connectivity Solutions (ACS), Elastomeric Material Solutions (EMS) and Power Electronics Solutions (PES). We have a history of innovation and established the Rogers Innovation Center for our leading research and development activities.

Our growth strategy is based upon the following principles: (1) market-driven organization, (2) innovation leadership, (3) synergistic mergers and acquisitions, and (4) operational excellence. As a market-driven organization, we are focused on three megatrends of expanding business opportunities: Internet Connectivity, Clean Energy and Safety & Protection. During 2015, we added the Safety & Protection megatrend in place of Mass Transit in response to the increase in demand for advanced driver assistance systems and growth in products focused on consumer impact protection, passenger safety and vibration management and flexible heater insulation.

In January 2015, we completed the acquisition of Arlon LLC and its subsidiaries, other than Arlon India (Pvt) Limited (the acquired subsidiaries, collectively, Arlon), for an aggregate purchase price of approximately $157 million. Arlon manufactures high performance materials for the printed circuit board industry and silicone rubber-based materials. The acquisition of Arlon and its subsequent integration into our business segments have enabled us to increase scale and complement our existing product offerings, thus enhancing our ability to support our customers. The Arlon polyimide and thermoset laminate business, which was not integrated, was sold in December 2015. For additional information regarding the Arlon acquisition and related financing, see Note 5, “Acquisition” and Note 12, “Debt” in “Item 8 Financial Statements and Supplementary Data.”

Rogers was founded in 1832 and incorporated in Massachusetts in 1927.

Our Business Segments

We operate our business in three strategic business segments: Advanced Connectivity Solutions (ACS), Elastomeric Material Solutions (EMS) and Power Electronics Solutions (PES). The following table reflects the net sales of the reportable segments of the Company for the last three fiscal years:

(Dollars in thousands)	2015	2014	2013
ACS	$267,630	$240,864	$184,949
EMS	180,898	173,671	168,082
PES	150,288	171,832	160,730
Other	42,627	24,544	23,721
Total	$641,443	$610,911	$537,482

In 2015, we updated the names of two of our segments to better align with their product portfolios: our “Printed Circuit Materials” segment was renamed to “Advanced Connectivity Solutions,” and our “High Performance Foams” segment was renamed to “Elastomeric Material Solutions.”

Additional financial information regarding each of our reportable segments, along with information regarding our revenues and long-lived assets by geographic area, is available in Note 16, “Business Segments,” in “Item 8 Financial Statements and Supplementary Data.”

Advanced Connectivity Solutions (ACS)

Our ACS segment designs, develops, manufactures and sells circuit materials enabling high-performance and high-reliability connectivity for applications including communications infrastructure (e.g., cellular communication antennas and equipment), automotive (e.g., advanced driver assistance systems and global positioning applications), consumer electronics and aerospace/defense. We sell our circuit materials under various tradenames, including RO3000®, RO4000®, RT/duroid®, ULTRALAM®, RO2800®, LoPro®, COOLSPAN® and TMM®. In January 2015, we acquired the Arlon business, and subsequently integrated a portion of the product portfolio into the ACS segment operations and products that expanded the segment’s product portfolio, market reach and customer base, particularly in the RF antenna business.

Our ACS segment has manufacturing and administrative facilities in Chandler, Arizona; Rogers, Connecticut; Bear, Delaware; Evergem, Belgium; and Suzhou, China.

Elastomeric Material Solutions (EMS)

Our EMS segment designs, develops, manufactures and sells elastomeric material solutions for critical cushioning, sealing, impact protection and vibration management applications including general industrial, portable electronics (e.g., mobile internet devices), consumer goods (e.g., protective sports equipment), automotive, mass transportation, construction and printing applications. We sell our elastomeric materials under various trade names, including PORON®, XRD®, BISCO® and eSORBA®. In January 2015, we acquired the Arlon business, and subsequently integrated a portion of the product portfolio into the EMS segment operations and products that expanded the segment’s product portfolio, market reach and customer base, particularly in the engineered silicones for sealing and insulation applications.

Our EMS segment has manufacturing and administrative facilities in Woodstock, Connecticut; Rogers, Connecticut; Bear, Delaware; Carol Stream, Illinois; and Suzhou, China. We also own 50% of: (1) Rogers Inoac Corporation (RIC), a joint venture that was established in Japan 1989 to design, develop, manufacture and sell PORON products predominantly for the Japanese market and (2) Rogers INOAC Suzhou Corporation (RIS) that was established in China in 2004 to design, develop, manufacture and sell PORON products primarily for RIC customers in China. INOAC Corporation owns the remaining 50% of both RIC and RIS. RIC has manufacturing facilities at the INOAC facilities in Nagoya and Mie, Japan, and RIS has manufacturing facilities at Rogers' facilities in Suzhou, China.

Power Electronics Solutions (PES)

Our PES segment designs, develops, manufactures and sells ceramic substrate materials for power module applications (e.g., variable frequency drives, vehicle electrification and renewable energy), laminated bus bars for power inverter and high power interconnect applications (e.g., mass transit, hybrid-electric and electric vehicles, renewable energy and variable frequency drives), and micro-channel coolers (e.g., laser cutting equipment). We sell our ceramic substrate materials and micro channel coolers under the curamik® tradename, and our bus bars under the ROLINX® tradename.

Our PES segment has manufacturing and administrative facilities in Ghent, Belgium; Eschenbach, Germany; Budapest, Hungary; and Suzhou, China.

Other

Our Other businesses consist of elastomeric components for applications in ground transportation, office equipment, consumer and other markets; elastomeric floats for level sensing in fuel tanks, motors, and storage tanks; and inverters for portable communications and automotive markets. In 2015, the Other businesses included the Arlon polyimide and thermoset laminate operations, which was sold in December 2015.

Sales and Competition

We sell our materials and components primarily through direct sales channels positioned near major concentrations of our customers in North America, Europe and Asia. We sold to over 3,000 customers worldwide in 2015, primarily original equipment manufacturers (OEMs) and component suppliers. No individual customer represented more than 3.9% of our total sales for 2015; however, there are concentrations of OEM customers in our ACS (Chinese telecommunications equipment manufacturers) and PES (semiconductor and automotive manufacturers) segments. Although the loss of all of the sales made to any one of our larger customers would require a period of adjustment during which the results of a particular operating segment would be adversely impacted, we believe that such adjustments could be successfully made over a period of time due to the diversity of our customer base. We believe that our business relationships with major customers in our key markets are favorable, and that we are in a good position to respond promptly to variations in customer requirements and technology trends.

We employ a technical sales and marketing approach pursuant to which we work collaboratively to provide design engineering, testing, product development and other technical support services to OEMs that incorporate our engineered materials and components in their products. Particularly in our ACS and EMS business segments, component suppliers convert, modify or otherwise incorporate our engineered materials and components into their components for these OEMs in accordance with their specifications. Accordingly, we provide similar technical support services to component suppliers.

We compete primarily with manufacturers of high-end materials, some of which are large, multi-national companies, principally on the basis of innovation, customer relationships, product quality and performance, technical service, breadth of product line, and manufacturing capabilities. We also compete with manufacturers of commodity materials, including smaller regional producers with lower overhead costs and profit requirements located in Asia that attempt to upsell their products based principally upon price, particularly for products that have matured in their life cycle. We believe that we have a competitive advantage because of our reputation for innovation, the quality and reliability of our materials and components and our demonstrated commitment to technical support and customer service.

Research and Development

We have a history of innovation, and innovation leadership is a key component of our overall business strategy. The markets we serve are typically characterized by rapid technological changes and advances. Accordingly, the success of our strategy is in part dependent on our ability to develop market-leading products, which is primarily driven by efforts in research and development. We are focused on identifying technologies and innovations related to both our current product portfolio as well as other long term initiatives targeted at further diversifying our business. As part of this technology commitment, we established the Rogers Innovation Center at Northeastern University in Burlington, Massachusetts, and, in 2015, opened a satellite innovation center at our facility in Suzhou, China. Our innovation centers focus on the earliest stages of technical and commercial development of new high-tech materials solutions in close alignment with market needs.

Patents and Other Intellectual Property

We have many domestic and foreign patents and licenses and have additional patent applications on file related to all business segments. These patents and licenses vary in duration and provide some protection from competition. We also own a number of registered and unregistered trademarks and have acquired and developed certain confidential and proprietary technology, including trade secrets that we believe to be of some importance to our business.

While we believe our patents and other intellectual property provide some important advantage to our business segments, we believe that a significant part of our competitive position and future success is also determined by such factors as the innovative skills, systems and process knowledge, and technological expertise of our personnel; the range and success of new products we develop; and our customer service and support.

Manufacturing and Raw Materials

The key raw materials used in our business are as follows: for our ACS segment, copper and polymer materials; for our EMS segment, polyurethane and silicone materials; and for our PES segment, copper and ceramic materials. We believe we have adequate sources for the supply of these key raw materials for our manufacturing needs.

Some of the raw materials used in our business are available through single or limited-source suppliers. We recently expanded our supplier base for certain key raw materials and components for efficiency, cost reduction and quality, while limiting the number of suppliers who act as the single-source supplier for a particular raw material. We seek to mitigate the impact of raw material supply disruptions by purchasing sufficient quantities of the particular raw material in advance to sustain production until alternative materials and production processes can be qualified with customers. However, this strategy may not be effective in all cases, and disruptions in our supply of raw materials could negatively impact our production and have a material adverse impact on our business.

Seasonality

There is no material concentration of products or markets within the business that are seasonal in nature, except for some minor seasonality for consumer products, which often align with year-end holidays and product launch cycles.

Our Employees

As of December 31, 2015, we employed approximately 2,800 people.

Backlog

Our backlog of firm orders was $63.3 million as of December 31, 2015, as compared to $77.0 million as of December 31, 2014. The decrease at the end of 2015 was primarily related to Power Electronics Solutions and Advanced Connectivity Solutions and our which experienced decreases in backlog of $7.3 million, $(9.1) million, respectively. These declines were slightly offset by Elastomeric Material Solutions, which experienced an increase of $2.8 million in the backlog. Contributing to the year-over-year change in backlog were customer delivery improvements, which reduced customer ordering cycles, combined with general market conditions. Additionally, the 2015 backlog contains $7.4 million related to the Arlon businesses. The backlog of firm orders is expected to be filled within the next 12 months.

Executive Officers

Our executive officers as of February 23, 2016 were as follows:

Name	Age	Present Position	Year Elected to Present Position	Other Positions Held During 2011-2015
Bruce D. Hoechner	56	President and Chief Executive Officer	2011	President, Asia Pacific Region, Dow Advanced Materials Division, Rohm and Haas Company from 2009 to September 2011
Janice E. Stipp	56	Vice President, Finance, Chief Financial Officer and Corporate Treasurer	2015	Executive Vice President, Chief Financial Officer and Treasurer, Tecumseh from October 2011 to November 2015; Chief Financial Officer, Revstone from January 2011 to August 2011
Robert C. Daigle	52	Senior Vice President and Chief Technology Officer	2009	
Gary M. Glandon	57	Vice President and Chief Human Resources Officer	2012	Chief Human Resources Officer, Solutia from October 2010 to July 2012
Jeffrey M. Grudzien	54	Vice President, Advanced Connectivity Solutions	2012	Vice President, Sales and Marketing September 2007 to February 2012
Jay Knoll	52	Vice President and General Counsel	2014	Senior Vice President, General Counsel PKC Group Oyj - North America from June 2012 to November 2014; Director and Chief Restructuring Officer Energy Conversion Devices, Inc. from November 2011 to June 2012, Interim President Energy Conversion Devices, Inc. from May 2011 to November 2011, Executive Vice President, General Counsel and Chief Administrative Officer Energy Conversion Devices, Inc. from January 2011 to April 2011.
John J. Krawczynski	44	Chief Accounting Officer and Corporate Controller	2014	Vice President Finance, Controller, The Yankee Candle Company, Inc. from September 2012 to February 2014; Vice President, Corporate Controller, Oakleaf Waste Management from March 2010 to September 2012
Helen Zhang	51		2013	

Vice President, Power Electronics Solutions and President, Rogers Asia	Global General Manager of Interconnect Technology, Dow Chemical Company, Dow Electronic Materials from July 2010 to April 2012

Available Information

We make available on our website (http://www.rogerscorp.com), or through a link posted on our website, free of charge, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, reports filed pursuant to Section 16 and amendments to those reports filed pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission (SEC). In addition, the SEC maintains an internet site that contains these reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC (http://www.sec.gov).

We also make available on our website, in a printable format, the charters for our Board of Directors committees, including the Audit Committee, Compensation and Organization Committee, and Nominating and Governance Committee, in addition to our Corporate Governance Guidelines, Bylaws, Code of Business Conduct and Ethics Policy, Related Party Transactions Policy and Compensation Recovery Policy. Our website is not incorporated into or a part of this Form 10-K.

Item 1A. Risk Factors

Our business, financial condition and results of operations are subject to various risks, including those discussed below, which may affect the value of our stock. The risks discussed below are those that we believe are currently the most significant, although additional risks not presently known to us or that we currently deem less significant may also impact our business, financial condition and results of operations, perhaps materially.

A substantial portion of our revenues is driven by the Internet Connectivity, Clean Energy, and Safety and Protection megatrends, and volatility in these megatrends may adversely affect our business.
We derived approximately 28%, 26% and 10% of our net sales for the year ended December 31, 2015 from sales relating to the Internet Connectivity, Clean Energy, and Safety and Protection megatrends, respectively. These megatrends are served by our direct and indirect customers in a variety of end markets, including the transportation, industrial, consumer electronics and communications sectors. These megatrends, as well as specific market and industry trends within these megatrends, are volatile, cyclical and sensitive to a variety of factors, including general economic conditions, technology disruptions, consumer preferences and political priorities. Adverse changes to and within these megatrends has resulted, and may continue to result, in reduced demand for certain of our products, production overcapacity, increased inventory levels and price erosion, ultimately leading to a decline in our revenues and gross margins.
We have extensive international operations and therefore events and circumstances that have general international consequence or more specific impact in the countries in which we operate may adversely affect our business.
For the year ended December 31, 2015, approximately 75% of our net sales resulted from sales in foreign markets, with approximately 51% and 22% of such net sales occurring in Asia and Europe, respectively. We expect our revenues in foreign markets to continue to represent a substantial majority of our consolidated net sales. We maintain significant manufacturing and administrative operations in China, South Korea, Germany, Hungary and Belgium, and 65% of our employees are located outside the United States. Risks related to our extensive international operations include the following:

- foreign currency fluctuations, particularly in the value of the Euro, the Hungarian forint, the Chinese yuan and the South Korean won against the U.S. dollar;
- economic and political instability, including regional or country-specific events;
- accounts receivable practices, including longer payment cycles;
- export control or customs matters and changes in trade policy, tariff regulations or other trade restrictions;
- complications in complying with a variety of foreign laws, including unexpected changes in the laws or regulations of the countries in which we operate;
- failure to comply with the U.S. Foreign Corrupt Practices Act or other applicable anti-corruption laws;
- greater difficulty protecting our intellectual property;
- employment regulations, work stoppages and labor and union disputes.

The foregoing risks may be particularly acute in emerging markets, such as China, where our operations are subject to greater uncertainty due to increased volatility associated with the developing nature of the economic, legal and governmental systems of these countries. In addition, our business has been - and may continue to be - adversely affected by the lack of development, or disruptions, of transportation or other critical infrastructure in emerging markets. If we are unable to successfully manage the risks associated with expanding our global business or to adequately manage operational fluctuations, it may adversely affect our business, financial condition and results of operations.
Our business is dependent upon our development of innovative products and our customers’ incorporation of those products into end user products and systems that achieve commercial success.

As a manufacturer and supplier of engineered materials and components, our business depends upon our ability to innovate and sell our new and improved materials and components for inclusion in other products that are developed, manufactured and sold by our customers. We strive to differentiate our products and secure long-term demand through our engagement with our customers to design in our materials and components as part of their product development processes. The value of any design in largely depends upon the decision of our customers to manufacture their products or systems in production quantities, the commercial success of the ultimate product and the extent to which the design of our customers' products or systems could accommodate substitution of competitor products. A consistent failure to introduce new products in a timely manner, achieve design ins or achieve market acceptance on commercially reasonable terms could adversely affect our business, financial condition and results of operations. Also, the introduction of new products presents particularly significant business challenges in our business because product development commitments and expenditures must be made well in advance of product sales.

Our dependence on sole or limited source suppliers for certain of our raw materials could adversely affect our ability to manufacture products and materially increase our costs.

We rely on sole and limited source suppliers for certain of the raw materials that are critical to the manufacturing of our products. This reliance subjects us to risks related to our potential inability to obtain an adequate supply of required components, particularly given our use of lean manufacturing and just-in-time inventory techniques, and our reduced control over pricing and timing of delivery of components. Our operating results would be adversely affected if we were unable to obtain adequate supplies of these materials in a timely manner or if their cost increased significantly.

If necessary, we believe we could obtain and qualify alternative sources for most sole and limited source supplier materials, but the transition time could be long. Seeking alternative sources for these materials could, however, require us to redesign our systems, resulting in increased costs and likely production and delivery delays. Ultimately, we may be unable to redesign our systems, which would further increase delays. If feasible, increased costs associated with such system redesigns would decrease our profit margins, perhaps materially, if we could not effectively pass such costs along to our customers. Further, production and delivery delays could lead to lost revenues and damage to our relationships with current and potential customers.

We face intense global competition, which could reduce demand for our products or cause additional pricing pressure for our products.
We operate in a highly competitive global environment and compete with domestic and international companies principally on the basis of the following:

- innovation;
- historical customer relationships;
- product quality, reliability, performance and price;
- technical and engineering service and support;
- breadth of product line; and
- manufacturing capabilities.

We believe that we currently compete effectively with respect to these factors in each of our operating segments and continue to devote strategic focus and investment to enhancing our competitiveness.

