valmont

Conserving Resources. Improving Life.

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2016

MESSAGE TO FELLOW SHAREHOLDERS

FORM 10-K

MESSAGE
TO FELLOW SHAREHOLDERS

2016 was a year of improved performance in difficult markets. While revenue growth was impeded by the continued cyclical weakness in a number of our markets, adjusted earnings per share grew 14 percent, (and 346 percent on a GAAP basis).

Numerous headwinds were specific to our end markets: Lower farm income led to reduced revenues in our irrigation business. Governments around the world continue to limit investments in infrastructure, and a strong U.S. dollar resulted in unfavorable foreign currency translation. In addition, volatile steel prices affected most of our businesses, creating challenges in product pricing and inventory management. Despite these difficulties, we had many bright spots as our teams around the world continued to lower costs, identify new market opportunities, introduce new products and generate demand in this environment.

We met all but one of our financial goals outlined at our Investor Day in February, 2016. Adjusted earnings per share grew 14 percent, return on invested capital achieved our 10 percent goal, and our free cash flow exceeded adjusted net earnings. While we missed meeting our revenue growth goal, we finished the year with revenue growth in the fourth quarter.

While our markets and businesses are cyclical, it is important to keep in mind the strong long-term drivers: in our irrigation business, there will be an ever-present need to improve food production to feed a growing population while making efficient use of scarce fresh water resources. In our infrastructure businesses, in order to develop, grow and maintain economies, good roadway, wireless communication and power transmission and distribution infrastructure is critical. These are powerful secular drivers.

Annual Segment Performance Update:

Engineered Support Structures: This segment saw increased sales and improved profitability supported by a lower cost structure. In North America, U.S. lighting and traffic results were positive. Non-residential construction spending provided growth partly through our strong relationships with lighting fixture manufacturers. While the passage of a five-year federal highway bill should help our lighting business in the U.S., the effects on 2016 were not significant. Wireless communication product sales were modestly lower in North America, but strong in China and Australia, as those countries continue to build out their 4G networks. Europe remains a tough market overall, although there were pockets of strength in certain geographic areas.

Utility Support Structures: This segment experienced lower sales, mostly due to decreased selling prices tied to lower steel costs. Volumes in our primary market in North America improved. Cost reductions and increased manufacturing productivity led to increased profitability. We delivered on our commitment to improve the quality of earnings by 200 basis points in 2016 compared to 2015. Market demand improved throughout the year and we enter 2017 optimistic about growth in sales and profitability.

Energy and Mining: Our primary market for products serving the mining industry in Australia remains stagnant. Low oil prices have resulted in reduced investment in oil and natural gas exploration, pressuring our offshore oil and access systems businesses. A bright spot has been the demand for offshore wind energy support structures and rotor housings for turbines. Our focus in this segment is to leverage our unique engineering and manufacturing capabilities to further penetrate new markets that are less dependent on energy prices.

Coatings: In this segment, our North American business performed well in the first half of the year, before a slowdown in general fabrication, solar and agricultural markets hampered volume and profitability in the second half. Late in the year, we opened a new plant in Texas to serve our internal needs and local market demand. Operations in the Asia-Pacific region have also been affected by a slowdown in energy end-markets in Southeast Asia and the weaker Australian economy. Hot-dipped galvanizing continues to be the best way to protect steel from corrosion and extend the longevity and value of products we coat for our customers and ourselves.

Irrigation: This segment continued to face weakness in North America due to declining net farm income as commodity prices remained low. Our international business on the other hand delivered improved revenues in 2016. Our international organization has been built over many years and has proven to be an important competitive advantage in our global irrigation business. Despite lower sales, quality of earnings remains strong, with operating margins in the mid-teens,

VALMONT'S **VISION**

Valmont is recognized throughout the world as an industry leader in **engineered products** and **services for infrastructure,** and **water conserving irrigation equipment** for agriculture. We grow our businesses by **leveraging our existing products, markets and processes.** We recognize that our growth will only create shareholder value if, at the same time, **we exceed our cost of capital.** Essential to our success is a company-wide **commitment to customer service and innovation,** and the ability to be the **best cost producer** for all products and services we provide. Recognizing that **our employees are the cornerstone of our accomplishments,** we pride ourselves on being **people of passion and integrity who excel and deliver results.**

highlighting the team's ability to operate efficiently even in the face of headwinds. Going forward, for this business to improve significantly in the short-term, there either needs to be an increase in end-market demand, or crop production problems in one or more major markets.

During the last two years, we have been acutely focused on rationalizing our footprint, driving out costs and improving productivity. These efforts throughout our organization have helped improve our cost structure and competitiveness in a significant way and position us well for when markets improve. Importantly, we were pleased to see a continued improvement in our safety performance, which is a key priority for us.

As we look to the future, I am enthusiastic about the appointment of Steve Kaniewski to the role of President and Chief Operating Officer. The board created this position as an important step in our succession planning. Steve is a seasoned executive with broad experience at Valmont, both at corporate and in two business segments.

While we will continue to pursue lean initiatives, we will sharpen our focus on sales and marketing efforts to increase revenue going forward by finding new geographies, untapped markets and innovative products to increase our value to our customers. We will also step up our merger and acquisition activities, while remaining disciplined and true to our approach of leveraging markets, products and geographies and growing shareholder value through a focus on return on invested capital. Though we do not anticipate major improvements in end markets in 2017, we do expect revenue and earnings growth and to meet our financial goals.

Thank you for your continued support. I look forward to updating you on our progress in 2017.

Mogens c. Bay

Mogens C. Bay
Chairman and Chief Executive Officer

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

Form 10-K

(Mark One)

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

For the fiscal year ended December 31, 2016

or

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

For the transition period from to

Commission file number 1-31429

Valmont Industries, Inc.
(Exact name of registrant as specified in its charter)

Delaware (State or Other Jurisdiction of Incorporation or Organization)	**47-0351813** (I.R.S. Employer Identification No.)
One Valmont Plaza, Omaha, Nebraska (Address of Principal Executive Offices)	**68154-5215** (Zip Code)

(402) 963-1000
(Registrant's telephone number, including area code)

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

Title of each class	Name of exchange on which registered
Common Stock $1.00 par value	New York Stock Exchange

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

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

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

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

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

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

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

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

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

At February 21, 2017 there were 22,521,423 of the Company's common shares outstanding. The aggregate market value of the voting stock held by non-affiliates of the Company based on the closing sale price the common shares as reported on the New York Stock Exchange on June 25, 2016 was $2,917,069,089.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Company's proxy statement for its annual meeting of shareholders to be held on April 25, 2017 (the "Proxy Statement"), to be filed within 120 days of the fiscal year ended December 31, 2016, are incorporated by reference in Part III.

This Introduction of the 10-K is a summary of Valmont Industries, Inc. It does not contain all of the information you should consider. Please read the entire 10-K carefully before voting or making an investment decision. In particular please refer to the following sections:

Item 1 Business

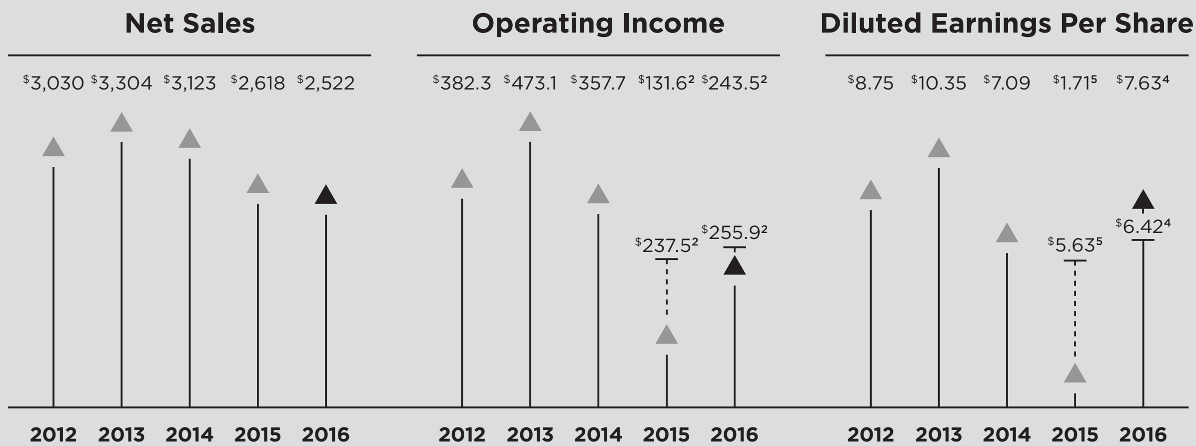
Item 6 Selected Financial Data

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

Item 8 Financial Statements and Supplementary Data

Note, this introduction does not contain Part III information as most of the information will be incorporated by reference from our proxy statement to be filed for the annual shareholders meeting on April 25, 2017.

FINANCIAL **HIGHLIGHTS**



Dollars in millions, except per share amounts

OPERATING RESULTS	**2016**	**2015**	**2014**
Net sales	$ 2,521.7	$ 2,618.9	$ 3,123.1
Operating income[2]	243.5	131.7	357.7
Net earnings[1,4,5]	173.2	40.1	184.0
Diluted earnings per share[4,5]	7.63	1.71	7.09
Dividends per share	1.50	1.50	1.375
FINANCIAL POSITION			
Total shareholders' equity	$ 982.8	$ 965.2	$ 1,250.4
Invested capital[3]	1,774.8	1,759.9	2,096.3
OPERATING PROFITS			
Gross profit as a % of net sales	26.0%	23.7%	25.9%
Operating income as a % of net sales	9.7%	5.0%	11.5%
Net earnings as a % of net sales[1,3]	6.9%	1.5%	5.9%
Return on beginning equity	18.9%	3.3%	12.1%
Return on invested capital[3]	9.5%	4.6%	11.3%
YEAR-END DATA			
Shares outstanding (000)	22,521	22,857	24,229
Approximate number of shareholders	3,500	3,000	2,500
Number of employees	10,552	10,697	11,321

1 Net earnings attributable to Valmont Industries, Inc.
2 Fiscal 2016 GAAP operating income included restructuring expense of $12.4 million (pre-tax). On an adjusted basis, operating income was $255.9 million. Fiscal 2015 GAAP operating income included intangible asset impairments of $42.0 million (pre-tax), restructuring expense of $39.9 million (pre-tax), and other non-recurring expenses of $24.0 million pre-tax on an adjusted basis, operating income was $237.5 million.
3 See Item 6, Selected Financial Data, in this Form 10-K for calculation of invested capital and return on invested capital.
4 Fiscal 2016 included deferred income tax benefit of $30.6 million ($1.35 per share) resulting primarily from the re-measurement of the deferred tax asset for the Company's U.K. defined benefit pension plan. In addition, fiscal 2016 included $9.9 million ($0.44 per share) recorded as a valuation allowance against a tax credit asset. Finally, fiscal 2016 included the reversal of a contingent liability that was recognized as part of the Delta purchase accounting of $16.6 million ($0.73 per share) which is not taxable.
5 Fiscal 2015 included intangible asset impairment of $40.1 million after tax ($1.72 per share), restructuring expense of $28.2 million after tax ($1.20 per share), other non-recurring expenses of $16.3 million after tax ($0.69 per share) and deferred tax expense of $7.1 million ($0.31 per share) due to a change in the U.K. tax rate. Fiscal 2014 included costs associated with refinancing of our long-term debt of $24.2 million after tax ($0.93 per share), and mark-to-market loss of $3.8 million after tax on shares of Delta Pty. Ltd. ($0.15 per share).

For more information on the footnotes above and the reasons why we believe the non-GAAP measures are useful, please see Item 6, Item 7 and Item 8.

VALMONT AT A GLANCE

Valmont competes in the global industries for infrastructure and agriculture through five primary business segments: **Engineered Support Structures, Utility Support Structures, Coatings, Energy and Mining, and Irrigation.**

Engineered Support Structures

We design, engineer, manufacture and supply essential infrastructure products for wireless communications, street, highways and commercial construction applications. In doing so, we support global infrastructure investment to enhance economic growth.

- **Steel, aluminum, composite and wood poles for lighting, traffic and signage**
- **Steel structures and components for wireless communications**
- **Highway safety products for road infrastructure**

Utility Support Structures

We provide the utility industry with highly engineered structures that support new generating capacity, including renewable energy sources, and upgrades to aging transmission grids.

- **Steel, concrete and hybrid structures for high-voltage electric power transmission, substations and distribution**

Coatings

Our high-performing coatings protect investments in infrastructure by preventing corrosion and extending the lifetimes of metal products across numerous end markets.

- **Hot-dip galvanizing and high-performing alternatives, including anodizing, powder coating, e-coating and other finishes**

Energy and Mining

We engineer and manufacture a number of products primarily serving the energy, mining, infrastructure and industrial markets. We also manufacture grinding media used in mining extraction.

- **Engineered access systems and perforated metal that allow people to effectively move through an industrial complex**
- **Towers and components for the wind energy industry and related products and services**
- **Grinding media for mining operations**

Irrigation

Through our efficient mechanized irrigation equipment, we help producers feed growing populations and support demand for biofuels, while making efficient use of the world's limited freshwater supply.

- **Center pivot, linear move and corner irrigation equipment**
- **Pivot tracking and water application control technology**
- **Tubular products for agriculture and industry**

Competitive Strengths

- We hold leadership positions in most of our major markets.
- We believe we are the leading competitor in fragmented industries.
- We are a global player with international revenues representing 61% of sales in 2016.

Our long term financial goals

- Grow revenue between 5-10% through growth in our existing businesses and by acquisition
- Grow earnings per-share more than 10%
- After-tax return on invested capital greater than 10%
- Free cash flow equals or exceeds net earnings

Our capital allocation philosophy is based on three priorities:

- Support the growth and operations of our existing businesses through working capital and capital investment
- Pursue acquisitions that leverage with our businesses or competencies and show clear path to exceeding our cost of capital within 2 to 3 years
- Return money to shareholders through dividends or opportunistic share repurchases

Value Creation

We believe shareholder value is created when our after-tax returns grow over time and exceed our cost of capital. We believe stock prices are correlated with value creation. We call our measure of value creation TVI (Total Value Impact), which is calculated as follows:

Net Operating Profit After-Tax – Cost of Capital = TVI

BOARD
OF DIRECTORS

Mogens C. Bay
Chairman and
Chief Executive Officer
Valmont Industries, Inc.
Director Since 1993

Kaj den Daas
Retired Executive Vice President
Phillips Lighting B.V.
of the Netherlands
Director Since 2004

Dr. Theo W. Freye
Retired Chairman
CLAAS KgaA
Director Since 2015

James B. Milliken
Chancellor
City University of New York
Director Since 2011

Daniel P. Neary
Chairman and Retired
Chief Executive Officer
Mutual of Omaha
Director Since 2005

Catherine J. Paglia
Director
Enterprise Asset Management
Director Since 2012

Ambassador
Clark T. Randt, Jr.
Former U.S. Ambassador
to the People's Republic of China
Director Since 2009

Walter Scott, Jr.
Retired Chairman
Peter Kiewit Sons, Inc.
Director Since 1981

Kenneth E. Stinson
Lead Director
Chairman Emeritus
Peter Kiewit Sons', Inc.
Director Since 1996

Audit
Committee
Walter Scott, Jr. (Chairman)
Kaj den Daas
Daniel P. Neary
Catherine J. Paglia

Human Resources
Committee
Daniel P. Neary (Chairman)
Catherine J. Paglia
Kenneth E. Stinson

Governance and
Nominating Committee
Clark T. Randt, Jr. (Chairman)
Dr. Theo W. Freye
James B. Milliken

CORPORATE & BUSINESS UNIT **MANAGEMENT**

Corporate Management

Mogens C. Bay
Chairman
& Chief Executive Officer

Stephen G. Kaniewski
President
& Chief Operating Officer

Mark C. Jaksich
Executive Vice President
& Chief Financial Officer

Vanessa K. Brown
Senior Vice President
Human Resources

Douglas M. Bryson
Senior Vice President
Steel Operations

Ellen S. Dasher
Vice President
Global Taxation

Timothy P. Francis
Vice President
& Corporate Controller

John A. Kehoe
Vice President
Information Technology

R. Andrew Massey
Vice President
Legal & Compliance

Darrel G. Moreland
Vice President
& Head of Audit

Business Unit Management

Engineered Support Structures

David M. LeBlanc
Group President
International

Barry A. Ruffalo
Group President
North America

Viswanath Devarajan
Managing Director
India

Gary P. King
Vice President
& General Manager
U.S. Lighting & Traffic

Stephen B. LeGrand
Vice President
Strategy Deployment

Casey L. Meyer
Vice President
& Group Controller

Jason Palumbis
Vice President
Sales & Marketing
Lighting, Traffic
& Communication
Structures

T. Mitchell Parnell
Vice President
Human Resources

Piet Stevens
Vice President
& General Manager
Europe, Middle East
& Africa

Jerry Wang
Managing Director
Structures, China

Dan Witt
Vice President
Agent Sales U.S.
Lighting & Traffic
& General Manager
MATCO

Utility Support Structures

Aaron M. Schapper
Group President

Michael Banat
Vice President
& General Manager
International Utility

James Christopher Colwell
Vice President
Strategy & Commerce

Timothy L. Kennedy
Vice President
Human Resources

Karen C. Potts
Vice President
Group Legal Counsel

Larry E. Price
Vice President
& Group Controller

John L. Schweitz
Vice President
Business Development

Irrigation

Leonard M. Adams
Group President

Joshua M. Dixon
Vice President
& General Manager
International Irrigation

Robert M. Gillen
Vice President
Operations

Robert J. Ludvik
Vice President
& Group Controller

Matt T. Ondrejko
Vice President
Global Marketing

Richard J. Panowicz
Vice President Sales
North American Sales

Coatings

Richard S. Cornish
Group President

Kevin C. Halstead
Vice President
Global Engineering

Pete Smith
Vice President
& General Manager
North American
Galvanizing

Energy and Mining

Barry A. Ruffalo
Group President

Jens Holk Nielsen
Chief Executive Officer
Valmont SM A/S

Paul Shelley
Managing Director
Donhad Pty Ltd

Ed Sill
Region President
Australia/New Zealand
and Managing Director
Access Systems

David Wong
Managing Director
Asia

CORPORATE & STOCK INFORMATION

Corporate Headquarters

Valmont Industries, Inc.
One Valmont Plaza
Omaha, Nebraska 68154-5215 USA
Tel 1-402-963-1000
Fax 1-402-963-1198
Online www.valmont.com

Independent Registered Public Accounting Firm

Deloitte & Touche LLP
Omaha, Nebraska USA

Legal Counsel

McGrath North Mullin & Kratz, PC LLO
Omaha, Nebraska USA

Stock Transfer Agent and Registrar Address Shareholder Inquiries to:

Broadridge Corporate Issuer Solutions, Inc.
P.O. Box 1342
Brentwood, NY 11717
1-844-202-5345 or 1-720-414-6878

Send Certificates for Transfer and Address Changes to:

Broadridge Corporate Issuer Solutions, Inc.
P.O. Box 1342
Brentwood, NY 11717
1-844-202-5345 or 1-720-414-6878

Annual Meeting

The annual meeting of Valmont's shareholders will be held at 1:00 p.m. on Tuesday, April 25, 2017, at One Valmont Plaza, Omaha, Nebraska USA.

Shareholder and Investor Relations

Valmont's common stock trades on the New York Stock Exchange (NYSE) under the symbol VMI.

We make available, free of charge through our Internet website at www.valmont.com, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as soon as reasonably practicable after such material is electronically filed with or furnished to the Securities and Exchange Commission.

We have also posted on our website our (1) Corporate Governance Principles, (2) Charters for the Audit Committee, Human Resources Committee and Governance and Nominating Committee of the Board, (3) Code of Business Conduct, and (4) Code of Ethics for Senior Officers applicable to the Chief Executive Officer, Chief Financial Officer and Controller. Valmont shareholders may also obtain copies of these items at no charge by writing to:

Jeffrey S. Laudin

Investor Relations Department
Valmont Industries, Inc.
One Valmont Plaza
Omaha, Nebraska 68154-5215 USA
Tel 1-402-963-1000
Fax 1-402-963-1096

VALMONT INDUSTRIES, INC.
Annual Report Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934
For the fiscal year ended December 31, 2016

TABLE OF CONTENTS

PART I

ITEM 1. BUSINESS.

(a) General Description of Business

General

We are a diversified global producer of fabricated metal products and are a leading producer of steel, aluminum and composite pole, tower and other structures in our Engineered Support Structures (ESS) segment, steel and concrete pole structures in our Utilities Support Structures (Utility) segment and are a global producer of mechanized irrigation systems in our Irrigation segment. Within our Energy and Mining segment, we manufacture industrial access systems, grinding media used in mining operations, and complex steel structures used in wind energy and utility transmission applications outside the United States. We also provide metal coating services, including galvanizing, painting and anodizing in our Coatings segment. Our products sold through the ESS segment include outdoor lighting, traffic control, and roadway safety structures, wireless communication structures and components. Our pole structures sold through our Utility segment support electrical transmission and distribution lines and related power distribution equipment. Our Irrigation segment produces mechanized irrigation equipment that delivers water, chemical fertilizers and pesticides to agricultural crops. Customers and end-users of our products include state and federal governments, contractors, utility and telecommunications companies, manufacturers of commercial lighting fixtures and large farms as well as the general manufacturing sector. In 2016, approximately 37% of our total sales were either sold in markets or produced by our manufacturing plants outside of North America. We were founded in 1946, went public in 1968 and our shares trade on the New York Stock Exchange (ticker: VMI).

Business Strategy

Our strategy is to pursue growth opportunities that leverage our existing product portfolio, knowledge of our principal end-markets and customers and engineering capability to increase our sales, earnings and cash flow, including:

Increasing the Market Penetration of our Existing Products. Our strategy is to increase our market penetration by differentiating our products from our competitors' products through superior customer service, technological innovation and consistent high quality. For example, our Utility segment increased its sales between 2010 and 2013 through our engineering capability and strong customer service to meet our customers' requirements, especially on large, complex projects.

Bringing our Existing Products to New Markets. Our strategy is to expand the sales of our existing products into geographic areas where we do not currently have a strong presence as well as into applications for which end-users do not currently purchase our type of product. We have also expanded our geographic presence in Europe, Middle East, and North Africa for lighting structures. We have also been successful introducing our pole products to utility and wireless communication applications where customers have traditionally purchased lattice tower products. Our strategy of building manufacturing presences in China and India was based primarily on expanding our offering of pole structures for lighting, utility and wireless communication to these markets. Our Irrigation segment has a long history of developing new mechanized irrigation markets in emerging markets. In recent years, these markets include China and Eastern Europe. Our 2015 acquisition of American Galvanizing provides us with a presence in the Northeast U.S. galvanizing market.

Developing New Products for Markets that We Currently Serve. Our strategy is to grow by developing new products for markets where we have a comprehensive understanding of end-user requirements and longstanding relationships with key distributors and end-users. For example, in recent years we developed and sold structures for tramway applications in Europe. The customers for this product line include many of the state and local governments that purchase our lighting structures. Another example is the development and expansion of decorative product concepts for lighting applications that have been introduced to our existing customer base. Our 2014 acquisition of the majority ownership in AgSense allows us to offer expanded remote monitoring services over irrigation equipment and other aspects of a farming operation.

Developing New Products for New Markets and Leverage a Core Competency to Further Diversify our Business. Our strategy is to increase our sales and diversify our business by developing new products for new markets or to leverage a core competency. For example, we have been expanding our offering of specialized decorative lighting poles in the U.S. including the fiberglass composite structures offered through Shakespeare Composite Structures which we acquired in 2014. The decorative lighting market has different customers than our traditional markets and the products to serve that market are different than the poles we manufacture for the transportation and commercial markets. The acquisition of Delta in 2010 gave us a presence in highway safety systems and industrial access systems, products that we believe are complementary to our existing products and provide us with future growth opportunities. The establishment and growth of our Coatings segment was based on using our expertise in galvanizing to develop what is now a global business segment.

Acquisitions

We have grown internally and by acquisition. Our significant business expansions during the past five years include the following (including the segment where the business reports):

2012

- Acquisition of a galvanizing business with three locations in Ontario, Canada (Coatings)

2013

- Acquisition of a manufacturer of perforated, expanded metal for the non-residential market, industrial flooring and handrails for the access systems market, and screening media for applications in the industrial and mining sectors in Australia and Asia (Energy and Mining)
- Acquisition of the remaining 40% not previously owned of Valley Irrigation South Africa Pty. Ltd (Irrigation)
- Acquisition of a distributor holding proprietary intellectual property for products serving the highway safety market located in New Zealand (ESS)

2014

- Acquisition of 90% of a manufacturer of heavy complex steel structures (Valmont SM) with two manufacturing locations in Denmark (Energy and Mining)
- Acquisition of a 51% ownership stake in AgSense, which provides farmers with remote monitoring equipment for their pivots and entire farming operation (Irrigation)
- Acquisition of a manufacturer of fiberglass composite support structures with two manufacturing locations in South Carolina (ESS)

2015

- Acquisition of a galvanizing business located in Hammonton, New Jersey (Coatings)

2016

- Acquisition of the remaining 30% not previously owned of IGC Galvanizing Industries (M) Sdn Bhd (Coatings)
- Acquisition of 5.2% of the remaining 10% not previously owned of Valmont SM (Energy & Mining)

There have been no significant divestitures of businesses in the past five years.

(b) Segments

The Company has five reportable segments based on our management structure. Each segment is global in nature with a manager responsible for segment operational performance and allocation of capital within the segment.

Our reportable segments are as follows:

Engineered Support Structures: This segment consists of the manufacture and distribution of engineered metal, wood, and composite structures and components for global lighting and traffic, wireless communication, and roadway safety;

Utility Support Structures: This segment consists of the manufacture of engineered steel and concrete structures for the global utility industry;

Energy and Mining: This segment, all outside of the United States, consists of the manufacture of access systems applications, forged steel grinding media, on and off shore oil, gas, and wind energy structures.

Coatings: This segment consists of galvanizing, anodizing and powder coating services on a global basis; and

Irrigation: This segment consists of the manufacture of agricultural irrigation equipment and related parts and services for the global agricultural industry as well as tubular products for a variety of industrial customers.

In addition to these five reportable segments, we had other operations and activities that individually are not more than 10% of consolidated sales, operating income or assets in fiscal years prior to 2016.

Amounts of sales, operating income and total assets attributable to each segment for each of the last three years is set forth in Note 19 of our consolidated financial statements.

(c) Narrative Description of Business

Information concerning the principal products produced and services rendered, markets, competition and distribution methods for each of our five reportable segments is set forth below.

Engineered Support Structures Segment

Products Produced—We manufacture steel, aluminum, and composite poles and structures to which lighting and traffic control fixtures are attached for a wide range of outdoor lighting applications, such as streets, highways, parking lots, sports stadiums and commercial and residential developments. The demand for these products is driven by infrastructure, commercial and residential construction and by consumers' desire for well-lit streets, highways, parking lots and common areas to help make these areas safer at night and to support trends toward more active lifestyles and 24-hour convenience. In addition to safety, customers want products that are visually appealing. In Europe, we are a leader in decorative lighting poles, which are attractive as well as functional. We are leveraging this expertise to expand our decorative product sales in North America and China. Traffic poles are structures to which traffic signals are attached and aid the orderly flow of automobile traffic. While standard designs are available, poles are often engineered to customer specifications to ensure the proper function and safety of the structure. Product engineering takes into account factors such as weather (e.g. wind, ice) and the products loaded on the structure (e.g. lighting fixtures, traffic signals, overhead signs) to determine the design of the pole. This product line also includes roadway safety systems, including guard rail barrier systems, wire rope safety barriers, crash attenuation barriers and other products designed to redirect vehicles when off course and to prevent collisions between vehicles. Highway safety systems are also designed and engineered to absorb collisions and ultimately reduce roadway fatalities and injury.

We also manufacture and distribute a broad range of structures (poles and towers) and components serving the wireless communication market. A wireless communication cell site mainly consists of a steel pole or tower, shelter (enclosure where the radio equipment is located), antennas (devices that receive and transmit data and voice information to and from wireless communication devices) and components (items that are used to mount antennas to the structure and to connect cabling and other parts from the antennas to the shelter). Structures are engineered and designed to customer specifications, which include factors such as the number of antennas on the structure and wind and soil conditions. Due to the size of these structures, design is important to ensure each structure meets performance and safety specifications. We do not provide any significant installation services on the structures we sell.

Markets—The key markets for our lighting, traffic and roadway safety products are the transportation and commercial lighting markets and public roadway building and improvement. The transportation market includes street and highway lighting and traffic control, much of which is driven by government spending programs. For example, the U.S. government funds highway and road improvement through the federal highway program. This program provides funding to improve the nation's roadway system, which includes roadway lighting and traffic control enhancements. Matching funding from the various states may be required as a condition of federal funding. The current federal highway program was renewed and extended in late 2015. In the United States, there are approximately 4 million miles of public roadways, with approximately 24% carrying over 80% of the traffic. Accordingly, the need to improve traffic flow through traffic controls and lighting is a priority for many communities. Transportation markets in other areas of the world are also heavily funded by local and national governments. The commercial lighting market is mainly funded privately and includes lighting for applications such as parking lots, shopping centers, sports stadiums and business parks. The commercial lighting market is driven by macro-economic factors such as general economic growth rates, interest rates and the commercial construction economy.

The main markets for our communication products have been the wireless telephone carriers and build-to-suit companies (organizations that own cell sites and attach antennas from multiple carriers to the pole or tower structure). We also sell products to state and federal governments for two-way radio communication, radar, broadcasting and security applications. We believe long-term growth should mainly be driven by increased usage, technologies such as 4G (including applications for smart phones, such as streaming video and internet) and demand for improved emergency response systems, as part of the U.S. Homeland Security initiatives. Subscriber growth should continue to increase, although at a lower rate than in the past. In general, as the number of subscribers and usage of wireless communication devices increase, we believe this will result in demand for communication structures and components.

All of the products that we manufacture in this segment are parts of customer investments in basic infrastructure. The total cost of these investments can be substantial, so access to capital is often important to fund infrastructure needs. Due to the nature of these markets, demand can be cyclical as projects sometimes can be delayed due to funding or other issues.

Competition—Our competitive strategy in all of the markets we serve is to provide high value to the customer at a reasonable price. We compete on the basis of product quality, high levels of customer service, timely, complete and accurate delivery of the product and design capability to provide the best solutions to our customers. There are numerous competitors in our markets, most of which are relatively small companies. Companies compete on the basis of price, product quality, reliable delivery and unique product features. Pricing can be very competitive, especially when demand is weak or when strong local currencies result in increased competition from imported products.

Distribution Methods—Sales and distribution activities are handled through a combination of a direct sales force and commissioned agents. Lighting agents represent Valmont as well as lighting fixture companies and sell other related products. Sales are typically to electrical distributors, who provide the pole, fixtures and other equipment to the end user as a complete package. Commercial lighting and highway safety sales are normally made through Valmont sales employees, who work on a salary plus incentive, although some sales are made through independent, commissioned sales agents.

Utility Support Structures Segment

Products Produced—We manufacture steel and concrete pole structures for electrical transmission, substation and distribution applications. Our products help move electrical power from where it is produced to where it is used. We produce tapered steel and pre-stressed concrete poles for high-voltage transmission lines, substations (which transfer high-voltage electricity to low-voltage transmission) and electrical distribution (which carry electricity from the substation to the end-user). In addition, we produce hybrid structures, which are structures with a concrete base section and steel upper sections. Utility structures can be very large, so product design engineering is important to the function and safety of the structure. Our engineering process takes into account weather and loading conditions, such as wind speeds, ice loads and the power lines attached to the structure, in order to arrive at the final design.

Markets—Our sales in this segment are mainly in North America, where the key drivers in the utility business are significant upgrades in the electrical grid to support enhanced reliability standards, policy changes encouraging more generation from renewable energy sources, interconnection of regional grids to share more efficient generation to the benefit of the consumer and increased electrical consumption which has outpaced the transmission investment in the past decades. According to the Edison Electric Institute, the electrical transmission grid in the U.S. requires significant investment in the coming years to respond to the compelling industry drivers and lack of investment over the past 25 years. The expected increase in electrical consumption around the world should also require substantial investment in new electricity generation capacity which will prompt further international growth in transmission grid development. We expect these factors to result in increased demand for electrical utility structures to transport electricity from source to user.

Competition—Our competitive strategy in this segment is to provide high value solutions to the customer at a reasonable price. We compete on the basis of product quality, engineering expertise, high levels of customer service and reliable, timely delivery of the product. There are many competitors. Companies compete on the basis of price, quality and service. Utility sales are often made through a competitive bid process, whereby the lowest bidder is awarded the contract, provided the competitor meets all other qualifying criteria. In weak markets, price is a more important criterion in the bid process.

Distribution Methods—Products are normally sold through commissioned sales agents or sold directly to electrical utilities.

Energy and Mining Segment

Products Produced— We produce and distribute access systems, which are engineered structures and components that allow people to move safely and effectively in an industrial, infrastructure or commercial facility. We also produce a line of products which are used in architectural applications. Examples of these products are perforated metal sun screens and facades that can be used on building structures to improve shading and aesthetics. Products offered in this product line are usually engineered to specific customer requirements and include floor gratings, handrails, barriers and sunscreens. This segment also manufactures complex steel structures, rotor houses, crown-mounted compensators, winches, cranes and material handling equipment for offshore and land-based wind energy, oil & gas, and utility transmission outside of North America. We also produce forged steel products used in the mining processing industry.

Markets - Markets for access systems are typically driven by infrastructure, industrial and commercial construction spending and can be cyclical depending on economic conditions in the markets in which we compete. Customers consist of construction firms or installers who participate in infrastructure, industrial and commercial construction projects, natural gas and mineral exploration companies, resellers such as steel service centers, and end users. Markets for the complex steel structures are in oil and gas, wind turbine towers, and material handling systems within Europe. The market for grinding media are mines typically within Australia.

Competition - For both access systems and grinding media, we compete on the basis of product quality and timely, complete and accurate delivery of the product. There are numerous competitors for both of these product lines. Pricing can be very competitive, especially when demand is weak or when strong local currencies result in increased competition from imported products. For offshore and complex steel structures, we compete based on our ability to co-engineer and design solutions with customers, carry out advanced order production of complex steel constructions with electronics and hydraulics and having highly automated series production for more mature products.

Coatings Segment

Services Rendered—We add finishes to metals that inhibit corrosion, extend service lives and enhance physical attractiveness of a wide range of materials and products. Among the services provided include:

- Hot-dipped Galvanizing
- Anodizing
- Powder Coating
- E-Coating

In our Coatings segment, we take unfinished products from our customers and return them with a galvanized, anodized or painted finish. Galvanizing is a process that protects steel with a zinc coating that is bonded to the product surface to inhibit rust and corrosion. Anodizing is a process applied to aluminum that oxidizes the surface of the aluminum in a controlled manner, which protects the aluminum from corrosion and allows the material to be dyed a variety of colors. We also paint products using powder coating and e-coating technology (where paint is applied through an electrical charge) for a number of industries and markets.

Markets—Markets for our products are varied and our profitability is not substantially dependent on any one industry or customer. Demand for coatings services generally follows the local industrial economies. Galvanizing is used in a wide variety of industrial applications where corrosion protection of steel is desired. While markets are varied, our markets for anodized or painted products are more directly dependent on consumer markets than industrial markets.

Competition—The Coatings markets traditionally have been very fragmented, with a large number of competitors. Most of these competitors are relatively small, privately held companies who compete on the basis of price and personal relationships with their customers. As a result of ongoing industry consolidation, there are also several (public and private) multi-facility competitors. Our strategy is to compete on the basis of quality of the coating finish and timely delivery of the coated product to the customer. We also use the production capacity at our network of plants to ensure that the customer receives quality, timely service.