Our competitors include commodity materials suppliers, which offer product substitutions based mostly on price, and suppliers of alternate solutions, which offer product substitutions or eliminations based mostly on technology. Certain of these competitors have greater financial and other resources than we have and, in some cases, these competitors are well established in specific product niches. We expect that our competitors will continue to improve the design and performance of their products, which could result in the development of products that offer price or performance features superior to our products. Competition may also result from the development of disruptive technologies. If we are unable to maintain our competitive advantage for any reason, demand for our products may be materially reduced, which may adversely affect our business, financial condition and results of operations.
We may acquire businesses, dispose of businesses or engage in other transactions for which we may not realize anticipated benefits, or it may take longer than expected to realize such benefits, which may adversely affect our operating results, financial condition and existing business.
From time to time, we have explored and pursued transaction opportunities that we believe complement our core businesses, and we may do so again in the future. We also may consider divesting businesses or assets that we do not regard as part of our core businesses. These transaction opportunities may come in the form of acquisitions, joint ventures, investments, divestitures or other structures. There are risks associated with such transactions, including, without limitation, general business risk, integration risk, technology risk, market acceptance risk, litigation risk,

environmental risk, regulatory approval risk and risks associated with the failure to complete announced transactions. In the case of acquisitions, we may not be able to discover, during the due diligence process or otherwise, all known and unknown risks associated with the business we are acquiring, including the existence of liabilities. In the case of divestitures, we may agree to indemnify acquiring parties for known or unknown liabilities arising from the businesses we are divesting.

Acquisition and disposition transactions may not ultimately create value for us or our stockholders and may harm our reputation and adversely affect our business, financial condition and results of operations.

Our business may be adversely affected if we cannot protect our proprietary technology or if we infringe the proprietary rights of others.

Our proprietary technology supports our ability to compete effectively with other companies, and we seek to protect our intellectual property rights by obtaining U.S. and foreign patents, trademarks and copyrights and maintaining trade secrets for our manufacturing processes. It is possible, however, that our efforts to obtain such protection in the U.S. and abroad will be unsuccessful or that the protection afforded will not be sufficiently broad to protect our technology. Even if U.S. and foreign laws do grant initial protection to our technology, our competitors or other third parties may subsequently obtain and unlawfully copy, use or disclose our technologies, products, and processes. We believe that the risk of piracy of our technology is particularly acute in the foreign countries in which we operate. In circumstances in which we conclude that our proprietary technology has been infringed, we may pursue litigation to enforce our rights. For instance, in December 2015, we initiated a patent infringement action in Germany against KCC Corporation and its German subsidiary for offering direct bonded copper substrates in Germany that are manufactured using a process we believe is protected by one of our German patents. The defense and prosecution of intellectual property infringement suits are both costly and time consuming, even if the outcome is favorable to us. If we are not successful in protecting our proprietary technology or if the protection afforded to us is not sufficiently broad, our competitors may be able to manufacture and offer products substantially similar to our own, thereby reducing demand for our products and adversely affecting our results of operations and financial condition. We may also be adversely affected by, and subject to increased competition as a result of, the normal expiration of our issued patents.

Third parties may also assert infringement claims against us in the future. In addition to the significant costs associated with such suits, as noted above, an adverse outcome could subject us to significant liabilities to third parties and/or require us to license rights from third parties or cease selling our products. Any of these events may have a material adverse effect on our business, financial condition and results of operations.

The failure to attract and retain specialized technical and management personnel could impair our expected growth and future success.

We depend upon the continued services and performance of key executives, senior management and skilled technical personnel, particularly our sales engineers and other professionals with significant experience in the key industries we serve. Competition for these personnel from other companies, academic institutions and government entities is intense, and our expected growth and future success will depend, in large part, upon our ability to attract and retain these individuals.

Increases in our effective tax rates as a result of decisions to repatriate non-U.S. earnings or changes in the geographic mix of our earnings or in the tax laws and regulations applicable to us may materially adversely affect our results of operations and financial condition.

We are subject to income taxes in the U.S. and in various foreign jurisdictions, and any significant increase in our future effective tax rates could materially reduce our net income in future periods. Given the global nature of our business, a number of factors may increase our effective tax rates, including:

- decisions to repatriate non-U.S. earnings for which we have not previously provided for U.S. income taxes;
- changes in the geographic mix of our profits among jurisdictions with differing statutory income tax rates;
- changes in tax laws and regulations applicable to us, including the expiration, renewal or application of tax holidays.

The terms of our credit agreement require us to satisfy financial ratios and comply with numerous covenants, and our failure to do so could lead to acceleration of our outstanding indebtedness.

Our credit agreement contains, and any future debt agreements into which we enter may contain, certain financial ratios and certain restrictive covenants that, among other things, limit our ability to incur indebtedness or liens, acquire other businesses, dispose of assets, or make investments. Our ability to make scheduled payments on these borrowings and to satisfy financial ratios may be adversely affected by changes in economic or business conditions beyond our control, while the restrictive covenants to which we are subject may limit our ability to take advantage of potential business opportunities as they arise. Failure to satisfy these financial ratios or to comply with the covenants in our credit agreement would constitute a default. An uncured default with respect to one or more of our covenants could result in outstanding borrowings thereunder being declared immediately due and payable, which may also trigger an obligation to repay other outstanding indebtedness. Any such acceleration of our indebtedness would have a material adverse effect on our cash flows and financial condition.

We may be adversely affected by litigation stemming from product liability and other claims.

We are involved in various unresolved legal matters that arise in the ordinary course of operations, including asbestos-related product liability claims related to prior operations. See “Item 3 - Legal Proceedings” and Note 15 to “Item 8 - Financial Statements and Supplementary Data” for additional information. We maintain insurance coverage with respect to certain claims, but we cannot be certain that the policy coverage limits will be adequate or that the policies will cover any particular loss. Costs associated with, among other things, the defense of, or settlements or judgments relating to, claims against us that are not covered by insurance or that result in recoveries in excess of insurance coverage may adversely affect our business, financial condition and results of operations. In addition, irrespective of insurance coverage, claims against us could divert the attention of our senior management and/or result in reputational damage, thereby adversely affecting our business.

We are subject to many environmental laws and regulations that could adversely affect our business.

We are subject to a variety of federal, state, local and foreign laws, rules and regulations related to the use, storage, handling, discharge or disposal of certain toxic, volatile or otherwise hazardous chemicals, gases and other substances used in manufacturing our products. Some of these laws in the U.S. include the Federal Clean Water Act, Clean Air Act, Resource Conservation and Recovery Act, Comprehensive Environmental Response, Compensation, and Liability Act and similar state statutes and regulations. Compliance with these laws could require us to incur substantial expenses, including in connection with the acquisition of new equipment. Any failure to comply with present or future environmental laws, rules and regulations could result in fines, suspension of production or cessation of operations, any of which could have a material adverse effect on our business, financial condition and results of operations.

In addition, some environmental laws impose liability, sometimes without fault, for investigating and/or cleaning up contamination on, or emanating from, properties currently or formerly owned, leased or operated by us, as well as for damages to property or natural resources and for personal injury arising out of such contamination. Such liability may be joint and several, meaning that we could be held responsible for more than our share of the liability involved, or even the entire liability. See Note 15, "Commitments and Contingencies" in “Item 8 - Financial Statements and Supplementary Data” for additional information.

A significant disruption in, or breach in security of, our information technology systems could materially and adversely affect our business or reputation.

In the ordinary course of business, we collect and store confidential information, including proprietary business information belonging to us, our customers, business partners and suppliers and personally identifiable information of our employees. We rely on information technology systems to protect this information and to keep financial records, process orders, manage inventory, coordinate shipments to customers, and operate other critical functions. Our information technology systems may be susceptible to damage, disruptions or shutdowns due to power outages, hardware failures, telecommunication failures and user errors. If we experience a disruption in the information technology systems that involve our interactions with customers or suppliers, it could result in the loss of sales and customers and significant incremental costs, which could adversely affect our business.

We may also be subject to security breaches caused by computer viruses, illegal break-ins or hacking, sabotage, or acts of vandalism by disgruntled employees or third parties. The risk of a security breach or disruption, particularly through cyberattack or cyber intrusion, including by computer hackers, foreign governments and cyber terrorists, has increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased. Our Information Technology (IT) network and systems have been and, we believe, continue to be under constant attack. Accordingly, despite our security measures or those of our third party service providers, a security breach may occur but not be detected. Security breaches of our information technology systems could result in the misappropriation or unauthorized disclosure of confidential information belonging to us or to our customers, business partners, suppliers or employees, which could result in our suffering significant financial or reputational damage.

Employee benefit cost increases could reduce our profitability.

Our profitability is affected by employee benefit costs, particularly medical, pension and other employee benefits. In recent years, employee medical costs have increased due to factors such as the increase in health care costs in the U.S. These factors will continue to put pressure on our business and financial performance, as employee benefit costs continue to escalate. Although we actively seek to control increases in employee benefit costs and encourage employees to maintain healthy lifestyles to reduce future potential medical costs, there can be no assurance that we will succeed in limiting future cost increases. Continued employee benefit cost increases could have an adverse effect on our results of operations, cash flows and financial condition.

We also sponsor various defined benefit pension plans that cover certain employees. Our costs of providing defined benefit pension plans have risen dramatically in recent years, and are dependent upon a number of factors and assumptions that drive our projected liabilities and annual expenses, such as discount rates, the actual and projected rates of return on the plans' assets, governmental regulation, global equity prices, portfolio composition and our required and/or voluntary contributions to the plans. Changes in assumptions, the ability to grow our pension investments over time to increase the value of the plans' assets, and other factors relating to worldwide and domestic economic trends and financial market conditions, could all have a negative impact on our pension plans, which could result in an increase in our pension liabilities, a reduction in the funded status of our plan, increases in annual expense recognized related to the plans, and requirements to increase funding for some or all of our defined benefit pension plans, among other factors, all of which could negatively impact our operations and financial condition.

To mitigate some of these risks, we amended our U.S. defined benefit pension plans during 2013 and participants no longer accrue benefits under such plans, effectively freezing the plans going forward. While the risks outlined above will remain in force, the freezing of the plans will reduce overall risk, as we no longer accrue new benefit obligations, thus reducing projected future liabilities and annual plan expenses.

Also, to mitigate some of these risks, during the fourth quarter of 2015, we announced that we would be amending the plan and changing the benefits related to the salaried and non-union hourly participants of the retirement health insurance benefits program. The result of this amendment is reduced future liabilities related to this plan.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

We operate various manufacturing facilities and sales offices throughout the United States, Europe and Asia. The following table provides certain information about the principal general offices and manufacturing facilities used by our business segments:

Location	Floor Space (Sq Ft)	Type of Facility	Leased / Owned
United States			
Rogers, Connecticut	506,000	Manufacturing / Administrative Offices	Owned
Chandler, Arizona	418,000	Manufacturing	Owned
Chandler, Arizona	17,000	Warehouse/Administrative Offices	Leased through 03/2017
Carol Stream, Illinois	215,000	Manufacturing	Owned
Woodstock, Connecticut	152,000	Manufacturing	Owned
Bear, Delaware	125,000	Manufacturing / Administrative Offices	Owned
Burlington, Massachusetts	5,000	R&D Lab and Office Space	Leased through 2/2018
Europe			
Eschenbach, Germany	149,000	Manufacturing / Administrative Offices	Leased through 6/2021
Ghent, Belgium	114,000	Manufacturing	Owned
Evergem, Belgium	77,000	Manufacturing / Administrative Offices	Owned
Budapest, Hungary	42,000	Manufacturing	Leased through 2/2019
Asia			
Suzhou, China	821,000	Manufacturing / Administrative Offices	Owned
Ansan, Korea	40,000	Manufacturing	Leased through 10/2018
Tokyo, Japan	3,094	Sales Office	Leased through 2/2018
Taipei, Taiwan, R.O.C.	1,000	Sales Office	Leased through 7/2016
Hwasung City, Korea	1,000	Sales Office	Leased through 8/2016
Singapore	1,000	Sales Office	Leased through 12/2016
Shanghai, China	1,000	Sales Office	Leased through 3/2017
Shenzhen, China	1,000	Sales Office	Leased through 5/2018
Beijing, China	1,000	Sales Office	Leased through 5/2018

Item 3. Legal Proceedings

Asbestos products litigation

We were a defendant in 488 asbestos-related product liability cases as of December 31, 2015, compared to 440 cases as of December 31, 2014, with the change reflecting new cases, dismissals, settlements and other dispositions. We have never mined, milled, manufactured or marketed asbestos; rather, we made and provided to industrial users a limited number of products that contained encapsulated asbestos, but we stopped manufacturing these products in the late 1980s. In virtually all of the cases against us, the plaintiffs are seeking unspecified damages above a jurisdictional minimum against multiple defendants who may have manufactured, sold or used asbestos-containing products to which the plaintiffs were allegedly exposed and from which they purportedly suffered injury. Most of these cases are being litigated in Illinois, Pennsylvania and Mississippi, however we are also defending cases in other states. We intend to vigorously defend these cases, primarily on the basis of the plaintiffs' inability to establish compensable loss as a result of exposure to our products. As of December 31, 2015, the estimated liability and estimated insurance recovery for the ten-year period through 2025 were $56.6 million and $53.4 million, respectively.

The defense and settlement costs of our asbestos-related product liability litigation to date have been substantially covered by insurance, and we have recorded a $3.2 million accrual for the amount by which estimated asbestos-related expenses exceed asbestos-related insurance coverage over a 10-year projection period. See Note 15, "Commitments and Contingencies" to "Item 8 - Financial Statements and Supplementary Data" for additional information regarding our asbestos-related product liability litigation.

Other matters

We are currently involved in a variety of other legal proceedings that we view as ordinary routine litigation incidental to our business, including commercial disputes, intellectual property matters, personal injury claims, tax claims and employment matters. Although the outcome of no legal matter can be predicted with certainty, we do not believe that the outcome of any of these legal proceedings, either individually or in the aggregate, will have a material adverse effect on our business, consolidated financial position, results of operations or cash flows. In addition, we are involved in certain environmental matters, principally investigations, that we do not view as material legal proceedings, either pending or known to be contemplated. See Note 15, "Commitments and Contingencies" to "Item 8 - Financial Statements and Supplementary Data" for additional information regarding these matters.

Item 4. Mine Safety Disclosures

Not applicable.

Part II

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

Capital Stock Market Prices and Dividend Policy

Our capital stock is traded on the New York Stock Exchange under the symbol “ROG”. As of the end of business on February 4, 2016, we had 366 shareholders of record. On the same date, the trading price of our capital stock closed at $45.61 per share.

The following table sets forth the high and low prices during each quarter of the last two fiscal years on a per share basis:

	2015		2014	
	High	Low	High	Low
Fourth	$57.15	$46.23	$82.48	$51.40
Third	66.99	51.65	68.34	53.69
Second	83.85	66.07	67.30	56.26
First	84.92	73.19	65.73	56.17

We did not pay any dividends on our capital stock in fiscal 2015 and 2014. We periodically evaluate the desirability of paying a dividend; however, at present, we expect to maintain a policy of emphasizing longer-term growth of capital rather than immediate dividend income. We do not currently have any restrictions in our ability to pay dividends under our current, amended credit agreement, (see Item 7 Management's Discussion and Analysis of Financial Condition and Results of Operations in this Form 10-K), as no default of event of default has occurred. If a default or event of default occurs, we would be restricted in our ability to pay dividends.

Issuer Purchases of Equity Securities

On August 6, 2015, we initiated a share repurchase program ("the Program") of up to $100.0 million of the Company's capital stock. The Program has no expiration date, and may be suspended or discontinued at any time without notice. We initiated this program to mitigate potentially dilutive effects of stock options and shares of restricted stock granted by the Company, in addition to enhancing shareholder value.

All repurchases were made using cash from operations and cash on hand. As of December 31, 2015, $60.0 million remained available to purchase under the program. See Note 19 "Share Repurchase" to “Item 8 Financial Statements and Supplementary Data for information regarding dividends and share repurchases for the year.

Following are our monthly stock repurchases for the fourth quarter of 2015, all of which were made as part of publicly announced plans or programs:

(Dollars in thousands, except per share amounts)

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet be Purchased under the Plans or Programs
October 1, 2015 to October 31, 2015	49,273	$51.44	49,273	$60,007

We did not repurchase any shares during November or December 2015.

Item 6. Selected Financial Data

(Dollars in thousands, except per share amounts)	2015	2014	2013	2012	2011
Financial Results					
Net sales	$641,443	$610,911	$537,482	$498,761	$548,341
Income before income taxes	$66,173	$81,224	$49,722	$23,273	$56,496
Net Income	$46,320	$53,412	$38,203	$67,473	$44,978
Per Share Data					
Basic	$2.52	$2.94	$2.22	$4.11	$2.81
Diluted	$2.48	$2.86	$2.15	$3.97	$2.69
Book value	$32.55	$31.91	$31.38	$25.93	$21.22
Financial Position					
Current assets	$429,137	$438,174	$383,623	$312,472	$272,269
Current liabilities	$79,120	$120,445	$90,040	$84,502	$78,558
Ratio of current assets to current liabilities	4.7 to 1	3.6 to 1	4.3 to 1	3.7 to 1	3.5 to 1
Cash and cash equivalents	$204,586	$237,375	$191,884	$114,863	$79,728
Net working capital	$350,017	$317,729	$293,583	$227,970	$193,711
Property, plant and equipment, net	$178,661	$150,420	$146,931	$149,017	$148,182
Total assets	$932,458	$840,435	$811,321	$764,267	$683,532
Long-term debt	$175,188	$25,000	$60,000	$77,500	$115,000
Shareholders’ equity	$584,582	$587,281	$560,314	$438,395	$344,160
Long-term debt as a percentage of shareholders’ equity	30.0 %	4.3 %	10.7 %	17.7 %	33.4 %
Other Data					
Depreciation and amortization	$34,054	$26,268	$26,351	$27,130	$26,308
Research and development expenses	$27,644	$22,878	$21,646	$19,311	$21,530
Capital expenditures	$24,837	$28,755	$16,859	$23,774	$21,316
Number of employees (average)	2,800	2,800	2,500	2,441	2,566
Net sales per employee	$229	$218	$215	$204	$214
Number of shares outstanding at year end	17,957,760	18,403,109	17,854,506	16,904,441	16,220,648

Amounts disclosed above have been adjusted for the Company's 2015 conversion from the last in, first out (LIFO) cost method to the first in, first out (FIFO) cost method for valuing inventory for all operations that were using the LIFO cost method. The financial data included within the preceding table should be read in conjunction with our Management's Discussion and Analysis of Financial Condition and Results of Operations as well as the Financial Statements and Supplementary Data (Items 7 and 8 of this Form 10-K), and with our previously filed Forms 10-K.

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

The following discussion and analysis of our financial condition and results of operations should be read together with the Selected Financial Data and our Consolidated Financial Statements and the related notes that appear elsewhere in this Form 10-K.

In the following discussion and analysis, we sometimes provide financial information that was not prepared in accordance with U.S. generally accepted accounting principles (GAAP). Management believes that this non-GAAP information provides meaningful supplemental information regarding the Company's performance by excluding certain expenses that are generally non-recurring or otherwise may not be indicative of the core business operating results. In general, the Company believes that the additional non-GAAP financial information provided herein is useful to management and investors in assessing the Company's historical performance and for planning, forecasting and analyzing future periods. However, non-GAAP information has limitations as an analytical tool and should not be considered in isolation from, or solely as an alternative to, financial information prepared in accordance with GAAP. Any time we provide non-GAAP information in the following narrative we identify it as such and in close proximity provide the most directly comparable GAAP financial measure, as well as the information necessary to reconcile the two measures.

Business Overview

Rogers Corporation designs, develops, manufactures and sells high-quality and high-reliability engineered materials and components for mission critical applications. We operate principally three strategic business segments: Advanced Connectivity Solutions (ACS), Elastomeric Material Solutions (EMS) and Power Electronics Solutions (PES). We have a history of innovation and have established two Rogers Innovation Centers for our leading research and development activities, in Massachusetts and China.

Our growth strategy is based upon the following principles: (1) market-driven organization, (2) innovation leadership, (3) synergistic mergers and acquisitions, and (4) operational excellence. As a market-driven organization, we are focused on three megatrends of expanding business opportunities: Internet Connectivity, Clean Energy and Safety & Protection. During 2015, we added the Safety & Protection megatrend in place of Mass Transit in response to the increase in demand for advanced driver assistance systems and growth in products focused on consumer impact protection, passenger safety and vibration management and flexible heater insulation.

In January 2015, we completed the acquisition of Arlon LLC and its subsidiaries, other than Arlon India (Pvt) Limited (the acquired subsidiaries, collectively, Arlon), for an aggregate purchase price of approximately $157 million. Arlon manufactures high performance materials for the printed circuit board industry and silicone rubber-based materials. The acquisition of Arlon and its subsequent integration into our business segments have enabled us to increase scale and complement our existing product offerings, thus enhancing our ability to support our customers. The Arlon polyimide and thermoset laminate business, which was not integrated, was sold in December 2015.

2015 Executive Summary

In 2015 as compared to 2014, our revenue increased 5.0% to $641.4 million, gross margin decreased 170 bps to 36.7%, and operating income decreased 6.1% to $76.3 million. The following key factors should be considered when reviewing our results of operations, financial condition and liquidity for the periods discussed:

- Our revenue growth in 2015 was attributable primarily to our newly-acquired Arlon operations. The increase in net sales in 2015 was composed of an organic sales decrease of 6.9%, negative currency impact of 4.5%, offset by acquisition related growth of 16.4%. We believe our revenue decline is associated with the uncertain macro-economic conditions in China and Europe as well as the U.S. This situation has resulted in the delay of several key projects within the markets that we participate in, leading to weaker demand in certain applications across all three business segments. We expect to see a moderate recovery in sales going forward however we remain cautious as to the exact timing of the recovery.
-

Our operating income declined due to a variety of factors in 2015. We achieved $76.3 million in operating income during 2015, a 6.1% decline over the $81.2 million achieved in 2014. Operating results in 2015 and 2014 included approximately $11.2 million and $7.7 million of special charges, respectively. Contributing to the decline in operating income was the decline in gross margin. Gross margin declined due to the lower organic sales and the lower gross margin from the Arlon business; however, this decline was partially mitigated through operational excellence initiatives across our business units. Gross margin was 36.7% in 2015 as compared to 38.4% in 2014.

- We are an innovation company and in 2015 spent approximately 4.3% of our revenues on research and development, an increase from 3.7% in 2014. Research and development (R&D) expenses were $27.6 million in 2015, an increase of 20.8%, from $22.9 million in 2014. The increased spending was due to increased investments that are targeted at developing new platforms and technologies, as evidenced by the recent creation of the Rogers Innovation Centers in Massachusetts and in Asia. Since 2013, we have made concerted efforts to realign our R&D organization to better fit the future direction of our Company, including dedicating resources to focus on current product extensions and enhancements to meet our short term technology needs.
- We completed $40.0 million in share repurchases in 2015. These repurchases were part of a $100 million share repurchase program announced in August 2015. The repurchases were made at an average price of $54.97 per share. We initiated this program to mitigate potentially dilutive effects of stock options and shares of restricted stock granted by the Company, in addition to enhancing shareholder value. Further share repurchases under the program will be subject to management's consideration of cash availability, including cash generation, as well as potential cash uses, including capital spending and other investments, and potential acquisitions.
- We closed on the acquisition of Arlon in January of 2015. The Arlon business has been fully integrated into the ACS and EMS businesses, and contributed approximately $100.0 million in sales in 2015.

Results of Continuing Operations

The following table sets forth, for the periods indicated, selected operations data expressed as a percentage of net sales.

	2015	2014	2013
Net sales	100.0%	100.0%	100.0%
Gross margin	36.7%	38.4%	35.1%
Selling, general and administrative expenses	20.5%	20.5%	19.8%
Research and development expenses	4.3%	3.7%	4.0%
Restructuring and impairment charges	—	0.9%	1.9%
Operating income	11.9%	13.3%	9.3%
Equity income in unconsolidated joint ventures	0.5%	0.7%	0.8%
Interest income (expense), net	(0.7)%	(0.5)%	(0.6)%
Other income (expense), net	(1.3)%	(0.2)%	(0.2)
Income before income taxes	10.3%	13.3%	9.3%
Income tax expense	3.1%	4.6%	2.1%
Income from continuing operations	7.2%	8.7%	7.0%

2015 vs. 2014

Net Sales

(Dollars in thousands)	2015	2014	Percent Change
Net Sales	$641,443	$610,911	5.0%

Net sales increased by 5.0% in 2015 from 2014. The increase in net sales in 2015 was composed of an organic sales decrease of 6.9% and a negative currency impact of 4.5%, offset by Arlon acquisition related growth of 16.4%. The decline in organic sales was the result of a decline in all operating segments. The Advanced Connectivity Solutions (ACS) operating segment net sales increased 11.1%: organic sales decline of 11.4% and negative currency impact of 1.3%, which partially offset acquisition growth of 23.8%. The Elastomeric Material Solutions (EMS) operating segment net sales increased 4.2%: organic sales decline of 7.9% and negative currency impact of 1.8%, which partially offset acquisition growth of 13.8%. The Power Electronics Solutions (PES) operating segment net sales declined 12.5%: organic sales decline of 0.5% combined with a negative currency impact of 12.0%. See “Segment Sales and Operations” below for further discussion on segment performance.

Gross Margin

(Dollars in thousands)	2015	2014	Percent Change
Gross Margin	$235,362	$234,753	0.3%
Percentage of sales	36.7 %	38.4 %	

Gross margin as a percentage of net sales declined by 170 basis points to 36.7% in 2015 compared to 38.4% in 2014. Our 2015 results included approximately $1.8 million of purchase accounting related to the Arlon acquisition, of which, $1.6 million was the non-recurring fair value adjustment for inventory. The year over year decline was primarily the result of lower organic net sales and lower gross margin contribution related to the Arlon business. This was partially offset by improvements in supply chain, product quality and procurement, which favorably impacted margin performance.

Selling, General and Administrative Expenses

(Dollars in thousands)	2015		2014		Percent Change
Selling, general and administrative expenses	$131,463		$125,244		5.0%
Percentage of sales	20.5	%	20.5	%	

Selling, general and administrative (SG&A) expenses increased by 5.0% in 2015 compared with 2014. Our 2015 results included approximately $9.6 million of special charges comprised of $1.6 million of severance related charges, $4.8 million in integration expenses related to the Arlon acquisition and $3.2 million related to the establishment of an environmental reserve. Our 2014 results included approximately $2.3 million of acquisition costs.

Excluding these special charges, SG&A expense decreased $1.1 million and as a percentage of sales, decreased by 110 basis points from 20.1% in 2014 to 19.0% in 2015. The decrease in expenses, excluding special charges, is due to a variety of factors, including $12.0 million of lower incentive and equity compensation costs, $1.1 million of lower costs related to asbestos related liabilities, $1.0 million of lower severance and lower operational spending and other discrete items incurred in 2014 of $2.2 million. Partially offsetting these amounts are increases in expenses due to a variety of factors, including $13.5 million of SG&A expenses related to the Arlon business (including $5.8 million of intangible amortization associated with the acquisition) and $1.8 million of defined benefit pension and retirement plan costs.

Research and Development Expenses

(Dollars in thousands)	2015		2014		Percent Change
Research and development expense	$27,644		$22,878		20.8%
Percentage of sales	4.3	%	3.7	%	

Research and development (R&D) expenses increased by 20.8% in 2015 compared with 2014. As a percentage of sales, R&D costs increased from 3.7% in 2014 to 4.3% in 2015. The overall increase is due to $1.8 million of expenses related to the Arlon business as well as an increase in investments that are targeted at developing new platforms and technologies focused on long term growth initiatives at our innovation centers in the U.S. and Asia.

Equity Income in Unconsolidated Joint Ventures

(Dollars in thousands)	2015	2014	Percent Change
Equity income in unconsolidated joint ventures	$2,890	$4,123	(29.9)%

Equity income in unconsolidated joint ventures declined approximately 29.9% in 2015 from 2014. The decrease was due to lower demand, product mix and unfavorable currency exchange rate shifts.

Interest Income (Expense), Net

(Dollars in thousands)	2015		2014		Percent Change
Interest income (expense), net	$(4,480	)	$(2,946	)	52.1%

Interest income (expense), net, was higher expense by 52.1% in 2015 from 2014. The increase year over year was driven by the increase in long term debt associated with the Arlon acquisition, which occurred in January of 2015.

Other Income (Expense), Net

(Dollars in thousands)	2015		2014		Percent Change
Other income (expense), net	$(8,492	)	$(1,194	)	611.2%

Other income (expense), net was higher expense of $7.3 million from 2014 to 2015. Our 2015 results included approximately $7.2 million of special charges comprised of $4.8 million of a loss on the sale of the Arlon specialty polyimide and epoxy-based laminates business and $2.4 million of receivables related to the tax indemnities that were reversed, which related to the release of uncertain tax positions.

Income Tax Expense

(Dollars in thousands)	2015	2014	Percent Change
Income tax expense	$19,853	$27,812	(28.6)%
Effective tax rate	30.0 %	34.2 %	

In 2015, the difference between the our effective tax rate and the statutory federal tax rate was favorably impacted by taxable income generated in countries with a lower tax rate to that of the United States, research and development credits, a tax benefit related to a change in the effective state rate and release of valuation allowance on certain state tax attributes. The rate was unfavorably impacted by reserves for uncertain tax positions, change to prior estimates and nondeductible expenses. The rate decreased from 2014 primarily due to a reduction in the level of repatriation of current foreign earnings, increased reversals of uncertain tax benefits and deferred state tax benefits due to the acquisition of Arlon, partially offset with a shift of earnings from low tax to high tax jurisdictions.

Backlog

Our backlog of firm orders was $63.3 million as of December 31, 2015, as compared to $77.0 million as of December 31, 2014. The decrease at the end of 2015 was primarily related to Power Electronics Solutions, Advanced Connectivity Solutions and our Other businesses, which experienced decreases in backlog of $7.3 million, $(9.1) million and , respectively. These declines were slightly offset by Elastomeric Material Solutions, which experienced an increase of $2.8 million in the backlog. Contributing to the year-over-year change in backlog were customer delivery improvements, which reduced customer ordering cycles, combined with general market conditions. Additionally, the 2015 backlog contains $7.4 million related to the Arlon businesses. The backlog of firm orders is expected to be filled within the next 12 months.

2014 vs. 2013

Net Sales

(Dollars in thousands)	2014	2013	Percent Change
Net Sales	$610,911	$537,482	13.7%

Net sales in 2014 increased 13.7% from 2013. The increase in net sales in 2014 was attributable to volume increases in all of our operating segments. Net sales in the Advanced Connectivity Solutions (ACS) operating segment experienced a 30.2% increase from $184.9 million in 2013 to $240.9 million in 2014, the Power Electronics Solutions (PES) operating segment achieved a 6.9% increase from $160.7 million in 2013 to $171.8 million in 2014, and the Elastomeric Material Solutions (EMS) operating segment increased 3.3% from $168.1 million in 2013 to $173.7 million in 2014. See “Segment Sales and Operations” below for further discussion on segment performance.

Gross Margin

(Dollars in thousands)	2014	2013	Percent Change
Gross Margin	234,753	188,537	24.5%
Percentage of sales	38.4 %	35.1 %	

Gross margin increased by approximately 330 basis points from 35.1% in 2013 to 38.4% in 2014. Our 2013 results included approximately $0.9 million or 20 basis points of special charges related to relocation costs associated with the move of certain manufacturing operations from the Power Electronics Solutions manufacturing facility in Eschenbach, Germany to a lower cost facility in Hungary. The primary driver of the improvement in gross margin was the increased sales volume achieved during 2014, which contributed approximately 180 basis points to the improvement. The remaining net improvement of 150 basis points was attributable primarily to our ability to leverage our existing asset base through production efficiencies to absorb the increased sales volume.

25

Selling, General and Administrative Expenses

(Dollars in thousands)	2014	2013	Percent Change
Selling, general and administrative expenses	$125,244	$106,398	17.7%
Percentage of sales	20.5 %	19.8 %	

Selling, general and administrative (SG&A) expenses in 2014 increased 17.7% from 2013. Our 2014 results included approximately $2.3 million of acquisition costs. Our 2013 results included approximately $1.3 million of special charges comprised of $0.6 million in costs related to the move of certain manufacturing operations from the Power Electronic Solutions manufacturing facility is Eschenbach, Germany to a lower cost facility in Hungary and $0.7 million of other severance related charges. Excluding these charges, SG&A expense increased $17.8 million. As a percentage of sales, SG&A expenses increased by 70 basis points from 19.8% in 2013 to 20.5% in 2014. The overall increase in expenses was due to a variety of factors, including $7.7 million of incremental incentive and equity compensation costs, $10.1 million for incremental expenditures in certain key strategic areas, such as sales and marketing, strategic planning, information technology and executive recruiting, as well as costs related to merit increases. Also contributing to the increased costs in 2014 were charges related to the CFO transition of $0.8 million, severance of $2.8 million, $1.3 million of incremental asbestos related liabilities and other cost increases of $2.1 million. These increases were offset by approximately $7.0 million in expense reductions related primarily to changes in our defined benefit pension plans initiated in 2013.

Research and Development Expenses

(Dollars in thousands)	2014	2013	Percent Change
Research and development expense	$22,878	$21,646	5.7%
Percentage of sales	3.7 %	4.0 %	

Research and development (R&D) expenses in 2014 increased 5.7%, from 2013. As a percentage of sales, R&D costs decreased from 4.0% in 2013 to 3.7% in 2014. The lower rate was due primarily to the significant increase in net sales. From a gross spending perspective, in the past year we have made concerted efforts to realign our R&D organization to better fit the future direction of the Company, including dedicating resources to focus on current product extensions and enhancements to meet our short term technology needs. We also increased investments that were targeted at developing new platforms and technologies focused on long term growth initiatives, as evidenced by our partnership with Northeastern University in Boston, Massachusetts. This partnership has resulted in the creation of the Rogers Innovation Center on its Burlington, Massachusetts campus.

Restructuring and Impairment Charges

Restructuring and impairment charges decreased 48.0% in 2014 from 2013. In 2014, these charges were comprised primarily of the following: (i) $5.2 million related to the settlement of certain long term pension obligations and (ii) $ 0.2 million related to an impairment charge on an investment in BrightVolt, Inc. (formerly Solicore, Inc.). In 2013, these charges were comprised primarily of the following: (i) $4.6 million related to the impairment charge on the investment in BrightVolt, Inc., (ii) $4.2 million of severance and related charges as a result of additional streamlining initiatives as well as changes to the executive management team, and (iii) a $1.5 million curtailment charge related to the freezing of the defined benefit pension plans.

Equity Income in Unconsolidated Joint Ventures

(Dollars in thousands)	2014	2013	Percent Change
Equity income in unconsolidated joint ventures	$4,123	$4,326	(4.7)%

Equity income in unconsolidated joint ventures decreased 4.7% in 2014 from 2013. The decline was primarily due to the depreciation of the Japanese Yen against the U.S. dollar of approximately 8.6% year over year.

Interest Income (Expense), Net

(Dollars in thousands)	2014	2013	Percent Change
Interest income (expense), net	$(2,946)	$(3,481)	(15.4)%

Interest income (expense), net, declined by 15.4% in 2014 from 2013. The decline was due primarily to lower interest expense on our debt facility, as we paid down principal from $98.0 million at the end of 2013 to $60.0 million at the end of 2014

Other Income (Expense), Net

(Dollars in thousands)	2014	2013	Percent Change
Other income (expense), net	$(1,194)	$(1,240)	(3.7)%

Other income (expense), net remained consistent in 2014 from 2013. Although the ending balance was the same year over year, there were changes in the activity. Our 2014 results included unfavorable commodity hedging transactions offset by lower commission payments to the joint ventures. Our 2013 results included approximately $0.7 million of unfavorable mark to market adjustments related to copper hedging contracts and approximately $0.3 million related to unfavorable foreign currency transaction adjustments.

Income Tax Expense

(Dollars in thousands)	2014	2013	Percent Change
Income tax expense	$27,812	$11,519	141.4 %
Effective tax rate	34.2 %	23.2 %	

In 2014, the difference between the our effective tax rate and the statutory federal tax rate was favorably impacted by taxable income generated in countries with a lower tax rate to that of the United States and research and development credits. The rate was unfavorably impacted by reserves for uncertain tax positions, distributions of current year earnings from our foreign subsidiaries as well as nondeductible acquisition costs. The rate increased from 2013 primarily due to an increased level of repatriation of current foreign earnings which was done to facilitate the Arlon acquisition, mix of earnings, lower reversals of uncertain tax benefits and nondeductible acquisition costs.