Distribution Methods—Due to freight costs, a galvanizing location has an effective service area of an approximate 300 to 500 mile radius. While we believe that we are globally one of the largest custom galvanizers, our sales are a small percentage of the total market. Sales and customer service are provided directly to the user by a direct sales force, generally assigned to each specific location.

Irrigation Segment

Products Produced—We manufacture and distribute mechanical irrigation equipment and related service parts under the "Valley" brand name. A Valley irrigation machine usually is powered by electricity and propels itself over a farm field and applies water and chemicals to crops. Water and, in some instances, chemicals are applied through sprinklers attached to a pipeline that is supported by a series of towers, each of which is propelled via a drive train and tires. A standard mechanized irrigation machine (also known as a "center pivot") rotates in a circle, although we also manufacture and distribute center pivot extensions that can irrigate corners of square and rectangular farm fields as well as conform to irregular field boundaries (referred to as a "corner" machine). Our irrigation machines can also irrigate fields by moving up and down the field as opposed to rotating in a circle (referred to as a "linear" machine). Irrigation machines can be configured to irrigate fields in size from 4 acres to over 500 acres, with a standard size in the U.S. configured for a 160-acre tract of ground. One of the key components of our irrigation machine is the control system. This is the part of the machine that allows the machine to be operated in the manner preferred by the grower, offering control of such factors as on/off timing, individual field sector control, rate and depth of water and chemical application. We also offer growers options to control multiple irrigation machines through centralized computer control or mobile remote control. The irrigation machine used in international markets is substantially the same as the one produced for the North American market.

Other Types of Irrigation — There are other forms of irrigation available to farmers, two of the most prevalent being flood irrigation and drip irrigation. In flood irrigation, water is applied through a pipe or canal at the top of the field and allowed to run down the field by gravity. Drip irrigation involves plastic pipe or tape resting on the surface of the field or buried a few inches below ground level, with water being applied gradually. We estimate that center pivot and linear irrigation comprises 50% of the irrigated acreage in North America. International markets use predominantly flood irrigation, although all forms are used to some extent.

The Company through its majority ownership in AgSense LLC, develops and markets remote monitoring technology for pivot irrigation systems that is sold on a subscription basis under the WagNet product name. WagNet technology allows growers to remotely monitor and operate irrigation equipment and other farm structures such as grain bins. Data management and control is achieved using applications running on either a personal computer-based internet browser or various mobile devices connected to the internet. We also manufacture tubular products for industrial customers primarily in the agriculture industry as well as in the transportation and other industries.

Markets—Market drivers in North American and international markets are essentially the same. Since the purchase of an irrigation machine is a capital expenditure, the purchase decision is based on the expected return on investment. The benefits a grower may realize through investment in mechanical irrigation include improved yields through better irrigation, cost savings through reduced labor and lower water and energy usage. The purchase decision is also affected by current and expected net farm income, commodity prices, interest rates, the status of government support programs and water regulations in local areas. In many international markets, the relative strength or weakness of local currencies as compared with the U.S. dollar may affect net farm income, since export markets are generally denominated in U.S. dollars.

The demand for mechanized irrigation comes from the following sources:

- conversion from flood irrigation
- replacement of existing mechanized irrigation machines
- converting land that is not irrigated to mechanized irrigation

One of the key drivers in our Irrigation segment worldwide is that the usable water supply is limited. We estimate that:

- only 2.5% of total worldwide water supply is freshwater
- of that 2.5%, only 30% of freshwater is available to humans
- the largest user of that freshwater is agriculture

We believe these factors, along with the trend of a growing worldwide population and improving diets, reflect the need to use water more efficiently while increasing food production to feed this growing population. We believe that mechanized irrigation can improve water application efficiency by 40-90% compared with traditional irrigation methods by applying water uniformly near the root zone and reducing water runoff. Furthermore, reduced water runoff improves water quality in nearby rivers, aquifers and streams, thereby providing environmental benefits in addition to conservation of water.

Competition—In North America, there are a number of entities that provide irrigation products and services to agricultural customers. We believe we are the leader of the four main participants in the mechanized irrigation business. Participants compete for sales on the basis of price, product innovation and features, product durability and reliability, quality and service capabilities of the local dealer. Pricing can become very competitive, especially in periods when market demand is low. In international markets, our competitors are a combination of our major U.S. competitors and privately‑owned local companies. Competitive factors are similar to those in North America, although pricing tends to be a more prevalent competitive strategy in international markets. Since competition in international markets is local, we believe local manufacturing capability is important to competing effectively in international markets and we have that capability in key regions.

Distribution Methods—We market our irrigation machines and service parts through independent dealers. There are approximately 280 dealer locations in North America, with another approximately 210 dealers serving international markets. The dealer determines the grower's requirements, designs the configuration of the machine, installs the machine (including providing ancillary products that deliver water and electrical power to the machine) and provides after‑sales service. Our dealer network is supported and trained by our technical and sales teams. Our international dealers are supported through our regional headquarters in South America, South Africa, Western Europe, Australia, China and the United Arab Emirates as well as the home office in Valley, Nebraska.

General

Certain information generally applicable to each of our five reportable segments is set forth below.

Suppliers and Availability of Raw Materials.

Hot rolled steel coil and plate, zinc and other carbon steel products are the primary raw materials utilized in the manufacture of finished products for all segments. We purchase these essential items from steel mills, steel service centers, and zinc producers and these materials are usually readily available. While we may experience increased lead times to acquire materials and volatility in our purchase costs, we do not believe that key raw materials would be unavailable for extended periods. We have not experienced extended or wide-spread shortages of steel during this time, due to what we believe are strong relationships with some of the major steel producers. In the past several years, we experienced volatility in zinc and natural gas prices, but we did not experience any disruptions to our operations due to availability.

Patents, Licenses, Franchises and Concessions.

We have a number of patents for our manufacturing machinery, poles and irrigation designs. We also have a number of registered trademarks. We do not believe the loss of any individual patent or trademark would have a material adverse effect on our financial condition, results of operations or liquidity.

Seasonal Factors in Business.

Sales can be somewhat seasonal based upon the agricultural growing season and the infrastructure construction season. Sales of mechanized irrigation equipment to farmers are traditionally higher during the spring and fall and lower in the summer. Sales of infrastructure products are traditionally higher summer and fall and lower in the winter.

Customers.

We are not dependent for a material part of any segment's business upon a single customer or upon very few customers. The loss of any one customer would not have a material adverse effect on our financial condition, results of operations or liquidity.

Backlog.

The backlog of orders for the principal products manufactured and marketed was $602.9 million at the end of the 2016 fiscal year and $590.4 million at the end of the 2015 fiscal year. An order is reported in our backlog upon receipt of a purchase order from the customer or execution of a sales order contract. We anticipate that most of the 2016 backlog of orders will be filled during fiscal year 2017. At year-end, the segments with backlog were as follows (dollar amounts in millions):

	12/31/2016	12/26/2015
Engineered Support Structures	$ 170.9	$ 148.2
Energy & Mining	99.4	110.6
Utility Support Structures	268.1	244.6
Irrigation	64.1	86.7
Coatings	0.4	0.3
	$ 602.9	$ 590.4

Research Activities.

The information called for by this item is included in Note 1 of our consolidated financial statements.

Environmental Disclosure.

We are subject to various federal, state and local laws and regulations pertaining to environmental protection and the discharge of materials into the environment. Although we continually incur expenses and make capital expenditures related to environmental protection, we do not anticipate that future expenditures should materially impact our financial condition, results of operations, or liquidity.

Number of Employees.

At December 31, 2016, we had 10,552 employees.

(d) Financial Information About Geographic Areas

Our international sales activities encompass over 100 foreign countries. The information called for by this item is included in Note 19 of our consolidated financial statements. While Australia accounted for approximately 13% of our net sales in 2016, no other foreign country accounted for more than 5% of our net sales. Net sales for purposes of Note 19 include sales to outside customers.

(e) Available Information

We make available, free of charge through our Internet web site at *http://www.valmont.com*, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as soon as reasonably practicable after such material is electronically filed with or furnished to the Securities and Exchange Commission.

ITEM 1A. RISK FACTORS.

The following risk factors describe various risks that may affect our business, financial condition and operations.

The ultimate consumers of our products operate in cyclical industries that have been subject to significant downturns which have adversely impacted our sales in the past and may again in the future.

Our sales are sensitive to the market conditions present in the industries in which the ultimate consumers of our products operate, which in some cases have been highly cyclical and subject to substantial downturns. For example, a significant portion of our sales of support structures is to the electric utility industry. Our sales to the U.S. electric utility industry were over $600 million in 2016 and 2015. Purchases of our products are deferrable to the extent that utilities may reduce capital expenditures for reasons such as unfavorable regulatory environments, a slow U.S. economy or financing constraints. In the event of weakness in the demand for utility structures due to reduced or delayed spending for electrical generation and transmission projects, our sales and operating income likely will decrease.

The end users of our mechanized irrigation equipment are farmers. Accordingly, economic changes within the agriculture industry, particularly the level of farm income, may affect sales of these products. From time to time, lower levels of farm income resulted in reduced demand for our mechanized irrigation and tubing products. Farm income decreases when commodity prices, acreage planted, crop yields, government subsidies and export levels decrease. In addition, weather conditions, such as extreme drought may result in reduced availability of water for irrigation, and can affect farmers' buying decisions. Farm income can also decrease as farmers' operating costs increase. Increases in oil and natural gas prices result in higher costs of energy and nitrogen‑based fertilizer (which uses natural gas as a major ingredient). Furthermore, uncertainty as to future government agricultural policies may cause indecision on the part of farmers. The status and trend of government farm supports, financing aids and policies regarding the ability to use water for agricultural irrigation can affect the demand for our irrigation equipment. In the United States, certain parts of the country are considering policies that would restrict usage of water for irrigation. All of these factors may cause farmers to delay capital expenditures for farm equipment. Consequently, downturns in the agricultural industry will likely result in a slower, and possibly a negative, rate of growth in irrigation equipment and tubing sales. As of November 2016, the U.S. Department of Agriculture (the "USDA") estimated U.S. 2016 net farm income to be $66.9 billion, down 17 percent from the USDA's final U.S. 2015 net farm income of $80.9 billion. If the USDA's estimate proves accurate, net farm income in 2016 would be at its lowest level since 2009.

We have also experienced cyclical demand for those of our products that we sell to the wireless communications industry. Sales of wireless structures and components to wireless carriers and build-to-suit companies that serve the wireless communications industry have historically been cyclical. These customers may elect to curtail spending on new capacity to focus on cash flow and capital management. Weak market conditions have led to competitive pricing in recent years, putting pressure on our profit margins on sales to this industry. Changes in the competitive structure of the wireless industry, due to industry consolidation or reorganization, may interrupt capital plans of the wireless carriers as they assess their networks.

The access systems and grinding media product lines are dependent on investment spending by our customers in the oil, natural gas, and other mined mineral exploration industries, most specifically in the Asia Pacific region. During periods of continued low oil and natural gas prices, these customers may elect to curtail spending on new exploration sites which will cause us to experience lower demand for these specific product lines.

Due to the cyclical nature of these markets, we have experienced, and in the future we may experience, significant fluctuations in our sales and operating income with respect to a substantial portion of our total product offering, and such fluctuations could be material and adverse to our overall financial condition, results of operations and liquidity.

Changes in prices and reduced availability of key commodities such as steel, aluminum, zinc, natural gas and fuel may increase our operating costs and likely reduce our net sales and profitability.

Hot rolled steel coil and other carbon steel products have historically constituted approximately one-third of the cost of manufacturing our products. We also use large quantities of aluminum for lighting structures and zinc for the galvanization of most of our steel products. Our facilities use large quantities of natural gas for heating and processing tanks in our galvanizing operations. We use gasoline and diesel fuel to transport raw materials to our locations and to deliver finished goods to our customers. The markets for these commodities can be volatile. The following factors increase the cost and reduce the availability of these commodities:

- increased demand, which occurs when we and other industries require greater quantities of these commodities, which can result in higher prices and lengthen the time it takes to receive these commodities from suppliers;

- lower production levels of these commodities, due to reduced production capacities or shortages of materials needed to produce these commodities (such as coke and scrap steel for the production of steel) which could result in reduced supplies of these commodities, higher costs for us and increased lead times;

- increased cost of major inputs, such as scrap steel, coke, iron ore and energy;

- fluctuations in foreign exchange rates can impact the relative cost of these commodities, which may affect the cost effectiveness of imported materials and limit our options in acquiring these commodities; and

- international trade disputes, import duties and quotas, since we import some steel for our domestic and foreign manufacturing facilities.

Increases in the selling prices of our products may not fully recover higher commodity costs and generally lag increases in our costs of these commodities. Consequently, an increase in these commodities will increase our operating costs and likely reduce our profitability. Rising steel prices in 2010 and 2011 put pressure on gross profit margins, especially in our Engineered Support Structures and Utility Support Structures segments. In both of these segments, the elapsed time between the quotation of a sales order and the manufacturing of the product ordered can be several months. As some of these sales are fixed price contracts, rapid increases in steel costs likely will result in lower operating income in these businesses.

Steel prices for both hot rolled coil and plate decreased substantially in North America in 2015 as compared to 2014. Decreases in our product sales pricing and volumes offset the increase in gross profit realized from the lower steel prices. Steel is most significant for our Utility Support Structures segment where the cost of steel has been approximately 50% of the net sales, on average. Assuming a similar sales mix, a hypothetical 20% change in the price of steel would have affected our net sales from our utility support structures segment by approximately $54 million for the year ended December 31, 2016.

We believe the volatility over the past several years was due to significant increases in global steel production and rapid changes in consumption (especially in rapidly growing economies, such as China and India). The speed with which steel suppliers impose price increases on us may prevent us from fully recovering these price increases particularly in our lighting and traffic and utility businesses. In the same respect, rapid decreases in the price of steel can also result in reduced operating margins in our utility businesses due to the long production lead times.

Demand for our infrastructure products and coating services is highly dependent upon the overall level of infrastructure spending.

We manufacture and distribute engineered infrastructure products for lighting and traffic, utility and other specialty applications. Our Coatings segments serve many construction-related industries. Because these products are used primarily in infrastructure construction, sales in these businesses are highly correlated with the level of construction activity, which historically has been cyclical. Construction activity by our private and government customers is affected by and can decline because of, a number of factors, including (but not limited to):

- weakness in the general economy, which may negatively affect tax revenues, resulting in reduced funds available for construction;

- interest rate increases, which increase the cost of construction financing; and

- adverse weather conditions which slow construction activity.

The current economic uncertainty and slowness in the United States and Europe will have some negative effect on our business. In our North American lighting product line, some of our lighting structure sales are for new residential and commercial areas. As residential and commercial construction remains weak, we have experienced some negative impact on our light pole sales to these markets. In a broader sense, in the event of an overall downturn in the economies in Europe, Australia or China, we may experience decreased demand if our customers have difficulty securing credit for their purchases from us.

In addition, sales in our Engineered Support Structures segment, particularly our lighting, traffic and highway safety products, are highly dependent upon federal, state, local and foreign government spending on infrastructure development projects, such as the 2015 U.S. federal highway bill. The level of spending on such projects may decline for a number of reasons beyond our control, including, among other things, budgetary constraints affecting government spending generally or transportation agencies in particular, decreases in tax revenues and changes in the political climate, including legislative delays, with respect to infrastructure appropriations. For instance, the lack of long-term U.S. federal highway spending legislation for a significant period of time prior to the 2015 U.S. federal highway bill has had a negative impact on our sales in this market. A substantial reduction in the level of government appropriations for infrastructure projects could have a material adverse effect on our results of operations or liquidity.

We may lose some of our foreign investment or our foreign sales and profits may reduce because of risks of doing business in foreign markets.

We are an international manufacturing company with operations around the world. At December 31, 2016, we operated over 80 manufacturing plants, located on six continents, and sold our products in more than 100 countries. In 2016, approximately 37% of our total sales were either sold in markets or produced by our manufacturing plants outside of North America. We have operations in geographic markets that have recently experienced political instability, such as the Middle East, and economic uncertainty, such as Western Europe. Our geographic diversity also requires that we hire, train and retain competent management for the various local markets. We also have a significant manufacturing presence in Australia, Europe and China. We expect that international sales will continue to account for a significant percentage of our net sales in the future. Accordingly, our foreign business operations and our foreign sales and profits are subject to the following potential risks:

- political and economic instability where we have foreign business operations, resulting in the reduction of the value of, or the loss of, our investment;
- recessions in economies of countries in which we have business operations, decreasing our international sales;
- difficulties and costs of staffing and managing our foreign operations, increasing our foreign operating costs and decreasing profits;
- potential violation of local laws or unsanctioned management actions that could affect our profitability or ability to compete in certain markets;
- difficulties in enforcing our rights outside the United States for patents on our manufacturing machinery, poles and irrigation designs;
- increases in tariffs, export controls, taxes and other trade barriers reducing our international sales and our profit on these sales; and
- acts of war or terrorism.

As a result, we may lose some of our foreign investment or our foreign sales and profits may be materially reduced because of risks of doing business in foreign markets. In 2015, we recorded a $7 million allowance for doubtful accounts in our Irrigation segment related to a long-term receivable with a Chinese municipal entity.

Failure to comply with any applicable anti-corruption legislation could result in fines, criminal penalties and an adverse effect on our business.

We must comply with all applicable laws, which may include the U.S. Foreign Corrupt Practices Act (FCPA), the UK Bribery Act or other anti-corruption laws. These anti-corruption laws generally prohibit companies and their intermediaries from making improper payments or providing anything of value to improperly influence government officials or private individuals for the purpose of obtaining or retaining a business advantage regardless of whether those practices are legal or culturally expected in a particular jurisdiction. Recently, there has been a substantial increase in the global enforcement of anti-corruption laws. Although we have a compliance program in place designed to reduce the likelihood of potential violations of such laws, violations of these laws could result in criminal or civil sanctions and an adverse effect on the company's reputation, business and results of operations and financial condition.

We are subject to currency fluctuations from our international sales, which can negatively impact our reported earnings.

We sell our products in many countries around the world. Approximately 39% of our fiscal 2016 sales were in markets outside the United States and are often made in foreign currencies, mainly the Australian dollar, euro, Brazilian real, Canadian dollar, Chinese renminbi and South African rand. Because our financial statements are denominated in U.S. dollars, fluctuations in currency exchange rates between the U.S. dollar and other currencies have had and will continue to have an impact on our reported earnings. For example, the U.S. dollar appreciated significantly against most currencies in fiscal 2015. The most significant impact was involving our Australian sales measured in U.S. dollar terms that decreased by approximately $68 million due to exchange rate translation effects in fiscal 2015. If the U.S. dollar weakens or strengthens versus the foreign currencies mentioned above, the result will be an increase or decrease in our reported sales and earnings, respectively. Currency fluctuations have affected our financial performance in the past and may affect our financial performance in any given period. In 2016, we realized a $1.6 million decrease in operating profit, as compared to 2015, from currency translation effects. In cases where local currencies are strong, the relative cost of goods imported from outside our country of operation becomes lower and affects our ability to compete profitably in our home markets.

We also face risks arising from the imposition of foreign exchange controls and currency devaluations. Exchange controls may limit our ability to convert foreign currencies into U.S. dollars or to remit dividends and other payments by our foreign subsidiaries or businesses located in or conducted within a country imposing controls. Currency devaluations result in a diminished value of funds denominated in the currency of the country instituting the devaluation. Actions of this nature could have a material adverse effect on our results of operations and financial condition in any given period.

Our businesses require skilled labor and management talent and we may be unable to attract and retain qualified employees.

Our businesses require skilled factory workers and management in order to meet our customer’s needs, grow our sales and maintain competitive advantages. Skills such as welding, equipment maintenance and operating complex manufacturing machinery may be in short supply in certain geographic areas (ex. United States), leading to shortages of skilled labor and/or increased labor costs. Management talent is critical as well, to help grow our businesses and effectively plan for succession of key employees upon retirement. In some geographic areas, skilled management talent in certain areas may be difficult to find. To the extent we have difficulty in finding and retaining these skills in the workforce, there may be an adverse effect on our ability to grow profitably in the future.

We may incur significant warranty or contract management costs.

In our Utility Support Structures segment, we manufacture large structures for electrical transmission. These products may be highly engineered for very large, complex contracts and subject to terms and conditions that penalize us for late delivery and result in consequential and compensatory damages. From time to time, we may have a product quality issue on a large utility structures order and the costs of curing that issue may be significant. For example, we recorded a $17.0 million reserve in the fourth quarter of 2015 for a commercial settlement with a large customer that requires ongoing quality monitoring. Our products in the Engineered Support Structures segment include structures for a wide range of outdoor lighting and wireless communication applications.

In our Irrigation segment, our products are covered under warranties, some for several years. We may incur significant warranty or product related costs, which may include repairing or replacing defective or non-conforming products, even if another party may have contributed to the problem. In such cases, the costs of correcting the quality issue may be significant.

We face strong competition in our markets.

We face competitive pressures from a variety of companies in each of the markets we serve. Our competitors include companies who provide the technologies that we provide as well as companies who provide competing technologies, such as drip irrigation. Our competitors include international, national, and local manufacturers, some of whom may have greater financial, manufacturing, marketing and technical resources than we do, or greater penetration in or familiarity with a particular geographic market than we have.

In addition, certain of our competitors, particularly with respect to our utility and wireless communication product lines, have sought bankruptcy protection in recent years, and may emerge with reduced debt service obligations, which could allow them to operate at pricing levels that put pressures on our margins. Some of our customers have moved manufacturing operations or product sourcing overseas, which can negatively impact our sales of galvanizing and anodizing services.

To remain competitive, we will need to invest continuously in manufacturing, product development and customer service, and we may need to reduce our prices, particularly with respect to customers in industries that are experiencing downturns. We cannot provide assurance that we will be able to maintain our competitive position in each of the markets that we serve.

We could incur substantial costs as the result of violations of, or liabilities under, environmental laws.

Our facilities and operations are subject to U.S. and foreign laws and regulations relating to the protection of the environment, including those governing the discharge of pollutants into the air and water, the management and disposal of hazardous substances and wastes, and the cleanup of contamination. Failure to comply with these laws and regulations, or with the permits required for our operations, could result in fines or civil or criminal sanctions, third party claims for property damage or personal injury, and investigation and cleanup costs. Potentially significant expenditures could be required in order to comply with environmental laws that regulators may adopt or impose in the future.

Certain of our facilities have been in operation for many years and, over time, we and other predecessor operators of these facilities have generated, used, handled and disposed of hazardous and other regulated wastes. We detected contaminants at some of our present and former sites, principally in connection with historical operations. In addition, from time to time we have been named as a potentially responsible party under Superfund or similar state laws. While we are not aware of any contaminated sites that are not provided for in our financial statements, including third‑party sites, at which we may have material obligations, the discovery of additional contaminants or the imposition of additional cleanup obligations at these sites could result in significant liability beyond amounts provided for in our financial statements.

We may not realize the improved operating results that we anticipate from acquisitions we may make in the future, and we may experience difficulties in integrating the acquired businesses or may inherit significant liabilities related to such businesses.

We explore opportunities to acquire businesses that we believe are related to our core competencies from time to time, some of which may be material to us. We expect such acquisitions will produce operating results better than those historically experienced or presently expected to be experienced in the future by us in the absence of the acquisition. We cannot provide assurance that this assumption will prove correct with respect to any acquisition.

Any future acquisitions may present significant challenges for our management due to the time and resources required to properly integrate management, employees, information systems, accounting controls, personnel and administrative functions of the acquired business with those of Valmont and to manage the combined company on a going forward basis. We may not be able to completely integrate and streamline overlapping functions or, if such activities are successfully accomplished, such integration may be more costly to accomplish than presently contemplated. We may also have difficulty in successfully integrating the product offerings of Valmont and acquired businesses to improve our collective product offering. Our efforts to integrate acquired businesses could be affected by a number of factors beyond our control, including general economic conditions. In addition, the process of integrating acquired businesses could cause the interruption of, or loss of momentum in, the activities of our existing business. The diversion of management's attention and any delays or difficulties encountered in connection with the integration acquired businesses could adversely impact our business, results of operations and liquidity, and the benefits we anticipate may never materialize. These factors are relevant to any acquisition we undertake.

In addition, although we conduct reviews of businesses we acquire, we may be subject to unexpected claims or liabilities, including environmental cleanup costs, as a result of these acquisitions. Such claims or liabilities could be costly to defend or resolve and be material in amount, and thus could materially and adversely affect our business and results of operations and liquidity.

We have, from time to time, maintained a substantial amount of outstanding indebtedness, which could impair our ability to operate our business and react to changes in our business, remain in compliance with debt covenants and make payments on our debt.

As of December 31, 2016, we had $756.4 million of total indebtedness outstanding. We had $584.6 million of capacity to borrow under our revolving credit facility at December 31, 2016. We normally borrow money to make business acquisitions and major capital expenditures. From time to time, our borrowings have been significant. Our level of indebtedness could have important consequences, including:

- our ability to satisfy our obligations under our debt agreements could be affected and any failure to comply with the requirements, including significant financial and other restrictive covenants, of any of our debt agreements could result in an event of default under the agreements governing our indebtedness;

- a substantial portion of our cash flow from operations will be required to make interest and principal payments and will not be available for operations, working capital, capital expenditures, expansion, or general corporate and other purposes, including possible future acquisitions that we believe would be beneficial to our business;

- our ability to obtain additional financing in the future may be impaired;

- we may be more highly leveraged than our competitors, which may place us at a competitive disadvantage;

- our flexibility in planning for, or reacting to, changes in our business and industry may be limited; and

- our degree of leverage may make us more vulnerable in the event of a downturn in our business, our industry or the economy in general.

We had $399.9 million of cash at December 31, 2016, which mitigates a portion of the risk associated with our debt. However, approximately 82% of our consolidated cash balances are outside the United States and most of our interest-bearing debt is borrowed by U.S. entities. In the event that we would have to repatriate cash from international operations to meet cash needs in the U.S., we are likely to incur significant income tax expenses to repatriate that cash. In addition, as we use cash for acquisitions and other purposes, any of these factors could have a material adverse effect on our business, financial condition, results of operations, cash flows and business prospects.

The restrictions and covenants in our debt agreements could limit our ability to obtain future financings, make needed capital expenditures, withstand a future downturn in our business, or the economy in general, or otherwise conduct necessary corporate activities. These covenants may prevent us from taking advantage of business opportunities that arise.

A breach of any of these covenants would result in a default under the applicable debt agreement. A default, if not waived, could result in acceleration of the debt outstanding under the agreement and in a default with respect to, and acceleration of, the debt outstanding under our other debt agreements. The accelerated debt would become immediately due and payable. If that should occur, we may not be able to pay all such debt or to borrow sufficient funds to refinance it. Even if new financing were then available, it may not be on terms that are favorable to us.

We assumed an underfunded pension liability as part of the Delta acquisition and the combined company may be required to increase funding of the plan and/or be subject to restrictions on the use of excess cash.

Delta is the sponsor of a United Kingdom defined benefit pension plan that, as of December 31, 2016, covered approximately 6,500 inactive or retired former Delta employees. At December 31, 2016, this plan was, for accounting purposes, underfunded by approximately £169.8 million ($209.5 million). The current agreement with the trustees of the pension plan for annual funding is approximately £10.0 million ($12.3 million) in respect of the funding shortfall and approximately £1.1 million ($1.4 million) in respect of administrative expenses. Although this funding obligation was considered in the offer price for the Delta shares, the underfunded position may adversely affect the combined company as follows:

- Laws and regulations in the United Kingdom normally require the plan trustees and us to agree on a new funding plan every three years. The next funding plan will be developed in 2019. Changes in actuarial assumptions, including future discount, inflation and interest rates, investment returns and mortality rates, may increase the underfunded position of the pension plan and cause the combined company to increase its funding levels in the pension plan to cover underfunded liabilities.

- The United Kingdom regulates the pension plan and the trustees represent the interests of covered workers. Laws and regulations, under certain circumstances, could create an immediate funding obligation to the pension plan which could be significantly greater than the £169.8 million ($209.5 million) assumed for accounting purposes as of December 31, 2016. Such immediate funding is calculated by reference to the cost of buying out liabilities on the insurance market, and could affect our ability to fund the Company's future growth of the business or finance other obligations.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None.

ITEM 2. PROPERTIES.

Our corporate headquarters are located in a leased facility in Omaha, Nebraska, under a lease expiring in 2021. The headquarters of the Company's reportable segments are located in Valley, Nebraska. We also maintain a management headquarters in Sydney, Australia. Most of our significant manufacturing locations are owned or are subject to long-term renewable leases. Our principal manufacturing locations are in Valley, Nebraska, McCook, Nebraska, Tulsa, Oklahoma, Brenham, Texas, Charmeil, France and Shanghai, China. All of these facilities are owned by us. We believe that our manufacturing capabilities and capacities are adequate for us to effectively serve our customers. Our capital spending programs consist of investment for replacement, achieving operational efficiencies and expand capacities where needed. Our principal operating locations by reportable segment are listed below.

Engineered Support Structures segment North America manufacturing locations are in Nebraska, Texas, Indiana, Minnesota, Oregon, South Carolina, Washington and Canada. The largest of these operations are in Valley, Nebraska and Brenham, Texas, both of which are owned facilities. We have communication components distribution locations in New York, California, Florida, Georgia, and Texas. International locations are in France, the Netherlands, Finland, Estonia, England, Germany, Poland, Morocco, Australia, Indonesia, the Philippines, Thailand, Malaysia, India and China. The largest of these operations are in Charmeil, France and Shanghai, China, all of which are owned facilities.

Utility Support Structures segment North America manufacturing locations are in Alabama, Georgia, Florida, California, Texas, Oklahoma, Pennsylvania, Tennessee, Kansas, Nebraska and Mexico. The largest of these operations are in Tulsa, Oklahoma, Monterrey, Mexico and Hazleton, Pennsylvania. The Tulsa and Monterrey facilities are owned and the Hazleton facility is located on both owned and leased property. Principal international manufacturing locations are in China and France.

Energy and Mining segment is all international locations with manufacturing in Australia, Denmark, Indonesia, Philippines, Thailand, Malaysia and China. The largest of these operations are in Australia, Denmark, and China.

Coatings segment North America operations include U.S. operations located in Nebraska, California, Minnesota, Iowa, Indiana, Illinois, Kansas, New Jersey, Oregon, Utah, Oklahoma, Texas, Virginia, Alabama, Florida and South Carolina and two locations near Toronto, Canada. International operations are located in Australia, Malaysia, the Philippines and India.

Irrigation segment North America manufacturing operations are located in Valley and McCook, Nebraska. Our principal manufacturing operations serving international markets are located in Uberaba, Brazil, Nigel, South Africa, Jebel Ali, United Arab Emirates, Madrid, Spain and Shandong, China. All facilities are owned except for China, which is leased.

Our other North America operations were located in Nebraska and Oregon.

ITEM 3. LEGAL PROCEEDINGS.

We are not a party to, nor are any of our properties subject to, any material legal proceedings. We are, from time to time, engaged in routine litigation incidental to our businesses.

ITEM 4. MINE SAFETY DISCLOSURES.

Not Applicable.

Executive Officers of the Company

Our executive officers at January 20, 2017, their ages, positions held, and the business experience of each during the past five years are, as follows:

Mogens C. Bay, age 68, Chairman and Chief Executive Officer since January 1997.

Mark C. Jaksich, age 59, Executive Vice President and Chief Financial Officer since February 2014. Vice President and Controller, February 2000 to February 2014.

Stephen G. Kaniewski, age 45, President and Chief Operating Officer since October 2016. Joined Valmont in August 2010 as Vice President-Information Technology, and later in January 2014 moved into the Vice President-Global Operations role for the Irrigation segment. In January 2015, he transferred to the Utility Support Structures segment as Senior Vice President and Managing Director and in August 2015 became Group President of Utility Support Structures segment.

Barry A. Ruffalo, age 47, Executive Vice President since March 2015. Mr. Ruffalo was a Group President of various divisions of Lindsay Corporation, an irrigation and infrastructure manufacturer, between 2007 and March 2015.

Vanessa K. Brown, age 64, Senior Vice President-Human Resources since July 2011. Director of Human Resources of North America Engineered Support Structures division from 1997 until 2011.

Timothy P. Francis, age 40, Vice President and Controller since June 2014. Mr. Francis served as Chief Financial Officer of Burlington Capital Group LLC (“BCG”) and America First Multifamily Investors, L.P. (“ATAX”), a NASDAQ listed Limited Partnership in which BCG serves as the General Partner, from January 2012 to May 2014.

John A. Kehoe, age 47, Vice President of Information Technology since June 2014. Mr. Kehoe was a senior information technology executive at Rockwell Collins, an aerospace and defense contractor and manufacturer, from 2004 - 2014.

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PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES.

Our common stock is traded on the New York Stock Exchange under the symbol "VMI". We had approximately 3,500 shareholders of common stock at December 31, 2016. Other stock information required by this item is included in Note 21 "Quarterly Financial Data (unaudited)" to the consolidated financial statements and incorporated herein by reference.

Issuer Purchases of Equity Securities

Period	(a) Total Number of Shares Purchased	(b) Average Price paid per share	(c) Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	(d) Approximate Dollar Value of Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs
September 25, 2016 to October 22, 2016	30,100	$ 128.38	30,100	$ 135,527,000
October 23, 2016 to November 26, 2016	26,772	125.31	26,772	132,172,000
November 27, 2016 to December 31, 2016	—	—	—	132,172,000
Total	56,872	$ 126.93	56,872	$ 132,172,000

On May 13, 2014, we announced a capital allocation philosophy which covered both the quarterly dividend rate as well as a share repurchase program. Specifically, the Board of Directors authorized the purchase of up to $500 million of the Company's outstanding common stock from time to time over twelve months at prevailing market prices, through open market or privately-negotiated transactions. On February 24, 2015, the Board of Directors authorized additional purchases of up to $250 million of the Company's outstanding common stock with no stated expiration date. As of December 31, 2016, we have acquired 4,588,131 shares for approximately $617.8 million under this share repurchase program.

ITEM 6. SELECTED FINANCIAL DATA.

SELECTED FIVE-YEAR FINANCIAL DATA

(Dollars in thousands, except per share amounts)	2016	2015	2014	2013	2012
Operating Data	(3)				
Net sales	$ 2,521,676	$2,618,924	$3,123,143	$3,304,211	$3,029,541
Operating income (1)	243,504	131,695	357,716	473,069	382,296
Net earnings attributable to Valmont Industries, Inc. (2)	173,232	40,117	183,976	278,489	234,072
Depreciation and amortization	82,417	91,144	89,328	77,436	70,218
Capital expenditures	57,920	45,468	73,023	106,753	97,074
Per Share Data					
Earnings:					
Basic (2)	$ 7.68	$ 1.72	$ 7.15	$ 10.45	$ 8.84
Diluted (2)	7.63	1.71	7.09	10.35	8.75
Cash dividends declared	1.500	1.500	1.375	0.975	0.855
Financial Position					
Working capital	$ 903,368	$ 860,298	$ 995,727	$1,161,260	$1,013,507
Property, plant and equipment, net	518,335	532,489	606,453	534,210	512,612
Total assets	2,391,731	2,392,382	2,721,955	2,773,046	2,564,560
Long-term debt, including current installments	755,646	757,995	760,122	467,661	468,826
Total Valmont Industries, Inc. shareholders' equity	943,482	918,441	1,201,833	1,522,025	1,349,912
Cash flow data:					
Net cash flows from operating activities	$ 219,168	$ 272,267	$ 174,096	$ 396,442	$ 197,097
Net cash flows from investing activities	(53,049)	(48,171)	(256,863)	(131,721)	(136,692)
Net cash flows from financing activities	(95,158)	(220,005)	(139,756)	(37,380)	(16,355)
Financial Measures					
Invested capital(a)	$ 1,774,781	$1,759,851	$2,096,276	$2,110,455	$1,977,511
Return on invested capital(a)	9.5%	4.6%	11.3%	15.0%	13.2%
Adjusted EBITDA(b)	$ 326,629	$ 285,115	$ 413,684	$ 546,208	$ 462,417
Return on beginning shareholders' equity(c)	18.9%	3.3%	12.1%	20.6%	20.4%
Leverage ratio (d)	2.32	2.66	1.87	0.89	1.04
Year End Data					
Shares outstanding (000)	22,521	22,857	24,229	26,825	26,674
Approximate number of shareholders	3,500	3,000	2,500	2,500	2,500
Number of employees	10,552	10,697	11,321	10,769	10,543

(1) Fiscal 2015 operating income included impairments of goodwill and intangible assets of $41,970 and restructuring expenses of $39,852.

(2) Fiscal 2016 included deferred income tax benefit of $30,590 ($1.35 per share) resulting primarily from the re-measurement of the deferred tax asset for the Company's U.K. defined benefit pension plan. In addition, fiscal 2016 included $9,888 ($0.44 per share) recorded as a valuation allowance against a tax credit asset. Finally, fiscal 2016 included the reversal of a contingent liability that was recognized as part of the Delta purchase accounting of $16,591 ($0.73 per share) which is not taxable. Fiscal 2015 included impairments of goodwill and intangible assets of $40,140 after-tax ($1.72 per share), restructuring expenses of $28,167 after-tax ($1.20 per share), and deferred income tax expense of $7,120 ($0.31 per share) for a change in U.K tax rates. Fiscal 2014 included costs associated with refinancing of our long-term debt of $24,171 after tax ($0.93 per share). Fiscal 2013 included $4,569 ($0.17 per share) in after-tax fixed asset impairment losses at Delta EMD Pty. Ltd. (EMD) and $12,011 ($0.45 per share) in losses associated with the deconsolidation of EMD.

(3) Fiscal 2016 was a 53 week fiscal year.

(a) Return on Invested Capital is calculated as Operating Income (after-tax) divided by the average of beginning and ending Invested Capital. Invested Capital represents total assets minus total liabilities (excluding interest-bearing debt). Return on Invested Capital is one of our key operating ratios, as it allows investors to analyze our operating performance in light of the amount of investment required to generate our operating profit. Return on Invested Capital is also a measurement used to determine management incentives. Return on Invested Capital is a non-GAAP measure. Accordingly, Invested Capital and Return on Invested Capital should not be considered in isolation or as a substitute for net earnings, cash flows from operations or other income or cash flow data prepared in accordance with GAAP or as a measure of our operating performance or liquidity. The table below shows how Invested Capital and Return on Invested Capital are calculated from our income statement and balance sheet.

	2016	2015	2014	2013	2012
Operating income	$ 243,504	$ 131,695	$ 357,716	$ 473,069	$ 382,296
Adjusted effective tax rate (1)	30.8%	32.0%	33.4%	35.1%	35.2%
Tax effect on operating income	(74,999)	(42,142)	(119,477)	(166,047)	(134,568)
After-tax operating income	168,505	89,553	238,239	307,022	247,728
Average invested capital	1,767,316	1,928,064	2,103,366	2,043,983	1,873,486
Return on invested capital	9.5%	4.6%	11.3%	15.0%	13.2%
Total assets	2,391,731	2,392,382	2,721,955	2,773,046	2,564,560
Less: Accounts and income taxes payable	(177,488)	(179,983)	(196,565)	(216,121)	(212,424)
Less: Accrued expenses	(162,318)	(175,947)	(176,430)	(194,527)	(180,408)
Less: Defined benefit pension liability	(209,470)	(179,323)	(150,124)	(154,397)	(112,043)
Less: Deferred compensation	(44,319)	(48,417)	(47,932)	(39,109)	(31,920)
Less: Other noncurrent liabilities	(14,910)	(40,290)	(45,542)	(51,731)	(44,252)
Less: Dividends payable	(8,445)	(8,571)	(9,086)	(6,706)	(6,002)
Total Invested capital	$1,774,781	$1,759,851	$2,096,276	$2,110,455	$1,977,511
Beginning of year invested capital	$1,759,851	$2,096,276	$2,110,455	$1,977,511	$1,769,461
Average invested capital	$1,767,316	$1,928,064	$2,103,366	$2,043,983	$1,873,486

(1) The adjusted effective tax rate in 2016 excludes deferred income tax benefit of $30,590 resulting primarily from the re-measurement of the deferred tax asset for the Company's U.K. defined benefit pension plan. In addition, fiscal 2016 excludes $9,888 recorded as a valuation allowance against a tax credit asset. Finally, it excludes the reversal of a contingent liability that was recognized as part of the Delta purchase accounting of $16,591, which is not taxable. The effective tax rate in 2016 including these items is 19.1%. The adjusted effective tax rate in 2015 excludes the effects of the goodwill impairments which are not deductible for income tax purposes and the $7,120 million deferred income tax expense recognized as a result of the U.K. corporate tax rate decreasing from 20% to 18%. The effective tax rate in 2015 including these items is 51.0%.

Return on invested capital, as presented, may not be comparable to similarly titled measures of other companies.

(b) Earnings before Interest, Taxes, Depreciation and Amortization (Adjusted EBITDA) is one of our key financial ratios in that it is the basis for determining our maximum borrowing capacity at any one time. Our bank credit agreements contain a financial covenant that our total interest-bearing debt not exceed 3.50x Adjusted EBITDA for the most recent four quarters. These bank credit agreements allow us to add estimated EBITDA from acquired businesses for periods we did not own the acquired businesses. The bank credit agreements also provide for an adjustment to EBITDA, subject to certain specified limitations, for non-cash charges or gains that are non-recurring in nature. If this financial covenant is violated, we may incur additional financing costs or be required to pay the debt before its maturity date. Adjusted EBITDA is non-GAAP measure and, accordingly, should not be considered in isolation or as a substitute for net earnings, cash flows from operations or other income or cash flow data prepared in accordance with GAAP or as a measure of our operating performance or liquidity. The calculation of Adjusted EBITDA is as follows:

	2016	2015	2014	2013	2012
Net cash flows from operations	$ 219,168	$ 272,267	$ 174,096	$ 396,442	$ 197,097
Interest expense	44,409	44,621	36,790	32,502	31,625
Income tax expense	42,063	47,427	94,894	157,781	126,502
Loss on investment	(586)	(4,555)	(3,795)	—	—
Non-cash debt refinancing costs	—	—	2,478	—	—
Change in fair value of contingent consideration	3,242	—	4,300	—	—
Deconsolidation of subsidiary	—	—	—	(12,011)	—
Impairment of goodwill and intangible assets	—	(41,970)	—	—	—
Impairment of property, plant and equipment	(1,099)	(19,836)	—	(12,161)	—
Deferred income tax (expense) benefit	23,685	(4,858)	(5,251)	10,141	(3,720)
Noncontrolling interest	(5,159)	(5,216)	(5,342)	(1,971)	(4,844)
Equity in earnings of nonconsolidated subsidiaries	—	(247)	29	835	6,128
Stock-based compensation	(9,931)	(7,244)	(6,730)	(6,513)	(5,829)
Pension plan expense	(1,870)	610	(2,638)	(6,569)	(4,281)
Contribution to pension plan	1,488	16,500	18,173	17,619	11,591
Increase in restricted cash - pension plan trust	13,652	—	—	—	—
Changes in assets and liabilities, net of acquisitions	13,690	(71,863)	98,376	(34,205)	108,469
Other	(631)	(2,327)	(392)	4,318	(321)
EBITDA	342,121	223,309	404,988	546,208	462,417
Reversal of contingent liability	(16,591)	—	—	—	—
Impairment of goodwill and intangible assets	—	41,970	—	—	—
Impairment of property, plant and equipment	1,099	19,836	—	—	—
EBITDA from acquisitions (months in 2014 not owned by Company)	—	—	8,696	—	—
Adjusted EBITDA	$ 326,629	$ 285,115	$ 413,684	$ 546,208	$ 462,417

	2016	2015	2014	2013	2012
Net earnings attributable to Valmont Industries, Inc.	$ 173,232	$ 40,117	$ 183,976	$ 278,489	$ 234,072
Interest expense	44,409	44,621	36,790	32,502	31,625
Income tax expense	42,063	47,427	94,894	157,781	126,502
Depreciation and amortization expense	82,417	91,144	89,328	77,436	70,218
EBITDA	342,121	223,309	404,988	546,208	462,417
Reversal of contingent liability	(16,591)	—	—	—	—
Impairment of goodwill and intangible assets	—	41,970	—	—	—
Impairment of property, plant and equipment	1,099	19,836	—	—	—
EBITDA from acquisitions (months in 2014 not owned by Company)	—	—	8,696	—	—
Adjusted EBITDA	$ 326,629	$ 285,115	$ 413,684	$ 546,208	$ 462,417

Adjusted EBITDA, as presented, may not be comparable to similarly titled measures of other companies. During 2014, we incurred $38,705 of costs associated with refinancing of debt. This category of expense is not in the definition of EBITDA for debt covenant calculation purposes per our debt agreements. As such, it was not added back in the Adjusted EBITDA reconciliation to cash flows from operations or net earnings for the year ended December 27, 2014.

(c) Return on beginning shareholders' equity is calculated by dividing Net earnings attributable to Valmont Industries, Inc. by the prior year's ending Total Valmont Industries, Inc. shareholders' equity.

(d) Leverage ratio is calculated as the sum of current portion of long-term debt, notes payable to bank, and long-term debt divided by Adjusted EBITDA. The leverage ratio is one of the key financial ratios in the covenants under our major debt agreements and the ratio cannot exceed 3.5 for any reporting period (four quarters). If those covenants are violated, we may incur additional financing costs or be required to pay the debt before its maturity date. Leverage ratio is a non-GAAP measure and, accordingly, should not be considered in isolation or as a substitute for net earnings, cash flows from operations or other income or cash flow data prepared in accordance with GAAP or as a measure of our operating performance or liquidity. The calculation of this ratio is as follows:

	2016	2015	2014	2013	2012
Current portion of long-term debt	$ 851	$ 1,077	$ 1,181	$ 202	$ 224
Notes payable to bank	746	976	13,952	19,024	13,375
Long-term debt	754,795	756,918	758,941	467,459	468,602
Total interest bearing debt	756,392	758,971	774,074	486,685	482,201
Adjusted EBITDA	326,629	285,115	413,684	546,208	462,417
Leverage Ratio	2.32	2.66	1.87	0.89	1.04

Leverage ratio, as presented, may not be comparable to similarly titled measures of other companies.

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

MANAGEMENT'S DISCUSSION AND ANALYSIS

Forward‑Looking Statements

Management's discussion and analysis, and other sections of this annual report, contain forward‑looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward‑looking statements are based on assumptions that management has made in light of experience in the industries in which the Company operates, as well as management's perceptions of historical trends, current conditions, expected future developments and other factors believed to be appropriate under the circumstances. These statements are not guarantees of performance or results. They involve risks, uncertainties (some of which are beyond the Company's control) and assumptions. Management believes that these forward‑looking statements are based on reasonable assumptions. Many factors could affect the Company's actual financial results and cause them to differ materially from those anticipated in the forward‑looking statements. These factors include, among other things, risk factors described from time to time in the Company's reports to the Securities and Exchange Commission, as well as future economic and market circumstances, industry conditions, company performance and financial results, operating efficiencies, availability and price of raw materials, availability and market acceptance of new products, product pricing, domestic and international competitive environments, and actions and policy changes of domestic and foreign governments.

The following discussion and analysis provides information which management believes is relevant to an assessment and understanding of our consolidated results of operations and financial position. This discussion should be read in conjunction with the Consolidated Financial Statements and related Notes.

General

	2016	2015	Change 2016 - 2015	2014	Change 2015 - 2014
	Dollars in millions, except per share amounts				
Consolidated					
Net sales	$ 2,521.7	$ 2,618.9	(3.7)%	$ 3,123.1	(16.1)%
Gross profit	656.2	621.0	5.7 %	808.1	(23.2)%
as a percent of sales	26.0%	23.7%		25.9%	
SG&A expense	412.7	489.3	(15.7)%	450.4	8.6 %
as a percent of sales	16.4%	18.7%		14.4%	
Operating income	243.5	131.7	84.9 %	357.7	(63.2)%
as a percent of sales	9.7%	5.0%		11.5%	
Net interest expense	41.3	41.3	— %	30.7	34.5 %
Effective tax rate	19.1%	51.0%		33.4%	
Net earnings attributable to Valmont Industries, Inc.	173.2	40.1	331.9 %	184.0	(78.2)%
Diluted earnings per share	$ 7.63	$ 1.71	346.2 %	$ 7.09	(75.9)%
Engineered Support Structures Segment					
Net sales	$ 764.5	$ 748.4	2.2 %	$ 735.0	1.8 %
Gross profit	210.8	191.6	10.0 %	194.2	(1.3)%
SG&A expense	139.4	132.0	5.6 %	128.2	3.0 %
Operating income	71.4	59.6	19.8 %	66.0	(9.7)%
Energy & Mining Segment					
Net sales	$ 314.5	$ 333.2	(5.6)%	$ 443.7	(24.9)%
Gross profit	57.0	53.4	6.7 %	93.8	(43.1)%
SG&A expense	45.1	72.1	(37.4)%	52.5	37.3 %
Operating income	11.9	(18.7)	163.6 %	41.3	(145.3)%
Utility Support Structures Segment					
Net sales	$ 630.8	$ 673.3	(6.3)%	$ 822.6	(18.1)%
Gross profit	133.8	116.0	15.3 %	172.0	(32.6)%
SG&A expense	64.7	78.2	(17.3)%	76.9	1.7 %
Operating income	69.1	37.8	82.8 %	95.1	(60.3)%
Coatings Segment					
Net sales	$ 243.9	$ 255.5	(4.5)%	$ 278.4	(8.2)%
Gross profit	77.8	79.8	(2.5)%	98.1	(18.7)%
SG&A expense	31.2	52.4	(40.5)%	37.1	41.2 %
Operating income	46.6	27.4	70.1 %	61.0	(55.1)%
Irrigation Segment					
Net sales	$ 568.0	$ 605.8	(6.2)%	$ 839.7	(27.9)%
Gross profit	175.8	183.5	(4.2)%	248.1	(26.0)%
SG&A expense	88.0	99.0	(11.1)%	96.6	2.5 %
Operating income	87.8	84.5	3.9 %	151.5	(44.2)%
Other					
Net sales	$ —	$ 2.7	(100.0)%	$ 3.7	(27.0)%
Gross profit	—	(3.1)	(100.0)%	1.7	(282.4)%
SG&A expense	—	6.7	(100.0)%	3.2	109.4 %
Operating income	—	(9.8)	(100.0)%	(1.5)	553.3 %
Net corporate expense					
Gross profit	$ 1.0	$ (0.2)	600.0 %	$ 0.2	(200.0)%
SG&A expense	44.3	48.9	(9.4)%	55.9	(12.5)%
Operating loss	(43.3)	(49.1)	(11.8)%	(55.7)	(11.8)%

RESULTS OF OPERATIONS

FISCAL 2016 COMPARED WITH FISCAL 2015

Overview

As discussed below, the Company's reported net earnings for the year ended December 31, 2016 was impacted by a decrease in net sales ($97.2 million) and restructuring expenses (pre-tax $12.4 million). Reported net earnings for the year ended December 26, 2015 included restructuring expenses (pre-tax $39.9 million) and impairments of goodwill and intangible assets (pre-tax $42.0 million).

On a consolidated basis, the decrease in net sales in 2016, as compared with 2015, reflected lower sales in all reportable segments except for the Engineered Support Structures segment. In fiscal 2016, the Company had 53 weeks of operations while fiscal 2015 and 2014 had 52 weeks of operations. The estimated impact on the company's results of operations due to the extra week in fiscal 2016 was additional net sales of approximately $50 million and additional net earnings of approximately $3 million.

The changes in net sales in 2016, as compared with 2015, was due to the following factors:

	Total	ESS	Energy & Mining	Utility	Coatings	Irrigation	Other
Sales - 2015	$2,618.9	$ 748.4	$ 333.2	$ 673.3	$ 255.5	$ 605.8	$ 2.7
Volume	(13.4)	36.8	(9.5)	1.5	(10.0)	(29.5)	(2.7)
Pricing/mix	(60.8)	(9.8)	(3.7)	(44.0)	(4.5)	1.2	—
Acquisitions	5.9	—	—	—	5.9	—	—
Currency translation	(28.9)	(10.9)	(5.5)	—	(3.0)	(9.5)	—
Sales - 2016	$2,521.7	$ 764.5	$ 314.5	$ 630.8	$ 243.9	$ 568.0	$ —

Volume effects are estimated based on a physical production or sales measure. Since products we sell are not uniform in nature, pricing and mix relate to a combination of changes in sales prices and the attributes of the product sold. Accordingly, pricing and mix changes do not necessarily directly result in operating income changes.

Restructuring Plan

In 2016, we executed a restructuring plan in Australia/New Zealand focused primarily on closing and consolidating locations within the Energy and Mining and Coatings segments as well as closing a structures facility in Canada (the "2016 Plan"). We incurred approximately $7.8 million of restructuring expense consisting of $5.0 million in cost of goods sold and $2.8 million in selling, general, and administrative expense in 2016. The Plan was substantially completed at year-end 2016.

In April 2015, our Board of Directors authorized a broad restructuring plan (the "2015 Plan") to respond to the market environment in certain of our businesses. During 2016, we incurred approximately $4.6 million of restructuring expense to complete the 2015 Plan consisting of $4.1 million in selling, general, and administrative expense with the remainder recorded in cost of goods sold.

Inclusive of both the 2016 and 2015 Plans, operating income in 2016 was reduced due to restructuring expense by segment as follows:

	Total	ESS	Energy & Mining	Utility	Coatings	Irrigation	Corporate
Full year	$ (12.4)	$ (3.1)	$ (5.2)	$ (0.5)	$ (0.9)	$ (0.5)	$ (2.2)

Currency Translation

In 2016, we realized a decrease in operating profit of $1.6 million, as compared with 2015, due to currency translation effects. On average, the U.S. dollar strengthened against most currencies and in particular against the Australian dollar, Brazilian Real, Euro, and South African Rand, resulting in less operating profit in U.S. dollar terms. The breakdown of this effect by segment was as follows:

	Total	ESS	Energy & Mining	Utility	Coatings	Irrigation	Corporate
Year-to-date	$ (1.6)	$ (0.5)	$ (0.6)	$ —	$ (0.2)	$ (0.3)	$ —

Gross Profit, SG&A, and Operating Income

At a consolidated level, the improvement in gross margin (gross profit as a percent of sales) in 2016, as compared with 2015, was due to restructuring activities undertaken in 2015 and the $17 million Utility segment commercial settlement recognized in 2015. Gross profit increased in 2016, as compared to 2015, for all operating segments except for Coatings and Irrigation. Gross profit decreased for Coatings and Irrigation primarily due to lower volumes and unfavorable currency translation effects. Reduced average selling prices also resulted in a decline in gross profit for the Coatings segment.

The Company incurred $6.8 million of restructuring expense in 2016 within selling, general and administrative (SG&A) expenses, compared to $18.2 million in 2015. Excluding restructuring expense, the Company saw a decrease in SG&A in 2016 of $65.2 million, as compared with 2015, mainly due to the following factors:

- $42.0 million of goodwill and intangible impairments recorded in 2015 which did not recur in 2016;
- reduced doubtful account provisions of $11.1 million, principally in the Irrigation segment;
- currency translation effects of $4.7 million (lower SG&A) due to the strengthening of the U.S. dollar primarily against the Australian dollar, Brazilian real, and South African rand;
- reversal of $3.2 million of a contingent consideration liability to the former owners of Pure Metal Galvanizing in 2016; and
- reductions due to exiting a business development activity, lower project expenses, reduced discretionary spending, and benefits from restructuring activities undertaken in 2015.

The above reductions were partially offset by the following increases in SG&A expenses in 2016 as compared with 2015:

- increased incentive expenses due to improved operating performance of $13.6 million;
- higher deferred compensation expenses of $1.5 million, which was offset by a decrease of the same amount of other expense; and
- increased pension expenses of $2.5 million.

In 2016 as compared to 2015, operating income improved for all operating segments. The increase in operating income is primarily attributable to reduced expenses for restructuring activities and the associated benefits of the restructuring activities, no goodwill or intangible asset impairments in 2016, lower doubtful account provisions, and reduced overall SG&A spending.

Net Interest Expense and Debt

Net interest expense in 2016, as compared to 2015, was consistent due to minimal changes in short and long-term borrowings.

Other Expense

The increase in other income in 2016 is a result of the reversal of a contingent liability provision, approximately $16.6 million, out of "Other noncurrent liabilities." This liability was originally recorded as part of the Delta purchase accounting in 2010 to address a certain contingent liability. The statutes of limitation have expired and we now determine this matter to be remote.

Income Tax Expense

Our effective income tax rates were 19.1% and 51.0% in 2016 and 2015. Fiscal 2016 includes $30.6 million of deferred income tax benefit attributable to the re-measurement of the deferred tax asset related to the Company's U.K. defined benefit pension plan. In addition, in fiscal 2016 we recorded a $9.9 million valuation allowance against a tax credit for which we believe we are not likely to receive the benefit. Excluding these items as well as the impact of the reversal of the contingent liability of $16.6 million that is not taxable, our effective tax rate would have been 30.8%. The fiscal 2015 rate is unusually high primarily due to the APAC Coatings and Access Systems goodwill impairments recorded that are not deductible for tax purposes. In addition, U.K. corporate tax rates were collectively reduced from 20% to 18% in 2015. Accordingly, we reduced the value of our deferred tax assets associated with net operating loss carryforwards and certain timing differences by $7.1 million, with a corresponding increase in deferred income tax expense. Excluding these items, our effective tax rate would have been 32.0% in fiscal 2015.

Noncontrolling Interests

Earnings attributable to noncontrolling interest was flat in 2016 as compared to 2015.

Cash Flows from Operations

Our cash flows provided by operations were approximately $219.2 million in 2016, as compared with $272.3 million provided by operations in 2015. The decrease in operating cash flow in 2016, as compared with 2015, was the result of higher net working capital and a reduction in noncurrent liabilities that was partially offset by improved net earnings.

Engineered Support Structures (ESS) segment

The increase in sales in 2016 as compared with 2015 was primarily due to improved volumes in our Asia-Pacific Structures businesses. The volume increase was partially offset by unfavorable currency translation effects and lower average selling prices mostly attributed to average lower cost of steel.

Global lighting and traffic, and roadway product sales in 2016 were higher compared to the same periods in fiscal 2015. Sales volumes in the U.S. were higher in the commercial and OEM markets (steel and aluminum), and modestly lower in the transportation markets. We expect the 2015 long-term U.S. highway bill to provide an uplift to the transportation market demand sometime in 2017. Sales in Canada decreased in 2016 as compared to 2015, from lower volumes due to less large projects and unfavorable currency translation. Sales in Europe were lower in 2016 compared to 2015, due to unfavorable currency translation effects and lower volumes primarily related to a large project in the Middle East in 2015. The domestic markets in general remain subdued in Europe, as economic conditions have curtailed infrastructure investment. In the Asia-Pacific ("APAC") region, sales were higher in 2016, as compared to 2015, due primarily to improved investment activity in Australia and overall market growth in India. Roadway product sales decreased in 2016 due to lower volumes and unfavorable currency translation effects.

Communication product line sales were lower in 2016, as compared with 2015. North America communication structure and component sales decreased, due to lower market demand. In China, sales of wireless communication structures in 2016 increased over the same period in 2015 as the investment levels by the major wireless carriers have remained strong and we have increased our market share through better sales coverage. In Australia, sales for wireless communication structures improved in 2016 due to higher demand from the national broadband network build out.

Gross profit, as a percentage of sales, and operating income for the segment were higher in 2016, as compared with 2015, due to margin expansion from lower average raw material costs, growth in the Asia-Pacific telecommunication business, and lower costs resulting from the 2015 restructuring activities. These increases were partially offset by unfavorable currency translation effects and lower sales volumes in Europe and the North American wireless communication businesses. Favorable LIFO inventory valuation reserve adjustments were approximately $4 million lower in 2016 as compared to 2015. SG&A spending in 2016 increased over the same period in 2015 due primarily to increased commissions owed on the higher telecommunication sales in the Asia-Pacific region and higher compensation costs.

Energy & Mining (E&M) segment

The decrease in sales in 2016, as compared to 2015, was primarily due to unfavorable currency translation effects, and modestly lower pricing.

Access systems product line sales in 2016 were lower when compared to 2015. The sales decrease was primarily due to the negative impact of currency translation effects and lower sales prices in Asia. The decrease in sales price is primarily related to fewer oil and gas related construction projects in the APAC region.

Offshore and other complex structures sales increased in 2016 as compared to 2015. The increase can be attributed to volume improvements primarily in the wind tower product line. Oil and gas product activity continues to be slow due to low oil prices that caused some previously planned projects to be postponed.

Grinding media sales were down in 2016 as compared to 2015, primarily due to lower volumes. Currency translation effects also negatively affected year-to-date sales in 2016 as compared to 2015. The volume decreases are primarily related to the continued slowdown in the Australia mining sector.

Operating income was higher for the segment in 2016, as compared to 2015, primarily due to goodwill and trade name impairment charges in 2015 associated with the Access Systems reporting unit totaling $24.6 million. In addition, the improvement was driven by a number of restructuring actions undertaken to improve our cost structure in our Access Systems business, including facility closures. The increase in operating income was partially offset by lower sales prices in the access systems business and unfavorable currency translation effects. SG&A expense decreased due to the 2015 goodwill and trade name impairments not recurring in 2016, currency translation effects, and a lower fixed cost structure arising from restructuring activities undertaken.

Utility Support Structures (Utility) segment

In the Utility segment, sales decreased in 2016 as compared with 2015, due mainly to decreased average selling prices tied to the lower cost of steel and lower international sales volumes. Declining cost of steel during the second half of 2015 and first quarter of 2016 contributed to lower average selling prices for the first three quarters of 2016. A number of our sales contracts contain provisions that tie the sales price to published steel index pricing at the time our customer issues their purchase order.

In North America, sales volumes in tons for steel utility structures were higher in 2016, as compared with 2015, while concrete sales volumes in tons decreased during 2016. International utility structures sales volumes were lower in 2016 as compared to 2015.

Gross profit as a percentage of sales improved in 2016, as compared to 2015, due to a number of actions taken in 2015 to improve our cost structure and operational efficiency in this segment, including certain restructuring activities involving facility closures. In addition, the segment recorded a $17.0 million reserve in the fourth quarter of 2015 for a commercial settlement with a large customer that requires ongoing quality monitoring. SG&A expense was lower in 2016, as compared with 2015, primarily due to the benefits realized from the 2015 restructuring activities. Operating income increased in 2016, as compared with 2015, primarily due to lower restructuring costs and the related improved cost structure realized in 2016 and the commercial settlement recorded in 2015.

Coatings segment

Coatings segment sales in North America decreased in 2016, as compared with 2015, due to lower volumes and less favorable sales pricing mostly due to mix. The decrease was partially offset by the acquisition of American Galvanizing that accounted for $5.9 million of sales. Coatings sales in the Asia-Pacific region were lower in 2016 due to reduced volumes, lower pricing and sales mix, and unfavorable currency translation effects primarily related to the strengthening of the U.S. dollar against the Australian dollar and Malaysian Ringgit.

SG&A expense was lower in 2016, as compared to 2015, due to $17.3 million of goodwill and trade name impairment charges recorded in 2015 associated with the APAC Coatings reporting unit. In addition, the contingent consideration liability to the former owners of Pure Metal Galvanizing (PMG), payable in calendar 2018, was reduced in 2016 by $3.2 million, due to changes in the estimated earnings over the earn out period. The decrease was partially offset by the SG&A of American Galvanizing, acquired in the fourth quarter of 2015. Operating income was higher in 2016, as compared with 2015, due primarily to the impairment charges in 2015 not recurring in 2016, the reduction in the PMG contingent consideration liability in 2016, and income from the American Galvanizing acquisition. These increases were partially offset by reduced volumes in North America and Asia Pacific and less favorable sales mix.

Irrigation segment

The decrease in Irrigation segment net sales in 2016, as compared with 2015, was mainly due to sales volume decreases in North America for both the irrigation and tubing businesses and unfavorable currency translation effects for our international irrigation business. Volume increases for international irrigation partially offset the decrease. In fiscal 2016, net farm income in the United States is expected to decrease 17.2% from the levels of 2015, due in part to lower market prices for corn and soybeans. The 2016 estimate represents the third consecutive year of a decrease in estimated net farm income. We believe this reduction contributed to lower demand for irrigation machines in North America in 2016 as compared with 2015. In international markets, sales volumes increased in 2016 over 2015 due to volume improvements in all regions except for Australia and China. The volume improvements were partially offset by unfavorable currency translation effects of $9.5 million primarily related to the South African rand and Brazilian real.

SG&A was lower in 2016 as compared with 2015, and is primarily attributed to approximately $10.5 million of lower provisions for uncollected international receivables. In 2015, the Company recorded a provision of approximately $8.0 million primarily related to delinquent receivables with a Chinese municipal entity. In addition, currency translation and lower overall discretionary spending contributed to lower SG&A. The decreases were partially offset by increased compensation and incentive expenses due primarily to improved international irrigation operations. Operating income for the segment improved in 2016 over 2015, due to lower provisions for uncollected international receivables and lower discretionary spending, partially offset by lower volumes and a higher LIFO inventory reserve due to higher steel prices in 2016.

Other

Due to the business reorganization that occurred in the fourth quarter of 2015, there are no longer business operations included in Other.

Net corporate expense

Net corporate expense in 2016 decreased compared to 2015. The decrease was mainly due to the following:

- lower restructuring expenses of $4.5 million;
- lower compensation expenses of $3.8 million due primarily to lower employment levels; and
- reduced discretionary spending.

The above decreases were partially offset by approximately $7.7 million of higher incentive costs in 2016 due to improved operations, $2.5 million of higher pension expense for the Delta Pension Plan, and increased deferred compensation expenses of $1.5 million, which was offset by the same amount of other expense.

FISCAL 2015 COMPARED WITH FISCAL 2014

Overview

As discussed below, the Company's reported net earnings for the year ended December 26, 2015 was impacted by the decrease in net sales ($504.2 million), restructuring expense (pre-tax $39.9 million), and impairments of goodwill and intangible assets (pre-tax $42.0 million).

On a consolidated basis, the decrease in net sales in 2015, as compared with 2014, reflected lower sales in all reportable segments except for the Engineered Support Structures segment. The changes in net sales in 2015, as compared with 2014, was due to the following factors:

	Total	ESS	Energy & Mining	Utility	Coatings	Irrigation	Other
Sales - 2014	$3,123.1	$ 735.0	$ 443.7	$ 822.6	$ 278.4	$ 839.7	$ 3.7
Volume	(302.7)	22.4	(49.7)	(65.8)	(18.5)	(190.1)	(1.0)
Pricing/mix	(86.9)	(3.8)	(6.9)	(76.3)	12.5	(12.4)	—
Acquisitions	73.6	44.9	15.4	—	2.2	11.1	—
Currency translation	(188.2)	(50.1)	(69.3)	(7.2)	(19.1)	(42.5)	—
Sales - 2015	$2,618.9	$ 748.4	$ 333.2	$ 673.3	$ 255.5	$ 605.8	$ 2.7

Volume effects are estimated based on a physical production or sales measure. Since products we sell are not uniform in nature, pricing and mix relate to a combination of changes in sales prices and the attributes of the product sold. Accordingly, pricing and mix changes do not necessarily directly result in operating income changes.

Acquisitions included DS SM A/S (renamed Valmont SM), AgSense LLC, Shakespeare, and American Galvanizing. We acquired Valmont SM in March 2014, AgSense in August 2014, Shakespeare in October 2014, and American Galvanizing in October 2015. Shakespeare is reported in the Engineered Support Structures segment, Valmont SM is recorded in the Energy & Mining segment, AgSense is reported in the Irrigation segment, and American Galvanizing is reported in the Coatings segment. Average steel index prices for both hot rolled coil and plate decreased substantially in North America in 2015 as compared to 2014. Decreases in sales pricing and volumes offset the increase in gross profit realized from the lower steel prices.

Restructuring Plan

In April 2015, our Board of Directors authorized a broad restructuring plan (the "Plan") including up to $60 million of expenses to respond to the market environment in certain of our businesses. During 2015 we incurred approximately $39.9 million of restructuring expense consisting of $21.7 million cost of goods sold and $18.2 million in selling, general, and administrative expense. The decrease in gross profit in 2015 due to restructuring expense by segment is as follows:

Gross Profit	Total	ESS	Energy & Mining	Utility	Coatings	Irrigation	Other	Corporate
Full year	$ (21.7)	$ (4.1)	$ (6.4)	$ (4.5)	$ (6.0)	$ (0.7)	$ —	$ —

The decrease in 2015 operating income due to restructuring expense by segment is as follows:

	Total	ESS	Energy & Mining	Utility	Coatings	Irrigation	Other	Corporate
Full year	$ (39.9)	$ (9.3)	$ (7.1)	$ (5.2)	$ (6.6)	$ (1.3)	$ (4.0)	$ (6.4)

Goodwill and Trade Name Impairment

The Company recognized a $16.2 million impairment of goodwill on the APAC Coatings reporting unit during fiscal 2015, which represented all of the remaining goodwill on this reporting unit. The goodwill impairment was a result of difficulties in the Australian market over the last couple of years, including a general slowdown in manufacturing. The Company also recorded a $1.1 million impairment of the Industrial Galvanizing trade name (in the Coatings segment) and a $5.8 million impairment of the Webforge trade name (in the Energy and Mining segment) during 2015. In the fourth quarter of 2015, the Company recorded an $18.8 million goodwill impairment of its Access Systems reporting unit due to continued downward pressure on oil and natural gas prices which in turn reduces the prospects for new oil and gas exploration primarily in Australia and Southeast Asia.

Currency Translation

In 2015, we realized a decrease in operating profit of $17.3 million, as compared with 2014, due to currency translation effects. On average, the U.S. dollar strengthened against most currencies and in particular against the Australian dollar, Brazilian Real, Euro, and South Africa Rand, resulting in less operating profit in U.S. dollar terms. The breakdown of this effect by segment was as follows:

	Total	ESS	Energy & Mining	Utility	Coatings	Irrigation	Other	Corporate
Year-to-date	$ (17.3)	$ (3.4)	$ (5.5)	$ 0.2	$ (1.9)	$ (7.6)	$ —	$ 0.9

Gross Profit, SG&A, and Operating Income

The decrease in gross margin (gross profit as a percent of sales) in fiscal 2015, as compared with 2014, was due to a combination of lower sales prices, unfavorable sales mix, restructuring charges, and reduced sales volumes in 2015. This was partially offset by gross margin from acquisitions and a reduction of LIFO inventory layers in 2015.

Selling, general and administrative (SG&A) expense in 2015 increased from 2014, primarily due to the following factors:

- acquisition of Valmont SM, AgSense, Shakespeare, and American Galvanizing with expenses of $12.7 million;
- increased doubtful account provisions of $11.1 million, principally in the irrigation segment;
- expenses incurred related to the restructuring plan of $18.2 million; and
- impairment of goodwill and trade names of $42.0 million.