Backlog

The backlog of firm orders was $77.0 million at December 31, 2014, as compared to $50.5 million at December 31, 2013. The increase at the end of 2014 was primarily related to the Power Electronics Solutions and Advanced Connectivity Solutions operating segments, which experienced an increase in backlog of $8.3 million and $18.9 million, respectively, at December 31, 2014 as compared to December 31, 2013.

Segment Sales and Operations

Core Strategic

Advanced Connectivity Solutions

(Dollars in millions)	2015	2014	2013
Net sales	$267.6	$240.9	$184.9
Operating income	$45.1	$44.0	$19.1

The Advanced Connectivity Solutions (ACS) operating segment is comprised of high frequency circuit material products used for making circuitry that receives, processes and transmits high frequency communications signals, in a wide variety of markets and applications, including wireless communications, high reliability, and automotive, among others.

2015 vs. 2014

Net sales in this segment increased by 11.1% in 2015. Organic sales declined 11.4%, currency fluctuations decreased net sales by 1.3% and the acquisition of Arlon added 23.8% net sales growth as compared to the same period in the prior year. The year over year increase in net sales, including the acquisition, was driven by an increase in automotive radar applications for Advanced Drive Assistance Systems (33.4%) and aerospace and defense applications (54.4%) and the wireless telecom market (1.5%). These increases were partially offset by weaker demand in 4G LTE base stations, primarily in China (-25%).

Operating income improved by 2.5% in 2015. As a percentage of net sales, operating income in 2015 was 16.9%, a 140 basis point decline as compared to the 18.3% reported in 2014. Our 2015 operating income included approximately $5.3 million of special charges comprised of $2.6 million of integration expenses related to the Arlon acquisition, $1.0 million of Arlon purchase accounting expenses related to the non-recurring fair value adjustment for inventory, a $1.4 million environmental charge and $0.4 million of severance related charges. Our 2014 operating income included approximately $2.9 million of special charges comprised of

$1.9 million from the early payment of certain long term pension obligations, $0.9 million related to acquisition costs and $0.1 million related to the impairment of the BrightVolt investment (formerly Solicore). As a percentage of sales, excluding the 2015 and 2014 special charges, 2015 operating income was 18.8%, a 70 basis point decline as compared to the 19.5% achieved in 2014. This decline is primarily due to the lower organic net sales partially offset by the addition of the operating income from the acquisition, combined with favorable results from the continuous efforts targeted at manufacturing efficiency improvements and favorable inventory absorption.

2014 vs. 2013

Net sales in this segment increased 30.2% in 2014. The increase in net sales was due primarily to a 52.9% increase in orders for high frequency circuit materials to support wireless base station and antenna applications in connection with the global 4G/LTE infrastructure build-out, particularly in China. Further, demand in automotive safety radar applications for Advanced Driver Assistance Systems increased by 37.7% year over year as auto manufacturers continue to adopt this safety feature into their designs. These increases were partially offset by a 15.9% decline in net sales for certain applications in handheld devices for improved internet connectivity.

Operating income improved by 130.4% in 2014. As a percentage of net sales, operating income for 2014 was 18.3%, an increase from 10.3% in 2013. 2014 operating income includes approximately $2.9 million of special charges comprised of $1.9 million from the early payment of certain long term pension obligations, $0.9 million related to acquisition costs and $0.1 million related to the impairment of the BrightVolt investment. Our 2013 operating income included approximately $2.8 million of special charges comprised primarily of $1.0 million in severance charges and $1.6 million allocation related to the impairment of the BrightVolt investment. Excluding these charges, operating income increased by 114.2% from $21.9 million in 2013 to $46.9 million in 2014. As a percentage of sales, excluding the 2014 and 2013 special charges, 2014 operating income was 19.5%, a 920 basis point improvement as compared to the 10.3% achieved in 2013. This increase was due primarily to the increase in net sales as we were able to achieve this growth by utilizing our existing manufacturing capacity. Results were also favorably impacted by the continuous efforts targeted at manufacturing efficiency improvements. This increase was partially offset by $6.9 million of higher allocated SG&A expenses in 2014 compared to 2013.

Elastomeric Material Solutions

(Dollars in millions)	2015	2014	2013
Net sales	$180.9	$173.7	$168.1
Operating income	$20.0	$23.3	$22.6

The Elastomeric Material Solutions (EMS) operating segment is comprised of polyurethane and silicone foam products, which are sold into a wide variety of markets for various applications such as general industrial, portable electronics, consumer and transportation markets for gasketing, sealing, and cushioning applications.

2015 vs. 2014

Net sales in this segment increased by 4.2% in 2015. Organic sales declined 7.9%, currency fluctuations decreased net sales by 1.8% and the acquisition of Arlon added 13.8% of sales growth as compared to the prior year. The increase in net sales, including the acquisition, was driven by increased demand in mass transit (26.2%) and general industrial (26.1%) applications. Offsetting these increases, this operating segment experienced a decline in net sales into the portable electronics segment (mobile internet devices and feature phone applications) (-22.7%) and consumer applications (-11.0%).

Operating income declined by 14.4% in 2015. As a percentage of net sales, the 2015 operating income was 11.0%, a 240 basis point decline as compared to the 13.4% reported in 2014. Our 2015 operating income includes approximately $3.2 million of special charges comprised of $1.6 million of integration expenses related to the Arlon acquisition, $0.5 million of Arlon purchase accounting expenses related to the non-recurring fair value adjustment for inventory, a $0.8 million environmental charge and $0.3 million of severance related charges. Our 2014 operating income includes approximately $2.0 million of special charges comprised of $1.3 million for the early payment of certain long term pension obligations and $0.6 million of acquisition costs. As a percentage of net sales, excluding the 2015 and 2014 special charges, 2015 operating income was 12.8%, a 180 basis point decline as compared to the 14.6% achieved in 2014. This decline is primarily due to the lower organic net sales partially offset by the addition of the operating income from the acquisition.

2014 vs. 2013

Net sales increased by 3.3% in 2014. This increase in net sales was driven primarily due to higher demand in general industrial (5.5%), battery applications for hybrid electric vehicles (67.4%), consumer comfort and impact protection (13.4%), and mass transit (12.3%). Elastomeric Material Solutions demand into the portable electronics (mobile internet devices and feature phones) applications was down 9.2% year over year.

Operating income increased by 3.1% in 2014. As a percentage of net sales, operating income for both 2014 and 2013 was 13.4%. Our 2014 operating income includes approximately $2.0 million of special charges comprised of $1.3 million for the early payment of certain long term pension obligations and $0.6 million of acquisition costs. Our 2013 results included approximately $3.3 million of special charges comprised primarily of $1.5 million in severance charges and a $1.6 million allocation related to the impairment of the BrightVolt investment. Excluding these items, operating income declined by 2.7% from $26.0 million in 2013 to $25.3 million in 2014. As a percentage of net sales, excluding the 2014 and 2013 special charges, 2014 operating income was 14.6%, a 90 basis point decline as compared to the 15.5% achieved in 2013. This decline is primarily attributable to the increase of $4.7 million in allocated selling, general and administrative expenses incurred during 2014 and was partially offset by increased operating profit due to increased net sales.

Power Electronics Solutions

(Dollars in millions)	2015	2014	2013
Net sales	$150.3	$171.8	$160.7
Operating income	$3.8	$5.7	$1.3

The Power Electronics Solutions (PES) operating segment is comprised of two product lines - curamik® direct-bonded copper (DBC) substrates that are used primarily in the design of intelligent power management devices, such as IGBT (insulated gate bipolar transistor) modules that enable a wide range of products including highly efficient industrial motor drives, wind and solar energy converters and electrical systems in automobiles, and RO-LINX® busbars that are used primarily in power distribution systems products in mass transit and clean technology applications.

2015 vs. 2014

Net sales in this segment decreased by 12.5% in 2015. Organic net sales declined 0.5% as compared to 2014. Net sales were unfavorably impacted by 12.0% due to currency fluctuations. The net sales decline was impacted by weaker demand in variable frequency motor drives (-19.1%), vehicle electrification (x-by-wire) (-25.2%) and certain renewable energy applications (-21.8%). These declines were partially offset by an increase in demand in electric vehicle applications (41.5%) and laser diode applications (11.5%).

Operating income declined by 33.7% in 2015. As a percentage of net sales, the 2015 operating income was 2.5%, a 80 basis point decline as compared to the 3.3% reported in 2014. Our 2015 operating income included approximately $2.0 million of special charges comprised of $1.1 million of an environmental charge and $0.9 million of severance related charges. Our 2014 operating income includes approximately $2.8 million of special charges comprised of $1.9 million for the early payment of certain long term pension obligations and $0.9 million of acquisition costs. As a percentage of net sales, excluding the 2015 and 2014 special charges, 2015 operating income was 3.8%, a 110 basis point decline as compared to the 4.9% achieved in 2014. This decrease was due to the lower organic net sales as well as the unfavorable foreign currency exchange impact.

2014 vs. 2013

Net sales increased by 6.9% in 2014. This increase in net sales was led by an increase in demand in mass transit (14.9%), energy efficient motor control applications (16.2%) and vehicle electrification (x-by-wire) applications (26.8%). These increases more than offset weaker demand in laser diode (15.1%) and certain renewable energy applications (8.2%).

Operating income increased by 338.5% in 2014. As a percentage of net sales, operating income in 2014 was 3.3%, an increase from 1.0% in 2013. Our 2014 operating income includes approximately $2.8 million of special charges comprised of $1.9 million of the early payment of certain long term pension obligations and $0.9 million of acquisition costs. Our 2013 results included approximately $6.1 million of special charges comprised primarily of

$3.8 million of severance related charges, a $1.2 million allocation related to the impairment of the SG&A investment, and $1.1 million related to the start-up of inspecting operations in Hungary. Excluding these items, operating income improved by 14.9% from $7.4 million in 2013 to $8.5 million in 2014. This improvement was the result of sales volume increases achieved in this operating segment and manufacturing efficiency improvements, partially offset by an increase of $7.6 million of higher allocated selling, general and administrative expenses incurred in 2014.

Other

(Dollars in millions)	2015	2014	2013
Net sales	$42.6	$24.5	$23.7
Operating income	$7.4	$8.2	$7.1

Our Other businesses consist of our elastomer rollers and float products, as well as the inverter distribution operations. Additionally, the Arlon acquisition added a business to this segment that manufactured specialty polyimide and epoxy-based laminates and bonding materials, which was sold in December 2015.

2015 vs 2014

Net sales increased by 73.7% in 2015. The acquisition of Arlon added 76.0% sales growth as compared to the same period in the prior year. Net sales were unfavorably impacted primarily by 2.2% due to currency fluctuations.

Operating income decreased 10.0% in 2015. The decline is comprised of lower operating profit of $0.6 million due to lower organic sales volume, $0.6 million of integration expenses related to the Arlon acquisition, offset by the performance of the specialty polyimide and epoxy-based laminates and bonding materials business.

2014 vs 2013

Net sales increased by 3.5% in 2014. The increase in net sales was due primarily to stronger demand for elastomer rollers and floats products, which increased 3.5% year over year. There was also stronger demand for inverters, which increased 3.0% year over year.

Operating results improved by 15.5% in 2014. Our 2013 results included approximately $0.4 million of special charges related primarily to this segment's allocated portion of severance charges and the BrightVolt impairment charge. The overall improvement in operating results in this segment was attributable primarily to the increase in volume and improved operational efficiencies.

Joint Ventures

Rogers INOAC Corporation (RIC)

RIC, our joint venture with Japan-based INOAC Corporation, was established over 30 years ago and manufactures high performance PORON urethane foam materials in Japan. RIC's 2015 net sales decreased by approximately 13.5% from 2014 to 2015 and decreased by approximately 17.7% from 2013 to 2014. A portion of these decreases relates to the depreciation of the Japanese Yen against the U.S. dollar as the currency value significantly changed during these periods. Excluding the impact of the currency change, net sales declined year over year primarily due to the continued weakness in the Japanese domestic and export markets, particularly LCD TV's, domestic mobile phones and general industrial applications.

Rogers INOAC Suzhou Corporation (RIS)

RIS, our joint venture agreement with INOAC Corporation for the purpose of manufacturing PORON urethane foam materials in China, began operations in 2004. Net sales decreased by approximately 6.3% from 2014 to 2015 and increased approximately 2.3% from 2013 to 2014. The decrease from 2014 to 2015 was primarily related to declines in portable electronic devices. The increase from 2013 to 2014 was primarily related small market gains in mobile internet devices.

Discontinued Operations

In the second quarter of 2012, we decided to cease production of our non-woven composite materials operating segment located in Rogers, Connecticut. Manufacturing operations ceased by the end of 2012 and last sales out of inventory occurred in the first quarter of 2013. In 2013, operating income of $0.1 million, net of tax, was reflected as discontinued operations in the accompanying consolidated statements of operations, net sales were $0.2 million, and income tax related to the discontinued operation was $0.1 million. There was no impact from discontinued operations in 2014 or 2015.

Product and Market Development

Our research and development team is dedicated to growing our business by developing cost effective solutions that improve the performance of customers' products and by identifying business and technology acquisition opportunities to expand our market presence. Currently, R&D spend is approximately 4% of net sales.

Liquidity, Capital Resources and Financial Position

We believe our existing sources of liquidity and cash flows expected to be generated from operations, together with available credit facilities, will be sufficient to fund our operations, capital expenditures, research and development efforts, and debt service commitments, as well as our other operating and investing needs, for at least the next twelve months and, well into the foreseeable future. We continue to have access to the remaining portion of the line of credit available under the Amended Credit Agreement (as defined in the Credit Facilities section which follows), as evidenced by our purchase of Arlon, LLC in the first quarter of 2015, for which we drew down our line of credit for approximately $125.0 million. We continually review and evaluate the adequacy of our cash flows, borrowing facilities and banking relationships to ensure that we have the appropriate access to cash to fund both near-term operating needs and long-term strategic initiatives.

(Dollars in thousands)

Key Balance Sheet Accounts:	December 31, 2015	December 31, 2014
Cash and cash equivalents	$204,586	$237,375
Accounts receivable, net	$101,428	$99,065
Inventories	$91,824	$76,806
Outstanding borrowings on credit facilities	$178,626	$60,000

(Dollars in thousands)	For the year ended	
Key Cash Flow Measures:	December 31, 2015	December 31, 2014
Cash provided by operating activities	$73,922	$85,207
Cash used in investing activities	$(180,297)	$(28,520)
Cash provided by financing activities	$83,027	$1,867

At December 31, 2015, cash and cash equivalents were $204.6 million as compared to $237.4 million at the end of 2014, a decrease of $32.8 million, or approximately 13.8%. This decrease was due primarily to $33.4 million (net) being disbursed for the acquisition of Arlon, $40.0 million in share repurchases, $24.8 in capital expenditures, $7.7 million in a contribution to our defined benefit plans and $6.4 million in required debt payments, partially offset by strong cash generated from operations and the receipt of $7.0 million related to stock option exercises and $2.9 million of dividends from our joint ventures.

The following table illustrates the location of our cash and cash equivalents by our three major geographic areas:

(Dollars in thousands)	December 31, 2015	December 31, 2014	December 31, 2013
U.S.	$37,263	$96,721	$40,058
Europe	66,295	71,802	93,764
Asia	101,028	68,852	58,062
Total cash and cash equivalents	$204,586	$237,375	$191,884

U.S. income taxes have not been provided on $179.1 million of undistributed earnings of foreign subsidiaries since it is the Company’s intention to permanently reinvest such earnings or to distribute them only when it is tax efficient to do so. It is impracticable to estimate the total tax liability, if any, that would be created by the future distribution of these earnings.

Net working capital was $350.0 million, $317.7 million and $293.6 million in 2015, 2014 and 2013, respectively.

Significant changes in our balance sheet accounts from December 31, 2014 to December 31, 2015 were as follows:
Goodwill increased $77.2 million or 78.6% from $98.2 million at December 31, 2014 to $175.4 million at December 31, 2015. This increase is primarily due to the acquisition of Arlon. There have been no impairments of goodwill during the year ended December 31, 2015.

Other intangible assets increased $36.7 million or 95.8% from $38.3 million at December 31, 2014 to $75.0 million at December 31, 2015. This increase is primarily due to the acquisition of Arlon. There have been no impairments of Other intangible assets during the year ended December 31, 2015.

Overall, our debt position increased by $118.6 million from $60.0 million at December 31, 2014 to $178.6 million at December 31, 2015 due to additional borrowings made to finance the acquisition of Arlon.

Property, plant and equipment increased by $28.2 million or 18.8% from $150.4 million at December 31, 2014 to $178.6 million at December 31, 2015. The increase was primarily due to the acquisition of Arlon, which increased property, plant and equipment by $28.7 million. Contributing to the increase was capital expenditures of $24.8 million, which was substantially offset by depreciation expense of $20.1 million.

During 2015, $180.3 million of net cash was used for investing activities as compared to $28.5 million in 2014 and $17.0 million in 2013. Investing activity for 2015 included the acquisition of Arlon, which used $158.4 million in investing cash. Capital expenditures were $24.8 million, $28.8 million and $16.9 million in 2015, 2014 and 2013, respectively.

Net cash provided by financing activities was $83.0 million, $1.9 million and $10.7 million in 2015, 2014 and 2013, respectively. Financing activities in 2015 included borrowings of $125.0 million to finance the acquisition of Arlon, offset by $40.0 million of cash used for the share buyback program.

Credit Facilities

On June 18, 2015, we entered into a secured five year credit agreement (the "Amended Credit Agreement"). The Amended Credit Agreement amends and restates the credit agreement signed between the Company and the same banks on July 13, 2011 and increased our borrowing capacity from $265.0 million to $350.0 million, with an additional $50.0 million accordion feature.

The Amended Credit Agreement provides (1) a $55.0 million term loan; (2) up to $295.0 million of revolving loans, with sublimits for multicurrency borrowings, letters of credit and swing-line notes; and (3) a $50.0 million expansion feature. Borrowings may be used to finance working capital needs, for letters of credit and for general corporate purposes in the ordinary course of business, including the financing of permitted acquisitions (as defined in the Amended Credit Agreement).