The above increases in SG&A were partially offset by the following:

- currency translation effects of $23.5 million due to the strengthening of the U.S. dollar primarily against the Australian dollar, Brazilian Real, Euro, and South African Rand;
- decreased employee incentive accruals and other compensation costs of $10.2 million, due to lower operating results;
- lower expenses associated with the Delta Pension Plan of $3.2 million, and;
- reduced deferred compensation expenses of $2.6 million, which is offset by the same amount of other expense.

The decrease in operating income on a reportable segment basis in 2015, as compared to 2014, was due to reduced operating performance in all segments. The decrease in operating income is primarily attributable to lower volumes and sales prices, restructuring expenses, impairment charges, and currency translation effects.

Net Interest Expense and Debt

Net interest expense increased in 2015, as compared with 2014, primarily due to additional long-term debt borrowed in the third quarter of 2014. In addition, interest income decreased due to less cash on hand for investment due to the share buyback program.

The approximate $38.7 million in costs associated with refinancing of debt recognized in 2014 is due to the Company's repurchasing through partial tender of $199.8 million in aggregate principal amount of a portion of the 6.625% senior unsecured notes due 2020. This expense was comprised of the following:

- Cash prepayment expenses of approximately $41.2 million; less
- Recognition of $4.4 million of the proportionate unamortized premium originally recorded upon the issuance of the 2020 notes; plus
- Recognition of approximately $2.0 million of expense comprised of the proportionate amount of the write-offs of unamortized loss on cash flow hedge and deferred financing costs.

Other Expense

The decrease in other expense in 2015, as compared with 2014, was due to the difference in investment income from the Company's shares of Delta EMD. In 2014, we recorded a non-cash mark to market loss of $3.8 million due to the decrease in fair value of the shares. In 2015, we received a $5.0 million special dividend that was fully offset by a non-cash mark to market loss; the EMD investment then appreciated approximately $0.5 million in 2015. An additional contributing factor was more favorable foreign currency transaction gains/losses due to currency exchange rate changes. These improvements were partially offset by reduced market performance of deferred compensation assets of $2.6 million.

Income Tax Expense

Our effective income tax rate in fiscal 2015 of 51.0%, respectively, was higher when compared with the same periods in fiscal 2014 of 33.4%. The increase primarily relates to the APAC Coatings and Access Systems goodwill impairments recorded in 2015 that are not deductible for tax purposes. In addition, U.K. corporate tax rates were collectively reduced from 20% to 18%. Accordingly, we reduced the value of our deferred tax assets associated with net operating loss carryforwards and certain timing differences by $7.1 million, with a corresponding increase in income tax expense.

Earnings attributable to noncontrolling interest was lower in 2015, as compared with 2014, due to the write-off of the remaining interest in a joint venture.

Cash Flows from Operations

Our cash flows provided by operations were approximately $272.3 million in 2015, as compared with $174.1 million provided by operations in 2014. The increase in operating cash flow in 2015 was the result of improved net working capital, partially offset by lower net earnings, compared with 2014.

Engineered Support Structures (ESS) segment

The increase in net sales in 2015 as compared with 2014 was primarily due to the acquisition of Shakespeare in October 2014 and improved volumes in certain regions. The increases were partially offset by unfavorable currency translation effects.

Global lighting, traffic, and roadway product sales in 2015 were lower compared to 2014. Sales volumes in the U.S. were higher in the commercial steel and aluminum markets and lower in the transportation markets. Sales volumes in Canada decreased in 2015 as compared to 2014, due to unfavorable currency impacts that were partially offset by slightly higher volumes. Sales in Europe were lower in 2015 compared to 2014, due to unfavorable currency translation effects that were partially offset by higher volumes relating to a large project in the Middle East that concluded in the second quarter. The domestic markets in general remain subdued in Europe. In the Asia Pacific region, sales were slightly lower in 2015 as compared to 2014, due to lower investment activity in both China and Australia.

Highway safety product sales decreased in 2015 as compared to 2014, due to unfavorable foreign currency translation. An increase in sales volume and price due to improved highway project activity in Australia and New Zealand offset some of the unfavorable foreign currency translation.

Communication product line sales were higher in 2015, as compared with 2014. North America communication structure sales decreased, primarily due to one customer who significantly reduced its 4G wireless network build out in 2015 compared with 2014. Communication component sales were slightly higher in 2015 due to continued expansion of the customer base. In China, sales of wireless communication structures in 2015 increased over the same period in 2014 as the investment levels by the major wireless carriers remained strong due to the 4G network build out. In Australia, sales for wireless communication structures were down for the year but started to improve in the fourth quarter as the anticipated national broadband network build out began.

The increase in SG&A spending in 2015 was due to the Shakespeare acquisition totaling $7.0 million and restructuring charges of $5.2 million. These increases were partially offset by currency translation effects. Operating income for the segment in 2015 was lower, as compared with to 2014, due to restructuring charges of $9.3 million and unfavorable currency translation effects of $3.4 million. Due to the rapid decreases in steel prices during 2015, our North American lighting and traffic businesses in general were able to hold on to higher sales prices which improved gross margin and partially offset the lower operating income. In addition, lower steel prices led to reduced LIFO inventory reserves and higher profits that were offset by revaluing the remaining FIFO inventory. Lastly, the acquisition of Shakespeare contributed nine additional months in 2015 (as compared to 2014) accounting for additional operating income of approximately $4.0 million.

Energy & Mining (E&M) segment

The decrease in net sales in 2015 as compared with 2014 was primarily due to unfavorable currency translation effects and reduced volumes, offset partially by two additional months of business in 2015 for Valmont SM.

Access systems product line sales decreased in 2015 as compared with 2014, primarily due to the negative impact of currency translation effects and lower volumes. The volume decrease was primarily related to the slowdown in mining sector investment in Australia, weaker market conditions in China, and fewer oil and gas related construction projects.

Offshore structures sales were down $43.4 million in 2015, as compared to 2014. The decrease is impacted by unfavorable currency translation effects and reduced volumes partially offset by two additional months of sales in 2015. A delay in wind energy product introduction by our customers has resulted in some projects being delayed. An additional factor contributing to the sales decrease is the continuation of low oil prices that has resulted in lower sales for our customers in the exploration industry.

Grinding media sales were down in 2015 as compared with 2014, due to the negative impact of currency translation effects. Volumes were relatively flat year-over-year.

Operating income for the segment in 2015 was lower, as compared with 2014, due to goodwill and trade name impairments totaling $24.6 million, restructuring charges of $7.1 million, and unfavorable currency translation effects of $5.5 million. The remainder of the decrease can be attributed to the reversal of the Locker earn-out liability in 2014 of approximately $4.0 million, and lower volumes and sales mix in the offshore structures and access systems businesses. SG&A spending increased in 2015 as a result of the goodwill and trade name impairments, restructuring costs, and two additional months of Valmont SM expenses being partially offset by currency translation effects.

Utility Support Structures (Utility) segment

In the Utility segment, sales decreased in 2015 as compared with 2014, due to lower sales volume, a decrease in average selling prices, most notably for our steel products, and an unfavorable sales mix. Our mix of revenue from very large transmission projects in 2015 was unfavorable to 2014. A backlog including some very large transmission projects at year-end 2013 provided for the more favorable mix of large transmission projects revenue in first quarter of 2014. Declining price of steel during 2015 and a competitive pricing environment also contributed to lower average selling prices in 2015 compared to 2014. In North America, sales volumes in tons for both steel and concrete utility structures were down in 2015, as compared with 2014. The pricing environment in North America continues to be very competitive. In 2015 as compared to 2014, international utility structures sales decreased due to lower volumes in export markets and unfavorable currency translation effects.

SG&A expense increased slightly in 2015, as compared with 2014, primarily due to restructuring costs. Operating income in 2015, as compared with 2014, decreased due to lower volumes, reduced sales margins, restructuring costs, and reduced leverage of fixed costs. In addition, the segment recorded a $17.0 million reserve in the fourth quarter of 2015 for a commercial settlement with a large customer that requires ongoing quality monitoring. While we initiated a number of actions to improve our cost structure in this segment, including certain restructuring activities, the full effect will be realized as these initiatives become fully implemented in 2016.

Coatings segment

Coatings segment sales in North America decreased in 2015, as compared with 2014, due to lower sales volumes and currency translation effects related to the strengthening of the U.S. dollar against the Canadian dollar. Intercompany sales volumes in North America were down as well. Those decreases were partially offset by higher average selling prices in 2015 as compared to 2014. Coatings sales in Asia Pacific decreased primarily due to currency translation effects related to the strengthening of the U.S. dollar against the Australian dollar. In addition, continued weak demand in Australia led to the lower volumes that were partially offset by price increases to recover higher costs of zinc. Sales in Asia were down slightly in 2015, due to currency translation effects.

SG&A expense increased in 2015, as compared to the same periods in 2014, primarily due to recording an impairment charge on the goodwill and trade name associated with the APAC Coatings reporting unit totaling $17.3 million. Operating income was lower in 2015, as compared with 2014, due to restructuring costs primarily in Australia, impairment charges, lower sales volumes, unfavorable currency impacts, and reduced leverage of fixed costs in both Australia and North America. Additionally, $3.0 million business interruption insurance proceeds were received in 2014 related to a 2013 fire at one of our North American facilities.

Irrigation segment

The decrease in Irrigation segment net sales in 2015, as compared with 2014, was mainly due to sales volume decreases in both North American and International markets. In calendar 2015, net farm income in the United States is estimated by the USDA to have decreased 38% from the levels of 2014, due in part to lower market prices for corn and soybeans. We believe this reduction contributed to lower demand for irrigation machines in North America in 2015, as compared with 2014. In addition, sales volume from storm damage in the United States was exceptionally high in 2014. For the tubing business, sales volumes were down due to lower price of steel and lower volumes in 2015. In international markets, Irrigation sales decreased in 2015, as compared with 2014, primarily due to reduced volumes in Brazil, Eastern Europe, Australia, and the Middle East and unfavorable currency translation effects in Brazil and South Africa.

SG&A was higher in 2015, as compared with 2014. This was due to increased provisions for uncollected international receivables of approximately $8.0 million, the majority of which was a specific allowance recorded for delinquent receivables with a Chinese municipal entity. AgSense which operated for seven additional months in 2015, provided additional SG&A totaling $3.1 million. These increases were partially offset by currency translation reductions of $3.6 million, lower incentives and reduced discretionary spending. Operating income for the segment declined in 2015 over 2014, due to sales volume decreases and associated operating deleverage of fixed operating costs, unfavorable currency impacts, and increased SG&A expense. These reductions were partially offset by the operating income of AgSense that was acquired in August 2014, lower average steel purchase prices, and reduced factory spending to adjust to the lower sales volumes.

Other

This unit includes industrial fasteners operations and a product under development that ended in 2015. The decrease in sales in 2015, as compared with 2014, was due primarily to lower volumes. Operating income in 2015 was lower than the same periods in 2014, due primarily to reduced sales volumes and approximately $4 million of restructuring costs.

Net corporate expense

Net corporate expense in 2015 decreased over the same periods in fiscal 2014. These decreases were mainly due to the following, which were offset partially by restructuring expenses of $6.4 million:

- decreased employee incentive accruals of $8.7 million, due to reduced operating results;
- lower expenses associated with the Delta Pension Plan of $3.3 million; and
- reduced deferred compensation expenses of $2.6 million, which was offset by the same amount of other expense.

LIQUIDITY AND CAPITAL RESOURCES

Cash Flows

Working Capital and Operating Cash Flows-Net working capital was $903.4 million at December 31, 2016, as compared with $860.3 million at December 26, 2015. The increase in net working capital in 2016 mainly resulted from a higher cash on hand and reduced accrued expenses primarily due to a lower warranty accrual. Operating cash flow was $219.2 million in 2016, as compared with $272.3 million in 2015 and $174.1 million in 2014. The decrease in operating cash flow in 2016, as compared to 2015, was due to less favorable working capital changes including receivables, accrued expenses primarily due to a reduced warranty accrual, and other noncurrent liabilities due primarily to the reversal of a contingent liability related to the Delta acquisition. The decreases were partially offset by higher net earnings and a lower pension contribution in 2016 as compared to 2015. The increase in operating cash flow in 2015, as compared with 2014, mainly was the result of lower current accounts receivable and improved working capital overall, partially offset by lower net earnings.

Investing Cash Flows-Capital spending in fiscal 2016 was $57.9 million, as compared with $45.5 million in fiscal 2015 and $73.0 million in fiscal 2014. Capital spending projects in 2016 included construction of a new galvanizing operation in Texas and investments in machinery and equipment across all businesses. We expect our capital spending for the 2017 fiscal year to be approximately $70 million. Investing cash flows included $12.8 million paid for American Galvanizing in 2015 and $185.7 million paid for Valmont SM, AgSense and Shakespeare Composite acquisitions in 2014.

Financing Cash Flows-Our total interest-bearing debt decreased to $756.4 million at December 31, 2016, from $759.0 million at December 26, 2015. During 2016, 2015, and 2014, we acquired approximately 0.4 million shares, 1.4 million shares and 2.7 million shares for approximately $53.8 million, $169.0 million, and $395.0 million, respectively, under the share repurchase program.

Capital Allocation Philosophy

We have historically funded our growth, capital spending and acquisitions through a combination of operating cash flows and debt financing. On May 13, 2014, our Board of Directors approved and publicly announced a capital allocation philosophy with the following priorities for Valmont's capital:

- working capital and capital expenditure investments necessary for future sales growth;
- dividends on common stock in the range of 15% of the prior year's fully diluted net earnings;
- acquisitions;
- return of capital to shareholders through share repurchases.

We also announced our intention to manage our capital structure to maintain our investment grade debt rating. Our most recent ratings were Baa3 by Moody's Investors Services, Inc. and BBB+ by Standard and Poor's Rating Services. We would be willing to allow our debt rating to fall to Baa3 or BBB- to finance a special acquisition or other opportunity. We expect to maintain a ratio of debt to invested capital which will support our current investment grade debt rating.

The Board of Directors in May 2014 authorized the purchase of up to $500 million of the Company's outstanding common stock from time to time over twelve months at prevailing market prices, through open market or privately-negotiated transactions. In February 2015, the Board of Directors authorized an additional $250 million of share purchases, without an expiration date. The purchases will be funded from available working capital and short-term borrowings and will be made subject to market and economic conditions. We are not obligated to make any repurchases and may discontinue the program at any time. As of December 31, 2016, we have acquired approximately 4.6 million shares for approximately $617.8 million under these share repurchase programs.

Sources of Financing

Our debt financing at December 31, 2016 consisted primarily of long‑term debt. During 2014, the Company issued $500 million of new notes and repurchased by partial tender $199.8 million in aggregate principal amount of the 2020 notes. Our long‑term debt as of December 31, 2016, principally consists of:

- $250.2 million face value ($253.8 million carrying value) of senior unsecured notes that bear interest at 6.625% per annum and are due in April 2020.
- $250 million face value ($248.9 million carrying value) of senior unsecured notes that bear interest at 5.00% per annum and are due in October 2044.
- $250 million face value ($246.8 million carrying value) of senior unsecured notes that bear interest at 5.25% per annum and are due in October 2054.
- We are allowed to repurchase the notes subject to the payment of a make-whole premium. All three tranches of these notes are guaranteed by certain of our subsidiaries.

On October 17, 2014, we entered into a First Amendment to our Credit Agreement with JPMorgan Chase Bank, as Administrative Agent, and the other lenders party thereto, dated as of August 15, 2012, which increased the committed unsecured revolving credit facility from $400 million to $600 million and extends the maturity date from August 15, 2017 to October 17, 2019. Under the amended credit agreement, up to $25 million is available for swingline loans, up to $75 million is available for letters of credit and up to $200 million is available for borrowings in foreign currencies. We may increase the revolving credit facility by up to an additional $200 million at any time, subject to participating banks increasing the amount of their lending commitments. The interest rate on our borrowings will be, at our option, either:

(a) LIBOR (based on a 1, 2, 3 or 6 month interest period, as selected by us) plus 100 to 162.5 basis points, depending on the credit rating of our senior debt published by Standard & Poor's Rating Services and Moody's Investors Service, Inc.; or

(b) the higher of

- the prime lending rate,
- the Federal Funds rate plus 50 basis points, and
- LIBOR (based on a 1 month interest period) plus 100 basis points (inclusive of facility fees),

Plus, in each case, 0 to 62.5 basis points, depending on the credit rating of our senior debt published by Standard & Poor's Rating Services and Moody's Investors Service, Inc.

A commitment fee is also required under the revolving credit facility which accrues at 10 to 27.5 basis points, depending on the credit rating of our senior debt published by Standard and Poor's Rating Services and Moody's Investor Services, Inc., on the average daily unused portion of the commitment under the revolving credit facility.

At December 31, 2016, we had no outstanding borrowings under the revolving credit facility. The revolving credit facility has a maturity date of August 17, 2019 and contains certain financial covenants that may limit our additional borrowing capability under the agreement. At December 31, 2016, we had the ability to borrow $584.6 million under this facility, after consideration of standby letters of credit of $15.4 million associated with certain insurance obligations. We also maintain certain short‑term bank lines of credit totaling $109.4 million; $109.4 million of which was unused at December 31, 2016.

Our senior unsecured notes and revolving credit agreement each contain cross-default provisions which permit the acceleration of our indebtedness to them if we default on other indebtedness that results in, or permits, the acceleration of such other indebtedness.

These debt agreements contain covenants that require us to maintain certain coverage ratios and may limit us with respect to certain business activities, including capital expenditures. These debt agreements allow us to add estimated EBITDA from acquired businesses for periods we did not own the acquired businesses. The debt agreements also provide for an adjustment to EBITDA, subject to certain specified limitations, for non-cash charges or gains that are non-recurring in nature. For 2016, our covenant calculations do not include any estimated EBITDA from acquired businesses.

Our key debt covenants are as follows:

- Interest-bearing debt is not to exceed 3.50x Adjusted EBITDA of the prior four quarters; and
- Adjusted EBITDA over the prior four quarters must be at least 2.50x our interest expense over the same period.

At December 31, 2016, we were in compliance with all covenants related to these debt agreements. The key covenant calculations at December 31, 2016 were as follows:

Interest-bearing debt	$ 756,392
Adjusted EBITDA-last four quarters	326,629
Leverage ratio	2.32
Adjusted EBITDA-last four quarters	326,629
Interest expense-last four quarters	44,409
Interest earned ratio	7.36

The calculation of Adjusted EBITDA-last four quarters is presented under the column for fiscal 2016 in footnote (b) to the table "Selected Five-Year Financial Data" in Item 6 - Selected Financial Data.

Our businesses are cyclical, but we have diversity in our markets, from a product, customer and a geographical standpoint. We have demonstrated the ability to effectively manage through business cycles and maintain liquidity. We have consistently generated operating cash flows in excess of our capital expenditures. Based on our available credit facilities, recent issuance of senior unsecured notes and our history of positive operational cash flows, we believe that we have adequate liquidity to meet our needs for fiscal 2017 and beyond.

We have not made any provision for U.S. income taxes in our financial statements on approximately $424.2 million of undistributed earnings of our foreign subsidiaries, as we intend to reinvest those earnings. Of our cash balances of $399.9 million at December 31, 2016, $329.5 million is held in entities outside the United States. If we need to repatriate foreign cash balances to the United States to meet our cash needs, income taxes would be paid to the extent that those cash repatriations were undistributed earnings of our foreign subsidiaries. The determination of the additional U.S. federal and state income taxes or foreign withholding taxes have not been provided, as the determination is not practicable.

FINANCIAL OBLIGATIONS AND FINANCIAL COMMITMENTS

We have future financial obligations related to (1) payment of principal and interest on interest-bearing debt, (2) Delta pension plan contributions, (3) operating leases and (4) purchase obligations. These obligations at December 31, 2016 were as follows (in millions of dollars):

Contractual Obligations	Total	2017	2018-2019	2020-2021	After 2021
Long-term debt	$ 763.0	$ 0.9	$ 1.6	$ 251.7	$ 508.8
Interest	907.8	42.5	84.9	65.7	714.7
Delta pension plan contributions	149.3	26	27.4	27.4	68.5
Operating leases	97.2	21.5	29.8	19.0	26.9
Unconditional purchase commitments	38.9	38.9	—	—	—
Total contractual cash obligations	$ 1,956.2	$ 129.8	$ 143.7	$ 363.8	$ 1,318.9

Long-term debt mainly consisted of $750.2 million principal amount of senior unsecured notes. At December 31, 2016, we had no outstanding borrowings under our bank revolving credit agreement. Obligations under these agreements may be accelerated in event of non-compliance with debt covenants. The Delta pension plan contributions are related to the current cash funding commitments to the plan with the plan's trustees. Operating leases relate mainly to various production and office facilities and are in the normal course of business.

Unconditional purchase commitments relate to purchase orders for zinc, aluminum and steel, all of which we plan to use in 2017, and certain capital investments planned for 2017. We believe the quantities under contract are reasonable in light of normal fluctuations in business levels and we expect to use the commodities under contract during the contract period.

At December 31, 2016, we had approximately $18.5 million of various long-term liabilities related to certain income tax, environmental, and other matters. These items are not scheduled above because we are unable to make a reasonably reliable estimate as to the timing of any potential payments.

OFF BALANCE SHEET ARRANGEMENTS

We have operating lease obligations to unaffiliated parties on leases of certain production and office facilities and equipment. These leases are in the normal course of business and generally contain no substantial obligations for us at the end of the lease contracts. We also maintain standby letters of credit for contract performance on certain sales contracts.

MARKET RISK

Changes in Prices

Certain key materials we use are commodities traded in worldwide markets and are subject to fluctuations in price. The most significant materials are steel, aluminum, zinc and natural gas. Over the last several years, prices for these commodities have been volatile. The volatility in these prices was due to such factors as fluctuations in supply and demand conditions, government tariffs and the costs of steel-making inputs. Steel is most significant for our utility support structures segment where the cost of steel has been approximately 50% of the net sales, on average. Assuming a similar sales mix, a hypothetical 20% change in the price of steel would have affected our net sales from our utility support structures segment by approximately $54 million for the year ended December 31, 2016.

We have also experienced volatility in natural gas prices in the past several years. Our main strategies in managing these risks are a combination of fixed price purchase contracts with our vendors to reduce the volatility in our purchase prices and sales price increases where possible. We use natural gas swap contracts on a limited basis to mitigate the impact of rising gas prices on our operating income.

Risk Management

Market Risk—The principal market risks affecting us are exposure to interest rates, foreign currency exchange rates and natural gas. We normally do not use derivative financial instruments to hedge these exposures (except as described below), nor do we use derivatives for trading purposes.

Interest Rates—Our interest-bearing debt at December 31, 2016 was mostly fixed rate debt. In the third quarter of 2014, the Company executed a derivative contract to lock in the treasury rate on $125 million of the $250 million aggregate principal amount of the Company's 5.00% Senior Notes due 2044 (the "2044 Notes") and a second derivative contract to lock in the base interest rate on $125 million of the $250 million aggregate principal amount of the Company's 5.25% Senior Notes due 2054 (the "2054 Notes"). These derivatives were settled in the third quarter of 2014. Our notes payable and a small portion of our long-term debt accrue interest at a variable rate. Assuming average interest rates and borrowings on variable rate debt, a hypothetical 10% change in interest rates would have affected our interest expense in 2016 and 2015 by approximately $0.1 million. Likewise, we have excess cash balances on deposit in interest-bearing accounts in financial institutions. An increase or decrease in interest rates of ten basis points would have impacted our annual interest earnings in 2016 and 2015 by approximately $0.3 million.

Foreign Exchange—Exposures to transactions denominated in a currency other than the entity's functional currency are not material, and therefore the potential exchange losses in future earnings, fair value and cash flows from these transactions are not material. From time to time, as market conditions indicate, we will enter into foreign currency contracts to manage the risks associated with anticipated future transactions and current balance sheet positions that are in currencies other than the functional currencies of our operations. At December 31, 2016, the Company had a few open foreign currency forward contracts, the most significant of which is a one-year foreign currency forward contract which qualified as a net investment hedge, in order to mitigate foreign currency risk on a portion of our foreign subsidiary investments denominated in British pounds. The forward contract has a maturity date of May 2017 and a notional amount to sell British pounds and receive $44.0 million. The unrealized gain recorded at December 31, 2016 is $6.9 million and is included in Other Current Assets on the Consolidated Balance Sheets.

At December 26, 2015, the Company had a number of open foreign currency forward contracts, including one related to the interest payments on an intercompany note between two entities with two different functional currencies. The notional amount of this forward contract to sell Australian dollars was $36.6 million and the contract was settled in January 2016. At December 27, 2014, the Company had a number of open foreign currency forward contracts, including some related to a large sales contract that was settled in Canadian dollars. The notional amount for these forward contracts to sell Canadian dollars was $14.8 million and were settled over the first nine months of 2015. Much of our cash in non-U.S. entities is denominated in foreign currencies, where fluctuations in exchange rates will impact our cash balances in U.S. dollar terms. A hypothetical 10% change in the value of the U.S. dollar would impact our reported cash balance by approximately $28.7 million in 2016 and $25.2 million in 2015.

We manage our investment risk in foreign operations by borrowing in the functional currencies of the foreign entities where appropriate. The following table indicates the change in the recorded value of our most significant investments at year-end assuming a hypothetical 10% change in the value of the U.S. Dollar.

	2016	**2015**
	(in millions)	
Australian dollar	$ 20.4	$ 22.3
Chinese renminbi	12.3	12.6
Danish krone	10.9	11.4
U.K. pound	9.6	7.4
Canadian dollar	5.9	5.5
Euro	5.4	4.4
Brazilian real	3.4	2.2

Commodity risk—Natural gas is a significant commodity used in our factories, especially in our Coatings segment galvanizing operations, where natural gas is used to heat tanks that enable the hot-dipped galvanizing process. Natural gas prices are volatile and we mitigate some of this volatility through the use of derivative commodity instruments. Our current policy is to manage this commodity price risk for 0-50% of our U.S. natural gas requirements for the upcoming 6-12 months through the purchase of natural gas swaps based on NYMEX futures prices for delivery in the month being hedged. The objective of this policy is to mitigate the impact on our earnings of sudden, significant increases in the price of natural gas. At December 31, 2016, we have open natural gas swaps for 60,000 MMBtu.

CRITICAL ACCOUNTING POLICIES

The following accounting policies involve judgments and estimates used in preparation of the consolidated financial statements. There is a substantial amount of management judgment used in preparing financial statements. We must make estimates on a number of items, such as provisions for bad debts, warranties, contingencies, impairments of long-lived assets, and inventory obsolescence. We base our estimates on our experience and on other assumptions that we believe are reasonable under the circumstances. Further, we re-evaluate our estimates from time to time and as circumstances change. Actual results may differ under different assumptions or conditions. The selection and application of our critical accounting policies are discussed annually with our audit committee.

Allowance for Doubtful Accounts

In determining an allowance for accounts receivable that will not ultimately be collected in full, we consider:

- age of the accounts receivable
- customer credit history
- customer financial information
- reasons for non-payment (product, service or billing issues).

If our customer's financial condition was to deteriorate, resulting in an impaired ability to make payment, additional allowances may be required. As the Company's international Irrigation business has grown, the exposure to potential losses in international markets has also increased. These exposures can be difficult to estimate, particularly in areas of political instability, or with governments with which the Company has limited experience, or where there is a lack of transparency as to the current credit condition of governmental units. Receivables that are not reasonably expected to be realized in cash within the next twelve months are classified as long-term receivables within other assets. As of December 31, 2016, the Company had approximately $9 million in delinquent accounts receivable with Chinese municipal entities with a specific allowance recorded against it based on our estimation of what will not be fully collected. The Company's allowance for doubtful accounts related to both current and long-term accounts receivables is $19.0 million at December 31, 2016.

Warranties

All of our businesses must meet certain product quality and performance criteria. We rely on historical product claims data to estimate the cost of product warranties at the time revenue is recognized. In determining the accrual for the estimated cost of warranty claims, we consider our experience with:

- costs to correct the product problem in the field, including labor costs
- costs for replacement parts
- other direct costs associated with warranty claims
- the number of product units subject to warranty claims

In addition to known claims or warranty issues, we estimate future claims on recent sales. The key assumptions in our estimates are the rates we apply to those recent sales (which is based on historical claims experience) and our expected future warranty costs for products that are covered under warranty for an extended period of time. Our provision for various product warranties was approximately $26.5 million at December 31, 2016. If our estimate changed by 50%, the impact on operating income would be approximately $13.3 million. If our cost to repair a product or the number of products subject to warranty claims is greater than we estimated, then we would have to increase our accrued cost for warranty claims.

Inventories

We use the last-in first-out (LIFO) method to determine the value of approximately 38% of our inventory. The remaining 62% of our inventory is valued on a first-in first-out (FIFO) basis. In periods of rising costs to produce inventory, the LIFO method will result in lower profits than FIFO, because higher more recent costs are recorded to cost of goods sold than under the FIFO method. Conversely, in periods of falling costs to produce inventory, the LIFO method will result in higher profits than the FIFO method.

In 2016 and 2014, we experienced higher average costs to produce inventory than in the prior year, due mainly to higher cost for steel and steel-related products. This resulted in higher costs of goods sold of approximately $3.0 million in 2016 and $2.0 million in 2014, than if our entire inventory had been valued on the FIFO method. In 2015, we experienced lower costs to produce inventory than in the prior year, due mainly to lower cost for steel and steel-related products. This resulted in lower cost of goods sold (and higher operating income) in 2015 of approximately $12.0 million, than had our entire inventory been valued on the FIFO method.

We write down slow-moving and obsolete inventory by the difference between the value of the inventory and our estimate of the reduced value based on potential future uses, the likelihood that overstocked inventory will be sold and the expected selling prices of the inventory. If our ability to realize value on slow-moving or obsolete inventory is less favorable than assumed, additional inventory write downs may be required.

Depreciation, Amortization and Impairment of Long-Lived Assets

Our long-lived assets consist primarily of property, plant and equipment, goodwill and intangible assets acquired in business acquisitions. We have assigned useful lives to our property, plant and equipment and certain intangible assets ranging from 3 to 40 years. In 2015, we determined that our galvanizing operation in Melbourne Australia would not generate sufficient cash flows on an undiscounted cash flow basis to recover its carrying value. We had the fixed assets valued by an appraisal firm and recognized an impairment of approximately $4.1 million. Other impairment losses were recorded in 2015 as facilities were closed and future plans for certain fixed assets changed in connection with our restructuring plans.

We identified thirteen reporting units for purposes of evaluating goodwill and we annually evaluate our reporting units for goodwill impairment during the third fiscal quarter, which usually coincides with our strategic planning process. We assess the value of our reporting units using after-tax cash flows from operations (less capital expenses) discounted to present value and as a multiple of earnings before interest, taxes, depreciation and amortization (EBITDA). The key assumptions in the discounted cash flow analysis are the discount rate and the projected cash flows. We also use sensitivity analysis to determine the impact of changes in discount rates and cash flow forecasts on the valuation of the reporting units. As allowed for under current accounting standards, we rely on our previous valuations for the annual impairment testing provided that the following criteria for each reporting unit are met: (1) the assets and liabilities that make up the reporting unit have not changed significantly since the most recent fair value determination and (2) the most recent fair value determination resulted in an amount that exceeded the carrying amount of the reporting unit by a substantial margin.

Our most recent impairment test during the third quarter of 2016 showed that the estimated fair value of all of our reporting units exceeded their respective carrying value, so no goodwill was impaired. Our offshore and other complex steel structures reporting unit with $13.3 million of goodwill, is the reporting unit with the least amount of cushion between its estimated fair value and its carrying value. In the impairment model, we are forecasting steady sales growth in 2018 to 2020 of the other complex steel structures to offset the decline in fiscal 2016 sales from offshore oil and gas structures. If this reporting unit is not able to build out a backlog of other steel structure projects during 2017 to construct and deliver in fiscal 2018, an interim impairment test may be required before the next annual impairment test. After the sales growth rate, the discount rate is the second most sensitive assumption used in the impairment model. A hypothetical 1% change in the discount rate would increase/decrease the fair value of this reporting unit by approximately $10 million.

If our assumptions on discount rates and future cash flows change as a result of events or circumstances, and we believe these assets may have declined in value, then we may record impairment charges, resulting in lower profits. Our reporting units are all cyclical and their sales and profitability may fluctuate from year to year. The Company continues to monitor changes in the global economy that could impact future operating results of its reporting units. If such conditions arise, the Company will test a given reporting unit for impairment prior to the annual test. In the evaluation of our reporting units, we look at the long-term prospects for the reporting unit and recognize that current performance may not be the best indicator of future prospects or value, which requires management judgment.

In fiscal 2015, we recognized a $16.2 million impairment charge which represented all of the goodwill on the APAC Coatings reporting unit. The forecast for lower prices for oil and natural gas required an interim step 2 test for our Access Systems reporting unit during the fourth quarter of 2015. We recognized an $18.7 million impairment of goodwill as a result of that test.

Our indefinite-lived intangible assets consist of trade names. We assess the values of these assets apart from goodwill as part of the annual impairment testing. We use the relief-from-royalty method to evaluate our trade names, under which the value of a trade name is determined based on a royalty that could be charged to a third party for using the trade name in question. The royalty, which is based on a reasonable rate applied against estimated future sales, is tax-effected and discounted to present value. The most significant assumptions in this evaluation include estimated future sales, the royalty rate and the after-tax discount rate. For our evaluation purposes, the royalty rates used vary between 0.5% and 1.5% of sales and the after-tax discount rate of 13.0% to 16.0%, which we estimate to be the after-tax cost of capital for such assets.

Our trade names were tested for impairment in the third quarter of 2016 where we determined no trade names were impaired. Two of our trade names, Webforge (in the Energy and Mining segment) and Industrial Galvanizing (in the Coatings segment), were estimated to have a fair value lower than carrying value during the 2015 impairment tests. As such, we recognized a $5.8 million impairment of the Webforge trade name and a $1.1 million impairment of the Industrial Galvanizing trade name.

Income Taxes

We record valuation allowances to reduce our deferred tax assets to amounts that are more likely than not to be realized. We consider future taxable income expectations and tax-planning strategies in assessing the need for the valuation allowance. If we estimate a deferred tax asset is not likely to be fully realized in the future, a valuation allowance to decrease the amount of the deferred tax asset would decrease net earnings in the period the determination was made. Likewise, if we subsequently determine that we are able to realize all or part of a net deferred tax asset in the future, an adjustment reducing the valuation allowance would increase net earnings in the period such determination was made.

At December 31, 2016, we had approximately $104.4 million in deferred tax assets relating to tax credits and loss carryforwards, with a valuation allowance of $81.9 million, including $62.2 million in valuation allowances remaining in the Delta entities related to capital loss carryforwards, which are unlikely ever to be realized. If circumstances related to our deferred tax assets change in the future, we may be required to increase or decrease the valuation allowance on these assets, resulting in an increase or decrease in income tax expense and a reduction or increase in net income. For example, we recorded a full $9.9 million valuation allowance against a tax credit asset in fiscal 2016 as we determined it is not more likely than not these credits will be utilized before they expire.

All foreign subsidiaries are considered permanently invested at December 31, 2016. We have not made any U.S. income tax provision in our financial statements for $424.2 million of undistributed earnings of our foreign subsidiaries, as we intend to reinvest those earnings. Foreign subsidiaries considered permanently invested had total cash of $329.5 million at December 31, 2016. If circumstances change and we determine that we are not permanently invested, we would need to record income tax expense in our financial statements for the resulting income tax that would be paid upon repatriation. It is not practical to determine the amount of the income tax that would be owed upon repatriation of foreign cash.

We are subject to examination by taxing authorities in the various countries in which we operate. The tax years subject to examination vary by jurisdiction. We regularly consider the likelihood of additional income tax assessments in each of these taxing jurisdictions based on our experiences related to prior audits and our understanding of the facts and circumstances of the related tax issues. We include in current income tax expense any changes to accruals for potential tax deficiencies. If our judgments related to tax deficiencies differ from our actual experience, our income tax expense could increase or decrease in a given fiscal period.

Pension Benefits

Delta Ltd. maintains a defined benefit pension plan for qualifying employees in the United Kingdom. There are no active employees as members in the plan. Independent actuaries assist in properly measuring the liabilities and expenses associated with accounting for pension benefits to eligible employees. In order to use actuarial methods to value the liabilities and expenses, we must make several assumptions. The critical assumptions used to measure pension obligations and expenses are the discount rate and expected rate of return on pension assets.

We evaluate our critical assumptions at least annually. Key assumptions are based on the following factors:

- Discount rate is based on the yields available on AA-rated corporate bonds with durational periods similar to that of the pension liabilities.

- Expected return on plan assets is based on our asset allocation mix and our historical return, taking into consideration current and expected market conditions. Most of the assets in the pension plan are invested in corporate bonds, the expected return of which are estimated based on the yield available on AA rated corporate bonds. The long-term expected returns on equities are based on historic performance over the long-term.

- Inflation is based on the estimated change in the consumer price index (“CPI”) or the retail price index (“RPI”), depending on the relevant plan provisions.

For 2017, we will modify the method used to estimate the interest cost components of the net periodic pension expense. The new method uses the full yield curve approach to estimate the interest cost by applying the specific spot rates along the yield curve used to determine the present value of the benefit plan obligations to relevant projected cash outflows for the corresponding year. Prior to 2017, the interest cost components were determined using a single weighted-average discount rate. The change does not affect the measurement of the total benefit plan obligation at year-end as the change in interest cost will be offset by an equivalent but opposite change in the actuarial gains and losses recorded in other comprehensive income (loss).

The discount rate used to measure the defined benefit obligation was 2.80% at December 31, 2016. The following tables present the key assumptions used to measure pension expense for 2017 and the estimated impact on 2017 pension expense relative to a change in those assumptions:

Assumptions	**Pension**
Discount rate	2.50%
Expected return on plan assets	4.22%
Inflation - CPI	2.25%
Inflation - RPI	3.15%

Assumptions In Millions of Dollars	**Increase in Pension Expense**
0.5% decrease in discount rate	$ 0.3
0.25% decrease in expected return on plan assets	$ 1.4
0.25% increase in inflation	$ 1.5

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

The information required is included under the captioned paragraph, "MARKET RISK" on page 37 of this report.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

The following consolidated financial statements of the Company and its subsidiaries are included herein as listed below:

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of
Valmont Industries, Inc.
Omaha, Nebraska

We have audited the accompanying consolidated balance sheets of Valmont Industries, Inc. and subsidiaries (the "Company") as of December 31, 2016 and December 26, 2015, and the related consolidated statements of earnings, comprehensive income, shareholders' equity, and cash flows for each of the three fiscal years in the period ended December 31, 2016. Our audits also included the financial statement schedule listed in the Index at Item 15. These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on the financial statements and financial statement 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, such consolidated financial statements present fairly, in all material respects, the financial position of Valmont Industries, Inc. and subsidiaries as of December 31, 2016 and December 26, 2015, and the results of their operations and their cash flows for each of the three fiscal years in the period ended December 31, 2016, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2016, based on the criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 28, 2017 expressed an unqualified opinion on the Company's internal control over financial reporting.

/s/ DELOITTE & TOUCHE LLP
Omaha, Nebraska
February 28, 2017

Valmont Industries, Inc. and Subsidiaries

CONSOLIDATED STATEMENTS OF EARNINGS

Three-year period ended December 31, 2016

(Dollars in thousands, except per share amounts)

	2016	2015	2014
Product sales	$ 2,255,860	$ 2,338,132	$ 2,824,456
Services sales	265,816	280,792	298,687
Net sales	2,521,676	2,618,924	3,123,143
Product cost of sales	1,682,355	1,804,055	2,118,687
Services cost of sales	183,078	193,836	196,339
Total cost of sales	1,865,433	1,997,891	2,315,026
Gross profit	656,243	621,033	808,117
Selling, general and administrative expenses	412,739	447,368	450,401
Impairment of goodwill and intangible assets	—	41,970	—
Operating income	243,504	131,695	357,716
Other income (expenses):			
Interest expense	(44,409)	(44,621)	(36,790)
Interest income	3,105	3,296	6,046
Costs associated with refinancing of debt	—	—	(38,705)
Other	18,254	2,637	(4,084)
	(23,050)	(38,688)	(73,533)
Earnings before income taxes and equity in earnings of nonconsolidated subsidiaries	220,454	93,007	284,183
Income tax expense (benefit):			
Current	65,748	42,569	89,643
Deferred	(23,685)	4,858	5,251
	42,063	47,427	94,894
Earnings before equity in earnings of nonconsolidated subsidiaries	178,391	45,580	189,289
Equity in earnings of nonconsolidated subsidiaries	—	(247)	29
Net earnings	178,391	45,333	189,318
Less: Earnings attributable to noncontrolling interests	(5,159)	(5,216)	(5,342)
Net earnings attributable to Valmont Industries, Inc.	$ 173,232	$ 40,117	$ 183,976
Earnings per share:			
Basic	$ 7.68	$ 1.72	$ 7.15
Diluted	$ 7.63	$ 1.71	$ 7.09
Cash dividends declared per share	$ 1.500	$ 1.500	$ 1.375

See accompanying notes to consolidated financial statements.

Valmont Industries, Inc. and Subsidiaries

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

Three-year period ended December 31, 2016

(Dollars in thousands)

	2016	2015	2014
Net earnings	$ 178,391	$ 45,333	$ 189,318
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustments:			
Unrealized translation gains (losses)	(58,315)	(96,694)	(82,275)
Gain/(loss) on hedging activities:			
Unrealized gain on net investment hedge, net of tax of $2,646	4,226	—	—
Amortization cost included in interest expense	74	74	594
Realized (gain) loss included in net earnings	—	(3,130)	983
Unrealized gain (loss) on cash flow hedges	—	2,855	4,837
	4,300	(201)	6,414
Actuarial (loss) on defined benefit pension plan, net of tax expense (benefit) of ($25,778) in 2016, ($10,732) in 2015, and ($3,450) in 2014	(24,141)	(40,274)	(13,709)
Other comprehensive income (loss)	(78,156)	(137,169)	(89,570)
Comprehensive income (loss)	100,235	(91,836)	99,748
Comprehensive loss (income) attributable to noncontrolling interests	(6,144)	(832)	(2,520)
Comprehensive income (loss) attributable to Valmont Industries, Inc.	$ 94,091	$ (92,668)	$ 97,228

See accompanying notes to consolidated financial statements.

Valmont Industries, Inc. and Subsidiaries

CONSOLIDATED BALANCE SHEETS

December 31, 2016 and December 26, 2015

(Dollars in thousands, except shares and per share amounts)

	2016	2015
ASSETS		
Current assets:		
Cash and cash equivalents	$ 399,948	$ 349,074
Receivables, less allowance of $10,250 in 2016 and $10,055 in 2015	439,342	466,443
Inventories	350,028	340,672
Prepaid expenses, restricted cash, and other assets	57,297	46,137
Refundable income taxes	6,601	24,526
Total current assets	1,253,216	1,226,852
Property, plant and equipment, at cost	1,105,736	1,081,056
Less accumulated depreciation and amortization	587,401	548,567
Net property, plant and equipment	518,335	532,489
Goodwill	321,110	336,916
Other intangible assets, net	144,378	170,197
Other assets, less allowance for doubtful receivables of $8,741 in 2016 and $10,953 in 2015	154,692	125,928
Total assets	$ 2,391,731	$ 2,392,382
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Current installments of long-term debt	$ 851	$ 1,077
Notes payable to banks	746	976
Accounts payable	177,488	179,983
Accrued employee compensation and benefits	72,404	70,354
Accrued expenses	89,914	105,593
Dividends payable	8,445	8,571
Total current liabilities	349,848	366,554
Deferred income taxes	35,803	35,669
Long-term debt, excluding current installments	754,795	756,918
Defined benefit pension liability	209,470	179,323
Deferred compensation	44,319	48,417
Other noncurrent liabilities	14,910	40,290
Shareholders' equity:		
Preferred stock of $1 par value -		
Authorized 500,000 shares; none issued	—	—
Common stock of $1 par value -		
Authorized 75,000,000 shares; 27,900,000 issued	27,900	27,900
Additional paid-in capital	—	—
Retained earnings	1,874,722	1,729,679
Accumulated other comprehensive income (loss)	(346,359)	(267,218)
Cost of treasury stock, common shares of 5,379,106 in 2016 and 5,042,775 in 2015	(612,781)	(571,920)
Total Valmont Industries, Inc. shareholders' equity	943,482	918,441
Noncontrolling interest in consolidated subsidiaries	39,104	46,770
Total shareholders' equity	982,586	965,211
Total liabilities and shareholders' equity	$ 2,391,731	$ 2,392,382

See accompanying notes to consolidated financial statements.

Valmont Industries, Inc. and Subsidiaries

CONSOLIDATED STATEMENTS OF CASH FLOWS

Three-year period ended December 31, 2016 (Dollars in thousands)

	2016	2015	2014
Cash flows from operating activities:			
Net earnings	$ 178,391	$ 45,333	$ 189,318
Adjustments to reconcile net earnings to net cash flows from operations:			
Depreciation and amortization	82,417	91,144	89,328
Noncash loss on trading securities	586	4,555	3,795
Increase in restricted cash - pension plan trust	(13,652)	—	—
Impairment of property, plant and equipment	1,099	19,836	—
Impairment of goodwill & intangible assets	—	41,970	—
Non-cash debt refinancing costs	—	—	(2,478)
Stock-based compensation	9,931	7,244	6,730
Change in fair value of contingent consideration	(3,242)	—	(4,300)
Defined benefit pension plan expense (benefit)	1,870	(610)	2,638
Contribution to defined benefit pension plan	(1,488)	(16,500)	(18,173)
Loss on sale of property, plant and equipment	631	2,327	392
Equity in earnings in nonconsolidated subsidiaries	—	247	(29)
Deferred income taxes	(23,685)	4,858	5,251
Changes in assets and liabilities (net of acquisitions):			
Receivables	24,622	50,267	907
Inventories	(11,461)	3,296	21,458
Prepaid expenses	1,138	10,844	(13,594)
Accounts payable	104	(6,805)	(34,321)
Accrued expenses	(12,207)	8,918	(34,778)
Other noncurrent liabilities	(23,880)	(1,764)	1,755
Income taxes payable (refundable)	7,994	7,107	(39,803)
Net cash flows from operating activities	219,168	272,267	174,096
Cash flows from investing activities:			
Purchase of property, plant and equipment	(57,920)	(45,468)	(73,023)
Proceeds from sale of assets	5,126	3,249	2,489
Acquisitions, net of cash acquired	—	(12,778)	(185,710)
Other, net	(255)	6,826	(619)
Net cash flows from investing activities	(53,049)	(48,171)	(256,863)
Cash flows from financing activities:			
Net payments under short-term agreements	(200)	(12,853)	(4,472)
Proceeds from long-term borrowings	—	68,000	652,211
Principal payments on long-term borrowings	(2,006)	(69,098)	(357,858)
Settlement of financial derivatives	—	—	4,981
Dividends paid	(34,053)	(35,357)	(32,443)
Dividends to noncontrolling interest	(2,938)	(2,634)	(2,919)
Purchase of noncontrolling interest	(11,009)	—	—
Debt issuance fees	—	—	(7,644)
Proceeds from exercises under stock plans	11,153	13,075	14,572
Excess tax benefits from stock option exercises	—	1,699	4,264
Purchase of treasury shares	(53,800)	(168,983)	(395,045)
Purchase of common treasury shares—stock plan exercises	(2,305)	(13,854)	(15,403)
Net cash flows from financing activities	(95,158)	(220,005)	(139,756)
Effect of exchange rate changes on cash and cash equivalents	(20,087)	(26,596)	(19,604)
Net change in cash and cash equivalents	50,874	(22,505)	(242,127)
Cash and cash equivalents—beginning of year	349,074	371,579	613,706
Cash and cash equivalents—end of period	$ 399,948	$ 349,074	$ 371,579

See accompanying notes to consolidated financial statements.

Valmont Industries, Inc. and Subsidiaries
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
Three-year period ended December 31, 2016
(Dollars in thousands, except shares and per share amounts)

	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive income (loss)	Treasury stock	Noncontrolling interest in consolidated subsidiaries	Total shareholders' equity
Balance at December 28, 2013	$ 27,900	$ —	$1,562,670	$ (47,685)	$ (20,860)	$ 22,821	$ 1,544,846
Net earnings	—	—	183,976	—	—	5,342	189,318
Other comprehensive loss	—	—	—	(86,748)	—	(2,822)	(89,570)
Cash dividends declared ($1.375 per share)	—	—	(35,036)	—	—	—	(35,036)
Dividends to noncontrolling interests	—	—	—	—	—	(2,919)	(2,919)
Acquisition of DS SM	—	—	—	—	—	9,309	9,309
Acquisition of AgSense	—	—	—	—	—	16,333	16,333
Addition of noncontrolling interest	—	—	—	—	—	508	508
Purchase of treasury shares; 2,711,149 shares acquired	—	—	—	—	(395,045)	—	(395,045)
Stock plan exercises; 97,974 shares acquired	—	—	—	—	(15,403)	—	(15,403)
Stock options exercised; 194,627 shares issued	—	(10,994)	7,052	—	18,514	—	14,572
Tax benefit from stock option exercises	—	4,264	—	—	—	—	4,264
Stock option expense	—	4,461	—	—	—	—	4,461
Stock awards; 22,010 shares issued	—	2,269	—	—	2,498	—	4,767
Balance at December 27, 2014	27,900	—	1,718,662	(134,433)	(410,296)	48,572	1,250,405
Net earnings	—	—	40,117	—	—	5,216	45,333
Other comprehensive income (loss)	—	—	—	(132,785)	—	(4,384)	(137,169)
Cash dividends declared ($1.50 per share)	—	—	(34,816)	—	—	—	(34,816)
Dividends to noncontrolling interests	—	—	—	—	—	(2,634)	(2,634)
Purchase of treasury shares; 1,435,488 shares acquired	—	—	—	—	(168,983)	—	(168,983)
Stock plan exercises; 112,995 shares acquired	—	—	—	—	(13,854)	—	(13,854)
Stock options exercised; 169,493 shares issued	—	(12,895)	5,716	—	20,254	—	13,075
Tax benefit from stock option exercises	—	1,699	—	—	—	—	1,699
Stock option expense	—	5,137	—	—	—	—	5,137
Stock awards; 10,329 shares issued	—	6,059	—	—	959	—	7,018
Balance at December 26, 2015	27,900	—	1,729,679	(267,218)	(571,920)	46,770	965,211
Net earnings	—	—	173,232	—	—	5,159	178,391
Other comprehensive income (loss)	—	—	—	(79,141)	—	985	(78,156)
Cash dividends declared ($1.50 per share)	—	—	(33,921)	—	—	—	(33,921)
Dividends to noncontrolling interests	—	—	—	—	—	(2,938)	(2,938)
Purchase of noncontrolling interest	—	(137)	—	—	—	(10,872)	(11,009)
Purchase of treasury shares; 441,494 shares acquired	—	—	—	—	(53,800)	—	(53,800)
Stock plan exercises; 16,777 shares acquired	—	—	—	—	(2,305)	—	(2,305)
Stock options exercised; 109,893 shares issued	—	(7,614)	5,732	—	13,035	—	11,153
Stock option expense	—	5,782	—	—	—	—	5,782
Stock awards; 15,700 shares issued	—	1,969	—	—	2,209	—	4,178
Balance at December 31, 2016	$ 27,900	$ —	$1,874,722	$ (346,359)	$ (612,781)	$ 39,104	$ 982,586

See accompanying notes to consolidated financial statements.

(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation

The consolidated financial statements include the accounts of Valmont Industries, Inc. and its wholly and majority‑owned subsidiaries (the Company). The investment in Delta EMD Pty. Ltd ("EMD") is recorded at fair value subsequent to its deconsolidation in 2013. Investments in other 20% to 50% owned affiliates and joint ventures are accounted for by the equity method. Investments in less than 20% owned affiliates are accounted for by the cost method. All intercompany items have been eliminated.

Cash overdrafts

Cash book overdrafts totaling $18,734 and $15,536 were classified as accounts payable at December 31, 2016 and December 26, 2015, respectively. The Company’s policy is to report the change in book overdrafts as an operating activity in the Consolidated Statements of Cash Flows.

Segments

The Company has five reportable segments based on its management structure. Each segment is global in nature with a manager responsible for segment operational performance and allocation of capital within the segment. Reportable segments are as follows:

ENGINEERED SUPPORT STRUCTURES: This segment consists of the manufacture of engineered metal structures and components for the global lighting and traffic, wireless communication, and roadway safety;

UTILITY SUPPORT STRUCTURES: This segment consists of the manufacture of engineered steel and concrete structures for the global utility industry;

ENERGY AND MINING: This segment consists of the manufacture of access systems applications, forged steel grinding media, and offshore oil and gas and wind energy structures.

COATINGS: This segment consists of galvanizing, anodizing and powder coating services on a global basis; and

IRRIGATION: This segment consists of the manufacture of agricultural irrigation equipment and related parts and services for the global agricultural industry as well as tubular products for industrial customers.

In addition to these five reportable segments, there are other businesses and activities that individually are not more than 10% of consolidated sales. These operations include the distribution of industrial fasteners in years prior to 2016. These operations collectively are reported in the “Other” category.

Fiscal Year

The Company operates on a 52 or 53 week fiscal year with each year ending on the last Saturday in December. Accordingly, the Company’s fiscal year ended December 31, 2016 consisted of 53 weeks. The Company's fiscal years ended December 26, 2015 and December 27, 2014 consisted of 52 weeks. The estimated impact on the company's results of operations due to the extra week in fiscal 2016 was additional net sales of approximately $50,000 and additional net earnings of approximately $3,000.

(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Accounts Receivable

Accounts receivable are reported on the balance sheet net of any allowance for doubtful accounts. Allowances are maintained in amounts considered to be appropriate in relation to the outstanding receivables based on age of the receivable, economic conditions and customer credit quality. As the Company's international Irrigation business has grown, the exposure to potential losses in international markets has also increased. These exposures can be difficult to estimate, particularly in areas of political instability, or with governments with which the Company has limited experience, or where there is a lack of transparency as to the current credit condition of governmental units. As of December 31, 2016, the Company had approximately $8,741 in delinquent accounts receivable with Chinese municipal entities with a specific allowance recorded against it based on our estimation of what will not be fully collected. The Company's allowance for doubtful accounts related to both current and long-term accounts receivables was $18,991 at December 31, 2016.

Inventories

Approximately 38% and 39% of inventory is valued at the lower of cost, determined on the last-in, first-out (LIFO) method, or market as of December 31, 2016 and December 26, 2015, respectively. All other inventory is valued at the lower of cost, determined on the first-in, first-out (FIFO) method or market. Finished goods and manufactured goods inventories include the costs of acquired raw materials and related factory labor and overhead charges required to convert raw materials to manufactured and finished goods. The excess of replacement cost of inventories over the LIFO value is approximately $38,047 and $35,075 at December 31, 2016 and December 26, 2015, respectively.

Long-Lived Assets

Property, plant and equipment are recorded at historical cost. The Company generally uses the straight-line method in computing depreciation and amortization for financial reporting purposes and accelerated methods for income tax purposes. The annual provisions for depreciation and amortization have been computed principally in accordance with the following ranges of asset lives: buildings and improvements 15 to 40 years, machinery and equipment 3 to 12 years, transportation equipment 3 to 24 years, office furniture and equipment 3 to 7 years and intangible assets 5 to 20 years. Depreciation expense in fiscal 2016, 2015 and 2014 was $66,482, $72,805 and $73,395, respectively.

An impairment loss is recognized if the carrying amount of an asset may not be recoverable and exceeds estimated future undiscounted cash flows of the asset. A recognized impairment loss reduces the carrying amount of the asset to its estimated fair value. The Company recognized a $4,151 impairment of the Melbourne galvanizing site's equipment in 2015 as the Company determined that our galvanizing operation in Melbourne, Australia would not generate sufficient cash flows on an undiscounted cash flow basis to recover its carrying value. Other impairment losses were recorded in 2016 and 2015 as facilities were closed and future plans for certain fixed assets changed in connection with the Company's restructuring plans.

The Company evaluates its reporting units for impairment of goodwill during the third fiscal quarter of each year, or when events or changes in circumstances indicate the carrying value may not be recoverable. Reporting units are evaluated using after-tax operating cash flows (less capital expenditures) discounted to present value. Indefinite-lived intangible assets are assessed separately from goodwill as part of the annual impairment testing, using a relief-from-royalty method. If the underlying assumptions related to the valuation of a reporting unit's goodwill or an indefinite-lived intangible asset change materially before or after the annual impairment testing, the reporting unit or asset is evaluated for potential impairment. In these evaluations, management considers recent operating performance, expected future performance, industry conditions and other indicators of potential impairment. Please see footnote 7 for details of impairments recognized during 2015.

(Dollars in thousands, except per share amounts)

(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Income Taxes

The Company uses the asset and liability method to calculate deferred income taxes. Deferred tax assets and liabilities are recognized on temporary differences between financial statement and tax bases of assets and liabilities using enacted tax rates. The effect of tax rate changes on deferred tax assets and liabilities is recognized in income during the period that includes the enactment date.

Warranties

The Company's provision for product warranty reflects management's best estimate of probable liability under its product warranties. Estimated future warranty costs are recorded at the time a sale is recognized. Future warranty liability is determined based on applying historical claim rate experience to units sold that are still within the warranty period. In addition, the Company records provisions for known warranty claims.

Pension Benefits

Certain expenses are incurred in connection with a defined benefit pension plan. In order to measure expense and the related benefit obligation, various assumptions are made including discount rates used to value the obligation, expected return on plan assets used to fund these expenses and estimated future inflation rates. These assumptions are based on historical experience as well as current facts and circumstances. An actuarial analysis is used to measure the expense and liability associated with pension benefits.

Derivative Instrument

The Company may enter into derivative financial instruments to manage risk associated with fluctuation in interest rates, foreign currency rates or commodities. Where applicable, the Company may elect to account for such derivatives as either a cash flow, fair value, or net investment hedge.

Comprehensive Income (Loss)

Comprehensive income (loss) includes net income, currency translation adjustments, certain derivative-related activity and changes in net actuarial gains/losses from a pension plan. Results of operations for foreign subsidiaries are translated using the average exchange rates during the period. Assets and liabilities are translated at the exchange rates in effect on the balance sheet dates. The components of accumulated other comprehensive income (loss) consisted of the following:

	Foreign Currency Translation Adjustments	Gain on Hedging Activities	Defined Benefit Pension Plan	Accumulated Other Comprehensive Income (Loss)
Balance at December 26, 2015	$ (191,928)	$ 3,678	$ (78,968)	$ (267,218)
Current-period comprehensive income (loss)	(59,300)	4,300	(24,141)	(79,141)
Balance at December 31, 2016	$ (251,228)	$ 7,978	$ (103,109)	$ (346,359)

(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Revenue Recognition

Revenue is recognized upon shipment of the product or delivery of the service to the customer, which coincides with passage of title and risk of loss to the customer. Customer acceptance provisions exist only in the design stage of our products. Acceptance of the design by the customer is required before the product is manufactured and delivered to the customer. We are not entitled to any compensation solely based on design of the product and we do not recognize any revenue associated with the design stage. No general rights of return exist for customers once the product has been delivered. Shipping and handling costs associated with sales are recorded as cost of goods sold. Sales discounts and rebates are estimated based on past experience and are recorded as a reduction of net sales in the period in which the sale is recognized. Service revenues predominantly consist of coatings services provided by our Coatings segment to its customers. Revenue from our offshore and other complex steel structures products is recognized using the percentage-of-completion method, based primarily on contract cost incurred to date compared to total estimated contract cost.

Use of Estimates

Management of the Company has made a number of estimates and assumptions relating to the reporting of assets and liabilities, the reported amounts of revenue and expenses and the disclosure of contingent assets and liabilities to prepare these financial statements in conformity with generally accepted accounting principles. Actual results could differ from those estimates.

Equity Method Investments

The Company has equity method investments in non-consolidated subsidiaries which are recorded within "Other assets" on the Consolidated Balance Sheet.

Treasury Stock

Repurchased shares are recorded as “Treasury Stock” and result in a reduction of “Shareholders’ Equity.” When treasury shares are reissued, the Company uses the last-in, first-out method, and the difference between the repurchase cost and re-issuance price is charged or credited to “Additional Paid-In Capital.”

In May 2014, the Company announced a capital allocation philosophy which covered a share repurchase program. Specifically, the Board of Directors authorized the purchase of up to $500,000 of the Company's outstanding common stock from time to time over twelve months at prevailing market prices, through open market or privately-negotiated transactions. In February 2015, the Board of Directors authorized an additional purchase of up to $250,000 of the Company's outstanding common stock with no stated expiration date. As of December 31, 2016, we have acquired 4,588,131 shares for approximately $617,800 under this share repurchase program.

Research and Development

Research and development costs are charged to operations in the year incurred. These costs are a component of “Selling, general and administrative expenses” on the Consolidated Statements of Earnings. Research and development expenses were approximately $8,300 in 2016, $11,600 in 2015, and $13,900 in 2014.

(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Recently Issued Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2014-09, *Revenue from Contracts with Customers (Topic 606)*, which supersedes the revenue recognition requirements in Accounting Standards Codification ("ASC") 605, Revenue Recognition. The new revenue recognition standard requires entities to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. This standard is effective for interim and annual reporting periods beginning after December 15, 2017, and can be adopted either retrospectively or as a cumulative effect adjustment as of the date of adoption. Early adoption is permitted for interim and annual periods beginning after December 15, 2016. The Company is currently evaluating the effect that adopting this new accounting guidance will have on its consolidated results of operations and financial position but expects to adopt it as a cumulative effect adjustment in fiscal 2018.

In July 2015, the FASB issued ASU 2015-11, *Simplifying the Measurement of Inventory*. Under this ASU, inventory will be measured at the “lower of cost and net realizable value” and options that currently exist for “market value” will be eliminated. The ASU defines net realizable value as the “estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation.” No other changes were made to the current guidance on inventory measurement. ASU 2015-11 is effective for interim and annual periods beginning after December 15, 2016. Early application is permitted and should be applied prospectively. The Company does not believe this inventory measurement change will have a significant effect on its valuation of inventory upon adoption in fiscal 2017.

In April 2015, the FASB issued ASU 2015-03, *Simplifying the Presentation of Debt Issuance Costs,* which provides guidance requiring debt issuance costs be presented in the balance sheet as a direct deduction from the carrying amount of the related debt liability and further clarification guidance allows the cost of securing a revolving line of credit to be recorded as a deferred asset regardless of whether a balance is outstanding. The Company retrospectively adopted this guidance and reclassified approximately $7,000 of debt issuance cost for its long-term debt (excluding its revolving line of credit) to direct reduction of long-term debt instead of an other asset in the consolidated balance sheet for December 26, 2015.

In February 2016, the FASB issued ASU 2016-02, *Leases*, which provides revised guidance on leases requiring lessees to recognize a right-of-use asset and a lease liability for virtually all of their leases (other than leases that meet the definition of a short-term lease). The liability will be equal to the present value of lease payments. For income statement purposes, the FASB retained a dual model, requiring leases to be classified as either operating or finance. Operating leases will result in straight-line expense (similar to current operating leases) while finance leases will result in a front-loaded expense pattern (similar to current capital leases). Classification will be based on criteria that are largely similar to those applied in current lease accounting, but without explicit bright lines. ASU 2016-02 is effective for interim and annual reporting periods beginning after December 15, 2018 and is to be applied on a modified retrospective transition. The Company is currently evaluating the effect of adopting this new accounting guidance but expects the adoption will result in a significant increase in total assets and liabilities.

In March 2016, the FASB issued ASU 2016-09, *Improvements to Employee Share-Based Payment Accounting,* which provides revised guidance for employee share-based compensation payments. The ASU requires all excess tax benefits and tax deficiencies (including tax benefits of dividends on share-based payment awards) be recognized as income tax expense or benefit in the income statement. It also states excess tax benefits to be classified along with other income tax cash flows as an operating activity whereas currently it is classified within a financing cash flow activity. ASU 2016-09 is effective prospectively for interim and annual reporting periods beginning after December 15, 2016. The Company early adopted this guidance prospectively in the second quarter of 2016 which resulted in an income tax benefit of approximately $355 in fiscal 2016.

(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

In August 2016, the FASB issued ASU 2016-15, *Classification of Certain Cash Receipts and Cash Payments in the Statement of Cash Flows*, which provides more specific guidance on cash flow presentation for certain transactions. ASU 2016-15 is effective for interim periods and fiscal years beginning after December 15, 2017, with early adoption permitted. We do not expect the provisions of this new standard will have a material impact on our consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, *Simplifying the Test for Goodwill Impairment,* which eliminates Step 2 from the goodwill impairment test. ASU 2017-04 is effective for periods and fiscal years beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company will consider early adopting this standard prior to the annual goodwill impairment test in the third quarter of 2017.

(2) ACQUISITIONS

Acquisitions of Businesses

On September 30, 2015, the Company purchased American Galvanizing for $12,778 in cash, net of cash acquired, plus assumed liabilities. American Galvanizing operates a custom galvanizing operation in New Jersey with annual sales of approximately $8,000. In the purchase price allocation, goodwill of $3,019 and $2,178 of customer relationships, trade name and other intangible assets were recorded. Goodwill is not deductible for tax purposes. This business is included in the Coatings segment and was acquired to expand the Company's geographic presence in the Northeast United States. The purchase price allocation was finalized in the first quarter of 2016. Proforma disclosures were omitted as this business did not have a significant impact on the Company's 2015 or 2016 financial results.

On March 3, 2014, the Company purchased 90% of the outstanding shares of DS SM A/S, which was renamed Valmont SM. Valmont SM is a manufacturer of heavy complex steel structures for a diverse range of industries including wind energy, offshore oil and gas, and electricity transmission. Valmont SM operates two manufacturing locations in Denmark and its operations are reported in the Energy and Mining segment. The purchase price paid for the business at closing (net of $56 cash acquired) was $120,483, including the payoff of an intercompany note payable by Valmont SM to its prior affiliates. The purchase was subject to an earn-out clause that was contingent on meeting future operational metrics for which no liability has been established based on expectations. The earn-out clause expired on December 31, 2016 and no earn-out payment was made. The acquisition, which was funded by cash held by the Company, was completed to participate in markets for wind energy, oil and gas exploration, power transmission and other related infrastructure projects and to increase the Company's geographic footprint in Europe. The Company also funded a portion of the acquisition with an intercompany note payable. The excess purchase price over the fair value of assets resulted in goodwill, which is not deductible for tax purposes.

(Dollars in thousands, except per share amounts)

(2) ACQUISITIONS (Continued)

The following table summarizes the fair values of the assets acquired and liabilities assumed as of the date of acquisition, which was finalized in the fourth quarter of 2014.

	At March 3, 2014
Current assets	$ 73,421
Property, plant and equipment	85,638
Intangible assets	30,340
Goodwill	16,803
Total fair value of assets acquired	$ 206,202
Current liabilities	47,754
Deferred income taxes	19,715
Intercompany note payable	37,448
Long-term debt	8,941
Total fair value of liabilities assumed	113,858
Non-controlling interests	9,309
Net assets acquired	$ 83,035

Based on the fair value assessments, the Company allocated $30,340 of the purchase price to acquired intangible assets. The following table summarizes the major classes of Valmont SM's acquired intangible assets and the respective weighted average amortization periods:

	Amount	Weighted Average Amortization Period (Years)
Trade Names	$ 11,470	Indefinite
Backlog	3,145	1.5
Customer Relationships	15,725	12.0
Total Intangible Assets	$ 30,340	

On October 6, 2014, the Company acquired Shakespeare Composite Structures (Shakespeare) for $48,272 in cash, plus assumed liabilities. Shakespeare is a manufacturer of fiberglass reinforced composite structures and products with two manufacturing facilities in South Carolina. Shakespeare's annual sales were approximately $55,000 and its operations are included in the Engineered Support Structures segment. The acquisition of Shakespeare was completed to expand our product offering of composite structure solutions. The fair value measurement process and purchase price allocation for Shakespeare was finalized in the third quarter of 2015.

(Dollars in thousands, except per share amounts)

(2) ACQUISITIONS (Continued)

The following table summarizes the fair values of the assets acquired and liabilities assumed as of the date of the Shakespeare acquisition (goodwill is deductible for tax purposes):

		At October 6, 2014
Current assets	$	12,532
Property, plant and equipment		10,694
Intangible assets		13,500
Goodwill		15,416
Total fair value of assets acquired	$	52,142
Current liabilities		3,870
Net assets acquired	$	48,272

Based on the fair value assessments, the Company allocated $13,500 of the purchase price to acquired intangible assets. The following table summarizes the major classes of Shakespeare acquired intangible assets and the respective weighted-average amortization periods:

	Amount	Weighted Average Amortization Period (Years)
Trade Names	$ 4,000	Indefinite
Customer Relationships	9,500	12.0
Total Intangible Assets	$ 13,500	

On August 25, 2014, the Company acquired 51% of AgSense, LLC (AgSense) for $17,000 in cash. AgSense operates in South Dakota and is the creator of global WagNet network which provides growers with a more complete view of their entire farming operation by tying irrigation decision making to field, crop and weather conditions. In the measurement of fair values of assets acquired and liabilities assumed, goodwill of $17,193 and $16,083 of customer relationships, trade name and other intangible assets were recorded. A portion of the goodwill was deductible for tax purposes. AgSense is included in the Irrigation Segment. The fair value measurement process and purchase price allocation for AgSense were finalized in the second quarter of 2015.

Acquisitions of Noncontrolling Interests

In April 2016, the Company acquired the remaining 30% of IGC Galvanizing Industries (M) Sdn Bhd that it did not own for $5,841. In June 2016, the Company acquired 5.2% of the remaining 10% of Valmont SM that it did not own for $5,168. As these transactions were for acquisitions of part or all of the remaining shares of consolidated subsidiaries with no change in control, they were recorded within shareholders' equity and as a financing cash flow in the Consolidated Statements of Cash Flows.