Borrowings under the Amended Credit Agreement bear interest based on one of two options. Alternate base rate loans bear interest that includes a base reference rate plus a spread of 37.5 to 75.0 basis points, depending on our leverage ratio. The base reference rate is the greater of the prime rate; federal funds effective rate plus 50 basis points; or adjusted 1-month LIBOR plus 100 basis points. Euro-currency loans bear interest based on adjusted LIBOR plus a spread of 137.5 to 175.0 basis points, depending on our leverage ratio.

In addition to interest payable on the principal amount of indebtedness outstanding from time to time under the Amended Credit Agreement, the Company is required to pay a quarterly fee of 0.20% to 0.30% (based upon our leverage ratio) of the unused amount of the lenders’ commitments under the Amended Credit Agreement.

The Amended Credit Agreement contains customary representations, warranties, covenants, mandatory prepayments and events of default under which the Company's payment obligations may be accelerated. The financial covenants include requirements to maintain (1) a leverage ratio of no more than 3.25 to 1.00, subject to a one-time election to increase the maximum leverage ratio to 3.50 to 1.00 for one fiscal year in connection with a permitted acquisition, and (2) an interest coverage ratio ("ICR") of no less than 3.00 to 1.00. The ICR is the ratio determined as of the end of each of its fiscal quarters ending on and after September 30, 2015, of (i) Consolidated Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) (as defined in the Amended Credit Agreement) minus the unfinanced portion of Consolidated Capital Expenditures to (ii) Consolidated Interest Expense paid in cash, in each case for the period of four consecutive fiscal quarters ending with the end of such fiscal quarter, all calculated for the Borrower and its subsidiaries on a consolidated basis. As of December 31, 2015, we were in compliance with all of the financial covenants in the Amended Credit Agreement, as we achieved actual ratios of approximately 1.47 to 1.00 on the leverage ratio and 23.82 to 1.00 on the ICR.

The Amended Credit Agreement requires the mandatory quarterly repayment of principal on amounts borrowed under such term loan. Payments commenced on September 30, 2015, and are scheduled to be completed in June 2020. The aggregate mandatory principal payments due are as follows:

Year	Payments Due	
2016	$3.4	million
2017	$4.1	million
2018	$4.8	million
2019	$5.5	million
2020	$160.8	million

All obligations under the Amended Credit Agreement are guaranteed by each of the Corporation's existing and future material domestic subsidiaries, as defined in the Amended Credit Agreement (the "Guarantors"). The obligations are also secured by a Second Amended and Restated Pledge and Security Agreement, dated as of June 18, 2015, entered into by the Company and the Guarantors which grants to the administrative agent, for the benefit of the lenders, a security interest, subject to certain exceptions, in substantially all of the non-real estate assets of the Guarantors.

All amounts borrowed or outstanding under the Amended Credit Agreement, with the exception of amounts borrowed under the term loan which are subject to quarterly principal payments, are due and mature on June 18, 2020, unless the commitments are terminated earlier either at the request of the Company or if certain events of default occur.

In addition, as of December 31, 2015 we had a $1.2 million standby letter of credit (LOC) to guarantee Rogers workers compensation plans that were backed by the Amended Credit Agreement. No amounts were drawn on the LOC as of December 31, 2015 or 2014.

The Amended Credit Agreement is secured by many of the assets of Rogers, including but not limited to, receivables, equipment, intellectual property, inventory, and stock in certain subsidiaries.

Before entering into the Amended Credit Agreement, we had $0.5 million of remaining capitalized costs from the previous credit agreements. These costs will continue to be amortized over the life of the Amended Credit Agreement. In the second quarter of 2015, we capitalized an additional $1.8 million in connection with the Amended Credit Agreement. These costs will be amortized over the life of the Amended Credit Agreement, which will terminate in June 2020.

We incurred amortization expense of $0.5 million in each of the years ended 2015, 2014 and 2013, respectively. At December 31, 2015, we have approximately $2.1 million of credit facility costs remaining to be amortized.

We borrowed $125.0 million under the line of credit in the first quarter of 2015 to fund the acquisition of Arlon. During 2015 and 2014, we made principal payments of $6.4 million and $17.5 million, respectively, on the outstanding debt. The principal amount of this debt has been transferred to the new revolving credit line created in June of 2015. We are obligated to pay $3.4 million on this debt obligation in the next 12 months under the term loan.

We incurred interest expense on our outstanding debt of $3.5 million, $1.8 million and $2.2 million for the years ended December 31, 2015, 2014 and 2013, respectively.

We incurred an unused commitment fee of $0.3 million, $0.4 million and $0.5 million for the years ended December 31, 2015, 2014 and 2013, respectively. In July 2012, we entered into an interest rate swap to hedge the variable interest rate on our term loan debt. As of December 31, 2015, the remaining notional amount of the interest rate swap covers $16.2 million of our term loan debt and has a rate of 0.752%. At December 31, 2015, our outstanding debt balance is comprised of a term loan of $53.6 million and $125.0 million borrowed on the revolving line of credit. At December 31, 2015, the rate charged on this debt is the 1 month LIBOR at 0.4375% plus a spread of 1.500%.

Capital Lease

During the first quarter of 2011, we recorded a capital lease obligation related to the acquisition of Curamik for its primary manufacturing facility in Eschenbach, Germany. Under the terms of the leasing agreement, we had an option to purchase the property in either 2013 or upon the expiration of the lease in 2021 at a price which is the greater of (i) the then-current market value or (ii) the residual book value of the land including the buildings and installations thereon. We chose not to exercise the option to purchase the property that was available to us on June 30, 2013. The total obligation recorded for the lease as of December 31, 2015 and 2014 was $5.8 million and $6.8 million, respectively. Depreciation expense related to the capital lease was $0.3 million, $0.4 million and $0.4 million for the years ending December 31, 2015, 2014 and 2013, respectively. Accumulated depreciation as of December 31, 2015 and 2014 was $1.9 million and $1.6 million, respectively.

These expenses are included as depreciation expense in Cost of Sales on our consolidated statements of operations. Interest expense related to the debt recorded on the capital lease is included in interest expense on the consolidated statements of operations.

We also incurred interest expense on the capital lease of $0.4 million, $0.5 million and $0.5 million for the years ended December 31, 2015, 2014 and 2013, respectively. Cash paid for interest was $3.3 million, $2.5 million and $3.1 million for 2015, 2014 and 2013, respectively.

Restriction on Payment of Dividends

Pursuant to the Amended Credit Agreement, we cannot make a cash dividend payment if (i) a default or event of default has occurred and is continuing or will result from the cash dividend payment.We do not currently have any restrictions in our ability to pay dividends under our current, amended credit agreement, as no default of event of default has occurred.

Contractual Obligations

The following table summarizes our significant contractual obligations as of December 31, 2015:

(Dollars in thousands)	Payments Due by Period				
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Operating leases	$10,221	$2,981	$3,764	$1,664	$1,812
Capital lease	5,833	284	568	568	4,413
Interest payments on capital lease	2,058	383	766	766	143
Inventory purchase obligation	868	868	—	—	—
Capital commitments	3,691	3,691	—	—	—
Outstanding borrowings on credit facilities	178,626	3,438	8,938	166,250	—
Retiree health and life insurance benefits	3,005	537	784	528	1,156
Pension obligation funding	362	287	75	—	—
Interest payments on outstanding borrowings (1)	19,971	3,674	8,913	7,384	—
Total	$224,635	$16,143	$23,808	$177,160	$7,524

(1) Estimated future interest payments are based on (1) rates that range from 1.375% to 1.75%, which take into consideration projected forward 1 Month LIBOR and (2) a leverage-based spread.

Unfunded pension benefit obligations, which amount to $11.4 million at December 31, 2015, are expected to be paid from operating cash flows and the timing of payments is not definitive. Retiree health and life insurance benefits, which amount to $2.7 million, are expected to be paid from operating cash flows.

Other long-term liabilities, such as deferred taxes, unrecognized tax benefits and asbestos-related product liability reserves, have been excluded from the table due to the uncertainty of the timing of payments combined with the absence of historical trends to be used as a predictor for such payments.

Effects of Inflation

We do not believe that inflation had a material impact on our business, sales, or operating results during the periods presented.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements that have, or are, in the opinion of management, reasonably likely to have, a current or future material effect on our financial condition or results of operations.

Critical Accounting Policies

Our Consolidated Financial Statements are prepared in accordance with U.S. generally accepted accounting principles, which require management to make estimates, judgments and assumptions that affect the amounts reported in the financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances and believe that appropriate reserves have been established based on reasonable methodologies and appropriate assumptions based on facts and circumstances that are known; however, actual results may differ from these estimates under different assumptions or conditions. An accounting policy is deemed to be critical if it requires an accounting estimate to be made based on assumptions that are highly judgmental and uncertain at the time the estimate is made, if different estimates could reasonably have been used, or if changes to those estimates are reasonably likely to periodically occur that could affect the amounts carried in the financial statements. These critical accounting policies are as follows:

Revenue Recognition

We recognize revenue when all of the following criteria are met: (1) we have entered into a binding agreement, (2) the product has shipped and title and risk of ownership have passed, (3) the sales price to the customer is fixed or determinable, and (4) collectability is reasonably assured. We recognize revenue based upon a determination that all criteria for revenue recognition have been met, which, based on the majority of our shipping terms, is considered to have occurred upon shipment of the finished product. Some shipping terms require the goods to be through customs or be received by the customer before title passes. In those instances, revenue is not recognized until either the customer has received the goods or they have passed through customs, depending on the circumstances. As appropriate, we record estimated reductions to revenue for customer returns and allowances and warranty claims. Provisions for such allowances are made at the time of sale and are typically derived from historical trends and other relevant information.

Inventory Valuation

Inventories are stated at the lower of cost or market with costs determined primarily on a first-in first-out basis. We also maintain a reserve for excess, obsolete and slow-moving inventory that is primarily developed by utilizing both specific product identification and historical product demand as the basis for our analysis. Products and materials that are specifically identified as obsolete are fully reserved. In general, most products that have been held in inventory greater than one year are fully reserved unless there are mitigating circumstances, including forecasted sales or current orders for the product. The remainder of the allowance is based on our estimates and fluctuates with market conditions, design cycles and other economic factors. Risks associated with this allowance include unforeseen changes in business cycles that could affect the marketability of certain products and an unexpected decline in current production. We closely monitor the marketplace and related inventory levels and have historically maintained reasonably accurate allowance levels. Our obsolescence reserve has ranged from 10.0% to 11.6% of gross inventory over the last three years.

Goodwill and Other Intangibles

We have made acquisitions over the years that included the recognition of goodwill and other intangible assets. Goodwill and indefinite lived intangibles are tested for impairment annually or more frequently if events or changes in circumstances indicate the carrying value may have been impaired. Application of the goodwill impairment test requires significant judgment, including the identification of reporting units, assignment of assets and liabilities to reporting units, and determination of the fair value of each reporting unit. Determining the fair value of a reporting unit is subjective and requires the use of significant estimates and assumptions, including revenue growth rates and operating margins, discount rates, and future market conditions, among others. We test goodwill for impairment using a two-step process. The first step of the impairment test requires a comparison of the implied fair value of each of our reporting units to the respective carrying value. If the carrying value of a reporting unit is less than its implied fair value, no indication of impairment exists and a second step is not performed. If the carrying amount of a reporting unit is higher than its fair value, there is an indication that impairment may exist and a second step must be performed. In the second step, the impairment is computed by comparing the implied fair value of the reporting unit's goodwill with the carrying amount of the goodwill. If the carrying amount of the reporting unit's goodwill is greater than the implied fair value of its goodwill, an impairment loss must be recognized for the excess and charged to operations.

In 2015, we estimated the fair value of our reporting units using an income approach based on the present value of future cash flows. We believe this approach yields the most appropriate evidence of fair value as our reporting units are not easily compared to other corporations involved in similar businesses. We further believe that the assumptions and rates used in our annual impairment test are reasonable, but inherently uncertain. We currently have four reporting units with goodwill and intangible assets - Advanced Connectivity Solutions (ACS), Elastomeric Material Solutions (EMS), Curamik and the Elastomer Components Division (ECD) and the annual impairment test was performed in the fourth quarter of 2015 as has been our historical practice. The ACS, EMS, Curamik and ECD reporting units had allocated goodwill of approximately $51.9 million, $56.3 million, $65.0 million and $2.2 million, respectively, at December 31, 2015. No impairment charges resulted from this analysis. The excess of fair value over carrying value for these reporting units was 341.0% for ACS, 208.6% for EMS, 73.8% for Curamik and 232.3% for ECD. From a sensitivity perspective, if the fair value of these reporting units declined by 10%, the fair value of the ACS reporting unit would exceed its carrying value by approximately 300%, the fair value of the EMS reporting unit would exceed its carrying value by approximately 178%, the fair value of the Curamik reporting unit would exceed its carrying value by approximately 56%, and the fair value of the ECD reporting unit would exceed its carrying value by approximately 199%. These valuations are based on a five year discounted cash flow analysis, which utilized discount rates ranging from 12.0% for EMS and ECD to 15.3% for Curamik and a terminal year growth rate of 3% for all three reporting units.

Intangible assets, such as purchased technology, customer relationships, and the like, are generally recorded in connection with a business acquisition. Values assigned to intangible assets are determined based on estimates and judgments regarding expectations of the success and life cycle of products and technology acquired and the value of the acquired businesses customer base. These assets are reviewed at least annually, or more frequently, if facts and circumstances surrounding such assets indicate a possible impairment of the asset exists. In 2015, there were no indicators of impairment on any of our other intangible assets.

Product Liability

For product liability claims, we typically maintain insurance coverage with reasonable deductible levels to protect us from potential exposures. Any liability associated with such claims is based on management's best estimate of the potential claim value, while insurance receivables associated with related claims are not recorded until verified by the insurance carrier.

For asbestos related claims, we recognize projected asbestos liabilities and related insurance receivables, with any difference between the liability and related insurance receivable recognized as an expense in the consolidated statements of operations. In order to determine projected asbestos related liabilities, we have historically engaged National Economic Research Associates, Inc. (NERA), a consulting firm with expertise in the field of evaluating mass tort litigation asbestos bodily-injury claims. Further, in order to determine the projected insurance coverage on the asbestos liabilities, we have historically engaged Marsh USA, Inc., also known as Marsh Risk Consulting (Marsh), to develop these projections. Projecting future asbestos costs and related insurance coverage is subject to numerous variables that are extremely difficult to predict, including the number of claims that might be received, the type and severity of the disease alleged by each claimant, the long latency period associated with asbestos exposure, dismissal rates, costs of medical treatment, the financial resources of other companies that are co-defendants in claims, uncertainties surrounding the litigation process from jurisdiction to jurisdiction and from case to case, and the impact of potential changes in legislative or judicial standards, including potential tort reform.

The models developed for determining the potential exposure and related insurance coverage were developed by outside consultants deemed to be experts in their respective fields with the forecast for asbestos related liabilities generated by NERA and the related insurance receivable projections developed by Marsh. The models contain numerous assumptions that significantly impact the results generated by the models. We believe the assumptions made are reasonable at the present time, but are subject to uncertainty based on the actual future outcome of our asbestos litigation. We determined that a ten-year projection period is appropriate as we have experience in addressing asbestos related lawsuits over the last few years to use as a baseline to project the liability over ten years. However, we do not believe we have sufficient data to justify a longer projection period at this time. As of December 31, 2015, the estimated liability and estimated insurance recovery for the ten-year period through 2025 was $56.6 million and $53.4 million, respectively.

Given the inherent uncertainty in making future projections, we plan to have the projections of current and future asbestos claims periodically re-examined, and we will update them further if needed based on our experience, changes in the underlying assumptions that formed the basis for NERA's and Marsh's models, and other relevant factors, such as changes in the tort system. There can be no assurance that our accrued asbestos liabilities will approximate our actual asbestos-related settlement and defense costs, or that our accrued insurance recoveries will be realized. We believe that it is reasonably possible that we will incur additional charges for our asbestos liabilities and defense costs in the future, which could exceed existing reserves, but cannot reasonably estimate such excess amounts at this time.

Pension and Other Postretirement Benefits

We provide various defined benefit pension plans for our U.S. employees and sponsor three defined benefit health care plans and a life insurance plan. The costs and obligations associated with these plans are dependent upon various actuarial assumptions used in calculating such amounts. These assumptions include discount rates, long-term rates of return on plan assets, mortality rates, and other factors. The assumptions used were determined as follows: (i) the discount rate used is based on the PruCurve high quality corporate bond index, with comparisons against other similar indices; and (ii) the long-term rate of return on plan assets is determined based on historical portfolio results, market conditions and our expectations of future returns. We determine these assumptions based on consultation with outside actuaries and investment advisors. Any changes in these assumptions could have a significant impact on future recognized pension costs, assets and liabilities.

The rates used to determine our costs and obligations under our pension and postretirement plans are disclosed in Note 10 to “Item 8 - Financial Statements and Supplementary Data”. Each assumption has different sensitivity characteristics. For the year ended December 31, 2015, a 25 basis point decrease in the discount rate would have increased our total pension expense by approximately $20,500. This number represents the aggregate increase in expense for the four pension plans: Employees' Pension Plan, Defined Benefit Pension Plan, Bear Pension Plan and the Restoration Plan. A 25 basis point decrease in the discount rate would decrease the other post-employment benefits (OPEB) expense by approximately $8,000. A 25 basis point decrease in the expected return on assets would increase the total 2015 pension expense approximately $0.4 million. This number represents the aggregate increase in the expense for the three qualified pension plans. Since the OPEB and non-qualified plans are unfunded, those plans would not be impacted by this assumption change.