(Dollars in thousands, except per share amounts)

(3) RESTRUCTURING ACTIVITIES

2016 Plan

In July 2016, the Company identified a restructuring plan (the "2016 Plan") in Australia/New Zealand focused primarily on closing and consolidating locations within the Energy and Mining and Coatings segments. In the fourth quarter of 2016, the Company decided to close a structures facility in Canada. The 2016 Plan was mostly completed by the end of the fiscal year. During the last six months of fiscal 2016, the Company recorded the following pre-tax expenses from the 2016 Plan:

	Energy & Mining	Coatings	ESS	Other/ Corporate	TOTAL
Severance	$ 665	$ 69	$ 955	$ —	$ 1,689
Other cash restructuring expenses	1,490	—	767	—	2,257
Asset impairments/net loss on disposals	887	—	212	—	1,099
Total cost of sales	3,042	69	1,934	—	5,045
Severance	175	236	174	—	585
Other cash restructuring expenses	1,961	—	—	234	2,195
Total selling, general and administrative expenses	2,136	236	174	234	2,780
Consolidated total	$ 5,178	$ 305	$ 2,108	$ 234	$ 7,825

2015 Plan

In April 2015, the Company's Board of Directors authorized a broad restructuring plan (the "2015 Plan") of up to $60,000 to respond to the market environment in certain businesses. The following pre-tax expenses were recognized in 2015:

	ESS	Energy & Mining	Utility	Coatings	Irrigation	Other/ Corporate	TOTAL
Severance	$ 2,305	$ 2,112	$ 1,555	$ 508	$ 724	$ —	$ 7,204
Other cash restructuring expenses	1,467	882	1,853	175	—	—	4,377
Asset impairments/net loss on disposals	333	3,361	1,142	5,291	—	—	10,127
Total cost of sales	4,105	6,355	4,550	5,974	724	—	21,708
Severance	2,951	714	404	270	423	1,957	6,719
Other cash restructuring expenses	—	—	238	336	—	1,142	1,716
Asset impairments/net loss on disposals	2,223	—	—	—	130	7,356	9,709
Total selling, general and administrative expenses	5,174	714	642	606	553	10,455	18,144
Consolidated total	$ 9,279	$ 7,069	$ 5,192	$ 6,580	$ 1,277	$ 10,455	$ 39,852

(Dollars in thousands, except per share amounts)

(3) RESTRUCTURING ACTIVITIES (Continued)

During fiscal 2016, the Company recognized the following pre-tax restructuring expense (all cash) of $4,581 related to the 2015 Plan:

- Utility segment recognized $528 (cost of sales)
- ESS segment recognized $1,040 (SG&A)
- Coatings segment recognized $602 (SG&A)
- Irrigation segment recognized $468 (SG&A)
- Corporate recorded $1,943 (SG&A)

The 2015 Plan contemplated that the Company may have to recognize an impairment of goodwill in its APAC galvanizing reporting unit, dependent on future financial projections factoring the restructuring activities taking place in that reporting unit. The Company recognized $17,300 of impairments in the APAC galvanizing reporting unit during fiscal 2015 which was comparable to the amount included in the $60,000 original estimate.

Change in the liabilities recorded for the restructuring plans were as follows:

	Balance at December 26, 2015	Recognized Restructuring Expense	Costs Paid or Otherwise Settled	Balance at December 31, 2016
Severance	$ 1,307	$ 3,660	$ (3,370)	$ 1,597
Other cash restructuring expenses	1,426	7,647	(4,492)	4,581
Total	$ 2,733	$ 11,307	$ (7,862)	$ 6,178

A significant change in market conditions in any of the Company's segments may affect the Company's assessment of the restructuring activities.

(4) CASH FLOW SUPPLEMENTARY INFORMATION

The Company considers all highly liquid temporary cash investments purchased with an original maturity of three months or less at the time of purchase to be cash equivalents. Cash payments for interest and income taxes (net of refunds) for the fifty-three weeks ended December 31, 2016, and the fifty-two weeks ended December 26, 2015, and December 27, 2014 were as follows:

	2016	2015	2014
Interest	$ 45,683	$ 44,974	$ 32,601
Income taxes	48,203	33,046	111,174

(Dollars in thousands, except per share amounts)

(5) INVENTORIES

Inventories consisted of the following at December 31, 2016 and December 26, 2015:

	2016	2015
Raw materials and purchased parts	$ 143,659	$ 162,977
Work-in-process	27,291	25,644
Finished goods and manufactured goods	217,125	187,126
Subtotal	388,075	375,747
Less: LIFO reserve	38,047	35,075
	$ 350,028	$ 340,672

(6) PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment, at cost, consist of the following:

	2016	2015
Land and improvements	$ 85,724	$ 79,450
Buildings and improvements	325,813	323,469
Machinery and equipment	564,171	565,771
Transportation equipment	22,423	17,774
Office furniture and equipment	77,453	77,054
Construction in progress	30,152	17,538
	$1,105,736	$1,081,056

The Company leases certain facilities, machinery, computer equipment and transportation equipment under operating leases with unexpired terms ranging from one to fifteen years. Rental expense for operating leases amounted to $24,756, $25,546, and $28,580 for fiscal 2016, 2015, and 2014, respectively.

Minimum lease payments under operating leases expiring subsequent to December 31, 2016 are:

Fiscal year ending	
2017	$ 21,459
2018	16,904
2019	12,874
2020	11,355
2021	7,656
Subsequent	26,910
Total minimum lease payments	$ 97,158

(Dollars in thousands, except per share amounts)

(7) GOODWILL AND INTANGIBLE ASSETS

Amortized Intangible Assets

The components of amortized intangible assets at December 31, 2016 and December 26, 2015 were as follows:

	December 31, 2016		
	Gross Carrying Amount	Accumulated Amortization	Weighted Average Life
Customer Relationships	$ 191,316	$ 111,342	13 years
Proprietary Software & Database	3,616	3,056	8 years
Patents & Proprietary Technology	6,434	3,420	11 years
Other	3,713	3,668	3 years
	$ 205,079	$ 121,486	

	December 26, 2015		
	Gross Carrying Amount	Accumulated Amortization	Weighted Average Life
Customer Relationships	$ 201,801	$ 101,614	13 years
Proprietary Software & Database	3,571	2,966	8 years
Patents & Proprietary Technology	6,815	3,421	11 years
Other	3,752	3,671	3 years
	$ 215,939	$ 111,672	

Amortization expense for intangible assets was $15,935, $18,339 and $18,414 for the fiscal years ended December 31, 2016, December 26, 2015 and December 27, 2014, respectively.

Estimated annual amortization expense related to finite-lived intangible assets is as follows:

	Estimated Amortization Expense
2017	$ 15,063
2018	13,434
2019	12,694
2020	11,634
2021	9,586

The useful lives assigned to finite-lived intangible assets included consideration of factors such as the Company's past and expected experience related to customer retention rates, the remaining legal or contractual life of the underlying arrangement that resulted in the recognition of the intangible asset and the Company's expected use of the intangible asset.

Non-amortized intangible assets

Intangible assets with indefinite lives are not amortized. The carrying values of trade names at December 31, 2016 and December 26, 2015 were as follows:

(Dollars in thousands, except per share amounts)

(7) GOODWILL AND INTANGIBLE ASSETS (Continued)

	December 31, 2016	December 26, 2015	Year Acquired
Webforge	$ 8,624	$ 10,430	2010
Valmont SM	8,765	8,919	2014
Newmark	11,111	11,111	2004
Ingal EPS/Ingal Civil Products	7,032	8,504	2010
Donhad	5,305	6,415	2010
Shakespeare	4,000	4,000	2014
Industrial Galvanizers	2,201	2,662	2010
Other	13,747	13,889	
	$ 60,785	$ 65,930	

In its determination of these intangible assets as indefinite‑lived, the Company considered such factors as its expected future use of the intangible asset, legal, regulatory, technological and competitive factors that may impact the useful life or value of the intangible asset and the expected costs to maintain the value of the intangible asset. The Company expects that these intangible assets will maintain their value indefinitely. Accordingly, these assets are not amortized.

The Company's trade names were tested for impairment separately from goodwill in the third quarter of 2016. The values of the trade names were determined using the relief-from-royalty method. The Company determined that the value of its trade names were not impaired. The decrease in certain trade names in 2016 was solely due to currency translation effects.

In 2015, the Company recorded a $5,830 impairment of the Webforge trade name (in Energy and Mining segment) and a $1,100 impairment of the Industrial Galvanizing trade name (in Coatings segment).

Goodwill

The carrying amount of goodwill by segment as of December 31, 2016 and December 26, 2015 was as follows:

	Engineered Support Structures Segment	Energy and Mining Segment	Utility Support Structures Segment	Coatings Segment	Irrigation Segment	Total
Gross Balance at December 26, 2015	$ 101,275	$ 99,829	$ 75,404	$ 75,941	$ 19,359	$ 371,808
Accumulated impairment losses	—	(18,670)	—	(16,222)	—	(34,892)
Balance at December 26, 2015	101,275	81,159	75,404	59,719	19,359	336,916
Foreign currency translation	(6,961)	(8,947)	—	(150)	252	(15,806)
Balance at December 31, 2016	$ 94,314	$ 72,212	$ 75,404	$ 59,569	$ 19,611	$ 321,110

(Dollars in thousands, except per share amounts)

(7) GOODWILL AND INTANGIBLE ASSETS (Continued)

	Engineered Support Structures Segment	Energy and Mining Segment	Utility Support Structures Segment	Coatings Segment	Irrigation Segment	Total
Balance at December 27, 2014	$ 107,868	$ 106,770	$ 75,404	$ 75,533	$ 19,536	$ 385,111
Impairment	—	(18,670)	—	(16,222)	—	(34,892)
Acquisition	—	—	—	3,019	—	3,019
Foreign currency translation	(4,856)	(6,941)	—	(2,611)	(177)	(14,585)
Divestiture of business	(1,737)	—	—	—	—	(1,737)
Balance at December 26, 2015	$ 101,275	$ 81,159	$ 75,404	$ 59,719	$ 19,359	$ 336,916

During the second quarter of 2015, the Company divested of a small business in its ESS segment. The goodwill allocated to that business was $1,737 and was required to be written off based on the selling price of the divested business.

The Company's annual impairment test of goodwill was performed during the third quarter of 2016 and it was determined that the goodwill on the consolidated balance sheet was not impaired.

In fiscal 2015, the Company recognized a $16,222 impairment charge which represented all of the goodwill on the APAC Coatings reporting unit. The forecast for lower prices for oil and natural gas required an interim step 2 test for our Access Systems reporting unit during the fourth quarter of 2015. Accordingly, the Company recorded a $18,670 impairment of Access System's goodwill.

(8) BANK CREDIT ARRANGEMENTS

The Company maintains various lines of credit for short-term borrowings totaling $109,424 at December 31, 2016. As of December 31, 2016 and December 26, 2015, $0 and $199 was outstanding, respectively. The interest rates charged on these lines of credit vary in relation to the banks' costs of funds. The unused and available borrowings under the lines of credit were $109,424 at December 31, 2016. The lines of credit can be modified at any time at the option of the banks. The Company pays no fees in connection with these lines of credit. In addition to the lines of credit, the Company also maintains other short-term bank loans. The weighted average interest rate on short-term borrowings was 5.23% at December 26, 2015. Other notes payable of $746 and $777 were outstanding at December 31, 2016 and December 26, 2015, respectively.

(9) INCOME TAXES

Earnings before income taxes and equity in earnings of nonconsolidated subsidiaries are as follows:

	2016	2015	2014
United States	$ 136,682	$ 99,175	$ 168,975
Foreign	83,772	(6,168)	115,208
	$ 220,454	$ 93,007	$ 284,183

(Dollars in thousands, except per share amounts)

(9) INCOME TAXES (Continued)

Income tax expense (benefit) consists of:

	2016	2015	2014
Current:			
Federal	$ 41,539	$ 23,130	$ 52,588
State	5,467	4,431	5,059
Foreign	19,123	15,077	32,443
	66,129	42,638	90,090
Non-current:	(381)	(69)	(447)
Deferred:			
Federal	8,504	3,382	447
State	202	(333)	1,376
Foreign	(32,391)	1,809	3,428
	(23,685)	4,858	5,251
	$ 42,063	$ 47,427	$ 94,894

The reconciliations of the statutory federal income tax rate and the effective tax rate follows:

	2016	2015	2014
Statutory federal income tax rate	35.0%	35.0%	35.0%
State income taxes, net of federal benefit	1.7	3.1	1.8
Carryforwards, credits and changes in valuation allowances	2.9	(0.1)	(0.4)
Foreign tax rate differences	(4.8)	(5.7)	(4.4)
Changes in unrecognized tax benefits	(0.2)	(0.1)	(0.2)
Domestic production activities deduction	(2.0)	(3.8)	(1.6)
Goodwill impairment	—	11.3	—
UK tax rate reduction	1.0	7.7	—
Reversal of contingent liability	(2.2)	—	—
UK defined benefit pension plan	(14.6)	—	—
Other	2.3	3.6	3.2
	19.1%	51.0%	33.4%

Fiscal 2016 includes $32,450 of deferred income tax benefit attributable to the re-measurement of the deferred tax asset related to the Company's U.K. defined benefit pension plan. This item arose from a 2016 international legal reorganization executed to better reflect the Company's operational business strategies. The Company considered many factors in effecting this realignment, including streamlining treasury functions, creating a platform for future growth, and capital allocation considerations. In addition, in fiscal 2016 the Company recorded a $9,888 valuation allowance against a tax credit which is not more likely than not to be realized. In 2016 and 2015, the Company was required to remeasure its U.K. deferred income tax assets to account for a change in the U.K. corporate tax rate. The Company recorded deferred income tax expense of $1,860 and $7,120 for this change in U.K. tax rates. The reversal of a $16,591 contingent non-current liability in 2016 is not taxable.

Deferred income taxes reflect the net tax effects of (a) temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, and (b) operating loss and tax credit carryforwards. The tax effects of significant items comprising the Company’s net deferred income tax liabilities are as follows:

(Dollars in thousands, except per share amounts)

(9) INCOME TAXES (Continued)

	2016	2015
Deferred income tax assets:		
Accrued expenses and allowances	$ 16,549	$ 18,320
Accrued insurance	1,071	1,408
Tax credits and loss carryforwards	104,439	130,743
Defined benefit pension liability	80,425	32,278
Inventory allowances	1,385	911
Accrued warranty	9,436	12,818
Deferred compensation	37,988	36,672
Gross deferred income tax assets	251,293	233,150
Valuation allowance	(81,923)	(90,837)
Net deferred income tax assets	169,370	142,313
Deferred income tax liabilities:		
Work in progress	2,161	3,087
Property, plant and equipment	37,961	41,147
Intangible assets	50,405	54,162
Other liabilities	6,164	3,517
Total deferred income tax liabilities	96,691	101,913
Net deferred income tax asset/(liability)	$ 72,679	$ 40,400

Deferred income tax assets (liabilities) are presented as follows on the Consolidated Balance Sheets:

Balance Sheet Caption	2016	2015
Other assets	$ 108,482	$ 76,069
Deferred income taxes	(35,803)	(35,669)
Net deferred income tax asset/(liability)	$ 72,679	$ 40,400

Management of the Company has reviewed recent operating results and projected future operating results. The Company's belief that realization of its net deferred tax assets is more likely than not is based on, among other factors, changes in operations that have occurred in recent years and available tax planning strategies. At December 31, 2016 and December 26, 2015 respectively, there were $104,439 and $130,743 relating to tax credits and loss carryforwards.

Valuation allowances have been established for certain losses that reduce deferred tax assets to an amount that will, more likely than not, be realized. The deferred tax assets at December 31, 2016 that are associated with tax loss and tax credit carryforwards not reduced by valuation allowances expire in periods starting 2017.

Uncertain tax positions included in other non-current liabilities are evaluated in a two-step process, whereby (1) the Company determines whether it is more likely than not that the tax positions will be sustained based on the technical merits of the position and (2) for those tax positions that meet the more likely than not recognition threshold, the Company would recognize the largest amount of tax benefit that is greater than fifty percent likely to be realized upon ultimate settlement with the related tax authority.

(9) INCOME TAXES (Continued)

The following summarizes the activity related to our unrecognized tax benefits in 2016 and 2015, in thousands:

	2016	2015
Gross unrecognized tax benefits—beginning of year	$ 3,876	$ 4,268
Gross decreases—tax positions in prior period	99	(173)
Gross increases—current‑period tax positions	695	687
Settlements with taxing authorities	(105)	(361)
Lapse of statute of limitations	(1,165)	(545)
Gross unrecognized tax benefits—end of year	$ 3,400	$ 3,876

There are approximately $1,210 of uncertain tax positions for which reversal is reasonably possible during the next 12 months due to the closing of the statute of limitations. The nature of these uncertain tax positions is generally the computation of a tax deduction or tax credit. During 2016, the Company recorded a reduction of its gross unrecognized tax benefit of $1,165 with $810 recorded as a reduction of income tax expense, due to the expiration of statutes of limitation in the United States. During 2015, the Company recorded a reduction of its gross unrecognized tax benefit of $545, with $511 recorded as a reduction of its income tax expense, due to the expiration of statutes of limitation in the United States. In addition to these amounts, there was an aggregate of $192 and $280 of interest and penalties at December 31, 2016 and December 26, 2015, respectively. The Company's policy is to record interest and penalties directly related to income taxes as income tax expense in the Consolidated Statements of Earnings.

The Company files income tax returns in the U.S. and various states as well as foreign jurisdictions. Tax years 2013 and forward remain open under U.S. statutes of limitation. The total amount of unrecognized tax benefits that, if recognized, would affect the effective tax rate was $3,328 and $3,813 at December 31, 2016 and December 26, 2015, respectively.

All foreign subsidiaries are considered permanently invested at December 31, 2016. Provision has not been made for United States income taxes on the undistributed earnings of the Company's foreign subsidiaries (approximately $424,000 at December 31, 2016 and $415,000 at December 26, 2015, respectively) because the Company intends to reinvest those earnings. Such earnings would become taxable upon the sale or liquidation of these foreign subsidiaries or upon remittance of dividends. The determination of the additional U.S. federal and state income taxes or foreign withholding taxes have not been provided, as the determination is not practicable. Furthermore, the currency translation adjustments in "Accumulated other comprehensive income (loss)" are not adjusted for income taxes as they relate to indefinite investments in foreign subsidiaries.

(Dollars in thousands, except per share amounts)

(10) LONG-TERM DEBT

Long-term debt is as follows:

	December 31, 2016	December 26, 2015
5.00% senior unsecured notes due 2044(a)	$ 250,000	$ 250,000
5.25% senior unsecured notes due 2054(b)	250,000	250,000
Unamortized discount on 5.00% and 5.25% senior unsecured notes (a)(b)	(4,360)	(4,405)
6.625% senior unsecured notes due 2020(c)	250,200	250,200
Unamortized premium on 6.625% senior unsecured notes(c)	3,557	4,518
Revolving credit agreement (d)	—	—
IDR Bonds(e)	8,500	8,500
Other notes	4,395	6,228
Debt issuance costs	(6,646)	(7,046)
Long-term debt	755,646	757,995
Less current installments of long-term debt	851	1,077
Long-term debt, excluding current installments	$ 754,795	$ 756,918

(a) The 5.00% senior unsecured notes due 2044 include an aggregate principle amount of $250,000 on which interest is paid and an unamortized discount balance of $1,120 at December 31, 2016. The notes bear interest at 5.000% per annum and are due on October 1, 2044. The discount will be amortized and recognized as interest expense as interest payments are made over the term of the notes. The notes may be repurchased prior to maturity in whole, or in part, at any time at 100% of their principal amount plus a make-whole premium and accrued and unpaid interest. These notes are guaranteed by certain subsidiaries of the Company.

(b) The 5.25% senior unsecured notes due 2054 include an aggregate principle amount of $250,000 on which interest is paid and an unamortized discount balance of $3,240 at December 31, 2016. The notes bear interest at 5.250% per annum and are due on October 1, 2054. The discount will be amortized and recognized as interest expense as interest payments are made over the term of the notes. The notes may be repurchased prior to maturity in whole, or in part, at any time at 100% of their principal amount plus a make-whole premium and accrued and unpaid interest. These notes are guaranteed by certain subsidiaries of the Company.

(c) The 6.625% senior unsecured notes due 2020, following a partial tender offer in September 2014, include a remaining aggregate principal amount of $250,200 on which interest is paid and an unamortized premium balance of $3,557 at December 31, 2016. The notes bear interest at 6.625% per annum and are due on April 1, 2020. In September 2014, the Company repurchased by partial tender $199,800 in aggregate principal amount of these notes and incurred cash prepayment expenses of approximately $41,200. In addition, $4,439 of the unamortized premium was recognized as income which is the proportionate amount of debt that was repaid. The remaining premium will be amortized against interest expense as interest payments are made over the term of the notes. The notes may be repurchased prior to maturity in whole, or in part, at any time at 100% of their principal amount plus a make-whole premium accrued and unpaid interest. These notes are guaranteed by certain subsidiaries of the Company.

(d) On October 17, 2014, the Company entered into a First Amendment to our Credit Agreement with JPMorgan Chase Bank, as Administrative Agent, and the other lenders party thereto, dated as of August 15, 2012, which increased the committed unsecured revolving credit facility from $400,000 to $600,000 and extended the maturity date from August 15, 2017 to October 17, 2019. The Company may increase the credit facility by up to an additional $200,000 at any time, subject to lenders increasing the amount of their commitments. The interest rate on our borrowings will be, at our option, either:

(10) LONG-TERM DEBT (Continued)

(i) LIBOR (based on a 1, 2, 3 or 6 month interest period, as selected by the Company) plus 100 to 162.5 basis points, depending on the credit rating of the our senior debt published by Standard & Poor's Rating Services and Moody's Investors Service, Inc., or;

(ii) the higher of

- the prime lending rate,
- the Federal Funds rate plus 50 basis points, and
- LIBOR (based on a 1 month interest period) plus 100 basis points,

plus, in each case, 0 to 62.5 basis points, depending on the credit rating of our senior debt published by Standard & Poor's Rating Services and Mood's Investors Service, Inc.

At December 31, 2016, the Company had no outstanding borrowings under the revolving credit facility. The revolving credit facility has a maturity date of October 17, 2019 and contains certain financial covenants that may limit additional borrowing capability under the agreement. At December 31, 2016, the Company had the ability to borrow $584,600 under this facility, after consideration of standby letters of credit of $15,400 associated with certain insurance obligations. We also maintain certain short-term bank lines of credit totaling $109,400, $109,400 of which was unused at December 31, 2016.

(e) The Industrial Development Revenue Bonds were issued to finance the construction of a manufacturing facility in Jasper, Tennessee. Variable interest is payable until final maturity on June 1, 2025. The effective interest rates at December 31, 2016 and December 26, 2015 were 1.48% and 1.22% respectively.

The lending agreements include certain maintenance covenants, including financial leverage and interest coverage. The Company was in compliance with all financial debt covenants at December 31, 2016. The minimum aggregate maturities of long-term debt for each of the five years following 2016 are: $894, $890, $749, $250,954 and $762.

The obligations arising under the 5.00% senior unsecured notes due 2044, the 5.25% senior unsecured notes due 2054, the 6.625% senior unsecured notes due 2020, and the revolving credit facility are guaranteed by the Company and its wholly-owned subsidiaries PiRod, Inc., Valmont Coatings, Inc., Valmont Newmark, Inc., and Valmont Queensland Pty. Ltd.

(11) STOCK-BASED COMPENSATION

The Company maintains stock-based compensation plans approved by the shareholders, which provide that the Compensation Committee of the Board of Directors may grant incentive stock options, nonqualified stock options, stock appreciation rights, non-vested stock awards and bonuses of common stock. At December 31, 2016, 706,298 shares of common stock remained available for issuance under the plans. Shares and options issued and available are subject to changes in capitalization. The Company’s policy is to issue shares upon exercise of stock options from treasury shares held by the Company.

Under the stock option plans, the exercise price of each option equals the market price at the time of the grant. Options vest beginning on the first anniversary of the grant in equal amounts over three to six years or on the fifth anniversary of the grant. Expiration of grants is from six to ten years from the date of grant. The Company recorded $5,782, $5,137 and $4,461 of compensation expense (included in selling, general and administrative expenses) in the 2016, 2015 and 2014 fiscal years, respectively. The associated tax benefits recorded in the 2016, 2015 and 2014 fiscal years was $2,197, $1,952 and $1,695, respectively.

(Dollars in thousands, except per share amounts)

(11) STOCK-BASED COMPENSATION (Continued)

At December 31, 2016, the amount of unrecognized stock option compensation expense, to be recognized over a weighted average period of 2.15 years, was approximately $9,872.

The Company uses a binomial option pricing model to value its stock options. The fair value of each option grant made in 2016, 2015 and 2014 was estimated using the following assumptions:

	2016	2015	2014
Expected volatility	33.88%	34.13%	32.27%
Risk-free interest rate	1.83%	1.58%	1.43%
Expected life from vesting date	3.0 yrs	3.0 yrs	3.0 yrs
Dividend yield	1.13%	0.94%	0.75%

Following is a summary of the activity of the stock plans during 2014, 2015 and 2016:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at December 28, 2013	795,221	$ 99.29		
Granted	177,717	132.94		
Exercised	(194,627)	(71.67)		
Forfeited	(9,716)	(126.23)		
Outstanding at December 27, 2014	768,595	$ 113.72	4.74	$ 15,983
Options vested or expected to vest at December 27, 2014	746,974	$ 113.06	4.69	15,981
Options exercisable at December 27, 2014	450,539	$ 97.29	3.59	15,944

The weighted average per share fair value of options granted during 2014, was $33.94.

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at December 27, 2014	768,595	$ 113.72		
Granted	291,708	104.89		
Exercised	(169,493)	74.37		
Forfeited	(41,201)	137.02		
Outstanding at December 26, 2015	849,609	$ 117.42	5.18	$ 4,536
Options vested or expected to vest at December 26, 2015	818,300	$ 117.61	5.13	4,456
Options exercisable at December 26, 2015	409,068	$ 119.43	3.74	3,376

The weighted average per share fair value of options granted during 2015 was $27.91.

(Dollars in thousands, except per share amounts)

(11) STOCK-BASED COMPENSATION (Continued)

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at December 26, 2015	849,609	$ 117.42		
Granted	85,092	151.37		
Exercised	(109,893)	101.69		
Forfeited	(31,635)	129.36		
Outstanding at December 31, 2016	793,173	$ 122.77	4.78	$ 16,640
Options vested or expected to vest at December 31, 2016	774,139	$ 124.18	4.75	16,200
Options exercisable at December 31, 2016	469,844	$ 123.75	3.96	9,056

The weighted average per share fair value of options granted during 2016 was $40.00.

Following is a summary of the status of stock options outstanding at December 31, 2016:

Outstanding and Exercisable By Price Range					
Options Outstanding				Options Exercisable	
Exercise Price Range	Number	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number	Weighted Average Exercise Price
$83.94 - 105.44	347,914	5.06 years	$ 100.47	162,533	$ 95.93
$110.33 - 132.84	147,717	4.95 years	132.17	94,517	132.44
$136.42 - 151.90	297,542	4.36 years	144.18	212,794	141.15
	793,173			469,844	

In accordance with shareholder-approved plans, the Company grants stock under various stock‑based compensation arrangements, including non-vested stock and stock issued in lieu of cash bonuses. Under such arrangements, stock is issued without direct cost to the employee. In addition, the Company grants restricted stock units. The restricted stock units are settled in Company stock when the restriction period ends. During fiscal 2016, 2015 and 2014, the Company granted non-vested stock and restricted stock units to directors and certain management employees as follows (which are not included in the above stock plan activity tables):

	2016	2015	2014
Shares issued	58,961	47,038	35,885
Weighted‑average per share price on grant date	$ 150.48	$ 108.97	$ 136.91
Recognized compensation expense	$ 4,069	$ 4,511	$ 3,978

At December 31, 2016 the amount of deferred stock‑based compensation granted, to be recognized over a weighted‑average period of 1.86 years, was approximately $11,896.

(Dollars in thousands, except per share amounts)

(12) EARNINGS PER SHARE

The following table provides a reconciliation between Basic and Diluted earnings per share (EPS):

	Basic EPS	Dilutive Effect of Stock Options	Diluted EPS
2016:			
Net earnings attributable to Valmont Industries, Inc.	$173,232	$ —	$173,232
Weighted average shares outstanding (000's)	22,562	147	22,709
Per share amount	$ 7.68	$ 0.05	$ 7.63
2015:			
Net earnings attributable to Valmont Industries, Inc.	$ 40,117	$ —	$ 40,117
Weighted average shares outstanding (000's)	23,288	117	23,405
Per share amount	$ 1.72	$ 0.01	$ 1.71
2014:			
Net earnings attributable to Valmont Industries, Inc.	$183,976	$ —	$183,976
Weighted average shares outstanding (000's)	25,719	213	25,932
Per share amount	$ 7.15	$ 0.06	$ 7.09

Basic and diluted net earnings and earnings per share in fiscal 2016 included a deferred income tax benefit of $30,590 ($1.35 per share) primarily attributable to the re-measurement of the deferred tax asset related to the Company's U.K. defined benefit pension plan. In addition, fiscal 2016 included $9,888 ($0.44 per share) recorded as a valuation allowance against a tax credit asset. Finally, fiscal 2016 included the reversal of a contingent liability that was recognized as part of the Delta purchase accounting of $16,591 ($0.73 per share) which was not taxable. Fiscal 2015 included impairments of goodwill and intangible assets of $40,140 after-tax ($1.72 per share), asset impairments arising from restructuring activities of $14,545 after-tax ($0.62 per share), and $13,622 of cash restructuring expenses ($0.58 per share). Fiscal 2014 included costs associated with refinancing of our long-term debt of $24,171 after tax ($0.93 per share).

Earnings per share are computed independently for each of the quarters. Therefore, the sum of the quarterly earnings per share may not equal the total for the year primarily due to the share buyback program that began in the second quarter of 2014.

At the end of fiscal years 2016, 2015, and 2014 there were approximately 197,303, 426,338, and 449,000 outstanding stock options, respectively, with exercise prices exceeding the market price of common stock that were excluded from the computation of diluted earnings per share, respectively.

(13) EMPLOYEE RETIREMENT SAVINGS PLAN

Established under Internal Revenue Code Section 401(k), the Valmont Employee Retirement Savings Plan ("VERSP") is a defined contribution plan available to all eligible employees. Participants can elect to contribute up to 50% of annual pay, on a pretax and/or after-tax basis. The Company also makes contributions to the Plan and a non-qualified deferred compensation plan for certain Company executives. The 2016, 2015 and 2014 Company contributions to these plans amounted to approximately $10,900, $11,700 and $12,600 respectively.

(13) EMPLOYEE RETIREMENT SAVINGS PLAN (Continued)

The Company sponsors a fully‑funded, non-qualified deferred compensation plan for certain Company executives who otherwise would be limited in receiving company contributions into VERSP under Internal Revenue Service regulations. The invested assets and related liabilities of these participants were approximately $35,784 and $37,963 at December 31, 2016 and December 26, 2015, respectively. Such amounts are included in "Other assets" and "Deferred compensation" on the Consolidated Balance Sheets. Amounts distributed from the Company's non-qualified deferred compensation plan to participants under the transition rules of section 409A of the Internal Revenue Code were approximately $5,317 and $2,439 at December 31, 2016 and December 26, 2015, respectively. All distributions were made in cash.

(14) DISCLOSURES ABOUT THE FAIR VALUE OF FINANCIAL INSTRUMENTS

The carrying amount of cash and cash equivalents, receivables, accounts payable, notes payable to banks and accrued expenses approximate fair value because of the short maturity of these instruments. The fair values of each of the Company's long-term debt instruments are based on the amount of future cash flows associated with each instrument discounted using the Company's current borrowing rate for similar debt instruments of comparable maturity (Level 2). The fair value estimates are made at a specific point in time and the underlying assumptions are subject to change based on market conditions. At December 31, 2016, the carrying amount of the Company's long-term debt was $755,646 with an estimated fair value of approximately $731,633. At December 26, 2015, the carrying amount of the Company's long-term debt was $757,995 with an estimated fair value of approximately $724,020.

For financial reporting purposes, a three‑level hierarchy for fair value measurements based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date is used. Inputs refers broadly to the assumptions that market participants would use in pricing the asset or liability, including assumptions about risk. Financial assets and liabilities carried at fair value will be classified and disclosed in one of the following three categories:

- Level 1: Quoted market prices in active markets for identical assets or liabilities.
- Level 2: Observable market based inputs or unobservable inputs that are corroborated by market data.
- Level 3: Unobservable inputs that are not corroborated by market data.

The categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. Following is a description of the valuation methodologies used for assets and liabilities measured at fair value.

Trading Securities: The assets and liabilities recorded for the investments held in the Valmont Deferred Compensation Plan of $35,784 ($37,963 in 2015) represent mutual funds, invested in debt and equity securities, classified as trading securities, considering the employee's ability to change investment allocation of their deferred compensation at any time. The Company's remaining ownership in Delta EMD Pty. Ltd. (JSE:DTA) of $2,016 ($4,734 in 2015) is recorded at fair value at December 31, 2016. Quoted market prices are available for these securities in an active market and therefore categorized as a Level 1 input. These securities are included in Other Assets on the Consolidated Balance Sheets.

(Dollars in thousands, except per share amounts)

(14) DISCLOSURES ABOUT THE FAIR VALUE OF FINANCIAL INSTRUMENTS (Continued)

		Fair Value Measurement Using:		
	Carrying Value December 31, 2016	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Trading Securities	$ 37,800	$ 37,800	$ —	$ —

		Fair Value Measurement Using:		
	Carrying Value December 26, 2015	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Trading Securities	$ 42,697	$ 42,697	$ —	$ —

(15) DERIVATIVE FINANCIAL INSTRUMENTS

The Company manages risk from foreign currency rate risk related to foreign currency denominated transactions and from natural gas supply pricing. From time to time, the Company manages these risks using derivative financial instruments. Some of these derivative financial instruments are marked to market and recorded in the Company's consolidated statements of earnings, while others may be accounted for as a fair value, cash flow, or net investment hedge. Derivative financial instruments have credit risk and market risk. To manage credit risk, the Company only enters into derivative transactions with counterparties who are recognized, stable multinational banks.

Natural Gas Prices: Natural gas supplies to meet production requirements of production facilities are purchased at market prices. Natural gas market prices are volatile and the Company effectively fixes prices for a portion of its natural gas usage requirements of certain of its U.S. facilities through the use of swaps. These contracts reference physical natural gas prices or appropriate NYMEX futures contract prices. While there is a strong correlation between the NYMEX futures contract prices and the Company's delivered cost of natural gas, the use of financial derivatives may not exactly offset the change in the price of physical gas. The contracts are traded in months forward and settlement dates are scheduled to coincide with gas purchases during that future period. The financial effects of these derivatives in 2016 and 2015 were minimal.

Interest Rate Fluctuations: In prior years, the Company executed contracts to lock in the treasury rate related to the issuance of each of their unsecured notes due in 2020, 2044, and 2054. These contracts were executed to hedge the risk of potential fluctuations in the treasury rates which would change the amount of net proceeds received from the debt offering. As the benchmark rate component of the fixed rate debt issuance and the cash flow hedged risk is based on that same benchmark, each was deemed an effective hedge at inception. The settlement with each of the counterparties was recorded in accumulated other comprehensive income and at December 31, 2016, the Company has a $3,557 deferred loss and a $4,360 deferred gain remaining in accumulated other comprehensive loss related to the past settlement of these forward contracts. The amount is amortized as a reduction of interest expense (for the deferred gain) or an increase in interest expense (for the deferred loss) over the term of the debt.

Foreign Currency Fluctuations: The Company operates in a number of different foreign countries and may enter into business transactions that are in currencies that are different from a given operation's functional currency. In certain cases, the Company may enter into foreign currency exchange contracts to manage a portion of the foreign exchange risk associated with a receivable or payable denominated in a foreign currency, a forecasted transaction or a series of forecasted transactions denominated in a foreign currency, or an investment in foreign operations with a different functional currency.

(Dollars in thousands, except per share amounts)

(15) DERIVATIVE FINANCIAL INSTRUMENTS (Continued)

At December 31, 2016, the Company had a couple of open foreign currency forward contracts, which are generally accounted for as cash flow hedges if hedge accounting is utilized. In the second quarter of 2016, the Company entered into a one-year foreign currency forward contract which qualified as a net investment hedge, in order to mitigate foreign currency risk on a portion of our foreign subsidiary investments denominated in British pounds. The forward contract has a maturity date of May 2017 and a notional amount to sell British pounds and receive $44,000 dollars. The unrealized gain recorded at December 31, 2016 is $6,872 and is included in Other Current Assets on the Consolidated Balance Sheets. No ineffectiveness has resulted from the hedge and the balance is recorded in the Consolidated Statements of Other Comprehensive Income within gain/(loss) on hedging activities. When the forward contract matures, the realized gain (loss) will be deferred in Other Comprehensive Income where it will remain until the net investments in our British subsidiaries are divested.

At December 26, 2015, the Company had one open forward contract related to interest payments on a large intercompany note denominated in Australian dollars. The interest from these notes are used to fund the delta pension plan in the United Kingdom with a functional currency of the British pound. The derivative was accounted for as a cash flow hedge and had a notional amount to sell Australian dollars of $36,590, which was settled in January 2016. Total gains on the forward contract related to the intercompany note interest payments in fiscal 2015 was $1,821.

(16) GUARANTEES

The Company's product warranty accrual reflects management's best estimate of probable liability under its product warranties. Historical product claims data is used to estimate the cost of product warranties at the time revenue is recognized.

The Company recorded a $17,000 provision in the fourth quarter of 2015 for a commercial settlement with a large customer that requires ongoing quality monitoring. Changes in the product warranty accrual, which is recorded in "Accrued expenses", for the years ended December 31, 2016 and December 26, 2015, were as follows:

	2016	2015
Balance, beginning of period	$ 36,653	$ 19,760
Payments made	(20,355)	(11,203)
Change in liability for warranties issued during the period	9,565	28,608
Change in liability for pre-existing warranties	675	(512)
Balance, end of period	$ 26,538	$ 36,653

(17) COMMITMENTS & CONTINGENCIES

Various claims and lawsuits are pending against Company and certain of its subsidiaries. The Company cannot fully determine the effect of all asserted and unasserted claims on its consolidated results of operations, financial condition, or liquidity. Where asserted and unasserted claims are considered probable and reasonably estimable, a liability has been recorded. We do not expect that any known lawsuits, claims, environmental costs, commitments, or contingent liabilities will have a material adverse effect on our consolidated results of operations, financial condition, or liquidity.

The Company established a provision in 2010 to address a pre-acquisition contingency which arose from the Delta acquisition and was recognized as part of the purchase accounting. The applicable statutes of limitations have expired and the Company determined this contingent liability is remote. Therefore in 2016, the Company reduced "Other noncurrent liabilities" by $16,591, the amount of the provision, and recognized "Other" income.

(Dollars in thousands, except per share amounts)

(18) DEFINED BENEFIT RETIREMENT PLAN

Delta Ltd., a wholly-owned subsidiary of the Company, is the sponsor of the Delta Pension Plan ("Plan"). The Plan provides defined benefit retirement income to eligible employees in the United Kingdom. Pension retirement benefits to qualified employees are 1.67% of final salary per year of service upon reaching the age of 65 years. This Plan has no active employees as members at December 31, 2016.

Funded Status

The Company recognizes the overfunded or underfunded status of the pension plan as an asset or liability. The funded status represents the difference between the projected benefit obligation (PBO) and the fair value of the plan assets. The PBO is the present value of benefits earned to date by plan participants, including the effect of assumed future salary increases (if applicable) and inflation. Plan assets are measured at fair value. Effective with year-end 2015, the Company early adopted the practical expedient accounting guidance that permits an entity to measure defined benefit plan assets and obligations using the month-end closest to the entity's fiscal year-end consistently going forward. The pension plan obligation recorded on the balance sheet as of December 26, 2015 was measured based on the pension plan assets and obligation as of December 31, 2015. Because the pension plan is denominated in British pounds sterling, the Company used exchange rates of $1.492/£ and $1.234/£ to translate the net pension liability into U.S. dollars at December 26, 2015 and December 31, 2016, respectively. The net funded status of $209,470 at December 31, 2016 is recorded as a noncurrent liability.

Projected Benefit Obligation and Fair Value of Plan Assets—The accumulated benefit obligation (ABO) is the present value of benefits earned to date, assuming no future compensation growth. As there are no active employees in the plan, the ABO is equal to the PBO. The underfunded ABO represents the difference between the PBO and the fair value of plan assets. Changes in the PBO and fair value of plan assets for the pension plan for the period from December 27, 2014 to December 31, 2015 were as follows:

	Projected Benefit Obligation	Plan Assets	Funded status
Fair Value at December 27, 2014	$ 692,283	$ 542,159	$ (150,124)
Employer contributions	—	16,500	
Interest cost	24,614	—	
Actual return on plan assets	—	(306)	
Benefits paid	(18,346)	(18,346)	
Actuarial loss	28,130	—	
Currency translation	(29,232)	(21,881)	
Fair Value at December 31, 2015	$ 697,449	$ 518,126	$ (179,323)

(Dollars in thousands, except per share amounts)

(18) DEFINED BENEFIT RETIREMENT PLAN (Continued)

Changes in the PBO and fair value of plan assets for the pension plan for the period from December 31, 2015 to December 31, 2016 were as follows:

	Projected Benefit Obligation	Plan Assets	Funded status
Fair Value at December 31, 2015	$ 697,449	$ 518,126	$ (179,323)
Employer contributions	—	1,426	
Interest cost	23,496	—	
Actual return on plan assets	—	80,538	
Benefits paid	(17,792)	(17,792)	
Actuarial loss	125,765	—	
Currency translation	(132,781)	(95,631)	
Fair Value at December 31, 2016	$ 696,137	$ 486,667	$ (209,470)

Pre-tax amounts recognized in accumulated other comprehensive income (loss) as of December 31, 2016 and December 26, 2015 consisted of actuarial gains (losses):

Balance December 27, 2014	$ (55,953)
Actuarial loss	(53,661)
Currency translation gain	2,655
Balance December 26, 2015	(106,959)
Actuarial loss	(66,957)
Currency translation gain	17,038
Balance December 31, 2016	$ (156,878)

The estimated amount to be amortized from accumulated other comprehensive income into net periodic benefit cost in 2017 is approximately $2,840.

Assumptions—The weighted-average actuarial assumptions used to determine the benefit obligation at December 31, 2016 and December 31, 2015 were as follows:

Percentages	2016	2015
Discount rate	2.80%	3.75%
Salary increase	N/A	N/A
CPI inflation	2.25%	2.15%
RPI inflation	3.15%	3.25%

(Dollars in thousands, except per share amounts)

(18) DEFINED BENEFIT RETIREMENT PLAN (Continued)

Expense

Pension expense is determined based upon the annual service cost of benefits (the actuarial cost of benefits earned during a period) and the interest cost on those liabilities, less the expected return on plan assets. The expected long-term rate of return on plan assets is applied to the fair value of plan assets. Differences in actual experience in relation to assumptions are not recognized in net earnings immediately, but are deferred and, if necessary, amortized as pension expense.

The components of the net periodic pension expense for the fiscal years ended December 31, 2016 and December 26, 2015 were as follows:

	2016	2015
Net Periodic Benefit Cost:		
Interest cost	23,496	24,614
Expected return on plan assets	(22,986)	(25,224)
Amortization of actuarial loss	1,360	—
Net periodic benefit expense (benefit)	$ 1,870	$ (610)

Assumptions—The weighted-average actuarial assumptions used to determine expense are as follows for fiscal 2016 and 2015:

Percentages	2016	2015
Discount rate	3.75%	3.65%
Expected return on plan assets	5.15%	5.00%
CPI Inflation	2.15%	2.10%
RPI Inflation	3.35%	3.20%

The discount rate is based on the yields of AA-rated corporate bonds with durational periods similar to that of the pension liabilities. The expected return on plan assets is based on our asset allocation mix and our historical return, taking into account current and expected market conditions. Inflation is based on expected changes in the consumer price index or the retail price index in the U.K. depending on the relevant plan provisions.

Cash Contributions

The Company completed negotiations with Plan trustees in 2016 regarding annual funding for the Plan. The annual contributions into the Plan are $12,340 (/£10,000) per annum as part of the Plan's recovery plan, along with a contribution to cover the administrative costs of the Plan of approximately $1,357 (/£1,100) per annum. The Company deferred its 2016 recovery plan contribution payment of £10,000, placing it into a restricted cash account. The restriction will release before March 31, 2017, when the Company contributes the £10,000 to the Plan.

Benefit Payments

The following table details expected pension benefit payments for the years 2017 through 2026:

(Dollars in thousands, except per share amounts)

(18) DEFINED BENEFIT RETIREMENT PLAN (Continued)

2017	$ 16,650
2018	17,200
2019	17,800
2020	18,250
2021	18,900
Years 2022 - 2026	104,000

Asset Allocation Strategy

The investment strategy for pension plan assets is to maintain a diversified portfolio consisting of

- Long-term fixed‑income securities that are investment grade or government‑backed in nature;
- Common stock mutual funds in U.K. and non-U.K. companies, and;
- Diversified growth funds, which are invested in a number of investments, including common stock, fixed income funds, properties and commodities.

The Plan, as required by U.K. law, has an independent trustee that sets investment policy. The general strategy is to invest approximately 50% of the assets of the plan in common stock mutual funds and diversified growth funds, with the remainder of the investments in long-term fixed income securities, including corporate bonds and index-linked U.K. gilts. The trustees regularly consult with representatives of the plan sponsor and independent advisors on such matters.

The pension plan investments are held in a trust. The weighted‑average maturity of the corporate bond portfolio was 13 years at December 31, 2016.

Fair Value Measurements

The pension plan assets are valued at fair value. The following is a description of the valuation methodologies used for the investments measured at fair value, including the general classification of such instruments pursuant to the valuation hierarchy.

Index-linked gilts—Index-linked gilts are U.K. government-backed securities consisting of bills, notes, bonds, and other fixed income securities issued directly by the U.K. Treasury or by government-sponsored enterprises. The fair value recorded by the Plan is calculated using net asset value (NAV) for each investment.

Corporate Bonds—Corporate bonds and debentures consist of fixed income securities issued by U.K. corporations. The fair value recorded by the Plan is calculated using NAV for each investment.

Corporate Stock—This investment category consists of common and preferred stock, including mutual funds, issued by U.K. and non-U.K. corporations. The fair value recorded by the Plan is calculated using NAV for each investment, except for one small holding that is actively traded.

Diversified growth funds - This investment category consists of diversified investment funds, whose holdings include common stock, fixed income funds, properties and commodities of U.K. and non-U.K. securities. The fair value recorded by the Plan is calculated using NAV for each investment.

(Dollars in thousands, except per share amounts)

(18) DEFINED BENEFIT RETIREMENT PLAN (Continued)

At December 31, 2016 and December 31, 2015, the pension plan assets measured at fair value on a recurring basis were as follows:

December 31, 2016	Quoted Prices in Active Markets for Identical Inputs (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Plan assets at fair value:				
Temporary cash investments	$ 1,900	$ —	$ —	$ 1,900
Corporate stock	480	—	—	480
Total plan net assets at fair value	$ 2,380	$ —	$ —	$ 2,380
Plan assets at NAV:				
Index-linked gilts				135,141
Corporate bonds				83,834
Corporate stock				165,338
Diversified growth funds				99,974
Total plan assets at NAV				484,287
Total plan assets				$ 486,667

December 31, 2015	Quoted Prices in Active Markets for Identical Inputs (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Plan assets at fair value:				
Temporary cash investments	$ 4,673	$ —	$ —	$ 4,673
Corporate stock	508	—	—	508
Total plan net assets at fair value	$ 5,181	$ —	$ —	$ 5,181
Plan assets at NAV:				
Index-linked gilts				123,257
Corporate bonds				100,701
Corporate stock				172,456
Diversified growth funds				116,531
Total plan assets at NAV				512,945
Total plan assets				$ 518,126

(19) BUSINESS SEGMENTS

The Company has five reportable segments based on its management structure. Each segment is global in nature with a manager responsible for segment operational performance and the allocation of capital within the segment. Net corporate expense is net of certain service-related expenses that are allocated to business units generally on the basis of employee headcounts and sales dollars.

Reportable segments are as follows:

ENGINEERED SUPPORT STRUCTURES: This segment consists of the manufacture of engineered structures and components for the global lighting and traffic, wireless communication, and roadway safety industries;

ENERGY AND MINING: This segment, all outside of the United States, consists of the manufacture of access systems applications, forged steel grinding media, on and off shore oil, gas, and wind energy structures;

UTILITY SUPPORT STRUCTURES: This segment consists of the manufacture of engineered steel and concrete structures for the global utility industry;

COATINGS: This segment consists of galvanizing, anodizing and powder coating services on a global basis; and

IRRIGATION: This segment consists of the manufacture of agricultural irrigation equipment and related parts and services for the global agricultural industry and tubular products for industrial customers.

In addition to these five reportable segments, the Company had other businesses and activities that individually are not more than 10% of consolidated sales. Due to the business reorganization that occurred in the fourth quarter of 2015, there are no longer business operations included in Other.

The accounting policies of the reportable segments are the same as those described in Note 1. The Company evaluates the performance of its business segments based upon operating income and invested capital. The Company does not allocate interest expense, non-operating income and deductions, or income taxes to its business segments.

(Dollars in thousands, except per share amounts)

(19) BUSINESS SEGMENTS (Continued)

Summary by Business

	2016	2015	2014
SALES:			
Engineered Support Structures segment:			
Lighting, Traffic, and Roadway Products	$ 632,455	$ 600,280	$ 648,352
Communication Products	168,070	171,173	161,618
Engineered Support Structures segment	800,525	771,453	809,970
Energy and Mining segment:			
Offshore and Other Complex Steel Structures	107,824	103,068	146,432
Grinding Media	83,110	96,442	116,056
Access Systems	131,703	138,349	181,495
Energy and Mining segment	322,637	337,859	443,983
Utility Support Structures segment:			
Steel	541,295	578,996	714,427
Concrete	90,256	95,581	110,589
Utility Support Structures segment	631,551	674,577	825,016
Coatings segment	289,481	302,385	333,853
Irrigation segment	575,204	612,201	846,326
Other	—	7,247	10,108
Total	2,619,398	2,705,722	3,269,256
INTERSEGMENT SALES:			
Engineered Support Structures	36,013	23,003	74,963
Energy and Mining	8,105	4,652	295
Utility Support Structures	769	1,239	2,451
Coatings	45,604	46,912	55,418
Irrigation	7,231	6,430	6,609
Other	—	4,562	6,377
Total	97,722	86,798	146,113
NET SALES:			
Engineered Support Structures segment	764,512	748,450	735,007
Energy and Mining segment	314,532	333,207	443,688
Utility Support Structures segment	630,782	673,338	822,565
Coatings segment	243,877	255,473	278,435
Irrigation segment	567,973	605,771	839,717
Other	—	2,685	3,731
Total	$ 2,521,676	$ 2,618,924	$ 3,123,143

(Dollars in thousands, except per share amounts)

(19) BUSINESS SEGMENTS (Continued)

	2016	2015	2014
OPERATING INCOME (LOSS):			
Engineered Support Structures	$ 71,398	$ 59,592	$ 66,024
Energy and Mining	11,851	(18,762)	41,342
Utility Support Structures	69,077	37,847	95,118
Coatings	46,596	27,369	60,921
Irrigation	87,835	84,537	151,508
Other	—	(9,802)	(1,535)
Corporate	(43,253)	(49,086)	(55,662)
Total	243,504	131,695	357,716
Interest expense, net	(41,304)	(41,325)	(30,744)
Costs associated with refinancing of debt	—	—	(38,705)
Other	18,254	2,637	(4,084)
Earnings before income taxes and equity in earnings of nonconsolidated subsidiaries	$ 220,454	$ 93,007	$ 284,183
TOTAL ASSETS:			
Engineered Support Structures	$ 610,366	$ 611,201	$ 640,132
Energy and Mining	364,658	396,366	500,407
Utility Support Structures	410,448	422,021	470,720
Coatings	274,666	270,793	301,707
Irrigation	313,982	310,967	360,883
Other	—	2,267	4,930
Corporate	417,611	378,767	443,176
Total	$ 2,391,731	$2,392,382	$2,721,955
CAPITAL EXPENDITURES:			
Engineered Support Structures	$ 16,045	$ 11,445	$ 11,849
Energy and Mining	3,427	3,544	4,893
Utility Support Structures	3,411	11,815	9,014
Coatings	24,873	6,836	14,029
Irrigation	8,836	7,756	21,113
Other	—	1,396	1,181
Corporate	1,328	2,676	10,944
Total	$ 57,920	$ 45,468	$ 73,023

(Dollars in thousands, except per share amounts)

(19) BUSINESS SEGMENTS (Continued)

	2016	2015	2014
DEPRECIATION AND AMORTIZATION:			
Engineered Support Structures	$ 21,048	$ 22,810	$ 22,363
Energy and Mining	17,425	20,733	22,146
Utility Support Structures	16,492	17,959	17,811
Coatings	12,883	12,962	14,615
Irrigation	12,097	11,746	10,471
Other	—	570	123
Corporate	2,472	4,364	1,799
Total	$ 82,417	$ 91,144	$ 89,328

Summary by Geographical Area by Location of Valmont Facilities:

	2016	2015	2014
NET SALES:			
United States	$ 1,535,321	$ 1,586,702	$ 1,808,427
Australia	315,470	347,975	439,530
Denmark	99,719	98,628	146,432
Other	571,166	585,619	728,754
Total	$ 2,521,676	$ 2,618,924	$ 3,123,143
LONG-LIVED ASSETS:			
United States	$ 568,085	$ 575,737	$ 609,005
Australia	216,416	259,326	316,382
Denmark	85,654	90,463	111,161
Other	268,360	240,004	292,466
Total	$ 1,138,515	$ 1,165,530	$ 1,329,014

No single customer accounted for more than 10% of net sales in 2016, 2015, or 2014. Net sales by geographical area are based on the location of the facility producing the sales and do not include sales to other operating units of the company. While Australia accounted for approximately 13% of the Company's net sales in 2016, no other foreign country accounted for more than 5% of the Company’s net sales.

Operating income by business segment are based on net sales less identifiable operating expenses and allocations and includes profits recorded on sales to other operating units of the company. Long-lived assets consist of property, plant and equipment, net of depreciation, goodwill, other intangible assets and other assets. Long-lived assets by geographical area are based on location of facilities.

(Dollars in thousands, except per share amounts)

(20) GUARANTOR/NON-GUARANTOR FINANCIAL INFORMATION

The Company has three tranches of senior unsecured notes. All of the senior notes are guaranteed, jointly, severally, fully and unconditionally (subject to certain customary release provisions, including sale of the subsidiary guarantor, or sale of all or substantially all of its assets) by certain of the Company's current and future direct and indirect domestic and foreign subsidiaries (collectively the "Guarantors"), excluding its other current domestic and foreign subsidiaries which do not guarantee the debt (collectively referred to as the "Non-Guarantors"). All Guarantors are 100% owned by the parent company. The Company is the issuer.

Consolidated financial information for the Company ("Parent"), the Guarantor subsidiaries and the Non-Guarantor subsidiaries is as follows:

CONDENSED CONSOLIDATED STATEMENTS OF EARNINGS
For the Year ended December 31, 2016

	Parent	Guarantors	Non-Guarantors	Eliminations	Total
Net sales	$1,126,985	$ 390,756	$1,195,812	$ (191,877)	$2,521,676
Cost of sales	837,616	285,924	932,609	(190,716)	1,865,433
Gross profit	289,369	104,832	263,203	(1,161)	656,243
Selling, general and administrative expenses	184,493	46,244	182,002	—	412,739
Operating income	104,876	58,588	81,201	(1,161)	243,504
Other income (expense):					
Interest expense	(43,703)	(10)	(696)	—	(44,409)
Interest income	273	112	2,720	—	3,105
Other	1,480	77	16,697	—	18,254
	(41,950)	179	18,721	—	(23,050)
Earnings before income taxes and equity in earnings of nonconsolidated subsidiaries	62,926	58,767	99,922	(1,161)	220,454
Income tax expense (benefit):					
Current	24,539	20,270	21,262	(323)	65,748
Deferred	6,216	—	(29,901)	—	(23,685)
	30,755	20,270	(8,639)	(323)	42,063
Earnings before equity in earnings of nonconsolidated subsidiaries	32,171	38,497	108,561	(838)	178,391
Equity in earnings of nonconsolidated subsidiaries	141,061	66,128	—	(207,189)	—
Net earnings	173,232	104,625	108,561	(208,027)	178,391
Less: Earnings attributable to noncontrolling interests	—	—	(5,159)	—	(5,159)
Net earnings attributable to Valmont Industries, Inc	$ 173,232	$ 104,625	$ 103,402	$ (208,027)	$ 173,232

(Dollars in thousands, except per share amounts)

(20) GUARANTOR/NON-GUARANTOR FINANCIAL INFORMATION (Continued)

CONDENSED CONSOLIDATED STATEMENTS OF EARNINGS
For the Year ended December 26, 2015

	Parent	Guarantors	Non-Guarantors	Eliminations	Total
Net sales	$1,169,674	$ 423,928	$1,238,609	$ (213,287)	$ 2,618,924
Cost of sales	890,242	332,847	987,729	(212,927)	1,997,891
Gross profit	279,432	91,081	250,880	(360)	621,033
Selling, general and administrative expenses	194,335	45,549	207,484	—	447,368
Impairment of goodwill and intangible assets	—	—	41,970	—	41,970
Operating income	85,097	45,532	1,426	(360)	131,695
Other income (expense):					
Interest expense	(43,552)	—	(1,069)	—	(44,621)
Interest income	9	103	3,184	—	3,296
Other	(2,374)	60	4,951	—	2,637
	(45,917)	163	7,066	—	(38,688)
Earnings before income taxes and equity in earnings of nonconsolidated subsidiaries	39,180	45,695	8,492	(360)	93,007
Income tax expense (benefit):					
Current	863	23,261	18,446	(1)	42,569
Deferred	10,042	(6,224)	1,040	—	4,858
	10,905	17,037	19,486	(1)	47,427
Earnings before equity in earnings of nonconsolidated subsidiaries	28,275	28,658	(10,994)	(359)	45,580
Equity in earnings of nonconsolidated subsidiaries	11,842	(39,418)	(247)	27,576	(247)
Net earnings	40,117	(10,760)	(11,241)	27,217	45,333
Less: Earnings attributable to noncontrolling interests	—	—	(5,216)	—	(5,216)
Net earnings attributable to Valmont Industries, Inc.	$ 40,117	$ (10,760)	$ (16,457)	$ 27,217	$ 40,117

(Dollars in thousands, except per share amounts)

(20) GUARANTOR/NON-GUARANTOR FINANCIAL INFORMATION (Continued)

CONDENSED CONSOLIDATED STATEMENTS OF EARNINGS
For the Year ended December 27, 2014

	Parent	Guarantors	Non-Guarantors	Eliminations	Total
Net sales	$1,392,509	$ 496,326	$1,456,053	$ (221,745)	$3,123,143
Cost of sales	1,040,808	371,639	1,124,813	(222,234)	2,315,026
Gross profit	351,701	124,687	331,240	489	808,117
Selling, general and administrative expenses	196,987	49,171	204,243	—	450,401
Operating income	154,714	75,516	126,997	489	357,716
Other income (expense):					
Interest expense	(34,267)	(5)	(2,518)	—	(36,790)
Interest income	38	359	5,649	—	6,046
Costs associated with refinancing of debt	(38,705)	—	—	—	(38,705)
Other	2,021	(511)	(5,594)	—	(4,084)
	(70,913)	(157)	(2,463)	—	(73,533)
Earnings before income taxes and equity in earnings of nonconsolidated subsidiaries	83,801	75,359	124,534	489	284,183
Income tax expense (benefit):					
Current	30,330	25,277	33,898	138	89,643
Deferred	(1,474)	1,866	4,859	—	5,251
	28,856	27,143	38,757	138	94,894
Earnings before equity in earnings of nonconsolidated subsidiaries	54,945	48,216	85,777	351	189,289
Equity in earnings of nonconsolidated subsidiaries	129,031	19,509	63	(148,574)	29
Net earnings	183,976	67,725	85,840	(148,223)	189,318
Less: Earnings attributable to noncontrolling interests	—	—	(5,342)	—	(5,342)
Net earnings attributable to Valmont Industries, Inc.	$ 183,976	$ 67,725	$ 80,498	$ (148,223)	$ 183,976

(Dollars in thousands, except per share amounts)

(20) GUARANTOR/NON-GUARANTOR FINANCIAL INFORMATION (Continued)

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
For the Year ended December 31, 2016

	Parent	Guarantors	Non-Guarantors	Eliminations	Total
Net earnings	$ 173,232	$ 104,625	$ 108,561	$ (208,027)	$ 178,391
Other comprehensive income (loss), net of tax:					
Foreign currency translation adjustments:					
Unrealized translation gains (losses)	—	49	(58,364)	—	(58,315)
Gain (loss) on hedging activity:					
Unrealized gain on net investment hedge	4,226	—	—	—	4,226
Amortization cost included in interest expense	74	—	—	—	74
	4,300	—	—	—	4,300
Actuarial gain (loss) in defined benefit pension plan liability	—	—	(24,141)	—	(24,141)
Equity in other comprehensive income	(83,252)	—	—	83,252	—
Other comprehensive income (loss)	(78,952)	49	(82,505)	83,252	(78,156)
Comprehensive income (loss)	94,280	104,674	26,056	(124,775)	100,235
Comprehensive income attributable to noncontrolling interests	—	—	(6,144)	—	(6,144)
Comprehensive income (loss) attributable to Valmont Industries, Inc.	$ 94,280	$ 104,674	$ 19,912	$ (124,775)	$ 94,091

(Dollars in thousands, except per share amounts)

(20) GUARANTOR/NON-GUARANTOR FINANCIAL INFORMATION (Continued)

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
For the Year ended December 26, 2015

	Parent	Guarantors	Non-Guarantors	Eliminations	Total
Net earnings	$ 40,117	$ (10,760)	$ (11,241)	$ 27,217	$ 45,333
Other comprehensive income (loss), net of tax:					
Foreign currency translation adjustments:					
Unrealized translation gains (losses)	—	(15,166)	(81,528)	—	(96,694)
	—	(15,166)	(81,528)	—	(96,694)
Gain (loss) on cash flow hedge:					
Amortization cost included in interest expense	74	—	—	—	74
Realized (gain) loss included in net earnings	(3,130)	—	—	—	(3,130)
Unrealized gain on cash flow hedges	2,855	—	—	—	2,855
	(201)	—	—	—	(201)
Actuarial gain (loss) in defined benefit pension plan liability	—	—	(40,274)	—	(40,274)
Equity in other comprehensive income	(132,584)	—	—	132,584	—
Other comprehensive income (loss)	(132,785)	(15,166)	(121,802)	132,584	(137,169)
Comprehensive income (loss)	(92,668)	(25,926)	(133,043)	159,801	(91,836)
Comprehensive income attributable to noncontrolling interests	—	—	(832)	—	(832)
Comprehensive income (loss) attributable to Valmont Industries, Inc.	$ (92,668)	$ (25,926)	$ (133,875)	$ 159,801	$ (92,668)

(Dollars in thousands, except per share amounts)

(20) GUARANTOR/NON-GUARANTOR FINANCIAL INFORMATION (Continued)

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
For the Year ended December 27, 2014

	Parent	Guarantors	Non-Guarantors	Eliminations	Total
Net earnings	$ 183,976	$ 67,725	$ 85,840	$ (148,223)	$ 189,318
Other comprehensive income (loss), net of tax:					
Foreign currency translation adjustments:					
Unrealized translation gains (losses)	—	(51,536)	(30,739)	—	(82,275)
	—	(51,536)	(30,739)	—	(82,275)
Gain (loss) on cash flow hedge:					
Amortization cost included in interest expense	594	—	—	—	594
Realized (gain) loss included in net earnings	983	—	—	—	983
Unrealized gain on cash flow hedges	4,837	—	—	—	4,837
	6,414	—	—	—	6,414
Actuarial gain (loss) in defined benefit pension plan liability	—	—	(13,709)	—	(13,709)
Equity in other comprehensive income	(93,162)	—	—	93,162	—
Other comprehensive income (loss)	(86,748)	(51,536)	(44,448)	93,162	(89,570)
Comprehensive income	97,228	16,189	41,392	(55,061)	99,748
Comprehensive income attributable to noncontrolling interests	—	—	(2,520)	—	(2,520)
Comprehensive income attributable to Valmont Industries, Inc.	$ 97,228	$ 16,189	$ 38,872	$ (55,061)	$ 97,228

(Dollars in thousands, except per share amounts)

(20) GUARANTOR/NON-GUARANTOR FINANCIAL INFORMATION (Continued)

CONDENSED CONSOLIDATED BALANCE SHEETS
December 31, 2016

	Parent	Guarantors	Non-Guarantors	Eliminations	Total
ASSETS					
Current assets:					
Cash and cash equivalents	$ 67,225	$ 6,071	$ 326,652	$ —	$ 399,948
Receivables, net	134,351	60,522	244,469	—	439,342
Inventories	126,669	45,457	182,056	(4,154)	350,028
Prepaid expenses, restricted cash, and other assets	13,271	880	43,146	—	57,297
Refundable income taxes	6,601	—	—	—	6,601
Total current assets	348,117	112,930	796,323	(4,154)	1,253,216
Property, plant and equipment, at cost	547,076	153,596	405,064	—	1,105,736
Less accumulated depreciation and amortization	352,960	76,776	157,665	—	587,401
Net property, plant and equipment	194,116	76,820	247,399	—	518,335
Goodwill	20,108	110,561	190,441	—	321,110
Other intangible assets	184	35,953	108,241	—	144,378
Investment in subsidiaries and intercompany accounts	1,279,413	901,758	1,089,369	(3,270,540)	—
Other assets	43,880	—	110,812	—	154,692
Total assets	$ 1,885,818	$ 1,238,022	$ 2,542,585	$ (3,274,694)	$ 2,391,731
LIABILITIES AND SHAREHOLDERS' EQUITY					
Current liabilities:					
Current installments of long-term debt	$ —	$ —	$ 851	$ —	$ 851
Notes payable to banks	—	—	746	—	746
Accounts payable	52,272	15,732	109,484	—	177,488
Accrued employee compensation and benefits	34,508	7,243	30,653	—	72,404
Accrued expenses	30,261	15,242	44,411	—	89,914
Dividends payable	8,445	—	—	—	8,445
Total current liabilities	125,486	38,217	186,145	—	349,848
Deferred income taxes	22,481	—	13,322	—	35,803
Long-term debt, excluding current installments	751,251	—	3,544	—	754,795
Defined benefit pension liability	—	—	209,470	—	209,470
Deferred compensation	39,476	—	4,843	—	44,319
Other noncurrent liabilities	3,642	5	11,263	—	14,910
Shareholders' equity:					
Common stock of $1 par value	27,900	457,950	648,683	(1,106,633)	27,900
Additional paid-in capital	—	159,414	1,107,536	(1,266,950)	—
Retained earnings	1,874,722	646,749	603,338	(1,250,087)	1,874,722
Accumulated other comprehensive income (loss)	(346,359)	(64,313)	(284,663)	348,976	(346,359)
Treasury stock	(612,781)	—	—	—	(612,781)
Total Valmont Industries, Inc. shareholders' equity	943,482	1,199,800	2,074,894	(3,274,694)	943,482
Noncontrolling interest in consolidated subsidiaries	—	—	39,104	—	39,104
Total shareholders' equity	943,482	1,199,800	2,113,998	(3,274,694)	982,586
Total liabilities and shareholders' equity	$ 1,885,818	$ 1,238,022	$ 2,542,585	$ (3,274,694)	$ 2,391,731

(Dollars in thousands, except per share amounts)

(20) GUARANTOR/NON-GUARANTOR FINANCIAL INFORMATION (Continued)

CONDENSED CONSOLIDATED BALANCE SHEETS
December 26, 2015

	Parent	Guarantors	Non-Guarantors	Eliminations	Total
ASSETS					
Current assets:					
Cash and cash equivalents	$ 62,281	$ 4,008	$ 282,785	$ —	$ 349,074
Receivables, net	130,741	66,387	269,315	—	466,443
Inventories	132,222	38,379	173,064	(2,993)	340,672
Prepaid expenses, restricted cash, and other assets	9,900	766	35,471	—	46,137
Refundable income taxes	24,526	—	—	—	24,526
Total current assets	359,670	109,540	760,635	(2,993)	1,226,852
Property, plant and equipment, at cost	541,536	132,864	406,656	—	1,081,056
Less accumulated depreciation and amortization	334,471	69,956	144,140	—	548,567
Net property, plant and equipment	207,065	62,908	262,516	—	532,489
Goodwill	20,108	110,562	206,246	—	336,916
Other intangible assets	238	40,959	129,000	—	170,197
Investment in subsidiaries and intercompany accounts	1,239,228	813,779	939,177	(2,992,184)	—
Other assets	40,067	—	85,861	—	125,928
Total assets	$ 1,866,376	$ 1,137,748	$ 2,383,435	$ (2,995,177)	$ 2,392,382
LIABILITIES AND SHAREHOLDERS' EQUITY					
Current liabilities:					
Current installments of long-term debt	$ 215	$ —	$ 862	$ —	$ 1,077
Notes payable to banks	—	—	976	—	976
Accounts payable	66,723	13,680	99,580	—	179,983
Accrued employee compensation and benefits	32,272	6,347	31,735	—	70,354
Accrued expenses	31,073	22,802	51,718	—	105,593
Dividends payable	8,571	—	—	—	8,571
Total current liabilities	138,854	42,829	184,871	—	366,554
Deferred income taxes	9,686	—	25,983	—	35,669
Long-term debt, excluding current installments	751,765	—	5,153	—	756,918
Defined benefit pension liability	—	—	179,323	—	179,323
Deferred compensation	43,485	—	4,932	—	48,417
Other noncurrent liabilities	4,145	—	36,145	—	40,290
Shareholders' equity:					
Common stock of $1 par value	27,900	457,950	648,683	(1,106,633)	27,900
Additional paid-in capital	—	159,414	1,107,536	(1,266,950)	—
Retained earnings	1,729,679	541,917	354,727	(896,644)	1,729,679
Accumulated other comprehensive income	(267,218)	(64,362)	(210,688)	275,050	(267,218)
Treasury stock	(571,920)	—	—	—	(571,920)
Total Valmont Industries, Inc. shareholders' equity	918,441	1,094,919	1,900,258	(2,995,177)	918,441
Noncontrolling interest in consolidated subsidiaries	—	—	46,770	—	46,770
Total shareholders' equity	918,441	1,094,919	1,947,028	(2,995,177)	965,211
Total liabilities and shareholders' equity	$ 1,866,376	$ 1,137,748	$ 2,383,435	$ (2,995,177)	$ 2,392,382

(Dollars in thousands, except per share amounts)

(20) GUARANTOR/NON-GUARANTOR FINANCIAL INFORMATION (Continued)

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
For the Year ended December 31, 2016