Income Taxes

We are subject to income taxes in the U.S. and in numerous foreign jurisdictions. The Company accounts for income taxes following ASC 740 (Accounting for Income Taxes) recognizing deferred tax assets and liabilities using enacted tax rates for the effect of temporary differences between book and tax basis of recorded assets and liabilities. Deferred tax assets are reduced by a valuation allowance if it is more likely than not that some or all of a deferred tax asset will not be realized.
U.S. income taxes have not been provided on $179.1 million of undistributed earnings of foreign subsidiaries since it is the Company's intention to permanently reinvest such earnings or to distribute them only when it is tax efficient to do so. It is impracticable to estimate the total tax liability, if any, that would be created by the future distribution of these earnings. If circumstances change and it becomes apparent that some, or all of the undistributed earnings as of December 31, 2015 will not be indefinitely reinvested, the provision for the tax consequences, if any, will be recorded in the period when circumstances change. Distributions out of current and future earnings are permissible to fund discretionary activities such as business acquisitions. However, when distributions are made, this could result in a higher effective tax rate.
We record benefits for uncertain tax positions based on an assessment of whether it is more likely than not that the tax positions will be sustained by the taxing authorities. If this threshold is not met, no tax benefit of the uncertain position is recognized. If the threshold is met, we recognize the largest amount of the tax benefit that is more than fifty percent likely to be realized upon ultimate settlement.
We recognize interest and penalties within the income tax expense line in the accompanying consolidated statements of operations. Accrued interest and penalties are included within the related tax liability line in the consolidated statements of financial position.

Stock-Based Compensation

Stock-based compensation expense associated with stock options, time-based and performance-based restricted stock grants, deferred stock units, and related awards is recognized in the consolidated statements of operations. Determining the amount of stock-based compensation expense to be recorded requires us to develop estimates to be used in calculating the grant-date fair value of stock options.

•Stock Options

Historically, we have used stock options as part of our overall compensation plan for key employees. To value stock options, we calculated the grant-date fair values using the Black-Scholes valuation model. The use of valuation models requires us to make estimates for the following assumptions:

Expected volatility - In determining expected volatility, we consider a number of factors, including historical volatility and implied volatility.

Expected term - We use historical employee exercise data to estimate the expected term assumption for the Black-Scholes valuation model.

Risk-free interest rate - We use the yield on zero-coupon U.S. Treasury securities for a period commensurate with the expected term assumption as the risk-free interest rate.
Expected dividend yield – We do not currently pay dividends on our capital stock; therefore, a dividend yield of 0% was used in the Black-Scholes model.

The amount of stock-based compensation expense recognized during a period is based on the value of the portion of the awards that are ultimately expected to vest. Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The term “forfeitures” is distinct from “cancellations” or “expirations” and represents only the unvested portion of the surrendered option. Based on an analysis of our historical forfeitures, we have applied an annual forfeiture rate of 3% to all unvested stock-based awards as of December 31, 2015. The rate of 3% represents the portion that is expected to be forfeited each year over the vesting period. This analysis is re-evaluated annually and the forfeiture rate is adjusted as necessary. Ultimately, the actual expense recognized over the vesting period will only be for those awards that vest.

- Performance-Based Restricted Stock

In 2006, we began granting performance-based restricted stock awards to certain key executives. We currently have awards from 2013, 2014 and 2015 outstanding. These awards cliff vest at the end of a 3 year measurement period to those individuals who are retirement eligible during the grant period, as such awards are subject to accelerated vesting as the grant is earned over the course of the vesting period (i.e. a pro-rata payout occurs based on the retirement date). Participants are eligible to be awarded shares ranging from 0% to 200% of the original award amount, based on certain defined performance measures. Compensation expense is recognized using the straight line method over the vesting period, unless the employee has an accelerated vesting schedule.

The 2013, 2014 and 2015 awards have two measurement criteria on which the final payout of the award is based - (i) the three year return on invested capital (ROIC) compared to that of a specified group of peer companies, and (ii) the three year total shareholder return (TSR) on the performance of our capital stock as compared to that of a specified group of peer companies. In accordance with the applicable accounting literature, the ROIC portion of the award is considered a performance condition. As such, the fair value of the ROIC portion is determined based on the market value of the underlying stock price at the grant date with cumulative compensation expense recognized to date being increased or decreased based on changes in the forecasted pay out percentage at the end of each reporting period. The TSR portion of the awards is considered a market condition. As such, the fair value of these awards was determined on the date of grant using a Monte Carlo simulation valuation model with related compensation expense fixed on the grant date and expensed on a straight-line basis over the life of the awards that ultimately vest with no changes for the final projected payout of the award. The assumptions used in the Monte Carlo are as follows:

Expected volatility – In determining expected volatility, we have considered a number of factors, including historical volatility.

Expected term – We use the vesting period of the award to determine the expected term assumption for the Monte Carlo simulation valuation model.

Risk-free interest rate – We use an implied "spot rate" yield on U.S. Treasury Constant Maturity rates as of the grant date for our assumption of the risk-free interest rate.

Expected dividend yield – We do not currently pay dividends on our capital stock; therefore, a dividend yield of 0% was used in the Monte Carlo simulation valuation model.

- Time-Based Restricted Stock

In 2011, we began granting time-based restricted stock awards to certain key executives and other key members of the Company's management team. We currently have grants from 2013, 2014 and 2015 outstanding. The majority of the 2013, 2014 and 2015 grants ratably vest on the first, second and third anniversaries of the original grant date. We recognize compensation expense on all of these awards on a straight-line basis over the vesting period. The fair value of the award is determined based on the market value of the underlying stock price at the grant date.

- Deferred Stock Units

We grant deferred stock units to non-management directors. These awards are fully vested on the date of grant and the related shares are generally issued on the 13th month anniversary of the grant date unless the individual elects to defer the receipt of these shares. Each deferred stock unit results in the issuance of one share of Rogers' stock. The grant of deferred stock units is typically done annually in the second quarter of each year. The fair value of the award is determined based on the market value of the underlying stock price at the grant date.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Market Risk

• Foreign Currency Risk

Our financial results are affected by changes in foreign exchange rates and economic conditions in foreign countries in which we operate. Our primary overseas markets are in Europe and Asia, thus exposing us to exchange rate risk from fluctuations in the Euro and the various currencies used in Asia. Exposure to variability in currency exchange rates is mitigated, when possible, through the use of natural hedges, whereby purchases and sales in the same foreign currency and with similar maturity dates offset one another. We further mitigate this exposure through hedging activities by entering into foreign exchange forward contracts with third parties when the use of natural hedges is not possible or desirable. We currently do not use derivative instruments for trading or speculative purposes. We monitor foreign exchange risks and at times manage such risks on specific transactions. Our risk management process primarily uses analytical techniques and sensitivity analysis. In 2015, a 10% increase/decrease in exchange rates would have resulted in an approximate increase/decrease to sales and net income of $26.1 million and $2.9 million, respectively.

• Interest Rate Risk

During the first quarter of 2011, we borrowed $145.0 million against our existing credit facilities to finance the strategic acquisition of Curamik Electronics GmbH. The interest charged on this credit facility fluctuates with movements in the benchmark LIBOR. In 2012, to limit exposure to upward movement in interest rates, we entered into an interest rate swap, which became effective in July 2013. This instrument caps exposure to upward movements in rates at 0.752% initially on 65% of the outstanding debt. Any movement in rates above this level would be offset by gains on the interest rate swap. During the first quarter of 2015, we borrowed an additional $125.0 million against our existing credit facilities to finance the strategic acquisition of Arlon. At December 31, 2015, the effective all-in rate of interest on the debt facility was 1.9375% and the amount of debt covered by the swap was $16.2 million. To illustrate, based on the outstanding debt as of December 31, 2015 of $178.6 million, a 100 basis point increase in LIBOR would increase the amount of interest expense by $1.8 million, annually. The effects of the interest rate swap would offset the interest expense increase by $1.0 million resulting in a net increase determined to be $0.8 million as of December 31, 2015.

• Commodity Risk

We are subject to fluctuations in the cost of raw materials used to manufacture our materials and products. In particular, we are exposed to market fluctuations in commodity pricing as we utilize certain materials, such as copper and ceramic, that are key materials in certain of our products. In order to minimize the risk of market driven price changes in these commodities, we utilize hedging strategies to insulate us against price fluctuations of copper, the commodity most used in our manufacturing processes. We currently do not use hedging strategies to minimize the risk of price fluctuations on other commodity-based raw materials; however, we continually review such strategies to hedge market risk on an ongoing basis.

For additional discussion, see Note 2, “Fair Value Measurements” and Note 3, “Hedging Transactions and Derivative Financial Instruments” in “Item 8 Financial Statements and Supplementary Data.”

Item 8. Financial Statements and Supplementary Data

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Exchange Act Rules 13a-15(f) and 15d-15(f). The Company's internal control over financial reporting was designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company's financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. Our internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States of America, and that receipts and expenditures are being made only in accordance with authorizations of our management and directors; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

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

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2015. In making its assessment of internal control over financial reporting, management used the criteria issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control-Integrated Framework (2013). Based on the results of this assessment, management, including our Chief Executive Officer and our Chief Financial Officer, has concluded that, as of December 31, 2015, our internal control over financial reporting was effective.

The Company's independent registered public accounting firm, PricewaterhouseCoopers, LLP, has audited the effectiveness of the Company's internal control over financial reporting as of December 31, 2015.

On January 22, 2015, the Company completed the acquisition of Arlon and its subsidiaries (collectively, “Arlon”). As a result, the Company has excluded Arlon from our assessment of internal control over financial reporting. Arlon is a wholly-owned subsidiary whose total assets and total revenues represent 6% and 15%, respectively as of December 31, 2015.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of Rogers Corporation

In our opinion, the accompanying consolidated statement of financial position as of December 31, 2015 and the related consolidated statements of operations, of comprehensive income (loss), of shareholders' equity and of cash flows for the year then ended present fairly, in all material respects, the financial position of Rogers Corporation and its subsidiaries at December 31, 2015, and the results of their operations and their cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedule, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 8. Our responsibility is to express opinions on these financial statements, on the financial statement schedule, and on the Company's internal control over financial reporting based on our integrated audit. We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audit of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinions.

As discussed in Note 1 to the consolidated financial statements, the Company has changed the manner in which it accounts for certain inventory from the last in, first out (LIFO) method to the first in, first out (FIFO) method in 2015.

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

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

As described in Management's Report on Internal Control over Financial Reporting, management has excluded Arlon from its assessment of internal control over financial reporting as of December 31, 2015 because Arlon (other than Arlon India (PvT) Limited) was acquired by the Company in a purchase business combination during 2015. We have also excluded Arlon from our audit of internal control over financial reporting. Arlon is a wholly-owned subsidiary whose total assets and total revenues represent 6% and 15%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2015.

/s/ PricewaterhouseCoopers LLP

Hartford, Connecticut
February 23, 2016

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Shareholders of Rogers Corporation
We have audited the accompanying consolidated statement of financial position of Rogers Corporation as of December 31, 2014, and the related consolidated statements of operations, comprehensive income (loss), shareholders' equity and cash flows for each of the two years in the period ended December 31, 2014. Our audits also included the financial statement schedule listed in the Index at Item 15. These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.
We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.
In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Rogers Corporation at December 31, 2014, and the consolidated results of its operations and its cash flows for each of the two years in the period ended December 31, 2014, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

/s/ Ernst & Young LLP
Boston, Massachusetts
February 18, 2015
Except for note 1, as to which the date is
February 23, 2016

CONSOLIDATED STATEMENTS OF OPERATIONS
For each of the fiscal years in the three-year period ended December 31, 2015
(Dollars and shares in thousands, except per share amounts)

	2015	2014	2013
Net sales	$641,443	$610,911	$537,482
Cost of sales	406,081	376,158	348,945
Gross margin	235,362	234,753	188,537
Selling, general and administrative expenses	131,463	125,244	106,398
Research and development expenses	27,644	22,878	21,646
Restructuring and impairment charges	—	5,390	10,376
Operating income	76,255	81,241	50,117
Equity income in unconsolidated joint ventures	2,890	4,123	4,326
Interest income (expense), net	(4,480)	(2,946)	(3,481)
Other income (expense), net	(8,492)	(1,194)	(1,240)
Income before income taxes	66,173	81,224	49,722
Income tax expense	19,853	27,812	11,519
Income from continuing operations	46,320	53,412	38,203
Income from discontinued operations, net of income taxes	—	—	102
Net income	$46,320	$53,412	$38,305
Basic earnings per share:			
Income from continuing operations	$2.52	$2.94	$2.22
Income from discontinued operations	—	—	0.01
Net income	$2.52	$2.94	$2.23
Diluted earnings per share:			
Income from continuing operations	$2.48	$2.86	$2.15
Income from discontinued operations	—	—	0.01
Net income	$2.48	$2.86	$2.16
Shares used in computing:			
Basic earnings per share	18,371	18,177	17,198
Diluted earnings per share	18,680	18,698	17,768

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

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
For each of the fiscal years in the three-year period ended December 31, 2015
(Dollars in thousands)

	2015	2014	2013
Income from continuing operations, net of tax	$46,320	$53,412	$38,203
Foreign currency translation adjustments	(27,172)	(36,949)	10,171
Derivative instruments designated as cash flow hedges:			
Unrealized gain (loss) on derivative instruments held at year end (net of taxes of $5 in 2015, $50 in 2014 and $110 in 2013)	(2)	(93)	(210)
Unrealized gain (loss) reclassified into earnings	84	209	236
Accumulated other comprehensive income (loss) pension and post-retirement benefits:			
Actuarial net gain (loss) incurred in fiscal year	2,760	(20,715)	32,749
Amortization of gain (loss)	966	3,904	2,482
Amortization of prior service credit (cost)	—	—	930
Other comprehensive income (loss)	(23,364)	(53,644)	46,358
Comprehensive income (loss) from continuing operations	22,956	(232)	84,561
Income from discontinued operations, net of income taxes	—	—	102
Comprehensive income (loss)	$22,956	$(232)	$84,663

The accompanying notes are an integral part of the consolidated financial statements.
45

ROGERS CORPORATION
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION
(Dollars and share amounts in thousands)

	December 31, 2015	December 31, 2014
Assets		
Current assets		
Cash and cash equivalents	$204,586	$237,375
Accounts receivable, less allowance for doubtful accounts of $695 and $476	101,428	99,065
Inventories	91,824	76,806
Prepaid income taxes	5,058	4,586
Deferred income taxes	9,565	6,467
Asbestos-related insurance receivables	8,245	6,827
Other current assets	8,431	7,048
Total current assets	429,137	438,174
Property, plant and equipment, net of accumulated depreciation	178,661	150,420
Investments in unconsolidated joint ventures	15,348	17,214
Deferred income taxes	8,594	44,051
Goodwill	175,453	98,227
Other intangible assets	75,019	38,340
Asbestos-related insurance receivables	45,114	46,186
Other long-term assets	5,132	7,823
Total assets	$932,458	$840,435
Liabilities and Shareholders' Equity		
Current liabilities		
Accounts payable	$19,851	$20,020
Accrued employee benefits and compensation	23,263	33,983
Accrued income taxes payable	3,599	6,103
Current portion of lease obligation	284	747
Current portion of long term debt	3,438	35,000
Asbestos-related liabilities	8,245	6,827
Other accrued liabilities	20,440	17,765
Total current liabilities	79,120	120,445
Long term debt	175,188	25,000
Long term lease obligation	5,549	6,042
Pension liability	12,623	17,652
Retiree health care and life insurance benefits	2,185	8,768
Asbestos-related liabilities	48,390	49,718
Non-current income tax	11,863	10,544
Deferred income taxes	9,455	14,647
Other long-term liabilities	3,503	338
Commitments and Contingencies (Note 15)		
Shareholders' Equity		
Capital Stock - $1 par value; 50,000 authorized shares; 17,957 and 18,404 shares outstanding	17,957	18,404
Additional paid-in capital	112,017	137,225

Retained earnings	543,066	496,746
Accumulated other comprehensive loss	(88,458)	(65,094)
Total shareholders' equity	584,582	587,281
Total liabilities and shareholders' equity	$932,458	$840,435

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

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
For each of the fiscal years in the three-year period ended December 31, 2015
(Dollars in thousands)

	Capital Stock/Capital Shares	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Shareholders' Equity
Balance at December 31, 2012	$ 16,904	$74,272	$405,029	$(57,808)	$438,397
Net income	—	—	38,305	—	38,305
Other comprehensive income (loss)	—	—	—	46,358	46,358
Stock options exercised	859	31,567	—	—	32,426
Stock issued to directors	15	(15)	—	—	—
Shares issued for employees stock purchase plan	24	710	—	—	734
Shares issued for restricted stock	53	(1,350)	—	—	(1,297)
Stock-based compensation expense	—	5,393	—	—	5,393
Balance at December 31, 2013	17,855	110,577	443,334	(11,450)	560,316
Net income	—	—	53,412	—	53,412
Other comprehensive income (loss)	—	—	—	(53,644)	(53,644)
Stock options exercised	465	20,048	—	—	20,513
Stock issued to directors	16	(16)	—	—	—
Shares issued for employees stock purchase plan	16	677	—	—	693
Shares issued for restricted stock	52	(1,594)	—	—	(1,542)
Stock-based compensation expense	—	7,533	—	—	7,533
Balance at December 31, 2014	18,404	137,225	496,746	(65,094)	587,281
Net income	—	—	46,320	—	46,320
Other comprehensive income (loss)	—	—	—	(23,364)	(23,364)
Stock options exercised	175	6,792	—	—	6,967
Stock issued to directors	16	(16)	—	—	—
Shares issued for employees stock purchase plan	13	714	—	—	727
Shares issued for restricted stock	77	(2,817)	—	—	(2,740)
Shares repurchased	(728)	(39,265)	—	—	(39,993)
Tax shortfalls on share-based compensation	—	(259)	—	—	(259)
Stock-based compensation expense	—	9,643	—	—	9,643
Balance at December 31, 2015	$ 17,957	$112,017	$543,066	$(88,458)	$584,582

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

CONSOLIDATED STATEMENTS OF CASH FLOWS
For each of the fiscal years in the three-year period ended December 31, 2015
(Dollars in thousands)

	December 31, 2015	December 31, 2014	December 31, 2013
Operating Activities:			
Net income	$46,320	$53,412	$38,305
Income from discontinued operations	—	—	(102)
Adjustments to reconcile net income to cash from operating activities:			
Depreciation and amortization	34,054	26,268	26,351
Stock-based compensation expense	9,643	7,533	5,393
Deferred income taxes	3,668	8,435	5,927
Equity in income of unconsolidated joint ventures	(2,890)	(4,123)	(4,326)
Dividends received from unconsolidated joint ventures	3,463	3,849	5,162
Pension and postretirement benefits	(1,512)	1,976	5,118
Loss from the disposal of property, plant and equipment	295	(69)	(7)
Impairment of assets/investments	150	—	4,620
Loss on disposition of a business	4,819	—	—
Changes in operating assets and liabilities excluding effects of acquisition and disposition of businesses:			
Accounts receivable	10,056	(10,188)	(2,727)
Inventories	(10,608)	(6,054)	6,351
Pension contribution	(7,737)	(14,645)	(13,751)
Other current assets	(1,278)	1,063	639
Accounts payable and other accrued expenses	(17,632)	16,638	9,020
Other, net	3,111	1,112	(8,806)
Net cash provided by operating activities of continuing operations	73,922	85,207	77,167
Net cash provided by operating activities of discontinued operations	—	—	848
Net cash provided by operating activities	73,922	85,207	78,015
Investing Activities:			
Capital expenditures	(24,837)	(28,755)	(16,859)
Proceeds from life insurance	2,682	—	—
Loss from the sale of property, plant and equipment, net	—	69	7
Other investing activities	(1,000)	166	(127)
Proceeds from the sale of a business	1,265	—	—
Acquisition of business, net of cash received	(158,407)	—	—
Net cash used in investing activities	(180,297)	(28,520)	(16,979)
Financing Activities:			
Proceeds from long term borrowings	125,000	—	—
Repayment of debt principal and long term lease obligation	(6,641)	(17,797)	(21,206)
Debt issuance costs	(293)	—	—
Repurchases of capital stock	(39,993)	—	—
Proceeds from issuance of capital stock, net	6,967	20,513	32,426
Issuance of restricted stock	(2,740)	(1,542)	(1,297)
Proceeds from issuance of shares to employee stock purchase plan	727	693	734
Net cash provided by financing activities	83,027	1,867	10,657
	(9,441)	(13,063)	5,328

Effect of exchange rate fluctuations on cash			
Net (decrease) increase in cash and cash equivalents	(32,789)	45,491	77,021
Cash and cash equivalents at beginning of year	237,375	191,884	114,863
Cash and cash equivalents at end of year	$204,586	$237,375	$191,884

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

ROGERS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and our wholly owned subsidiaries, after elimination of inter-company accounts and transactions.

For all periods and amounts presented, reclassifications have been made for discontinued operations. In the fourth quarter of 2012, the operations of the non-woven composite materials operating segment (aggregated in Other business) ended and the segment qualified as a discontinued operation. See Note 18, "Discontinued Operations" for further discussion. In 2015, the we changed our method for accounting for certain inventory items from the last in, first out (LIFO) method to the first in, first out (FIFO) method. Adjustments have been made to all periods and amounts presented to appropriately reflect the retrospective application of this accounting change. See the discussion below entitled "Inventories" for further information.

The preparation of financial statements, in conformity with accounting principles generally accepted in the United States, requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Organization

Our reporting structure is comprised of the following operating segments: Advanced Connectivity Solutions (ACS), Elastomeric Material Solutions (EMS) and Power Electronics Solutions (PES). The remaining operations are reported under our Other business.

In 2015, we updated the names of two of our segments to better align with their product portfolios: our “Printed Circuit Materials” segment was renamed to “Advanced Connectivity Solutions,” and our “High Performance Foams” segment was renamed to “Elastomeric Material Solutions.”

- Advanced Connectivity Solutions

Our ACS segment designs, develops, manufactures and sells circuit materials enabling high-performance and high-reliability connectivity for applications including communications infrastructure (e.g., cellular communication antennas and equipment), automotive (e.g., advanced driver assistance systems and global positioning applications), consumer electronics and aerospace/defense. We sell our circuit materials under various tradenames, including RO3000®, RO4000®, RT/duroid®, ULTRALAM®, RO2800®, LoPro®, COOLSPAN® and TMM®. In January 2015, we acquired the Arlon business, and subsequently integrated a portion of the product portfolio into the ACS segment operations and products that expanded the segment’s product portfolio, market reach and customer base, particularly in the RF antenna business.
Our ACS segment has manufacturing and administrative facilities in Chandler, Arizona; Rogers, Connecticut; Bear, Delaware; Evergem, Belgium; and Suzhou, China.

- Elastomeric Material Solutions

Our EMS segment designs, develops, manufactures and sells elastomeric material solutions for critical cushioning, sealing, impact protection and vibration management applications including general industrial, portable electronics (e.g., mobile internet devices), consumer goods (e.g., protective sports equipment), automotive, mass transportation,

construction and printing applications. We sell our elastomeric materials under various trade names, including PORON®, XRD®, BISCO® and eSORBA®. In January 2015, we acquired the Arlon business, and subsequently integrated a portion of the product portfolio into the EMS segment operations and products that expanded the segment's product portfolio, market reach and customer base, particularly in the engineered silicones for sealing and insulation applications.
Our EMS segment has administrative and manufacturing facilities in Woodstock, Connecticut; Rogers, Connecticut; Bear, Delaware; Carol Stream, Illinois; and Suzhou, China. We also own 50% of (1) Rogers Inoac Corporation (RIC), a joint venture that was established in Japan 1989 to design, develop, manufacture and sell PORON products predominantly for the Japanese market and (2) Rogers INOAC Suzhou Corporation (RIS) that was established in China in 2004 to design, develop, manufacture and sell PORON products primarily for RIC customers in China. INOAC Corporation owns the remaining 50% of both RIC and RIS. RIC has manufacturing facilities at INOAC facilities in Nagoya and Mie, Japan, and RIS has manufacturing facilities at Rogers' facilities in Suzhou, China.

- Power Electronics Solutions

Our PES segment designs, develops, manufactures and sells ceramic substrate materials for power module applications (e.g., variable frequency drives, vehicle electrification and renewable energy), laminated bus bars for power inverter and high power interconnect applications (e.g., mass transit, hybrid-electric and electric vehicles, renewable energy and variable frequency drives), and micro-channel coolers (e.g., laser cutting equipment). We sell our ceramic substrate materials and micro channel coolers under the curamik® tradename, and our bus bars under the ROLINX® tradename.

Our PES segment has administrative and manufacturing facilities in Ghent, Belgium; Eschenbach, Germany; Budapest, Hungary; and Suzhou, China.

- Other

Other business consists of elastomeric components for applications in ground transportation, office equipment, consumer and other markets; elastomeric floats for level sensing in fuel tanks, motors, and storage tanks; and inverters for portable communications and automotive markets. The Arlon polyimide and thermoset laminate business, which was sold in December 2015, was also included within our Other businesses in 2015.

Cash Equivalents

Highly liquid investments with original maturities of three months or less are considered cash equivalents. These investments are stated at cost, which approximates fair value.

Investments in Unconsolidated Joint Ventures

We account for our investments in and advances to unconsolidated joint ventures, all of which are 50% owned, using the equity method of accounting.

Foreign Currency

All balance sheet accounts of foreign subsidiaries are translated or remeasured at exchange rates in effect at each year end, and income statement items are translated at the average exchange rates for the year. Resulting translation adjustments for those entities that operate under the local currency are made directly to a separate component of shareholders' equity, while remeasurement adjustments for those entities that operate under the parent's functional currency are made to the income statement as a component of “Other income (expense), net.” Currency transaction gains and losses are reported as income or expense, respectively, in the consolidated statements of operations as a component of "Other income (expense), net." Such adjustments resulted in a gain of $0.3 million in 2015 and a loss of $0.7 million in 2013. There were no material foreign currency transaction gains/losses in 2014.

Allowance for Doubtful Accounts

The allowance for doubtful accounts is determined based on a variety of factors that affect the potential collectability of the related receivables, including the length of time receivables are past due, customer credit ratings, financial stability of customers, specific one-time events and past customer history. In addition, in circumstances where we are made aware of a specific customer's inability to meet its financial obligations, a specific allowance is established. The majority of accounts are individually evaluated on a regular basis and appropriate reserves are established as deemed appropriate based on the criteria previously mentioned. The remainder of the reserve is based on management's estimates and takes into consideration historical trends, market conditions and the composition of our customer base.

Inventories

Inventories are valued at the lower of cost or market. Effective October 1, 2015, the Company changed its method for inventory costing from the last in, first out (LIFO) cost method to the first in, first out (FIFO) cost method for all operations that were using the LIFO cost method. This change in accounting method was deemed preferable because this change causes inventory to be valued on a consistent basis throughout the entire Company and on a more comparable basis with industry peer companies.

This change in accounting method was completed in accordance with Accounting Standards Codification (ASC) 250 Accounting changes and error corrections, and all periods presented have been retrospectively adjusted to reflect the period-specific effects of applying the new accounting principle. The cumulative effect of this change to the new accounting principle, on periods prior to those presented, resulted in an increase in retained earnings of $4.2 million as of December 31, 2012, as presented in this Form 10-K.

The following table summarizes the effect of this accounting change on the Company's consolidated statements of operations for each of the two years ended December 31, 2014 and 2013:

(Dollars in thousands, except per share amounts)	As Originally Reported under LIFO	As Adjusted under FIFO	Effect of Change	
2013				
Cost of Sales	$349,782	$348,945	$(837	)
Income from continuing operations	$37,659	$38,203	$544	
Net income	$37,761	$38,305	$544	
Basic earnings per share	$2.20	$2.23	$0.03	
Diluted earnings per share	$2.13	$2.16	$0.03	
2014				
Cost of Sales	$376,972	$376,158	$(814	)
Income from continuing operations	$52,883	$53,412	$529	
Net income	$52,883	$53,412	$529	
Basic earnings per share	$2.91	$2.94	$0.03	
Diluted earnings per share	$2.83	$2.86	$0.03	

There was no impact on cash provided by operating activities as a result of the above changes.

Inventories consisted of the following:

(Dollars in thousands)	December 31, 2015	December 31, 2014 (1)
Raw materials	$35,499	$29,980
Work-in-process	22,804	18,537
Finished goods	33,521	28,289
Total Inventory	$91,824	$76,806

(1) Inventory amounts have been adjusted for the 2015 conversion from LIFO to FIFO as discussed above.

Property, Plant and Equipment

Property, plant and equipment are stated on the basis of cost. For financial reporting purposes, provisions for depreciation are calculated on a straight line basis over the following estimated useful lives of the underlying assets:

	Years
Buildings and improvements	30-40
Machinery and equipment	5-15
Office equipment	3-10

51

Software Costs

We capitalize certain computer software and software development costs incurred in connection with developing or obtaining computer software for internal use when both the preliminary project stage is completed and it is probable that the software will be used as intended. Capitalized software costs include only (i) external direct costs of materials and services utilized in developing or obtaining computer software, and (ii) compensation and related benefits for employees who are directly associated with the software project. Capitalized software costs are included in property, plant and equipment on our consolidated statement of financial position and amortized on a straight-line basis when placed into service over the estimated useful lives of the software, which approximates three to five years. Net capitalized software and development costs were $6.7 million and $3.4 million for the years ended December 31, 2015 and 2014, respectively. Capitalized software is included within "Property, plant and equipment, net of accumulated depreciation" in the consolidated statements of financial position.

Goodwill and Intangible Assets

Intangible assets are classified into three categories: (1) intangible assets with definite lives subject to amortization; (2) intangible assets with indefinite lives not subject to amortization; and (3) goodwill. We review goodwill, which has an indefinite life, and intangible assets with indefinite lives for impairment annually and/or if events or changes in circumstances indicate the carrying value of an asset may have been impaired. We review intangible assets with definite lives for impairment whenever conditions exist that indicate the carrying value may not be recoverable.

Goodwill and indefinite lived intangible assets are assessed for impairment by comparing the net book value of a reporting unit to its estimated fair value. Fair values are estimated using a discounted cash flow methodology. The determination of discounted cash flows is based on the reporting unit's strategic plans and long-term operating forecasts. The revenue growth rates included in the plans are management's best estimates based on current and forecasted market conditions, and the profit margin assumptions are projected by each segment based on the current cost structure and expected strategic changes to the cost structure.

Purchased or acquired patents, covenants-not-to-compete, customer relationships and licensed technology are capitalized and amortized on a straight-line over their estimated useful lives.

Environmental and Product Liabilities

We accrue for our environmental investigation, remediation, operating and maintenance costs when it is probable that a liability has been incurred and the amount can be reasonably estimated. For environmental matters, the most likely cost to be incurred is accrued based on an evaluation of currently available facts with respect to each individual site, including existing technology, current laws and regulations and prior remediation experience. For sites with multiple potential responsible parties (PRPs), we consider our likely proportionate share of the anticipated remediation costs and the ability of the other parties to fulfill their obligations in establishing a provision for those costs. When no amount within a range of estimates is more likely to occur than another, we accrue to the low end of the range. When future liabilities are determined to be reimbursable by insurance coverage, an accrual is recorded for the potential liability and a receivable is recorded for the estimated insurance reimbursement amount. We are exposed to the uncertain nature inherent in such remediation and the possibility that initial estimates will not reflect the final outcome of a matter.

We periodically perform a formal analysis to determine potential future liability and related insurance coverage for asbestos-related matters. Projecting future asbestos costs is subject to numerous variables that are extremely difficult to predict, including the number of claims that might be received, the type and severity of the disease alleged by each claimant, the long latency period associated with asbestos exposure, dismissal rates, costs of medical treatment, the financial resources of other companies that are co-defendants in claims, uncertainties surrounding the litigation process from jurisdiction to jurisdiction and from case to case, and the impact of potential changes in legislative or judicial standards, including potential tort reform. Furthermore, any predictions with respect to these variables are subject to even greater uncertainty as the projection period lengthens.

The models developed for determining the potential exposure and related insurance coverage were developed by outside consultants deemed to be experts in their respective fields with the forecast for asbestos related liabilities generated by National Economic Research Associates, Inc. (NERA) and the related insurance receivable projections developed by Marsh Risk Consulting (Marsh). The models contain numerous assumptions that significantly impact the results generated by the models. We believe the assumptions made are reasonable at the present time, but are subject to uncertainty based on the actual future outcome of our asbestos litigation. We determined that a ten-year projection period is appropriate as we have experience in addressing asbestos related lawsuits over the last few years to use as a baseline to project the liability over ten years. However, we do not believe we have sufficient data to justify a longer projection period at this time.

Fair Value of Financial Instruments

Management believes that the carrying values of financial instruments, including cash and cash equivalents, short-term investments, accounts receivable, accounts payable and accrued liabilities approximate fair value based on the maturities of these instruments. The fair values of our long-term debt are determined using discounted cash flows based upon the our estimated current interest cost for similar type borrowings or current market value, which falls under Level 2 of the fair value hierarchy. The carrying values of the long-term debt approximate fair market value.

Concentration of Credit and Investment Risk

We extend credit on an uncollateralized basis to almost all customers. Concentration of credit and geographic risk with respect to accounts receivable is limited due to the large number and general dispersion of accounts that constitute our customer base. We routinely perform credit evaluations on our customers. At December 31, 2015 and 2014, there were no customers that individually accounted for more than ten percent of total accounts receivable. We have purchased credit insurance coverage for certain accounts receivable. We did not experience significant credit losses on customers' accounts in 2015, 2014 or 2013.

We are subject to credit and market risk by using derivative instruments. If a counterparty fails to fulfill its performance obligations under a derivative contract, our credit risk will equal the fair value of the derivative instrument. We minimize counterparty credit (or repayment) risk by entering into derivative transactions with major financial institutions with investment grade credit ratings.

We invest excess cash principally in investment grade government securities. We have established guidelines relative to diversification and maturities in order to maintain safety and liquidity. These guidelines are periodically reviewed and modified to reflect changes in market conditions.

Income Taxes

We are subject to income taxes in the U.S. and in numerous foreign jurisdictions. The Company accounts for income taxes following ASC 740 (Accounting for Income Taxes) recognizing deferred tax assets and liabilities using enacted tax rates for the effect of temporary differences between book and tax basis of recorded assets and liabilities. Deferred tax assets are reduced by a valuation allowance if it is more likely than not that some or all of a deferred tax asset will not be realized.

U.S. income taxes have not been provided on $179.1 million of undistributed earnings of foreign subsidiaries since it is the Company’s intention to permanently reinvest such earnings or to distribute them only when it is tax efficient to do so. It is impracticable to estimate the total tax liability, if any, that would be created by the future distribution of these earnings. If circumstances change and it becomes apparent that some, or all of the undistributed earnings as of December 31, 2015 will not be indefinitely reinvested, the provision for the tax consequences, if any, will be recorded in the period when circumstances change. Distributions out of current and future earnings are permissible to fund discretionary activities such as business acquisitions. However, when distributions are made, this could result in a higher effective tax rate.

We record benefits for uncertain tax positions based on an assessment of whether it is more likely than not that the tax positions will be sustained by the taxing authorities. If this threshold is not met, no tax benefit of the uncertain position is recognized. If the threshold is met, we recognize the largest amount of the tax benefit that is greater than fifty percent likely to be realized upon ultimate settlement.

We recognize interest and penalties within the income tax expense line in the accompanying consolidated statements of operations. Accrued interest and penalties are included within the related tax liability line in the consolidated statements of financial position.

Revenue Recognition

We recognize revenue when all of the following criteria are met: (1) we have entered into a binding agreement, (2) the product has shipped and title and risk of ownership have passed, (3) the sales price to the customer is fixed or determinable, and (4) collectability is reasonably assured. We consider that the criteria for revenue recognition have been met upon shipment of the finished product, based on the majority of our shipping terms. Some shipping terms require the goods to be through customs or be received by the customer before title passes. In those instances, revenue is not recognized until either the customer has received the goods or they have passed through customs, depending on the circumstances. As appropriate, we record estimated reductions to revenue for customer returns and allowances and warranty claims. Provisions for such allowances are made at the time of sale and are typically derived from historical trends and other relevant information.

Shipping and Handling Charges

Costs that we incur for shipping and handling charges are charged to “Cost of sales” and payments received from our customers for shipping and handling charges are included in “Net sales” on our consolidated statements of operations.

Pension and Retiree Health Care and Life Insurance Benefits

We provide various defined benefit pension plans for our U.S. employees and we sponsor multiple fully insured or self-funded medical plans and fully insured life insurance plans for retirees. In 2013, the defined benefit pension plans were frozen, so that future benefits no longer accrue. The costs and obligations associated with these plans are dependent upon various actuarial assumptions used in calculating such amounts. These assumptions include discount rates, long-term rate of return on plan assets, mortality rates, and other factors. The assumptions used in these models are determined as follows: (i) the discount rate used is based on the PruCurve index; (ii) the long-term rate of return on plan assets is determined based on historical portfolio results, market results and our expectations of future returns, as well as current market assumptions related to long-term return rates; and (iii) the mortality rate is based on a mortality projection that estimates current longevity rates and their impact on the long-term plan obligations. We review these assumptions periodically throughout the year and update as necessary.