	Parent	Guarantors	Non-Guarantors	Eliminations	Total
Cash flows from operating activities:					
Net earnings	$ 173,232	$ 104,625	$ 108,561	$ (208,027)	$ 178,391
Adjustments to reconcile net earnings to net cash flows from operations:					
Depreciation and amortization	27,096	13,316	42,005	—	82,417
Noncash loss on trading securities	—	—	586	—	586
Increase in restricted cash - pension plan trust	—	—	(13,652)	—	(13,652)
Impairment of property, plant and equipment	—	—	1,099	—	1,099
Stock-based compensation	9,931	—	—	—	9,931
Change in fair value of contingent consideration	—	—	(3,242)	—	(3,242)
Defined benefit pension plan expense (benefit)	—	—	1,870	—	1,870
Contribution to defined benefit pension plan	—	—	(1,488)	—	(1,488)
(Gain) loss on sale of property, plant and equipment	165	103	363	—	631
Equity in earnings in nonconsolidated subsidiaries	(141,061)	(66,128)	—	207,189	—
Deferred income taxes	6,216	—	(29,901)	—	(23,685)
Changes in assets and liabilities (net of acquisitions):					
Receivables	(3,610)	5,865	22,367	—	24,622
Inventories	5,554	(7,078)	(11,097)	1,160	(11,461)
Prepaid expenses	(1,250)	(114)	2,502	—	1,138
Accounts payable	(14,452)	2,052	12,504	—	104
Accrued expenses	1,423	(6,664)	(6,966)	—	(12,207)
Other noncurrent liabilities	(2,333)	5	(21,552)	—	(23,880)
Income taxes payable (refundable)	32,873	(16,567)	(8,312)	—	7,994
Net cash flows from operating activities	93,784	29,415	95,647	322	219,168
Cash flows from investing activities:					
Purchase of property, plant and equipment	(9,031)	(22,320)	(26,569)	—	(57,920)
Proceeds from sale of assets	44	102	4,980	—	5,126
Other, net	(633)	(5,085)	5,785	(322)	(255)
Net cash flows from investing activities	(9,620)	(27,303)	(15,804)	(322)	(53,049)
Cash flows from financing activities:					
Net payments under short-term agreements	—	—	(200)	—	(200)
Principal payments on long-term borrowings	(215)	—	(1,791)	—	(2,006)
Dividends paid	(34,053)	—	—	—	(34,053)
Purchase of noncontrolling interest	—	—	(11,009)	—	(11,009)
Dividends to noncontrolling interest	—	—	(2,938)	—	(2,938)
Proceeds from exercises under stock plans	11,153	—	—	—	11,153
Purchase of treasury shares	(53,800)	—	—	—	(53,800)
Purchase of common treasury shares - stock plan exercises	(2,305)	—	—	—	(2,305)
Net cash flows from financing activities	(79,220)	—	(15,938)	—	(95,158)
Effect of exchange rate changes on cash and cash equivalents	—	(49)	(20,038)	—	(20,087)
Net change in cash and cash equivalents	4,944	2,063	43,867	—	50,874
Cash and cash equivalents—beginning of year	62,281	4,008	282,785	—	349,074
Cash and cash equivalents—end of period	$ 67,225	$ 6,071	$ 326,652	$ —	$ 399,948

(Dollars in thousands, except per share amounts)

(20) GUARANTOR/NON-GUARANTOR FINANCIAL INFORMATION (Continued)

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
For the Year ended December 26, 2015

	Parent	Guarantors	Non-Guarantors	Eliminations	Total
Cash flows from operating activities:					
Net earnings	$ 40,117	$ (10,760)	$ (11,241)	$ 27,217	$ 45,333
Adjustments to reconcile net earnings to net cash flows from operations:					
Depreciation and amortization	29,433	12,611	49,100	—	91,144
Noncash loss on trading securities	—	—	4,555	—	4,555
Impairment of property, plant and equipment	7,486	542	11,808	—	19,836
Impairment of goodwill & intangibles assets	—	—	41,970	—	41,970
Stock-based compensation	7,244	—	—	—	7,244
Defined benefit pension plan expense (benefit)	—	—	(610)	—	(610)
Contribution to defined benefit pension plan	—	—	(16,500)	—	(16,500)
(Gain) loss on sale of property, plant and equipment	983	319	1,025	—	2,327
Equity in earnings in nonconsolidated subsidiaries	(11,842)	39,418	247	(27,576)	247
Deferred income taxes	10,042	(6,224)	1,040	—	4,858
Changes in assets and liabilities (net of acquisitions):					
Receivables	27,576	3,547	19,144	—	50,267
Inventories	(4,364)	18,130	(12,698)	2,228	3,296
Prepaid expenses	2,337	(172)	8,679	—	10,844
Accounts payable	6,831	(1,970)	(11,666)	—	(6,805)
Accrued expenses	(16,485)	17,713	7,366	324	8,918
Other noncurrent liabilities	177	—	(1,941)	—	(1,764)
Income taxes payable (refundable)	7,895	(306)	(482)	—	7,107
Net cash flows from operating activities	107,430	72,848	89,796	2,193	272,267
Cash flows from investing activities:					
Purchase of property, plant and equipment	(14,362)	(7,718)	(23,388)	—	(45,468)
Proceeds from sale of assets	3,996	302	(1,049)	—	3,249
Acquisitions, net of cash acquired	—	(12,778)	—	—	(12,778)
Other, net	72,866	(50,447)	(13,400)	(2,193)	6,826
Net cash flows from investing activities	62,500	(70,641)	(37,837)	(2,193)	(48,171)
Cash flows from financing activities:					
Net payments under short-term agreements	—	—	(12,853)	—	(12,853)
Proceeds from long-term borrowings	68,000	—	—	—	68,000
Principal payments on long-term borrowings	(68,213)	—	(885)	—	(69,098)
Dividends paid	(35,357)	—	—	—	(35,357)
Intercompany dividends	26,115	—	(26,115)	—	—
Dividends to noncontrolling interest	—	—	(2,634)	—	(2,634)
Proceeds from exercises under stock plans	13,075	—	—	—	13,075
Excess tax benefits from stock option exercises	1,699	—	—	—	1,699
Purchase of treasury shares	(168,983)	—	—	—	(168,983)
Purchase of common treasury shares - stock plan exercises	(13,854)	—	—	—	(13,854)
Net cash flows from financing activities	(177,518)	—	(42,487)	—	(220,005)
Effect of exchange rate changes on cash and cash equivalents	—	(356)	(26,240)	—	(26,596)
Net change in cash and cash equivalents	(7,588)	1,851	(16,768)	—	(22,505)
Cash and cash equivalents—beginning of year	69,869	2,157	299,553	—	371,579
Cash and cash equivalents—end of period	$ 62,281	$ 4,008	$ 282,785	$ —	$ 349,074

(Dollars in thousands, except per share amounts)

(20) GUARANTOR/NON-GUARANTOR FINANCIAL INFORMATION (Continued)

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
For the Year ended December 27, 2014

	Parent	Guarantors	Non-Guarantors	Eliminations	Total
Cash flows from operating activities:					
Net earnings	$ 183,976	$ 67,725	$ 85,840	$ (148,223)	$ 189,318
Adjustments to reconcile net earnings to net cash flows from operations:					
Depreciation and amortization	24,509	12,926	51,893	—	89,328
Non-cash loss on trading securities	—	—	3,795	—	3,795
Non-cash debt refinancing costs	(2,478)	—	—	—	(2,478)
Stock-based compensation	6,730	—	—	—	6,730
Defined benefit pension plan expense	—	—	2,638	—	2,638
Contribution to defined benefit pension plan	—	—	(18,173)	—	(18,173)
Change in fair value of contingent consideration	—	—	(4,300)	—	(4,300)
(Gain) loss on sale of property, plant and equipment	145	143	104	—	392
Equity in earnings in nonconsolidated subsidiaries	(129,031)	(19,509)	(63)	148,574	(29)
Deferred income taxes	(1,474)	1,866	4,859	—	5,251
Changes in assets and liabilities (net of acquisitions):					
Receivables	(19,136)	40,186	(20,143)	—	907
Inventories	5,094	15,317	1,047	—	21,458
Prepaid expenses	(2,352)	429	(11,671)	—	(13,594)
Accounts payable	(2,260)	(5,212)	(26,849)	—	(34,321)
Accrued expenses	(21,448)	(9,590)	(3,740)	—	(34,778)
Other noncurrent liabilities	622	—	1,133	—	1,755
Income taxes payable	(24,945)	(19,417)	4,559	—	(39,803)
Net cash flows from operating activities	17,952	84,864	70,929	351	174,096
Cash flows from investing activities:					
Purchase of property, plant and equipment	(41,260)	(2,823)	(28,940)	—	(73,023)
Acquisitions, net of cash acquired	—	—	(185,710)	—	(185,710)
Proceeds from sale of assets	43	126	2,320	—	2,489
Other, net	34,735	(73,799)	38,796	(351)	(619)
Net cash flows from investing activities	(6,482)	(76,496)	(173,534)	(351)	(256,863)
Cash flows from financing activities:					
Net payments under short-term agreements	—	—	(4,472)	—	(4,472)
Proceeds from long-term borrowings	652,540	—	(329)	—	652,211
Principal payments on long-term obligations	(356,994)	—	(864)	—	(357,858)
Settlement of financial derivative	4,981	—	—	—	4,981
Dividends paid	(32,443)	—	—	—	(32,443)
Intercompany dividends	116,995	(36,600)	(80,395)	—	—
Intercompany interest on long-term note	—	648	(648)	—	—
Intercompany capital contribution	(143,000)	—	143,000	—	—
Dividends to noncontrolling interest	—	—	(2,919)	—	(2,919)
Debt issuance fees	(7,644)	—	—	—	(7,644)
Proceeds from exercises under stock plans	14,572	—	—	—	14,572
Excess tax benefits from stock option exercises	4,264	—	—	—	4,264
Purchase of treasury shares	(395,045)	—	—	—	(395,045)
Purchase of common treasury shares - stock plan exercises	(15,403)	—	—	—	(15,403)
Net cash flows from financing activities	(157,177)	(35,952)	53,373	—	(139,756)
Effect of exchange rate changes on cash and cash equivalents	—	(56)	(19,548)	—	(19,604)
Net change in cash and cash equivalents	(145,707)	(27,640)	(68,780)	—	(242,127)
Cash and cash equivalents—beginning of year	215,576	29,797	368,333	—	613,706
Cash and cash equivalents—end of year	$ 69,869	$ 2,157	$ 299,553	$ —	$ 371,579

(Dollars in thousands, except per share amounts)

(21) QUARTERLY FINANCIAL DATA (Unaudited)

			Net Earnings					
		Gross		Per Share		Stock Price		Dividends
	Net Sales	Profit	Amount	Basic	Diluted	High	Low	Declared
2016								
First	$ 596,605	$ 160,968	$ 32,969	$ 1.45	$ 1.45	$ 125.69	$ 96.50	$ 0.375
Second	640,249	175,117	42,026	1.86	1.85	145.94	117.10	0.375
Third	610,247	155,023	28,173	1.25	1.24	139.62	125.60	0.375
Fourth (1)	674,575	165,135	70,064	3.12	3.10	156.05	120.65	0.375
Year	$ 2,521,676	$ 656,243	$ 173,232	$ 7.68	$ 7.63	$ 156.05	$ 96.50	$ 1.50
2015								
First	$ 670,398	$ 165,454	$ 30,739	$ 1.29	$ 1.28	$ 130.26	$ 117.56	$ 0.375
Second (2)	682,123	169,548	27,873	1.19	1.19	128.26	118.09	0.375
Third (3)	632,575	156,751	12,066	0.52	0.52	121.23	97.44	0.375
Fourth (4)	633,828	129,280	(30,561)	(1.34)	(1.34)	117.94	93.99	0.375
Year	$ 2,618,924	$ 621,033	$ 40,117	$ 1.72	$ 1.71	$ 130.26	$ 93.99	$ 1.50

Earnings per share are computed independently for each of the quarters. Therefore, the sum of the quarterly earnings per share may not equal the total for the year.

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(1) The fourth quarter of 2016 included a deferred income tax benefit of $30,590 ($1.35 per share) primarily attributable to the re-measurement of the deferred tax asset related to the Company's U.K. defined benefit pension plan. In addition, fiscal 2016 included $9,888 ($0.44 per share) recorded as a valuation allowance against a tax credit asset. Finally, the fourth quarter of 2016 included the reversal of a contingent liability that was recognized as part of the Delta purchase accounting of $16,591 ($0.73 per share).

(2) The second quarter of 2015 included costs associated with the restructuring plan (the "2015 Plan") that was approved by the Board of Directors in April 2015 of $9,828 after tax ($0.42 per share).

(3) The third quarter of 2015 included costs associated with the Plan of $6,310 after tax ($0.27 per share) and non-cash impairments of goodwill and trade names of $13,370 after tax ($0.58 per share).

(4) The fourth quarter of 2015 included costs associated with the Plan of $11,521 after tax ($0.50 per share) and non-cash impairments of goodwill and intangibles of $7,130 and $19,640 after tax (combined $1.16 per share) related to our APAC Coatings and Access Systems businesses, respectively. In addition, the Company recorded a one time increase in its warranty reserve related to one large utility project of $11,135 after tax ($0.50 per share) and an increase to the bad debt allowance for a large international irrigation receivable of $5,110 after tax ($0.21 per share). Lastly, U.K. corporate tax rates were collectively reduced from 20% to 18% which reduced the value of our deferred tax assets associated with net operating loss carryforwards and certain timing differences which increased the Company's tax expense by $7,120 ($0.31 per share).

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

None.

ITEM 9A. CONTROLS AND PROCEDURES.

The Company carried out an evaluation under the supervision and with the participation of the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures pursuant to Securities Exchange Act Rule 13a-15. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of the end of the period covered by this report, the Company's disclosure controls and procedures are effective to provide reasonable assurance that information required to be disclosed by the Company in the reports the Company files or submits under the Securities Exchange Act of 1934 is (1) accumulated and communicated to management, including the Company's Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosures and (2) recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms.

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting as such term is defined in Securities Exchange Act Rule 13a-15(f). The Company carried out an evaluation under the supervision and with the participation of the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, of the effectiveness of the Company's internal control over financial reporting. The Company's management used the framework in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations (COSO) to perform this evaluation. Based on that evaluation, the Company's management concluded that the Company's internal control over financial reporting was effective as of December 31, 2016.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2016 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, a copy of which is included in this Annual Report on Form 10-K.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of
Valmont Industries, Inc.
Omaha, Nebraska

We have audited the internal control over financial reporting of Valmont Industries, Inc. and subsidiaries (the "Company") as of December 31, 2016, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying *Management's Report on Internal Control Over Financial Reporting*. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our 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 effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on the criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

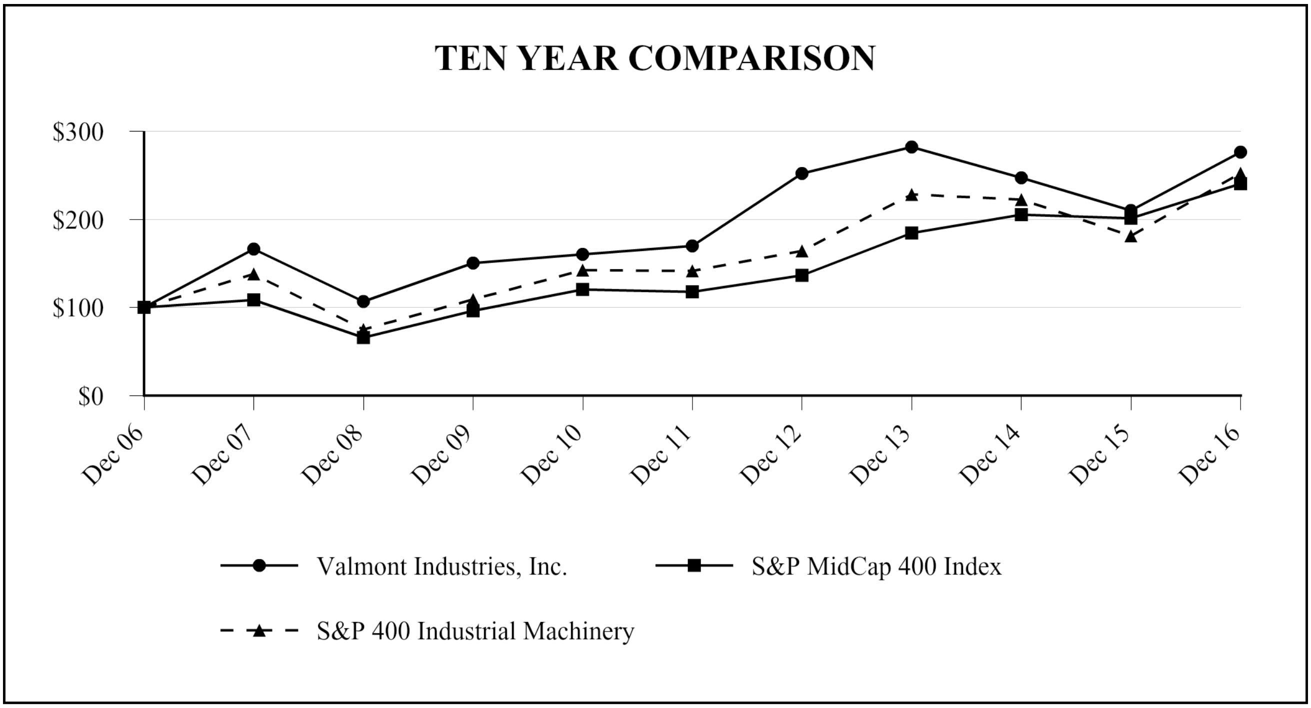
We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements and financial statement schedule as of and for the year ended December 31, 2016, of the Company and our report dated February 28, 2017 expressed an unqualified opinion on those financial statements and financial statement schedule.

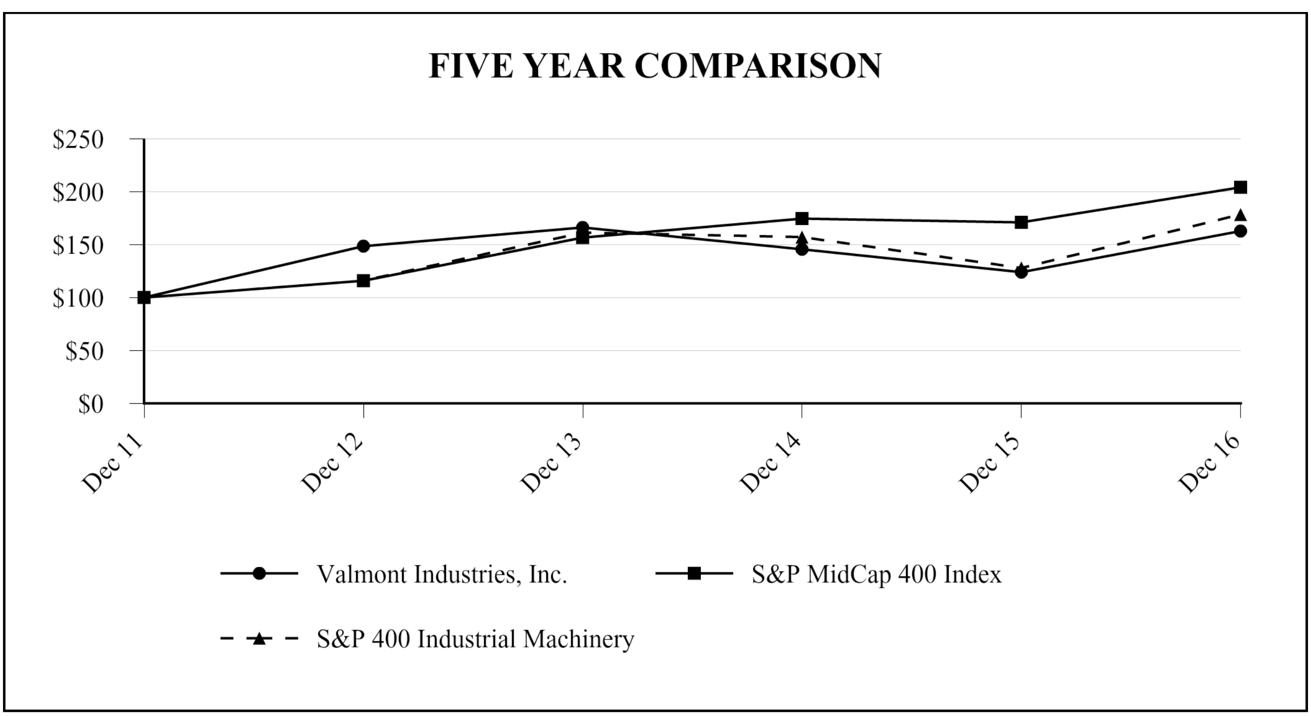
/s/ Deloitte & Touche LLP
Omaha, Nebraska
February 28, 2017

ITEM 9B. OTHER INFORMATION.

Shareholder Return Performance Graphs

The graphs below compare the yearly change in the cumulative total shareholder return on the Company's common stock with the cumulative total returns of the S&P Mid Cap 400 Index and the S&P Mid Cap 400 Industrial Machinery Index for the five and ten-year periods ended December 31, 2016. The Company was added to these indexes in 2009 by Standard & Poor's. The graphs assume that the beginning value of the investment in Valmont Common Stock and each index was $100 and that all dividends were reinvested.





PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

Except for the information relating to the executive officers of the Company set forth in Part I of this 10-K Report, the information called for by items 10, 11, and 13 is incorporated by reference to the sections entitled “Certain Shareholders”, “Corporate Governance”, “Board of Directors and Election of Directors”, “Compensation Discussion and Analysis”, "Compensation Risk Assessment", “Human Resources Committee Report”, “Summary Compensation Table”, “Grants of Plan-Based Awards for Fiscal Year 2016”, “Outstanding Equity Awards at Fiscal Year-End”, “Options Exercised”, “Nonqualified Deferred Compensation”, “Director Compensation”, “Potential Payments Upon Termination or Change-in-Control” and “Section 16(a) Beneficial Ownership Reporting Compliance” in the Proxy Statement.

The Company has adopted a Code of Ethics for Senior Officers that applies to the Company’s Chief Executive Officer, Chief Financial Officer and Controller and has posted the code on its website at *www.valmont.com* through the “Investors Relations” link. The Company intends to satisfy the disclosure requirement under Item 5.05 of Form 8-K relating to amendments to or waivers from any provision of the Code of Ethics for Senior Officers applicable to the Company’s Chief Executive Officer, Chief Financial Officer or Controller by posting that information on the Company’s Web site at *www.valmont.com* through the “Investors Relations” link.

ITEM 11. EXECUTIVE COMPENSATION.

See Item 10.

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

Incorporated herein by reference to “Certain Shareholders” and “Equity Compensation Plan Information” in the Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

See Item 10.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

The information called for by Item 14 is incorporated by reference to the sections titled “Ratification of Appointment of Independent Auditors” in the Proxy Statement.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a)(1)(2) *Financial Statements and Schedules*.

The following consolidated financial statements of the Company and its subsidiaries are included herein as listed below:

Consolidated Financial Statements

The following financial statement schedule of the Company is included herein:

All other schedules have been omitted as the required information is inapplicable or the information is included in the consolidated financial statements or related notes. Separate financial statements of the registrant have been omitted because the registrant meets the requirements which permit omission.

(a)(3) *Exhibits*.

Index to Exhibits, Page 103

VALMONT INDUSTRIES, INC. AND SUBSIDIARIES
Valuation and Qualifying Accounts
(Dollars in thousands)

	Balance at beginning of period	Charged to profit and loss	Currency Translation Adjustment	Deductions from reserves*	Balance at close of period
Fifty-three weeks ended December 31, 2016					
Reserve deducted in balance sheet from the asset to which it applies—					
Allowance for doubtful receivables	$ 21,008	1,273	(734)	(2,556)	$ 18,991
Allowance for deferred income tax asset valuation	90,837	9,888	(18,129)	(673)	81,923
Fifty-two weeks ended December 26, 2015					
Reserve deducted in balance sheet from the asset to which it applies—					
Allowance for doubtful receivables	$ 9,922	12,420	(1,143)	(191)	$ 21,008
Allowance for deferred income tax asset valuation	104,487	1,267	(14,917)	—	90,837
Fifty-two weeks ended December 27, 2014					
Reserve deducted in balance sheet from the asset to which it applies—					
Allowance for doubtful receivables	$ 10,369	1,780	(308)	(1,919)	$ 9,922
Allowance for deferred income tax asset valuation	107,767	958	(4,238)	—	104,487

* The deductions from reserves are net of recoveries.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on the 28th day of February, 2017.

Valmont Industries, Inc.

By: /s/ MOGENS C. BAY

Mogens C. Bay
Chief Executive Officer

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

Signature	Title	Date
/s/ MOGENS C. BAY Mogens C. Bay	Director, Chairman and Chief Executive Officer (Principal Executive Officer)	2/28/2017
/s/ MARK C. JAKSICH Mark C. Jaksich	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	2/28/2017
/s/ TIMOTHY P. FRANCIS Timothy P. Francis	Vice President and Controller (Principal Accounting Officer)	2/28/2017

Walter Scott, Jr.*	Kenneth E. Stinson*
Daniel P. Neary*	James B. Milliken*
Catherine James Paglia*	K.R. den Daas*
Theo W. Freye*	Clark Randt*

* Mogens C. Bay, by signing his name hereto, signs the Annual Report on behalf of each of the directors indicated on this 28th day of February, 2017. A Power of Attorney authorizing Mogens C. Bay to sign the Annual Report on Form 10-K on behalf of each of the indicated directors of Valmont Industries, Inc. has been filed herein as Exhibit 24.

By: /s/ MOGENS C. BAY

Mogens C. Bay
Attorney-in-Fact

INDEX TO EXHIBITS

Exhibit 3.1 — The Company’s Restated Certificate of Incorporation, as amended. This document was filed as Exhibit 3.1 to the Company’s Quarterly Report on Form 10-Q (Commission file number 001-31429) for the quarter ended March 28, 2009 and is incorporated herein by this reference.

Exhibit 3.2 — The Company's By-Laws, as amended. This document was filed as Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 29, 2014 and is incorporated herein (Commission file number 001-31429) by reference.

Exhibit 4.1 — Credit Agreement, dated as of August 15, 2012, among the Company, Valmont Industries Holland B.V. and Valmont Group Pty. Ltd., as Borrowers, JPMorgan Chase Bank, N.A., as Administrative Agent, and the other lenders party thereto. This document was filed as Exhibit 10.1 to the Company's Current Report on Form 8-K (Commission file number 001-31429) dated August 15, 2012 and is incorporated herein by reference.

Exhibit 4.2 — First Amendment dated as of October 17, 2014 to Credit Agreement, dated as of August 15, 2012, among the Company, Valmont Industries Holland B.V. and Valmont Group Pty. Ltd., as Borrowers, JPMorgan Chase Bank, N.A., as Administrative Agent, and the other lenders party thereto. This document was filed as exhibit 4.2 to the Company's Current Report on Form 8-K (Commission file number 001-31429) dated October 17, 2014 and is incorporated herein by this reference.

Exhibit 4.3 — Second Amendment dated as of February 23, 2016 to Credit Agreement, dated as of August 15, 2012, among the Company, Valmont Industries Holland B.V. and Valmont Group Pty. Ltd., as Borrowers, JPMorgan Chase Bank, N.A., as Administrative Agent, and the other lenders party thereto. This document was filed as Exhibit 10.1 to the Company’s Current Report on Form 8-K (Commission file number 001-31429) dated February 23, 2016 and is incorporated herein by reference.

Exhibit 4.4 — Indenture relating to senior debt, dated as of April 12, 2010, among Valmont Industries, Inc., the Subsidiary Guarantors party thereto and Wells Fargo Bank, National Association., as Trustee. This document was filed as Exhibit 4.1 to the Company’s Current Report on Form 8-K (Commission file number 001-31429) dated April 12, 2010 and is incorporated herein by this reference.

Exhibit 4.5 — First Supplemental Indenture, dated as of April 12, 2010, to indenture relating to senior debt, dated as of April 12, 2010, among Valmont Industries, Inc., the Subsidiary Guarantors party thereto and Wells Fargo Bank, National Association, as Trustee. This document was filed as Exhibit 4.2 to the Company’s Current Report on Form 8-K (Commission file number 001-31429) dated April 12, 2010 and is incorporated herein by this reference.

Exhibit 4.6 — Second Supplemental Indenture, dated as of September 22, 2014, to Indenture relating to senior debt, dated as of April 12, 2010, among Valmont Industries, Inc., the Subsidiary Guarantors party thereto and Wells Fargo Bank, National Association, as Trustee. This document was filed as Exhibit 4.2 to the Company's Current Report on Form 8-K (Commission file number 001-31429) dated September 22, 2014 and is incorporated herein by this reference.

Exhibit 4.7 — Third Supplemental Indenture, dated as of September 22, 2014, to Indenture relating to senior debt, dated as of April 12, 2010, among Valmont Industries, Inc., the Subsidiary Guarantors party thereto and Wells Fargo Bank, National Association, as Trustee. This document was filed as Exhibit 4.2 to the Company's Current Report on Form 8-K (Commission file number 001-31429) dated September 22, 2014 and is incorporated herein by this reference.

Exhibit 10.1 — The Company's 1996 Stock Plan. This document was filed as Exhibit 10.1 to the Company's Annual Report on Form 10-K (Commission file number 001-31429) for the year ended December 26, 2009 and is incorporated herein by this reference.

Exhibit 10.2 — The Company's 1999 Stock Plan, as amended. This document was filed as Exhibit 10.2 to the Company's Annual Report on Form 10-K (Commission file number 001-31429) for the year ended December 26, 2009 and is incorporated herein by this reference.

Exhibit 10.3 — The Company's 2002 Stock Plan. This document was filed as Exhibit 10.3 to the Company's Annual Report on Form 10-K (Commission file number 001-31429) for the year ended December 31, 2011 and is incorporated herein by reference.

Exhibit 10.4 — Amendment No. 1 to Valmont 2002 Stock Plan. This document was filed as Exhibit 10.4 to the Company's Annual Report on Form 10-K (Commission file number 001-31429) for the year ended December 26, 2009 and is incorporated herein by this reference.

Exhibit 10.5 — The Company's 2008 Stock Plan. This document was filed as Exhibit 10.5 to the Company's Annual Report on Form 10-K (Commission file number 001-31429) for the fiscal year ended December 28, 2013 and is incorporated herein by this reference.

Exhibit 10.6 — The Company's 2013 Stock Plan. This document was filed as Exhibit 10.1 to the Company's Current Report on Form 8-K (Commission file number 001-31429) dated April 30, 2013 and is incorporated herein by reference.

Exhibit 10.7 2013 Stock Plan Amendment, dated December 17, 2015. This document was filed as Exhibit 10.7 to the Company's Annual Report on Form 10-K (Commission file number 001-31429) for the year ended December 26, 2015 and is incorporated herein by this reference.

Exhibit 10.8* — Form of Stock Option Agreement.

Exhibit 10.9 — Form of Restricted Stock Agreement. This document was filed as Exhibit 10.4 to the Company's Current Report on Form 8-K (Commission file number 001-31429) dated April 30, 2013 and is incorporated herein by reference.

Exhibit 10.10 — Form of Restricted Stock Unit Agreement (Director). This document was filed as Exhibit 10.5 to the Company's Current Report on Form 8-K (Commission file number 001-31429) dated April 30, 2013 and is incorporated herein by reference.

Exhibit 10.11* — Form of Restricted Stock Unit Agreement (Domestic).

Exhibit 10.12 — Form of Restricted Stock Unit Agreement (International). This document was filed as Exhibit 10.12 to the Company's Annual Report on Form 10-K (Commission file number 001-31429) for the year ended December 26, 2015 and is incorporated herein by this reference.

Exhibit 10.13 — Form of Director Stock Option Agreement. This document was filed as Exhibit 10.9 to the Company's Annual Report on form 10-K (Commission file number 001-31429) for the year ended December 29, 2012 and is incorporated herein by reference.

Exhibit 10.14 — The 2013 Valmont Executive Incentive Plan. This document was filed as Exhibit 10.2 to the Company's Current Report on Form 8-K (Commission file number 001-31429) dated April 30, 2013 and is incorporated herein by reference.

Exhibit 10.15 —	Director and Named Executive Officers Compensation, is incorporated by reference to the sections entitled “Compensation Discussion and Analysis”, “Compensation Committee Report”, “Summary Compensation Table”, “Grants of Plan-Based Awards for Fiscal Year 2016”, “Outstanding Equity Awards at Fiscal Year-End”, “Options Exercised and Stock Vested”, “Nonqualified Deferred Compensation”, and “Director Compensation” in the Company’s Proxy Statement for the Annual Meeting of Stockholders on April 25, 2017.
Exhibit 10.16 —	The Amended Unfunded Deferred Compensation Plan for Nonemployee Directors. This document was filed as Exhibit 10.15 to the Company's Annual Report on Form 10-K (Commission file number 001-31429) for the fiscal year ended December 28, 2013 and is incorporated herein by this reference.
Exhibit 10.17 —	VERSP Deferred Compensation Plan. This document was filed as Exhibit 10.16 to the Company's Annual Report on Form 10-K (Commission file number 001-31429) for the fiscal year ended December 28, 2013 and is incorporated herein by this reference.
Exhibit 21* —	Subsidiaries of the Company.
Exhibit 23* —	Consent of Deloitte & Touche LLP.
Exhibit 24* —	Power of Attorney.
Exhibit 31.1* —	Section 302 Certification of Chief Executive Officer.
Exhibit 31.2* —	Section 302 Certification of Chief Financial Officer.
Exhibit 32.1* —	Section 906 Certifications.
Exhibit 101 —	The following financial information from the Company’s Annual Report on Form 10-K for the year ended December 31, 2016, formatted in XBRL (eXtensible Business Reporting Language): (i) the Consolidated Statements of Earnings, (ii) the Consolidated Statements of Comprehensive Income,(iii) the Consolidated Balance Sheets, (iv) the Consolidated Statements of Cash Flows, (v) the Consolidated Statements of Shareholders’ Equity, (vi) Notes to Consolidated Financial Statements, and (vii) document and entity information.

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* Filed herewith

Pursuant to Item 601(b)(4) of Regulation S-K, certain instruments with respect to the registrant’s long-term debt are not filed with this Form 10-K. Valmont will furnish a copy of such long-term debt agreements to the Securities and Exchange Commission upon request.

Management contracts and compensatory plans are set forth as exhibits 10.1 through 10.17.

Exhibit 31.1

CERTIFICATION OF THE CHIEF EXECUTIVE OFFICER

I, Mogens C. Bay, certify that:

1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2016 of Valmont Industries, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

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

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

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

/s/ MOGENS C. BAY

Mogens C. Bay
Chairman and Chief Executive Officer

Date: February 28, 2017

Exhibit 31.2

CERTIFICATION OF THE CHIEF FINANCIAL OFFICER

I, Mark C. Jaksich, certify that:

1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2016 of Valmont Industries, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

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

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

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

/s/ MARK C. JAKSICH

Mark C. Jaksich
Executive Vice President and Chief Financial Officer

Date: February 28, 2017

Exhibit 32.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

Pursuant to 18 U.S.C. Section 1350, as adopted

pursuant to Section 906 of the Sarbanes‑Oxley Act of 2002

The undersigned, Mogens C. Bay, Chairman and Chief Executive Officer of Valmont Industries, Inc. (the "Company"), has executed this certification in connection with the filing with the Securities and Exchange Commission of the Company's Annual Report on Form 10-K for the year ended December 31, 2016 (the "Report").

The undersigned hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes‑Oxley Act of 2002, to his knowledge that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

IN WITNESS WHEREOF, the undersigned has executed this certification as of the 28th day of February, 2017.

/s/ Mogens C. Bay

Mogens C. Bay
Chairman and Chief Executive Officer

CERTIFICATION OF CHIEF FINANCIAL OFFICER

Pursuant to 18 U.S.C. Section 1350, as adopted

pursuant to Section 906 of the Sarbanes‑Oxley Act of 2002

The undersigned, Mark C. Jaksich, Executive Vice President and Chief Financial Officer of Valmont Industries, Inc. (the "Company"), has executed this certification in connection with the filing with the Securities and Exchange Commission of the Company's Annual Report on Form 10-K for the year ended December 31, 2016 (the "Report").

The undersigned hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes‑Oxley Act of 2002, to his knowledge that:

3. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

4. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

IN WITNESS WHEREOF, the undersigned has executed this certification as of the 28th day of February, 2017.

/s/ MARK C. JAKSICH

Mark C. Jaksich
Executive Vice President and Chief Financial Officer

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