Earnings Per Share

The following table sets forth the computation of basic and diluted earnings per share:

(In thousands, except per share amounts)	2015	2014	2013
Numerator:			
Net income from continuing operations	$46,320	$53,412	$38,203
Denominator:			
Weighted-average shares outstanding - basic	18,371	18,177	17,198
Effect of dilutive shares	309	521	570
Weighted-average shares outstanding - diluted	18,680	18,698	17,768
Basic income from continuing operations per share:	$2.52	$2.94	$2.22
Diluted income from continuing operations per share:	$2.48	$2.86	$2.15

Certain potential options to purchase shares were excluded from the calculation of diluted weighted-average shares outstanding because the exercise price was greater than the average market price of our capital stock during the year. For 2015, 44,350 shares were excluded. No shares were excluded in 2014 or 2013.

Hedging Activity

We use derivative instruments to manage commodity, interest rate and foreign currency exposures. Derivative instruments are viewed as risk management tools and are not used for trading or speculative purposes. To qualify for hedge accounting treatment, derivatives used for hedging purposes must be designated and deemed effective as a hedge of the identified underlying risk exposure at the inception of the contract. Accordingly, changes in fair value of the derivative contract must be highly correlated with changes in the fair value of the underlying hedged item at inception of the hedge and over the life of the hedge contract.

Derivatives used to hedge forecasted cash flows associated with foreign currency commitments or forecasted commodity purchases are accounted for as cash flow hedges. For those derivative instruments that qualify for hedge accounting treatment, gains and losses are recorded in other comprehensive income and reclassified to earnings in a manner that matches the timing of the earnings impact of the hedged transactions. The ineffective portion of all hedges, if any, is recognized currently in earnings. For those derivative instruments that do not qualify for hedge accounting treatment, any related gains and losses are recognized in the consolidated statements of operations as a component of "Other income (expense), net."

Advertising Costs

Advertising is expensed as incurred and amounted to $3.2 million for 2015, $3.3 million for 2014 and $2.9 million for 2013.

Equity Compensation

Stock-based compensation is comprised of stock options and restricted stock. Stock options are measured at the grant date, based on the grant-date fair value of the awards ultimately expected to vest and, in most cases, is recognized as an expense on a straight-line basis over the vesting period, which is typically four years. A provision in our stock option agreements requires us to accelerate the expense for retirement eligible employees, as any unvested options would immediately vest upon retirement for such employees. We develop estimates used in calculating the grant-date fair value of stock options to determine the amount of stock-based compensation to be recorded. We calculate the grant-date fair value using the Black-Scholes valuation model. The use of this valuation model requires estimates of assumptions such as expected volatility, expected term, risk-free interest rate, expected dividend yield and forfeiture rates.

Performance-based restricted stock compensation expense is based on achievement of certain performance and service conditions. The fair value of the awards is determined based on the market value of the underlying stock price at the grant date and marked to market over the vesting period based on probabilities and projections of the underlying performance measures.

Time-based restricted stock compensation awards are expensed over the vesting period, which is typically three years. The fair value of the awards is determined based on the market value of the underlying stock price at the grant date.

NOTE 2 – FAIR VALUE MEASUREMENTS

The accounting guidance for fair value measurements establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value.

- Level 1 – Quoted prices in active markets for identical assets or liabilities.
- Level 2 – Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

From time to time we enter into various instruments that require fair value measurement, including foreign currency contracts, interest rate swaps and copper derivative contracts. Assets measured at fair value on a recurring basis, categorized by the level of inputs used in the valuation, include:

(Dollars in thousands)	Carrying amount as of December 31, 2015	Level 1	Level 2	Level 3
Foreign currency contracts	$(78)	$—	$(78)	$—
Copper derivative contracts	$193	$—	$193	$—
Interest rate swap	$(18)	$—	$(18)	$—

(Dollars in thousands)	Carrying amount as of December 31, 2014	Level 1	Level 2	Level 3
Foreign currency contracts	$(18)	$—	$(18)	$—
Copper derivative contracts	$355	$—	$355	$—
Interest rate swap	$(144)	$—	$(144)	$—

55

The following table presents information about our assets and liabilities measured at fair value on a non-recurring basis as of December 31, 2015, aggregated by the level in the fair value hierarchy within which those measurements fall. This Level 3 asset represents the investment in BrightVolt, Inc. (formerly known as Solicore, Inc.) The valuation is based on our evaluation of BrightVolt's financial performance through December 31, 2015 and the most recent round of capital financing that was initiated in the first quarter of 2015. See Note 9, "Investment" for further details.

(Dollars in thousands)	Carrying amount as of December 31, 2015	Level 1	Level 2	Level 3
BrightVolt investment	$341	$—	$—	$341

There were no changes in the fair value of the BrightVolt investment Level 3 asset for the year ended December 31, 2015.

Derivatives Contracts

We are exposed to certain risks relating to our ongoing business operations. The primary risks being managed through the use of derivative instruments are interest rate risk, foreign currency exchange rate risk and commodity pricing risk (particularly related to copper).

Foreign Currency - The fair value of any foreign currency option derivatives is based upon valuation models applied to current market information such as strike price, spot rate, maturity date and volatility, and by reference to market values resulting from an over-the-counter market or obtaining market data for similar instruments with similar characteristics.

Commodity (Copper) - The fair value of copper derivatives is computed using a combination of intrinsic and time value valuation models. The intrinsic valuation model reflects the difference between the strike price of the underlying copper derivative instrument and the current prevailing copper prices in an over-the-counter market at period end. The time value valuation model incorporates the constant changes in the price of the underlying copper derivative instrument, the time value of money, the underlying copper derivative instrument's strike price and the remaining time to the underlying copper derivative instrument's expiration date from the period end date. Overall, fair value is a function of five primary variables: price of the underlying instrument, time to expiration, strike price, interest rate, and volatility.

Interest Rates - The fair value of our interest rate swap instruments is derived by comparing the present value of the interest rate forward curve against the present value of the swap rate, relative to the notional amount of the swap. The net value represents the estimated amount we would receive or pay to terminate the agreements. Settlement amounts for an "in the money" swap would be adjusted down to compensate the counterparty for cost of funds, and the adjustment is directly related to the counterparty's credit ratings.

We do not use derivative financial instruments for trading or speculation purposes.

For further discussion on our derivative contracts, see Note 3, "Hedging Transactions and Derivative Financial Instruments."

NOTE 3 – HEDGING TRANSACTIONS AND DERIVATIVE FINANCIAL INSTRUMENTS

The guidance for the accounting and disclosure of derivatives and hedging transactions requires companies to recognize all of their derivative instruments as either assets or liabilities at fair value in the consolidated statements of financial position. The accounting for changes in the fair value (i.e., gains or losses) of a derivative instrument depends on whether it has been designated and qualifies for hedge accounting treatment as defined under the applicable accounting guidance. For derivative instruments that are designated and qualify for hedge accounting treatment (i.e., hedging the exposure to variability in expected future cash flows that is attributable to a particular risk), the effective portion of the gain or loss on the derivative instrument is reported as a component of other comprehensive income (loss). This gain or loss is reclassified into earnings in the same line item of the consolidated statements of operations associated with the forecasted transaction and in the same period or periods during which the hedged transaction affects earnings. The remaining gain or loss on the derivative instrument in excess of the cumulative change in the present value of the future cash flows of the hedged item (i.e., the ineffective portion) if any, is recognized in the earnings during the current period. There was no material ineffectiveness for the year ended December 31, 2015, 2014 or 2013.

As of December 31, 2015, we have twenty-four outstanding contracts to hedge our exposure related to the purchase of copper by our Power Electronics Solutions and Advanced Connectivity Solutions operating segments. These contracts are held with financial institutions and minimize our risk associated with a potential rise in copper prices. These contracts cover the 2016 and 2017 monthly

copper exposure and do not qualify for hedge accounting treatment; therefore, any mark-to-market adjustments required on these contracts are recorded in the "Other income, net" line item in our consolidated statements of operations.
In 2015, we entered into Euro, Japanese Yen, U.S Dollar, South Korean Won, Great Britain Pound and Chinese Yuan currency forward contracts. We entered into these foreign currency forward contracts to mitigate certain global balance sheet exposures. Mark-to-market adjustments required on the contracts that do not qualify for hedge accounting treatment are recorded in the "Other income, net" line item in our consolidated statements of operations.
We have an interest rate swap to hedge the variable interest rate on our term loan debt. As of December 31, 2015, the remaining notional amount of the interest rate swap covers $16.2 million of our term loan debt. This transaction has been designated as a cash flow hedge and qualifies for hedge accounting treatment.

Notional Value of Copper Derivatives	
January 2016- March 2016	150 metric tons per month
April 2016 - June 2016	130 metric tons per month
July 2016 - September 2016	127 metric tons per month
October 2016 - December 2016	117 metric tons per month
January 2017 - March 2017	16 metric tons per month

Notional Values of Foreign Currency Derivatives	
YEN/USD	¥155,000,000
USD/KRW	7,580,028,000
CNY/EUR	¥14,000,000
EUR/GBP	€408,291
CNY/USD	¥45,000,000
USD/EUR	$400,000
YEN/EUR	¥160,000,000
EUR/CNH	€363,029

(Dollars in thousands)	The Effect of Current Derivative Instruments on the Financial Statements for the year ended December 31, 2015		Fair Values of Derivative Instruments as of December 31, 2015
Foreign Exchange Contracts	Location of gain (loss)	Amount of gain (loss)	Other Assets (Liabilities)
Contracts not designated as hedging instruments	Other income (expense), net	$(78)	$(78)
Copper Derivative Instruments			
Contracts not designated as hedging instruments	Other income (expense), net	(666)	193
Interest Rate Swap Instrument			
Contracts designated as hedging instruments	Other comprehensive income (loss)	126	(18)

(Dollars in thousands)	The Effect of Current Derivative Instruments on the Financial Statements for the year ended December	Fair Values of Derivative

Foreign Exchange Contracts	31, 2014 Location of gain (loss)	Amount of gain (loss)	Instruments as of December 31, 2014 Other Assets (Liabilities)
Contracts not designated as hedging instruments	Other income (expense), net	$(18)	$(18)
Copper Derivative Instruments			
Contracts not designated as hedging instruments	Other income (expense), net	(605)	355
Interest Rate Swap Instrument			
Contracts designated as hedging instruments	Other comprehensive income (loss)	152	(144)

57

NOTE 4 - ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)
The changes in accumulated other comprehensive income (loss) by component for the year ended December 31, 2015 were as follows:

(Dollars in thousands)	Foreign currency translation adjustments	Funded status of pension plans and other postretirement benefits (1)	Unrealized gain (loss) on derivative instruments (2)	Total
Beginning Balance December 31, 2014	$(14,193)	$(50,808)	$(93)	$(65,094)
Other comprehensive income before reclassifications	(27,172)	—	(2)	(27,174)
Actuarial net gain (loss) incurred in the fiscal year	—	2,760	—	2,760
Amounts reclassified from accumulated other comprehensive income	—	966	84	1,050
Net current-period other comprehensive income	(27,172)	3,726	82	(23,364)
Ending Balance December 31, 2015	$(41,365)	$(47,082)	$(11)	$(88,458)

(1) Net of taxes of $9,879 and $11,952 for the periods ended December 31, 2015 and December 31, 2014, respectively.
(2) Net of taxes of $5 and $50 for the periods ended December 31, 2015 and December 31, 2014, respectively.
The changes in accumulated other comprehensive income (loss) by component for the year ended December 31, 2014 were as follows:

(Dollars in thousands)	Foreign currency translation adjustments	Funded status of pension plans and other postretirement benefits (3)	Unrealized gain (loss) on derivative instruments (4)	Total
Beginning Balance December 31, 2013	$22,756	$(33,997)	$(209)	$(11,450)
Other comprehensive income before reclassifications	(36,949)	—	(93)	(37,042)
Actuarial net gain (loss) incurred in the fiscal year	—	(20,715)	—	(20,715)
Amounts reclassified from accumulated other comprehensive income	—	3,904	209	4,113
Net current-period other comprehensive income	(36,949)	(16,811)	116	(53,644)
Ending Balance December 31, 2014	$(14,193)	$(50,808)	$(93)	$(65,094)

(3) Net of taxes of $11,952 and $2,900 for the periods ended December 31, 2014 and December 31, 2013, respectively.
(4) Net of taxes of $50 and $110 for the periods ended December 31, 2014 and December 31, 2013, respectively.

The reclassifications out of accumulated other comprehensive income (loss) for the year ended December 31, 2015 were as follows:

Details about accumulated other comprehensive income components	Amounts reclassified from accumulated other comprehensive income (loss) for the period ended December 31, 2015		Affected line item in the statement where net income is presented
Unrealized gains and losses on derivative instruments:			
	$129		Other income (expense), net
	(45	)	Tax benefit (expense)
	$84		Net of tax
Amortization of defined benefit pension and other post-retirement benefit items:			
Actuarial losses	$1,486		Total before tax (5)
	(520	)	Tax benefit (expense)
	$966		Net of tax

(5) These accumulated other comprehensive income components are included in the computation of net periodic pension cost. See Note 10 - "Pension Benefits and Retirement Health and Life Insurance Benefits" for additional details.

The reclassifications out of accumulated other comprehensive income (loss) for the year ended December 31, 2014 were as follows:

Details about accumulated other comprehensive income components	Amounts reclassified from accumulated other comprehensive income (loss) for the period ended December 31, 2014		Affected line item in the statement where net income is presented
Unrealized gains and losses on derivative instruments:			
	$321		Realized gain (loss)
	(112	)	Tax benefit (expense)
	$209		Net of tax
Amortization of defined benefit pension and other post-retirement benefit items:			
Actuarial losses	$6,006		(6) Total before tax
	(2,102	)	Tax benefit (expense)
	$3,904		Net of tax

(6) These accumulated other comprehensive income components are included in the computation of net periodic pension cost. See Note 10 - "Pension Benefits and Other Postretirement Benefit Plans" for additional details.

NOTE 5 - ACQUISITION

On January 22, 2015, we completed the acquisition of Arlon and its subsidiaries, other than Arlon India (Pvt) Limited (collectively, “Arlon”), pursuant to the terms of the Stock Purchase Agreement, dated December 18, 2014, by and among the Company, Handy & Harman Group, Ltd. (“H&H Group”) and its subsidiary Bairnco Corporation (“Bairnco”), as amended, (the “Purchase Agreement”).

Pursuant to the terms of the Purchase Agreement, we acquired Arlon and assumed certain liabilities related to the acquisition for an aggregate purchase price of approximately $157 million. We used borrowings of $125.0 million under our bank credit facility in addition to cash on hand to fund the acquisition.

Arlon manufactures high performance materials for the printed circuit board industry and silicone rubber-based materials. The acquisition of Arlon and its integration into our operating segments is expected to provide increased scale and complementary product offerings, allowing us to enhance our ability to support our customers.

The acquisition has been accounted for in accordance with applicable purchase accounting guidance. We recorded goodwill, primarily related to the expected synergies from combining operations and the value of the existing workforce. We also recorded intangible assets related to trademarks, technology and customer relationships. As of the filing date of this Form 10-K, the process of valuing the net assets of the business is complete. The following table represents the fair market values assigned to the acquired assets and liabilities in the transaction:

(Dollars in thousands)	January 22, 2015
Assets:	
Cash	$ 142
Accounts receivable	17,301
Other current assets	856
Inventory	9,916
Deferred income tax assets, current	1,084
Property, plant & equipment	30,667
Intangible assets	50,020
Goodwill	85,803
Other long-term assets	106
Total assets	195,895
Liabilities:	
Accounts payable	4,958
Other current liabilities	4,385
Deferred tax liability	23,463
Other long-term liabilities	4,540
Total liabilities	37,346
Fair value of net assets acquired	$ 158,549

The intangible assets consist of developed technology valued at $15.8 million, customer relationships valued at $32.7 million and trademarks valued at $1.6 million. The fair value of acquired identified intangible assets was determined by applying the income approach, using several significant unobservable inputs for projected cash flows and a discount rate. These inputs are considered Level 3 under the fair value measurements and disclosure guidance.

The weighted average amortization period for the intangible asset classes are 5.7 years for developed technology, 6.0 years for customer relationships and 3.2 years for trademarks, resulting in amortization expenses ranging from $1.8 million to $5.8 million annually. The estimated annual future amortization expense is $5.8 million for each of the years ending 2016, 2017, 2018 and 2019.

During 2015, we incurred transaction costs of $1.5 million, which were recorded within selling, general and administrative expenses on the consolidated statements of operations.

The results of Arlon have been included in our consolidated financial statements only for the period subsequent to the completion of our acquisition. Arlon's revenues for the year ended December 31, 2015 totaled $100.0 million. Arlon's net operating income for the year ended December 31, 2015 totaled $24.7 million.

The following unaudited pro forma financial information presents the combined results of operations of Rogers and Arlon for the year and quarter ended December 31, 2014, as if the acquisition had occurred on January 1, 2014. The unaudited pro forma financial information is not intended to represent or be indicative of our consolidated results of operations that would have been reported had the Arlon acquisition been completed as of January 1, 2014 and should not be taken as indicative of our future consolidated results of operations.

	December 31, 2014	
(Dollars in thousands)	Year ended	Quarter ended
Net sales	$714,303	$173,633
Net income	$63,751	$8,814

On December 21, 2015 we sold an Arlon business, which makes polyimide and thermoset epoxy laminate products. This operation was acquired as part of our acquisition of Arlon. The operations were previously reported with our Other business. We received proceeds of $1.3 million and recognized a loss of $4.8 million, which was recorded in "Other income (expense), net" within the consolidated statements of operations. The assets of this business were reported as assets held for sale in the third quarter of 2015.

NOTE 6 - PROPERTY, PLANT AND EQUIPMENT

(Dollars in thousands)	December 31, 2015	December 31, 2014
Land	$16,726	$